CABLE COMPARISONS

QUICK REFERENCE GUIDE
SPECS AND SONIC SIGNATURE

SHUNYATA RESEARCH

2025.05 // VERSION .01

POWER CORDS // SPECIFICATIONS

All Shunyata Research power cables use fluorocarbon dielectric.

		Conductors	Gauge	AC Connector	IEC Connector	Noise Reduction	TAPc	KPIP v2™	QRBB™	Length
GAMMA	Gamma XC	OFE copper	10	Audiophile grade solid brass	Audiophile grade gold-plated pure copper	-	-	4 Days	-	1.75m
	Gamma NR	OFE copper	10	Audiophile grade solid brass	Audiophile grade gold-plated pure copper	NR Gen2 (> 12 dB @ 1 MHz)	-	4 Days	-	1.75m
THETA	Theta XC	VTX-Ag™	10	Audiophile grade solid brass	Audiophile grade gold-plated pure copper	-	-	4 Days	-	1.75m
	Theta NR	VTX-Ag™	10	Audiophile grade solid brass	Audiophile grade gold-plated pure copper	NR Gen2 (> 12 dB @ 1 MHz)	-	4 Days	-	1.75m
ALPHA-X	Alpha-X XC	VTX-Ag™	8	CopperCONN™	CopperCONN™	-	Dual 108 elements	4 Days	-	1.75m
	Alpha-X NR	VTX-Ag™	8	CopperCONN™	CopperCONN™	NR Gen3 (> 6 dB @ 1 MHz)	Dual 108 elements	4 Days	-	1.75m
SIGMA-X	Sigma-X XC	VTX-Ag™	6	CopperCONN™	CopperCONN™	-	Dual 108 elements	4 Days	-	1.75m
	Sigma-X NR	VTX-Ag™	6	CopperCONN™	CopperCONN™	NR Gen3 (> 6 dB @ 1 MHz)	Dual 108 elements	4 Days	-	1.75m
	Sigma-X QR	VTX-Ag™	6	CopperCONN™	CopperCONN™	NR Gen3 (> 6 dB @ 1 MHz)	Triple 210 elements	4 Days	Single	1.75m
OMEGA-X	Omega-X XC	VTX-Ag™	4	CopperCONN™ platinum-plated	CopperCONN™ platinum-plated	-	Dual 108 elements	8 Days	-	1.75m
	Omega-X QR	VTX-Ag™	6	CopperCONN™ platinum-plated	CopperCONN™ platinum-plated	NR Gen3 (> 6 dB @ 1 MHz)	Triple 223 elements	8 Days	Dual	2.00m

SHUNYATA RESEARCH POWER CORDS

For nearly thirty years, Shunyata Research has led the development of high-performance aftermarket power cords used in critical-care medical systems, recording studios, mastering labs, and audio-video applications. The success of Shunyata Research power cords in these areas of specialty is well documented, with extensive third-party measurements confirming their profound noise-reducing capabilities in both heart surgery systems and in professional recording environments. Additionally, Shunyata Research has pioneered DTCD® (Dynamic Transient Current Delivery) measurements, showcasing its advanced scientific approach and material innovations (see website for details).

NR Power cord ***with*** noise reduction tech, for use with system components.

XC Power cord ***without*** reduction tech, optimal for power distributors.

QR Power cord ***enhanced*** by patented QRBB™ tech to boost peak current.

GAMMA NR/XC

With their high-current capable 10-gauge OFE copper conductors, Gamma power cords imbue sound systems with an organic, seamless coherence and natural tone. The Gamma NR achieves exceptional noise reduction — more than 12dB @ 1mHz. This translates to greater background silence, more detail and a more three dimensional presence of instruments and vocals on recordings. Gamma NR can be used on all electronics, but is especially effective when used on source and line-level components. Gamma XC deploys the exact material characteristics of Gamma NR but does not contain the Gen2 NR filtering. Gamma XC was designed expressly to connect Shunyata Research's more affordable power distributors to the wall outlet.

THETA NR/XC

Theta has similar build characteristics to Gamma but employs our reference level 10-gauge VTX-Ag™ (OFE copper with silver core) conductor geometry that makes for an even quieter, more extended and resolved sonic or visual presentation. Theta power cords can be used to elevate the performance affordable systems but has also received rave reviews when applied to upscale recording, mastering and audio-visual systems. If Shunyata Research were to choose the best example of its advantages in value and performance, the Theta power cords would be an easy choice. Theta XC deploys the exact material characteristics of Theta NR but does not contain the Gen2 NR filtering. Theta XC was designed expressly to connect Shunyata Research's lower and mid-priced power distributors to the wall outlet.

