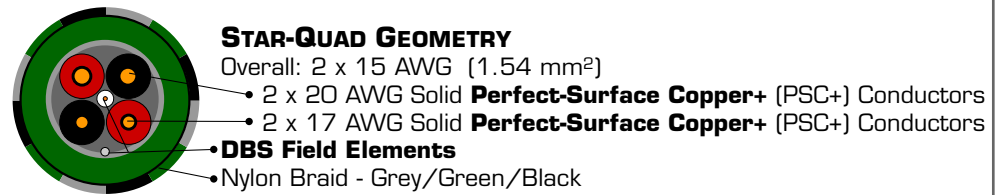


## CV-4 SPEAKER CABLES: STAR-QUAD GEOMETRY



CV-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 CV-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 CV-4's very clear sound. Whether a conductor is solid or stranded, skin-effect is a prime distortion mechanism in speaker cables. CV-4 very simply keeps this effect out of the audio range by using conductor sizes that are below the threshold for audible distortion.

**PERFECT-SURFACE COPPER+:** CV-4 uses extremely high purity Perfect-Surface Copper+ (PSC+) conductors. All conductors are solid, which prevents strand interaction, a major source of distortion. Surface quality is critical because a conductor can be considered as a rail-guide for both the electric fields within a conductor, and for the magnetic fields outside the conductor. The astonishingly smooth and pure Perfect-Surface eliminates harshness and greatly increases clarity compared to OFHC, OCC, 8N and other coppers. The superior purity of PSC+ further minimizes distortion caused by grain boundaries, which exist within any metal conductor.

**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 36 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 CV-4 cables are first terminated, CV-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.

**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 CV-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 CV-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. The four different SST-determined conductor sizes used in CV-4 allow an exceptionally clear, clean and dynamic sound.

**TERMINATIONS:** AudioQuest offers a wide range of high quality connectors that allow CV-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 even an affordable cable like CV-4 can sound so good.