

## AUDIO CABLES

We are cable performance.

*Tributaries complete line of audio, speaker and power cables were developed exclusively for Tributaries by celebrated cable designer Jay Victor. Using some of the same design principles from Clarus Audiophile cables, it took 3 years to complete the engineering and cosmetic design to offer this comprehensive family of cables to the market.*

*Tributaries cables incorporate a host of patented technologies. Beginning with copper made specifically for audio applications; conductors are multi-gauge in design with individually insulated strands and precision impedances. The Tributaries collection is complemented by painstakingly meticulous hand-craftsmanship.*

### Copper

One of the most important considerations in developing audio cables is the grade of copper. Typical high quality electrical grade copper has a purity level of 2N and approximately 1500 crystal per foot. Signals crossing thru these crystal boundaries result in loss and distortion. The next level above this is oxygen-free copper (OFC), the purity of OFC varies. Tributaries uses 2 grades: 3N OFC and a high-conductivity oxygen-free copper (HC-OFC) with 4N of purity. Both are extruded in an oxygen free environment resulting in only 400 crystals per foot. Series 8 cables use copper with purity of 5N called "linear-crystal" copper (LC-OFC). LC-OFC is carefully drawn to produce only 70 crystals per foot, a vast improvement resulting in less loss and distortion.



### The Expert in Cable Design

Jay Victor, The engineer behind the development of the Tributaries Audio, Power and Speaker Cables, is a holder of approximately 50 patents for cable geometry. "I am a musician and a life-long music fanatic. Being a technically-minded person, and an Engineer, it is inevitable that Hi-Fi equipment would become a major preoccupation. If music is a major value in your life, then the realistic reproduction of it becomes an obsession. This is what goes into the cables that I design; a relentless pursuit of perfection in reproducing the sound of real music."

### Insulated Multi-Gauge Conductors

Tributaries uses solid conductors in its audio cable design. Although stranded cables are valued for their flexibility, the signal can jump from strand to strand in an undesirable manner causing distortion. Another undesirable effect is oxidation which can quickly spread between strands and cause a diode effect impeding signal flow. Conductor size also has an influence on sound. Large conductors transmit signals with less resistance than smaller ones and will also more accurately reproduce the lower frequencies; medium gauge conductors, the mid-frequencies; and fine gauge conductors the high frequencies. Most theories cite skin effect and flux density as reasons for this phenomenon. Further, insulating gauges from one another result in greater clarity.

### Cable Geometry

Tributaries audio cables use a twinaxial design. Twinaxial cables have two equally balanced conductors precision twisted and surrounded by a shield. Conductors are insulated using Polyethylene. Polyethylene is chosen because its transparency is similar to Teflon but without the harshness in the high frequencies. Polyethylene is flexible and has a sound quality that is warm and balanced. The shields have 360° coverage to keep noise from entering the signal path. Series 6 and 8 cables include copper braided shields with lower resistance for trapping induced noise current. In this design the signal and return have dedicated separate conductors and the shield is free to be connected at the source end only eliminating EMI & RFI induced noise from entering the receiver. The best balanced cables are triple balanced with three equally balanced twisted conductors surrounded by a shield. In a balanced system using dedicated conductors for the positive, negative and ground with an additional shield connected only at the source end delivers audible improvements by lowering the noise allowing you will hear more of the recorded music

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*The contribution of a USB cable to sound quality has long been a controversial and frequently misunderstood subject. The skeptics will say that it's all ones and zeros. When you think about how these "ones and zeros" actually work; it is important to understand that the only thing that will travel down a cable is voltage. Errors will occur when the correct voltage does not reach the receiving device to be accurately interpreted as a one or zero. These "timing" issues cause distortion or "jitter". Many things can introduce timing errors, and cables happen to be one of them. To get the best out of your system try Tributaries Series 6 USB cables.*



### SERIES 6 USB AUDIO CABLE

## MODEL: 6USB

Professional Grade Audio cable

Many things can introduce timing errors, and cables happen to be one of them. The Series 6 USB cables were designed with this specifically in mind, and the precision twisting techniques used are quite similar to those found on high-end HDMI cables, where the timing is also critical. This is one of many factors that contributes to making a fine quality low-jitter USB cable specifically intended for Audio. 6USB uses heavy gauge signal conductors to lower resistance and dramatically increase signal transfer, thus reducing potential timing errors. USB is a high frequency system by design, with the signal frequency in the GHz range, so Tributaries added silver plating to improve signal transfer by minimizing signal loss due to skin effect. The power conductors are also a much larger gauge, this is to ensure that adequate current is provided to USB audio devices. In addition, separate shielding on the signal conductors prevent noise on the power lines from getting into the signal path. There is also another double set of shields that isolate the entire cable from outside EMI and RFI. Overall, there are many factors that differentiate Tributaries Series 6 from standard USB cables, and listening to them will remove all doubt as to the effectiveness of these special audio-related construction techniques.

The Series 6 USB Audio cable is stocked in 1 meter and 2 meter cables.

#### Model 6USB Highlights

- Made in China. Designed, Tested and Packaged in Orlando Florida, USA.
- USB A to USB B cable designed for high speed USB 2.0 audio applications
- Precision twisting techniques implemented to ensure accurate signal timing
- 2.5% silver-plated 26AWG HC-OFC signal conductors for improved signal transfer
- 24AWG HC-OFC power conductors ensures adequate current flow to devices
- Signal conductors are shielded to prevent power line noise from getting into the signal
- Overall dual shielding protects from EMI/RFI interference
- Decorative woven jacket over flexible PVC black jacket