ALPHA-X NR/XC

Moving up from Theta, the Alpha-X power cords add three critical layers of performance enhancing technology. The first is TAPc (Transverse Axial Polarizer) technology, which disrupts electromagnetic noise surrounding the conductors, dramatically reducing perceived noise and enhancing the resolution of sound and images. The second is our proprietary CopperCONN™ AC connectors, maximizing contact integrity for superior peak-current capability. Finally, a newly refined level of noise filtering is applied to the NR model in the form of the Gen3 NR filters. These key refinements, combined with their heavier 8-gauge VTX-Ag™ conductors, elevate the Alpha-X cords to a significantly higher level of performance than their more affordable counterparts. When used on amplifiers or source components, the Alpha-X delivers striking improvements in the lifelike scale, weight, and three-dimensional presence of instruments and vocals. Alpha-X XC deploys the exact material characteristics of Alpha-X NR but does not contain the Gen3 NR filtering. Alpha-X XC was designed expressly to connect Shunyata Research's power distributors to the wall outlet.

POWER CORDS // SONIC CHARACTERISTICS

SIGMA-X QR/NR/XC

With its massive 6-gauge conductors and a full complement of exclusive technologies, the Sigma-X power cords represent a grand-scale evolution of the Alpha-X in both material value and performance. When applied to critical sources or amplification, Sigma-X delivers an expanded sense of scale and dynamic authority, transforming music playback into a deeply immersive physical experience. Sigma-X conveys an effortless sense of power, extended frequency response, and absolute control, heightening the listener's connection to the performance. While these qualities are evident in Shunyata's more affordable power cords, they reach their full expression with Sigma-X, revealing layers of detail and impact that redefine system performance.

The Sigma-X QR incorporates what may be the most consequential of Shunyata Research's 12 patented technologies: the QRBB™ circuit. This groundbreaking innovation boosts peak current delivery to power supplies, fundamentally transforming the performance of amplifiers and critical source components. The QRBB™ circuit serves as the dynamic "engine" driving the award-winning performance of Shunyata Research's top power distributors. Its impact on power cords is nothing short of stunning. Listeners who experience the Sigma-X QR in a system — whether with amplifiers, DACs, phono stages, or top-tier preamps — are immediately struck by its transformative effect. No careful comparison is necessary; the dramatic improvement in performance is apparent in mere seconds.

Sigma-X XC deploys the exact material characteristics of Sigma-X NR but does not contain the Gen3 NR filtering. Sigma-X XC was designed expressly to connect Shunyata Research's top of range power distributors to the wall outlet.

OMEGA-X QR/XC

The Omega-X QR was engineered to transcend all boundaries of conventional design philosophy, achieving something truly profound. Omega-X QR exists as a template for what is possible when 30 years of research, measurement and testing is distilled into one, signature product. The patent-pending TAPc module has more than 2x the elements of the TAPc in the Alpha-X, vastly enhancing its ability to suppress electromagnetic noise. Unlike the Sigma-X QR, which utilizes a single QRBB™ circuit, Omega-X QR employs a ***dual*** QRBB™ circuit, acting as a "supercharged" peak-energy device that delivers maximum transient energy to connected components. Additionally, Omega-X QR features Shunyata Research's premium platinum-plated copper CopperCONN™ AC connectors, ensuring the highest level of connection integrity. The resulting performance, whether applied to amplifiers, sources, or line-level components, extends beyond a simple component upgrade — it fundamentally elevates the entire system. In both its scientific refinement and material integrity, the Omega-X QR is the finest power cord product in existence today.

Omega-X XC shares similar material characteristics with Omega-X QR but features larger 4-gauge conductors for increased current delivery. Unlike Omega-X QR, it does not include Gen3 NR filtering or QRBB™ technology. Designed specifically to connect Shunyata Research's flagship power distributors to the wall outlet, Omega-X XC ensures maximum power transfer for uncompromised system performance.

