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HI-FI & HOME CINEMA MAINS PRODUCTS

### Cryogenic Treatment of Audio Cables & Connectors

Simply put, cryogenic treatment dramatically increases the useful life and performance of hi-fi and home cinema components, both metal and plastic parts will both benefit. It does so primarily by re-aligning the molecular structure, thereby relieving internal stresses and distortions caused by the casting and/or drawing out process. In the case of steel and its alloys, cryogenic treatment removes the built-in kinetic energy of atoms, which is the energy of motion. There is a normal attraction between atoms that makes them want to “get together”. But their energy of motion keeps them apart unless that energy is removed by low temperature cooling. Cryogenic treatment sufficiently cools and slows down the atoms, allowing them to converge, actually “shrinking” the molecular structure.

These ultra-cold temperatures greatly increase the strength and wear life of all types of metals, including ferrous and non-ferrous. Other benefits include reduced maintenance, repair and replacement of tools and components, reduced vibration, rapid and more uniform heat dissipation, and **improved electrical conductivity**. In addition, controlled deep cryogenic treatment processes (lower than  $-310^{\circ}\text{F}$ ) are capable of treating a wide variety of other materials, such as metallic alloys, carbides, plastics (including nylon and teflon) and ceramics.

Cryo treatment is not just for industry. Certain musical instruments, including trumpets & saxophones have been cryogenically treated for improved performance. High-quality, high-end stereo & home cinema is now benefiting from this process, with the results being more articulate and refined sonics, together with greater clarity and highly-resolved video playback. Raw wire, electrical connectors, fully-populated printed circuit boards, capacitors, system cabling, and even transformers are being cryo treated. Music and home cinema lovers can benefit fully from parts that are cryo treated as standard such as the WATTGATE range of connectors.

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