ETI BULLETPLUG® RCA CONNECTOR

The ETI BulletPlug® is a totally new approach to RCA/phono connection in which every aspect of electron flow has been considered.

The result is an RCA compatible connector that can improve the performance of any analogue, digital or video cable — often dramatically.

The ETI BulletPlug® represents a radical departure from conventional RCA designs. Rather than overwhelm the user with mass, thickness, and a jewelled contact surface, the ETI BulletPlug® is a minimalist design in which thickness, mass, materials, and contact surface area have been optimized for better sound, higher resolution video, and enhanced signal integrity. Listening was a major part of its development.

Most audio/video cables are made from highly conductive annealed copper or silver wires — terminated with low-conductive, nickel and gold-plated brass RCA plugs. Annealed copper has a conductivity rating of at least 100% IACS (International Annealed Copper Standard). Brass has a conductivity rating of 28% IACS.

Because of this low conductivity, we believe conventional RCA plugs act as a bottleneck to electron flow. These plugs may also cause phase errors and smearing through mass and skin effect.

Another problem relates to the return/ground collar which can impair electron flow through:

- Eddy current distortion — as electrons proceed to and from the RCA socket into the collar through multiple contact points the equivalent of electron turbulence occurs. Signal degradation results
- Capacitive distortion — where gaps exist between the socket and collar
- Micro-arcing distortion — an electrical short that can occur where gaps exist between the socket and collar

Additionally, RCA plugs are coaxial designs (metal return/ground surrounding signal pin) that have an impedance effect. This impedance can have a varied and adverse impact on performance.

The ETI BulletPlug® solves these problems by providing a faster, cleaner signal of high purity and detail. To achieve this we have designed the BulletPlug® as a miniature cable — with high-conductive, gold-plated tellurium copper (CuTe) pins—as our standard product—providing rapid transfer of electrons to and from RCA sockets.

Additionally, the ETI BulletPlug® features direct 24k gold flashing over the tellurium copper conductor. This eliminates the nickel plating typically found on even the most deluxe and expensive RCA jacks as a third (and dissimilar) metal. The sole reason for using nickel under gold is to provide the shiny jewelled look that makes expensive connectors look expensive. It is not used for sound quality or signal integrity. In fact almost everything done to provide this look runs counter to good sound and in fact degrades performance.

In our patented design, the return pin makes single point contact with the side wall of an RCA socket — concentrating electrons to one point thereby reducing distortion. This is a similar approach to “star earthing (grounding)” used in amplifiers.

For the ultimate in RCA/phono connection, ETI also offers the BulletPlug® in pure silver. Utilising the same patented RCA blueprint, the silver ETI BulletPlug® provides enhanced conductivity for what is arguably the absolute best level of performance available.

The contact pins are machined from hard drawn 4-nines pure silver rods, and then treated with Caig PreservIT — which leaves a microscopic protective coating to prevent oxidation and enhance conductivity. Sound quality is superb, with subtle but significant improvements over the standard tellurium copper plug. The silver ETI BulletPlug® is ideal for silver interconnects and any high performance cable.

Home Theatre

The importance of the RCA plug is often overlooked in the context of a high resolution video or home theatre system. Yet the quality of the RCA plug can have a disproportionate effect on the final performance of the system. This is easy to understand when two points are taken into consideration.

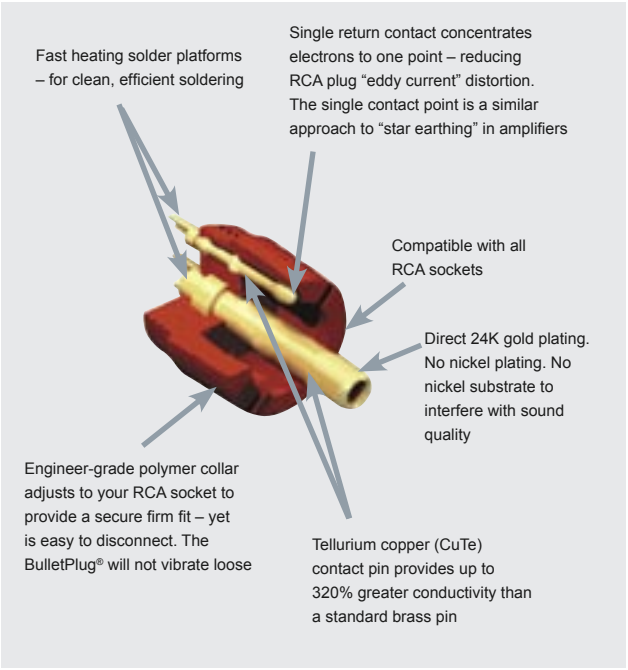
1. The delicate nature of the tiny millivolt-level signals flowing through a system's interconnect, digital, and video cables

2. The number of times these signals cumulatively travel through RCA connectors (usually low-conductive ones) en-route to their destination

Central to the ETI BulletPlug® design was the preservation of the delicate signals that represent the picture that will ultimately be seen and the audio that will ultimately be heard.

The ETI BulletPlug® has arguably obsoleted every other RCA jack in the world intended for use in high resolution applications. And nowhere is this more evident than its use in high quality home theatre systems.

®Registered, U.S. Patent and Trademark Office
®Registered, European Community



ETI BULLETPLUG® RCA CONNECTOR

ETI

EICHMANN TECHNOLOGIES INTERNATIONAL