		Conductors	Gauge	Shield	Connectors	TAPc	KPIP v2™	PMZ	Length
GAMMA	Gamma RCA	Coaxial OCC copper	18	SPC braided	Gold-plated brass	-	4 Days	•	1.00m
	Gamma XLR	Twinaxial OCC copper (tinned)	18	100% foil	Gold-plated brass	-	4 Days	-	1.00m
	Gamma Phono	Coaxial OCC copper	18	SPC braided	Gold-plated brass	-	4 Days	•	1.00m
THETA	Theta RCA	Coaxial OCC copper	16	Pure copper braided	Gold-plated brass	-	4 Days	•	1.00m
	Theta XLR	Twinaxial OCC copper	16	100% foil	Gold-plated brass	-	4 Days	-	1.00m
	Theta Phono	Coaxial OCC copper	16	Pure copper braided	Gold-plated brass	-	4 Days	•	1.00m
ALPHA-X	Alpha-X RCA	Coaxial OCC copper	16	SPC 100% braided	Gold/copper	Dual module 38 elements	4 Days	•	1.00m
	Alpha-X XLR	Twinaxial OCC copper	16	100% foil	Gold/copper	Dual module 38 elements	4 Days	-	1.00m
	Alpha-X Phono	Coaxial OCC copper	16	SPC 100% braided	Gold/copper	Dual module 38 elements	4 Days	•	1.00m
SIGMA-X	Sigma-X RCA	Coaxial OCC copper	16	SPC 100% braided	Gold/copper	Dual module 70 elements	4 Days	•	1.00m
	Sigma-X XLR	Twinaxial OCC copper	16	100% foil	Gold/copper	Dual module 70 elements	4 Days	-	1.00m
	Sigma-X Phono	Coaxial OCC copper	16	SPC 100% braided	Gold/copper	Dual module 70 elements	4 Days	•	1.00m
OMEGA	Omega RCA	Coaxial PSOCC silver	16	SPC 95% braided	Platinum or gold carbon fiber	Dual module TAP	8 Days	-	1.25m
	Omega XLR	Twinaxial PSOCC silver	16	SPC 95% braided	Platinum or gold carbon fiber	Dual module TAP	8 Days	-	1.25m
	Omega Phono	Coaxial PSOCC silver	16	SPC 95% braided	Platinum or gold carbon fiber	Dual module TAP	8 Days	-	1.25m

INTERCONNECTS // SONIC CHARACTERISTICS

ASCENSION

The critical acclaim and professional recognition earned by Shunyata Research interconnect designs result from a 25-year development cycle dedicated to crafting the world's finest signal conductors. Our Theta interconnects received *The Absolute Sound*'s 2025 Product of the Year award, recognizing the union of advanced science with outstanding material value. Starting with Gamma, the entire range of Shunyata Research interconnects possess ascending degrees of proprietary materials and patent-pending science that has no peer, at any price. Shunyata interconnects are definably unique, technological marvels that use explainable science to achieve new heights in performance.

THE WONDER OF SCIENCE

The foundational science behind Shunyata Research interconnects begins with ultra-pure, single-crystal copper. Next, designer Caelin Gabriel's PMZ (Precision Matched Impedance) process is applied across all coaxial interconnects. This ultra-slow extrusion process operates at one-quarter the normal speed, yielding a virtually perfect-lay conductor at the molecular level. Shunyata Research then applies its advanced KPIP v2™ (Kinetic Phase Inversion Process), an extreme metal tempering method that eliminates incongruities in the conductors, resulting in a more linear, grain-free signal path. In the Alpha-X and Sigma-X interconnects, Shunyata Research incorporates its scalable, patent-pending TAPc (Transverse Axial Polarizer) modules, which dramatically reduce EMI interference. All Shunyata interconnect designs use custom engineered connectors and meticulously cold-soldered termination techniques to perfect this ground-breaking range of interconnect designs.

GAMMA INTERCONNECTS

Since its inception, Shunyata Research has upheld a self-imposed mandate to ensure that its most affordable products embody the same scientific excellence and meticulous craftsmanship as its flagship designs. Gamma interconnects exemplify this mission through their advanced material properties and precision-engineered conductor treatments. Listeners immediately notice the signature silence that defines Shunyata Research — manifesting not just as a blacker background but as an enveloping quiet that enhances the harmonic structure of each note from inception to decay. Gamma interconnects reveal the nuance, natural tone and timbre one might expect from the finest copper interconnects, yet they also scale dynamic peaks with ease — as if they were culled from the finest grade silver. This quality is a direct result of Shunyata's applied metal refinements and material superiority, allowing Gamma to punch far beyond its affordable price. There are no price-comparable interconnects that possess the science, metallurgic or material value of Gamma interconnects.

THETA INTERCONNECTS

With respect to performance differences, Theta interconnects are akin to being the older, more world-wise big brother of the Shunyata Gamma interconnects. They possess similar materials but Theta was designed to deliver a heightened degree of resolution and frequency extension, with more powerful transient definition. Dynamic punch and authority are also enhanced compared to its more affordable sibling. The family resemblance is evident, but with adjustments made to shielding and geometry, Theta ascends to a level in performance that has surprised even the most experienced industry professionals and reviewers. Of all Shunyata Research cable designs, Theta has received the most review attention because of its incredible price to performance ratio. At major trade shows, Theta cable systems are in high demand for application in systems costing $250,000 and up. Leading component manufacturers, review publications and studios worldwide have compared Theta interconnects to designs costing thousands more and found them to be the best they have tested.

ALPHA-X INTERCONNECTS

In designing the Alpha-X interconnects, Shunyata Research has taken the gloves off of its most impactful technology. The patent-pending TAPc module, which significantly lowers electromagnetic field distortion (EMI) is applied around the boundary of the Alpha-X's larger, more geometrically complex conductor mass. This breakthrough technology leads to a dramatic drop in the perceived noise floor, unveiling finer details and opening a more immediate, pristine window into favorite recordings. The greater resolution supports an even more seamless, analog-like coherence in tone and timbre, preserving ideal harmonic transitions as if they were live. The Alpha-X interconnects allow the "system" to disappear in a way that creates an immersive experience, similar to the feeling one has when attending a live music event. The Alpha-X relaxes the listener yet the suddenness of its dynamic impact and noise-free performance will leave no doubt about the Alpha-X interconnects superiority to products at and far above their reasonable price.

