

## SPEAKER CABLES



Plug into  
Performance!

Tributaries high performance speaker cables are a unique design by Jay Victor optimized for superior sound quality. Starting with the same conductor criteria as Tributaries audio cables; speaker cable designs incorporate high performance copper with insulated multi-gauge conductors sharing the same sonic traits resulting in a sound which is more frequency balanced.

Special attention to cable geometry is given to the design of speaker cables. Speaker cables carry high current signals that are susceptible to magnetic fields. As a signal travels along a wire it creates a magnetic field that increases with signal voltage. This self-inductance impedes the signal by virtue of its inductive reactance. Star-Quad design cancels magnetic fields and improves the sound quality of your system.

### Star-Quad Geometry

Tributaries Series 4, 6 and 8 speaker cables all include a Star-Quad design. Star-Quad speaker cables are designed with four conductors, all wound together, in a "positive, negative, positive, negative" configuration. The cable is produced such that all 4 wires are evenly twisted together keeping each conductor the same distance from the center and ensuring each positive conductor is next to each negative conductor. The net result is the cancellation of opposing electromagnetic fields generated by each conductor pair. This design improves the system's performance by preventing EMI noise from entering and distorting the signals in nearby low level audio, video or digital cables. Another benefit of the Star Quad design is the reduction of the cable's inductance, again, improving the cables electrical performance and reducing the distortion it produces.



### Resistance

Resistance is another consideration when choosing a speaker cable. In simple terms: the larger the diameter of the cable or conductor; the lower the resistance. Cable resistance is expressed in ohms per unit. For instance, 500 feet of 16-gauge wire has a resistance of about 4 ohms. With speaker cables this becomes an issue. Because speakers exhibit input impedances in the range of 2 to 8 ohms, the resistance of the cable can add significantly to the overall load. For example, if a 4-ohm speaker is connected to an amplifier with a cable that exhibits a 4-ohm resistance, the cable will dissipate half of the amp's power before it even gets to the speaker! Tributaries offers a full line of speaker wire with gauges from from 11AWG to 16 AWG for your consideration. Below is a handy guide for choosing the correct size speaker wire for your unique installation.

**Maximum Wire Lengths for Two Conductor Copper Wire**

Wire Size	2 Ω load	4 Ω load	6 Ω load	8 Ω load
16 AWG	12 ft	24 ft	36 ft	48 ft
14 AWG	20 ft	40 ft	60 ft	80 ft
12 AWG	30 ft	60 ft	90 ft	120 ft
10 AWG	50 ft	100 ft	150 ft	200 ft

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In Bi-wiring, two pairs of speaker cables are run from the same channel of an amplifier to a speaker. The cable design is 2 conductors to 4 conductors. One pair will connect to the high-frequency input and the other to the low frequency input of a speaker. Tributaries Star-Quad Bi-Wire cables are made with 2 pairs of speaker cable in one overall jacket. The cables are arranged in an alternating positive, negative, positive, negative order. The star quad configuration has been designed to reduce noise from Electromagnetic Interference (EMI), minimize the cable's inductance, improve the cable's electrical performance, and decrease distortion. With a lower noise floor - you can hear details in the sound that were previously dulled. Tributaries Bi-Wire Cables are sold in each.



### SERIES 4 STAR-QUAD BI-WIRE SPEAKER CABLE

## MODEL 4BW

High Performance Speaker Cable

All Series 4 audio cables are meticulously assembled by hand in Orlando, Florida. Series 4 Bi-Wire Speaker cables begin with ultra-pure highly conductive oxygen-free copper (HC-OFC) developed specifically for audio applications. Six stranded bundles are constructed by twisting strands clockwise and then wrapping the bundles counterclockwise around one insulated large solid conductor canceling magnetic fields thus reducing distortion. Two 16AWG conductors are designed for connection to the high frequency loudspeaker driver terminals while two 14AWG conductors are designed for connection to the low frequency driver terminals. Tributaries Series 4 Star-Quad design results in a high performance speaker cable that looks as good as it sounds.

The Series 4 Star-Quad Bi-Wire Speaker cable is stocked in each in lengths from 4 foot to 12 foot lengths with custom lengths available.

#### Model 4BW Highlights

- Assembled by hand with foreign and domestic parts in Orlando Florida, USA
- Star-Quad design reduces cable inductance and distortion
- Two 14AWG and two 16AWG conductors for superior signal transfer
- Sophisticated multi-gauge design for superior bass, mids & highs
- Insulated solid conductor eliminates distortion with stranded bundles
- Decorative woven jacket over a UL® CL2 PVC Jacket
- Available terminated with Spade Lugs or Banana Plugs