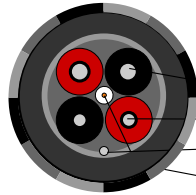


## KE-4 SPEAKER CABLES: STAR-QUAD GEOMETRY



### STAR-QUAD GEOMETRY

Overall: 2 x 15 AWG (1.54 mm<sup>2</sup>)

- 2 x 20 AWG Solid **Perfect-Surface Silver (PSS)** Conductors
- 2 x 17 AWG Solid **Perfect-Surface Silver (PSS)** Conductors
- **DBS Field Elements**
- Nylon Braid - Grey/Silver/Black

KE-4 might look like a normal round cable, but inside is a fully optimized combination of extraordinary materials and extremely refined design.

**CONDUCTORS:** All four of KE-4's conductors are solid. Electrical and magnetic interaction between strands in a conventional cable is the single greatest source of distortion, often causing a somewhat harsh, dirty and confused sound. Solid conductors are the most important ingredients enabling KE-4's very clear sound. Whether a conductor is solid or stranded, skin-effect is a prime distortion mechanism in speaker cables. KE-4 very simply keeps this effect out of the audio range by using conductor sizes that are below the threshold for audible distortion.

**DIELECTRIC-BIAS SYSTEM** (patent pending): Unfortunately, because insulation stores and releases energy, it is also a "dielectric." In a cable application, all released energy is distortion. The misnomer "break-in" is often used to describe the pronounced improvement in performance as the dielectric adapts to a charged state as the cable is used. Whenever a cable does not have a charge on it, it is re-adapting to an uncharged state; it is becoming new again.

By maintaining a 72 volt dielectric-bias, far above the voltage of delicate audio signals, the DBS system provides considerably better transparency and dynamics than is possible even from a cable in continuous use. It takes a couple of weeks for the DBS system to reach maximum performance. Since DBS battery packs are attached when KE-4 cables are first terminated, KE-4 will be approaching or at peak performance by the time it is installed in your system. Since there is no "load" on the two standard hardware-store batteries, they will last for years. A test button and LED allow for occasional verification of battery performance.

**PERFECT-SURFACE SILVER:** KE-4's PSS (Perfect-Surface Silver) has an astonishingly smooth and pure surface. Proprietary metal processing technology protects the wire's surface at every stage of drawing and fabrication. When high-purity low-oxide copper is kept as soft, pure and smooth as possible, it becomes the wonderfully low distortion PSC conductor used in many AudioQuest models. Beginning the same process with ultra pure copper makes possible PSC+ copper's even more focused and free-flowing sound. PSS's extreme transparency is made possible by applying Perfect Surface Technology to ultra pure solid silver. For fifteen years AudioQuest has pioneered the use of superior metals; yet even we were surprised by the huge leap in performance made possible with Perfect Surface Technology. PSC and PSC+ simply outperform all previously available metals at any price. PSS is the ultimate example of how far this remarkable technology can take us.

All drawn metal exhibits directionality, whether in hardware store wire or in the best AQ cable. We wish we could design away this awkwardness. Since we can't, we pay close attention to optimizing performance by clearly marking the cables and our terminations. Please watch for these markings when installing any audio cables.

**GEOMETRY:** The relationship between conductors defines a cable's most basic electrical values (capacitance and inductance). However, even when those variables are kept in a reasonable balance, the relationship between conductors can be varied in ways that greatly effect the sound. The spiral construction of KE-4 allows for significantly better dynamic contrast and information intelligibility than if the same conductors were run in parallel. The specific 4-cross geometry used in KE-4 maximizes this advantage.

**SST** (Spread Spectrum Technology): Any single size or shape of conductor has a specific distortion profile. Even though radially symmetrical conductors (solid round or tubular) have the fewest discontinuities, any particular size does have a sonic signature. SST is a method for significantly reducing the awareness of these character flaws by using a precise combination of different size conductors. SST has enabled KE-4 to be the biggest possible four conductor cable that avoids audible skin-effect.

**TERMINATIONS:** AudioQuest offers a wide range of high quality connectors that allow KE-4 to be securely attached to any type of equipment. "Quality" is in the low distortion sound, not necessarily in the eye-candy effect. AQ ends are either a dull looking gold or silver because these metals are plated directly over the connector. There is no shiny and harsh sounding nickel layer underneath. AQ spade lugs are soft because better metal is soft, and facilitates a higher quality connection. AQ spade lugs are available in several sizes. AQ Benda-Pins fit all equipment, except pieces requiring a banana plug or BFA connector, in which case the AQ

Crimp BFA/Banana provides unprecedented performance at a fraction the cost of those not-so-good sounding big eye-candy versions.

A combination of these major ingredients, and many more subtle details add up to explain how KE-4 can sounds so good.