SIGMA-X INTERCONNECTS

While sharing the core elements of single-crystal copper, PMZ extrusion, and KPIP v2™ metal treatment, Sigma-X expands upon Alpha-X by doubling the noise-canceling elements within a larger TAPc (Transverse Axial Polarizer) module. The results have astonished even the most seasoned industry veterans and retailers who believed they had "heard it all". What distinguishes Sigma-X is its limitless portrayal of a recording's spatial, harmonic, and timing nuances — delivering a remarkable sense of weight and dimensional presence. Transitions from delicate passages to dynamic fortissimos at scale are both startling in impact and effortlessly fluid in execution. Sigma-X interconnects perform these feats without a hint of time smear or hardness, allowing listeners to forget they are listening to a recording. To a greater degree than Alpha-X, Sigma-X interconnects disappear into the listening experience, leaving listeners with a direct, unmediated connection to the artist and music. Boundaries of the listening space dissolve, revealing the verisimilitude of the recorded space and a profound connection to favorite recordings.

OMEGA INTERCONNECTS

The Omega interconnect's stunning performance is the result of Caelin Gabriel's 25 years of intensive research into the patented technology and material science behind superior signal transmission. Every part and process within the Omega interconnects was approached with no constraints with regard to time in development, cost, or material refinement. Omega interconnects paint a vivid sonic portrait without editorializing, equalizing, or highlighting. There is an unmistakable purity of tone that captures the essence of a musical performance. They deliver a stunning sense of realism and dimensional space, as if the recordings had been mastered at 32/384 kHz resolution versus 16/44.1 kHz. Omega interconnects express the subtlest shifts in micro-dynamics while simultaneously propelling explosive bass transitions, all emerging from a background of velvet silence. Whether reproducing the loudest crescendo or the softest whisper, they render sound as if it is untethered to a system of electronics. The music ebbs and flows with a natural, unforced, and grain-free realism that must be experienced to fully appreciate.

DIGITAL CABLES // SPECIFICATIONS

		Cable Type	Shield	Gauge	Dielectric	Connectors	CMode	TAPc	KPIP v2™	PMZ	Length
GAMMA	Gamma AES/EBU	Twinaxial OCC copper (tinned)	100% foil	18	Fluorocarbon	Gold-plated brass	-	-	4 Days	-	1.00m
	Gamma S/PDIF	Coaxial OCC copper	SPC 100% braided	18	Fluorocarbon	Gold-plated brass	-	-	4 Days	●	1.00m
	Gamma Clock-75	Coaxial OCC copper	SPC 100% braided	18	Fluorocarbon	BNC gold-plated brass	-	-	4 Days	●	1.00m
	Gamma Ethernet	SR-6a/ proprietary	100% foil	22	PTFE	SR1-RJ45 metal	-	-	4 Days	-	1.50m
	Gamma USB	OFC copper	100% braid	24	PVC	SR-USB gold-plated	-	-	4 Days	●	1.50m
THETA	Theta AES/EBU	Twinaxial OCC copper	100% foil	16	Fluorocarbon	Gold-plated brass	-	-	4 Days	-	1.00m
	Theta S/PDIF	Coaxial OCC copper	OCC 100% braided	16	Fluorocarbon	Gold-plated brass	-	-	4 Days	●	1.00m
	Theta Clock-75	Coaxial OCC copper	OCC 100% braided	16	Fluorocarbon	BNC gold-plated brass	-	-	4 Days	●	1.00m
	Theta Clock-50	Coaxial, SPC braid	SPC 100% braided	20	PTFE	BNC gold-plated brass	-	-	4 Days	●	1.00m
	Theta Ethernet	SR-6a/ proprietary	100% foil	22	PTFE	SR2-RJ45 metal	-	-	4 Days	-	1.50m
	Theta USB	OFC copper	Dual shields (foil and braid)	22	PE	SR-USB gold-plated	-	-	4 Days	●	1.50m
ALPHA-X	Alpha-X AES/EBU	Twinaxial OCC copper	100% foil	16	Fluorocarbon	Black chrome 110 ohm	1	Dual module 19 elements	4 Days	-	1.00m
	Alpha-X S/PDIF	Coaxial SPC copper	SPC 100% braided	16	PTFE	Black chrome 75 ohm	1	Dual module 19 elements	4 Days	●	1.00m
	Alpha-X Clock-75	Coaxial SPC copper	SPC 100% braided	16	PTFE	BNC-75	1	Dual module 19 elements	4 Days	●	1.00m
	Alpha-X Clock-50	Coaxial, SPC copper	SPC 100% braided	20	PTFE	BNC-50	1	Dual module 19 elements	4 Days	●	1.00m
	Alpha-X Ethernet	SR-6a/ proprietary	100% coverage	22	PTFE	Telegartner	1	Dual module 19 elements	4 Days	-	1.50m
	Alpha-X USB	4 conductor/ proprietary	Dual shields (foil and braid)	22	PE	SR-USB gold-plated	-	Dual module 19 elements	4 Days	●	1.50m

