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# Quiessence™

## TECHNICAL SUMMARY

ETI's Quiessence™ cables and interconnects are the result of over twenty five years of dedicated research by designer Keith Eichmann. They represent the logical extension of his work on the interaction between ground and signal carrying conductors, and elevate the concepts behind the patented Eichmann Ratio™ to a new level. In his new Quiessence™ designs, passive Ground Nulling Circuitry (GnC™) is employed to reduce and control the effects of the ground on the signal conductor, and to simultaneously use the ground to protect it from external interferences such as EMI, EMF, RF, and static charges. Patent applications have been filed and are pending.

Cable manufacturers industry-wide essentially have the same stated goals. Most feel that a key aspect in reaching these goals relates to how inductive and capacitive reactances are dealt with. They spend development time and money addressing issues of capacitance and inductance in cables, and—using language from their literature—by 'controlling', 'balancing', or 'reducing' one or both. They build their marketing and technical stories around whichever approach they have taken; they write about it at length, and emphasise the uniqueness of their design direction.

All invariably focus on the signal carrying conductor, and manipulate variables such as the size and shape of the conductor, its configuration, the conductivity of various materials, the purity of the conductor, the kind and quality of the dielectric. Some place networks in the signal path to compensate.

In stark contrast to these approaches, Keith Eichmann's research has produced a proprietary Ground Nulling Circuit (GnC™) which actively works to maintain a quiescent zero Voltage state across the ground, protecting the signal conductor from ground induced capacitance and inductance. This facilitates smooth uninterrupted signal flow from one component to another, effectively isolates them and allows them to perform their tasks without interference.

The bottom line is that all other cable manufacturers have been looking for solutions in all the wrong places.





GnC™ is a passive circuit comprised of hand wound conductors—no electronic components—implemented in the ground side of the cable. It requires precise calculation, hours of hand fabrication, and several days of run-in on a professional cable burner. With each higher model in the range, the GnC™ grows in size, complexity, and sophistication.

In addition to GnC™, Quiessence™ cables introduce and implement one of the most radical approaches ever taken in connector design. Unlike other manufacturers who typically design their products to have identical characteristics between the ground and the signal conductor, in the Quiessence™ Series Keith Eichmann has taken the opposite approach. He has designed a calculated and purposeful difference between the two. That same concept has been extended to the Quiessence™ connectors. With the Quiessence™ Series ETI introduces the first and only cables to use hybrid connector technology, designs in which the signal conductors are high purity Tellurium Copper, and the returns 99.99% solid Silver.

There is an unmistakable parallel between GnC™ as implemented in the cables and the hybrid approach taken in the connectors. There is a sympathy that manifests itself in shockingly better performance—better than silver/silver or copper/copper with Quiessence™ cables and interconnects.

The hybrid version of the industry-reference BulletPlug® RCA connector is particularly interesting. Not only is the return pure silver, but it makes single point contact with the female socket, creating a star ground. With Quiessence™ speaker cables copper Bayonet Plugs (banana connectors) or copper spades are used for the signal conductor and silver Bayonet Plugs or silver spades for the returns.

Quiessence™ cabling is proprietary. We employ highly annealed, mil-spec OFHC (Oxygen Free High Conductivity Copper) in all Quiessence™ cables. Our OFHC is the highest grade available—99.99% pure. The raw copper itself is mined at Mt. Isa in northwest Queensland, Australia then shipped to Sydney for the annealing and OFHC processing. We then use the highest quality natural unbleached Australian cotton as both the dielectric and for resonance damping; and ETI lead-free silver solder (at 5.2%, the highest silver content solder available) for all solder connections. Balanced XLR versions of each interconnect are also available.

All Quiessence™ cables and interconnects are designed and manufactured by ETI in Brisbane, QLD, Australia.

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