# DR-510 / DB-510



## Pure silver digital transmission

In order to maximize the potential of material, we believe that it is necessary to have the highest level of technology and method on the basis of the experience and the data. We conceived of the idea of making a cable using pure silver which has the highest electrical conductivity of all metals.

The FTVS-408, a coaxial cable, was designed to be mainly used for digital signal transmission. Although it was produced as a limited production model, it became a regular product in our lineup due to strong to customer demand.

Doing further validation of FTVS-408, we devoted much energy to providing the finest 5N silver and researching the perfect insulator and shield for the silver conductor. As a resilt, we achived to produce FTVS-510 which was designed to be used for antenna, sound and digital signal transmission.

To enhance electrical conductivity of connectors as well as cable, we attached SLSC and SLSB with pure silver contacts for perfect signal transmission by pure silver.

DR-510 / DB-510 represent the ultimate purity and transparency that we have pursued for the finest digital cable.

#### 5N Pure Silver Conductor

Pure silver is the best material for high-speed transmission due to its excellent electrical conductivity which is far superior to high-purity copper. However, the price of silver continues to rise ever higher making it one of the rare metals.

For the core of FTVS-510, 5N (99.9995%) pure silver is installed. After being melted in a ceramic crucible, it is molded into 15mm diameter round bars. It is further reduced in diameter by means of 19 repetitions of the cold rolling process.

#### Insulator

Although the conductor is the most important factor in signal transmission, the insulator is also significant in enhancing the transmitting capabilities of the cable.

For the purpose of lessening signal loss, we employed FEP (Teflon) which provides excellent electrical isolation and low electric permittivity.

For the first insulation layer, we selected PE (Polyethylene) which keeps permittivity to a minimum and enhances the flexibility of the cable. This layering of these

## Semiconductor Layer

When signal flows in a cable, it generates ultra weak vibration by which cause the discharge of an electric corona. In order to solve this problem, we installed Carbon PE as a semiconductor layer. By surrounding just the outside of the first insulation layer, its semiconductor layer helps to discharge static buildup from the Teflon layer in an orderly fashion.

different materials not only enhances the conductor's electric capabilities but also attenuates internal vibration by altering the resonance point.

Triple-shielding structure

The ultra silent background of the FTVS-510 is provided by a triplelayered shielding structure. The first semiconductor layer attenuates static noise and electric micro waves. The second copper foil shielding protects against high-frequency noise. The third, silver plated mesh shielding, protects against lowfrequency noise. It also protects against high-frequency noise by means of the skin effect on the silver plating.

#### Pure silver connectors

Outer: UV out polyurethane Shield: Silver plating copper Shield: Copper foil tape Insulating Layer: Miler film Semiconductor Layer: Carbon Insulation: foamed polyethylene Skin Layer: 0.2mm Teflon skin Conductor: 1.05mm 5N (99.9995%) Pure silver

The terminal connectors are very important for a cable component. To enhance electrical conductivity of connectors as well as cable, we attached SLSC and SLSB with pure silver contacts for perfect signal transmission by pure silver.

### **Specification** DR-510 / DB-510

Cable FTVS-510(5N pure silver Conductor, 75ohm Coaxial)

DR-510 : SLSC(pure silver Connector RCA) Plug

DB-510 : SLSB(pure silver Connector BNC)

DR-510: 0.7m/1.3m Cable Length DB-510: 0.7m/1.3m

Release Date 11/15/2005