		Cable Type	Shield	Gauge	Dielectric	Connectors	CMode	TAPc	KPIP v2™	PMZ	Length
SIGMA-X	Sigma-X AES/EBU	Twinaxial OCC copper	100% foil	16	Fluorocarbon	Black chrome 110 ohm	2	Dual module 35 elements	4 Days	-	1.00m
	Sigma-X S/PDIF	Coaxial SPC copper	SPC 100% braided	16	PTFE	Black chrome 75 ohm	2	Dual module 35 elements	4 Days	●	1.00m
	Sigma-X Clock-75	Coaxial SPC copper	SPC 100% braided	16	PTFE	BNC-75	2	Dual module 35 elements	4 Days	●	1.00m
	Sigma-X Clock-50	Coaxial, SPC copper	SPC 100% braided	20	PTFE	BNC-50	2	Dual module 35 elements	4 Days	●	1.00m
	Sigma-X Ethernet	SR-6a/ proprietary	100% coverage	22	PTFE	Telegartner	2	Dual module 35 elements	4 Days	-	1.50m
	Sigma-X USB	4 conductor/ proprietary	Dual shields (foil and braid)	22	PE	SR-USB gold-plated	-	Dual module 35 elements	4 Days	●	1.50m
OMEGA-X	Omega-X AES/EBU	Twinaxial OCC copper	100% foil	16	Fluorocarbon	Platinum-plated 110 ohm	3	Dual module 50 elements	8 Days	-	1.25m
	Omega-X S/PDIF	Coaxial SPC copper	SPC 100% braided	16	PTFE	Platinum-plated 75 ohm	3	Dual module 50 elements	8 Days	●	1.25m
	Omega-X Clock-75	Coaxial SPC copper	SPC 100% braided	16	PTFE	BNC-75	3	Dual module 50 elements	8 Days	●	1.25m
	Omega-X Clock-50	Coaxial, SPC copper	SPC 100% braided	20	PTFE	BNC-50	3	Dual module 50 elements	8 Days	●	1.25m
	Omega-X Ethernet	SR-6a/ proprietary	100% coverage	22	PTFE	Telegartner	3	Dual module 50 elements	8 Days	-	1.50m
	Omega-X USB	4 conductor/ proprietary	Dual shields (foil and braid)	22	PE	SR-USB gold-plated	-	Dual module 71 elements	8 Days	●	1.50m

DIGITAL CABLES // SONIC CHARACTERISTICS

No product category defines the technology and performance advantages of Shunyata Research products better than the award-winning range of digital cables. The array of technologies deployed is legion, including OCC base metal, proprietary PMZ process, KPIP v2™ conductor treatment, premium dielectrics, and exceptional noise filtration with our TAPc and CMode filters. Recording professionals, mastering labs, digital component manufacturers, and reviewers rely on Shunyata Research digital cables to deliver the finest possible resolution from digital audio playback. Whether the cable is ethernet, USB, clock, AES/EBU, or S/PDIF, the conductor science and noise reduction contained in Shunyata Research digital cables deliver master-tape quality performance.

GAMMA DIGITAL CABLES

Gamma digital cables set a new standard for entry-level refinement, starting with ultra-pure single-crystal OCC copper. These conductors undergo Shunyata Research's own proprietary PMZ Process, extruded at one-quarter normal speed to refine conductor surfaces, dielectrics, and shielding agents at a molecular level. The result is an ultra-refined, grain-free signal path that brings an analog ease and deep resolution to digital playback. Each cable is finished with premium connectors for ethernet, USB, AES/EBU, 75-ohm Clock, and S/PDIF connections, making Gamma digital cables an ideal choice for refined yet accessible performance.

THETA DIGITAL CABLES

Theta Series digital cables build on the many scientific innovations introduced in the Gamma range by increasing the wire gauge, along with several material and connector refinements. These enhancements provide improved dynamic scale, solidity, and dimensionality, bringing the listener closer to the musical performance. Particularly in the heavier-gauge AES/EBU, S/PDIF, and USB models, Theta cables deliver greater impact and authority in sound reproduction, making them a step up for those seeking a more immersive listening experience.

ALPHA-X DIGITAL CABLES

Alpha-X digital cables represent a transformative leap in digital cable design, introducing Shunyata Research's groundbreaking TAPc technology. Each Alpha-X cable is equipped with dual 19-element TAPc + CMode filter modules, operating in parallel to the signal path to eliminate high-frequency noise that can distort the digital signal. The resulting performance redefines the quality of digital audio playback, bringing it closer to the analog master tape than ever before. Trusted by mastering engineers, reviewers, retailers, and hobbyists worldwide, Alpha-X digital cables set a new benchmark for high-performance digital playback.

SIGMA-X DIGITAL CABLES

Sigma-X digital cables take the advancements of Alpha-X even further, incorporating an expanded TAPc + CMode filter design with 35 elements per module. The results are jaw-dropping to anyone who compares these technically advanced designs to anything on the market, at any price. Sigma-X models have found their way into elite mastering and recording studios and are used by a plurality of digital electronics manufacturers at home and at trade exhibits because they allow every digital front end and system to deliver analog-master-level performance.

OMEGA-X DIGITAL CABLES

Omega-X digital cables stand at the pinnacle of Shunyata Research's engineering expertise. Revered by professional recording engineers and audiophiles alike, these superlative cables are indispensable parts of any no-compromise reference playback, recording, or mastering system. Omega-X digital cables achieved this unrivaled stature by harnessing the full array of technologies Shunyata Research has in its arsenal. For example, Omega-X digital cables contain massive 50-element, dual-module TAPc + CMode filters (compared to 35 elements in Sigma-X) and are treated with Shunyata Research's proprietary KPIP v2™ conductor treatment process for 8 days — double the duration of other designs — to ensure peak performance. Omega-X cables bring performances and artists into the room with breathtaking authenticity, immersing listeners in an experience that redefines the very essence of high-fidelity audio.

All Shunyata Research speaker cables use fluorocarbon dielectric.

SPEAKER CABLES // SPECIFICATIONS

		Conductors	Gauge	Terminals	TAPc	KPIP v2™	HARP	Length
GAMMA	Gamma SP	VTX™	10	Gold-copper fixed	-	4 Days	-	2.50m
	Gamma STIS™ SP	VTX™	10	STIS™ v3	-	4 Days	-	2.50m
THETA	Theta SP	VTX™	8	STIS™ v3	-	4 Days	-	2.50m
ALPHA-X	Alpha-X SP	VTX-Ag™	8	Gold-copper fixed or STIS™ v3	Dual module 204 elements	4 Days	Dual 10	2.50m
SIGMA-X	Sigma-X SP	VTX-Ag™	6	Gold-copper fixed or STIS™ v3	Dual module 204 elements	4 Days	Dual 20	2.50m
OMEGA	Omega SP	VTX-Ag™	4	Platinum-plated fixed	TAP quad module	8 Days	Quad	2.50m

SPEAKER CABLES // SONIC CHARACTERISTICS

WHERE SCIENCE MATTERS MOST

Of all the cables in a music system, speaker cables are the most complex in terms of their design imperatives. They must convey current from amplifiers of varying output to loudspeakers with often complex impedance and crossover characteristics; all while preserving the delicate audio signal as it shares the path of current flow. To say there are opportunities for signal loss and distortion along the length of speaker cables would be an understatement. Shunyata Research has mastered the art and science of speaker cable design by crafting highly efficient pathways for current while at the same time, implementing science that mitigates the inherent distortion characteristics common to current-carrying, heavy gauge conductors.

SPEAKER CABLES // SONIC CHARACTERISTICS

GAMMA SPEAKER CABLES

Don't be fooled by the price — Gamma speaker cables deliver performance that punches far above their weight. Their ultra-pure CDA-101 copper conductors are shaped into Shunyata's VTX™ (Virtual Tube) geometry to minimize skin-effect distortion, then refined through a 4-day KPIP v2™ process that refines metals at a molecular scale. Combining these technologies delivers sound with uncharacteristically low distortion along with an elevated sense of time coherence that connects the listener intimately to favorite recordings. Gamma's rich tones and natural timbre belie their dynamic agility and dramatic reproduction of scale. Music is presented with authority and suddenness often associated with all-silver cables, but with a far more naturally rendered palette of colors.

THETA SPEAKER CABLES

Theta speaker cables build on the advanced conductor science found in Gamma, adding heavier 8-gauge conductors and Shunyata's STIS™ interchangeable connectors. This increased conductor mass supports high-current applications and adds greater weight and dimensionality to sound. Yet it's Theta's seamless timing coherence and low-level silence — born from their low-distortion conductor geometry and intensive metal tempering — that truly sets them apart. Subtle details emerge naturally, enriching the emotional connection to music. Theta's standout performance has earned awards including *The Absolute Sound's* Product of the Year, and they are widely used in top studios and industry events worldwide.

ALPHA-X SPEAKER CABLES

Alpha-X speaker cables advance the science behind Gamma and Theta by introducing VTX-Ag™ conductors — a concentric ring of copper with pure silver core — for improved timing and dynamic precision. They also incorporate two of Shunyata Research's most significant noise-reduction technologies. TAPc (Transverse Axial Polarizer) surrounds the conductors to eliminate EMI distortion, revealing low-level musical detail. The newly refined HARP module counters current-induced resonances, enhancing dynamic nuance and deepening the silence between notes. Together, these innovations in the Alpha-X design brings the listener closer to the music and artists on favorite recordings.

SIGMA-X SPEAKER CABLES

Sigma-X speaker cables build on Alpha-X's core technologies with massive 6-gauge VTX-Ag™ conductors and double the scale of HARP modules — from 10 to 20 — for even greater noise control and resolution. The added conductor mass and expanded HARP array deliver powerful dynamic impact, deeper silence, and lifelike dimensionality. Instruments and voices take on physical presence, while notes fade with a natural, immersive decay. In full-range systems, Sigma-X brings the energy of a live performance into the room in a way other products in its price-category merely hint at.

OMEGA SPEAKER CABLES

Designer Caelin Gabriel spared nothing in developing Omega — his most ambitious speaker cable design to date. Massive 4-gauge VTX-Ag™ conductors form the foundation, joined by quad HARP and quad TAP modules, and subjected to an 8-day KPIP v2™ treatment. The result is breathtaking: dynamics feel limitless, as if amplifier power has doubled. Even beyond Sigma-X, Omega vanishes behind an immense, unbounded soundstage where instruments and voices transcend the room. With uncanny timing accuracy and a gravity that anchors every note, Omega recreates the physical and emotional thrill of live music.

All Shunyata Research ground cables use fluorocarbon dielectric.

GROUND CABLES // SPECIFICATIONS

		Conductors	Gauge	Terminals	TAPc/CMode	KPIP v2™	HARP	Length
GAMMA	Gamma CGC/SGC	VTX™	10	STIS™ v3	-	4 Days	-	1.00m
THETA	Theta CGC/SGC	VTX™	8	STIS™ v3	-	4 Days	-	1.00m
ALPHA-X	Alpha-X CGC/SGC	VTX-Ag™	8	STIS™ v3	-	4 Days	-	1.00m
SIGMA-X	Sigma-X CGC/SGC	VTX-Ag™	6	STIS™ v3	Dual module 1 element	4 Days	-	1.00m
OMEGA-X	Omega-X CGC/SGC	VTX-Ag™	6	STIS™ v3	Dual module 2 elements	8 Days	-	1.25m

GROUND CABLES // SONIC CHARACTERISTICS

CRITICAL, ARTERIAL GROUND CONNECTIONS

On the surface, ground cables appear to be straightforward in design, but their construction methods, metallurgy, material quality, and applied technologies play a critical role in making the Altaira ground system superior to others on the market. Shunyata Research ground cables feature premium STIS v3™ interchangeable terminations, heavy-gauge VTX™ or VTX-Ag™ conductors, and KPIP v2™ conditioning to create ultra-low-resistance pathways to ground. The lower the resistance of the ground cable design, the higher the percentage of chassis-borne noise that is filtered out. Shunyata offers five tiers of ground cables, each delivering progressively lower resistance and higher performance. At the top, Sigma-X and Omega-X include TAPc and CMode modules — proprietary filters that strip away EMI/RFI, revealing hidden layers of low-level detail and spatial information. The best ground cables function like wide-open arteries for noise dissipation, eliminating resistance between components and Shunyata's noise-reducing Altaira ground hubs.

GROUND CABLES // SONIC CHARACTERISTICS

GAMMA GROUND CABLES

Gamma ground cables are an affordable yet highly effective solution for removing chassis-borne noise. Their 10-gauge VTX™ copper conductors allow any connected Altaira hubs or GPNR (Ground Plane Noise Reduction) equiped power distributors to significantly lower system noise, enhancing detail and resolution in both sound and video. Improvements are immediately noticeable — greater dynamics, dimensionality, bass weight, and harmonic clarity. For many systems, Gamma ground cables alone are enough to unlock the full benefits of the Shunyata grounding systems.

THETA GROUND CABLES

Theta ground cables build on the Gamma design with heavier 8-gauge VTX™ conductors, further lowering impedance and increasing noise reduction. The added conductor mass enhances background silence, dynamics, scale, and timing. In systems already using Gamma cables, upgrading the main connection between the ground hub and system ground with a single Theta cable can offer the most impactful performance improvement.

ALPHA-X GROUND CABLES

Alpha-X ground cables build on the Theta design by upgrading to VTX-Ag™ conductors, which feature a silver core surrounded by pure copper. This enhances conductivity and lowers noise even further, advancing every key performance trait of the Altaira system. The result is improved dynamics, timing, and low-level detail rendered with greater realism and scale. Positioned at the center of the lineup, Alpha-X offers an ideal balance of price and performance — and is often featured in dealer demonstration systems for that reason. Compared to the more affordable Gamma and Theta models, Alpha-X delivers greater authority, clarity, and sonic refinement across the board.

SIGMA-X GROUND CABLES

In addition to their larger 6-gauge VTX-Ag™ conductors, Sigma-X ground cables introduce our highly consequential TAPc (Transverse Axial Polarizer) and CMode (Common Mode noise reduction) filter modules — patent-pending technologies that encircle the conductors to dissipate EMI and RF noise. The result is greater harmonic detail, dimensional imaging, and a more grounded sense of weight and scale. Instruments and vocals take on a vivid, physical presence, while nuanced textures emerge from an exceptionally silent background — deepening the listener's connection to the music and performance.

OMEGA-X GROUND CABLES

Omega-X ground cables push performance to the extreme with dual TAPc and CMode modules — doubling the implementation found in Sigma-X — and an 8-day KPIP v2™ treatment for maximum conductor conditioning. Combined with 6-gauge VTX-Ag™ conductors, these scientifically derived refinements produce dramatic reductions in perceived noise and a corresponding increase in resolution and low-level detail. Every recording comes to life with a heightened sense of realism and presence. Omega-X reveals just how much performance is often left untapped — and why those who think they've "heard it all" haven't yet experienced Altaira with Omega-X.

TAPc is a patent-pending technology that Shunyata Research has developed to improve the performance of its reference signal cables. For the first time, a significant reduction in the size of the TAPc modules allows this technology to be applied to power cords. TAPc technology disrupts electromagnetic noise surrounding cable conductors, and has proven to have a profound effect on performance that cannot be replicated by any competing product or technology. The sonic results of TAPc technology include a profound drop in perceived noise floor, effortlessly portrayed dynamics, and an exceptional rendering of timing and coherency.

The **QRBB™** module possesses the ability to act as an electric charge reservoir, meaning it stores and releases energy in a manner that improves a component's access to instantaneous current. Dynamics are actually improved reducing any sense of dynamic strain often heard from amplifiers that are connected with lesser power cables. The sonic result is a lifelike presentation of timing and dynamic contrasts in sound that cannot be replicated by ANY other means. In layman's terms, it acts like a super-charger for amplifiers, pre-amps, DACs and CD players.

KPIP v2™ is Shunyata Research's proprietary Kinetic Phase Inversion Process which includes four days of continuous KPIP v2™ processing used to refine conductor metals at a molecular level. This dramatically reduces burn-in time and significantly improves sonic performance, delivering a relaxed and life-like presentation. When compared to the original process, KPIP v2™ represents a dramatic performance upgrade on par with a component-level upgrade.

HARP was discovered through Gabriel's research into 'current drift' and audio frequency current resonances that occur in speaker cables. Theoretically, a speaker cable may develop current resonances in the audio band, being roughly analogous to standing waves (modals) in room acoustics. The HARP module acts as a current mode diffraction device that breaks up these resonances, improving the perceived resolution and coherency of the system.

Shunyata Research produces select cables using a **Precision Matched Z (PMZ)** concept. This means that tolerances of the conductor surface, dielectric extrusion, and the precision of the braided shield are held to minute variances. To achieve these tight tolerances, the extrusion and braiding machines must be run at one-quarter speed during the manufacturing process. *(Note: Z means impedance)*

VTX-Ag™ cables are constructed with both an inner, center conductor made of pure silver and an outer concentric ring conductor made of pure copper. It's made using the finest fluorocarbon insulation to minimize dielectric absorption and re-radiation which translates to an improvement in resolution and clarity. VTX-Ag™ delivers the speed and clarity of silver and the midrange warmth and three dimensional power in the lower octaves of copper without imparting any of the negatives associated with either metal. *~ The best qualities of silver and copper combined.*

Many audiophile-grade connectors are made from brass or bronze. While some may get a plating of silver, gold or rhodium, the majority of current is carried by the contact's base-metal. **CopperCONN™** connectors contain pure copper contacts which have a much higher conductivity than brass. The difference in performance is clearly audible.

Common-mode 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.*

OCC	Ohno Continuous Cast copper
OFC	Oxygen Free Copper
OFE	Oxygen Free Electrolytic
CMode	Common mode filter
HARP	Current mode resonance diffraction
KPIP v2™	Kinetic Phase Inversion Process™
PE	Polyethylene
PMZ	Precision Matched Z (ohm)
PSOCC	Pure Silver Ohno Continuous Casting
PTFE	Polytetrafluoroethylene (Teflon®)
PVC	Polyvinyl Chloride
SPC	Silver Plated Copper
TAPc	Transverse axial polarizer
VTX™	OFE copper with a hollow inner core
VTX-Ag™	Silver inner conductor with an outer concentric layer of OFE copper