

# FURUTECH

PURE TRANSMISSION



## Line optimizer



NCF Clear Line-XLR (F) (1pcs)



NCF Clear Line-XLR (M) (1pcs)

### NCF Clear Line-XLR (Passive type)

*"Plug and play, you'll notice the effects immediately. With overwhelming improvement in S/N (signal-to-noise) ratio, you'll experience an increase in detail information, taking your listening or viewing experience to the next level and enhancing the reproduction of subtle nuances. Without coloring the sound, it brings out the original appeal of your sound source."*

#### **Technology:**

#### **NCF Clear Line-XLR (F/Female)(Nano Crystal<sup>2</sup> Formula (NCF) Body material and Damping clips)**

The contacts are housed in a body formed with NCF Liquid Crystal Polymer Resin. The resin incorporates nylon, fiberglass, nano-sized crystalline piezo ceramic particles, carbon powder and Furutech special "NCF" anti-resonance damping material. The NCF Clear Line-XLR also features special NCF material damping clips of the same material. it generates negative ions that eliminate static and additional 'piezoelectric effect' damping properties.

### NCF Clear Line-XLR (M/Male)(Nano Crystal<sup>2</sup> Formula (NCF) Body material and Damping clips)

The features a body formed with NCF Liquid Crystal Polymer Resin. The resin incorporates nylon, fiberglass, nano-sized crystalline piezo ceramic particles, carbon powder and Furutech special "NCF" anti-resonance damping material. The same special NCF damping material is injected into the NCF Clear Line XLR(M)'s rhodium-plated α (Alpha) Pure copper one-piece construction conductor pins!

#### Hybrid Ceramic Capacitors



Features audio grade ceramic capacitor (passive type) to enhance the acoustic performance of your devices. Our team has put in countless hours of testing to determine the perfect type and specifications of capacitor to help you achieve the ultimate sound quality. We have coated the outer layer of our ceramic capacitor with a high-performance silver-colored special damping treatment to suppress any unwanted vibration and boost sound clarity. The ceramic capacitor also features advanced tuning technology that eliminates any noise interference induced from your equipment's output terminals, ensuring that you get the best possible sound experience.

#### Usage:

Using Furutech's NCF Clear Line-XLR is easy. Simply insert the NCF Clear Line-XLR (F) into the available output terminals or insert the NCF Clear Line-XLR (M) into the available input terminals of your equipment (Refer the picture). For optimal results, insert this product into the available output or input terminals of your system's preamp, SACD/CD/multi-player.



The improvement in performance is remarkable. You will immediately notice an improvement in soundstage depth and focus, as well as in the improvement of harmonics and balance of sound. It increases transparency and reduces high-frequency noise. It enhances the overall contrast, reduces distortion, and increases clarity.

## Furutech's Two-Stage Cryogenic and Demagnetization Alpha Process

Using cutting-edge technology and materials, Furutech developed a low-temperature two-stage process that significantly improves every facet of audio and video performance. The treatment begins during the manufacturing process with a deep, conditioning cryogenic freeze of all metal parts. Using high-end refrigerants -- liquid N2 or He -- Furutech achieves temperatures of between -196 to -250°C. The treated parts change their molecular structure at these extremes of temperature relieving internal stress. The molecules bond together more tightly, and the overall structure becomes more stable. This improves electrical conductivity and so power and signal transfer.

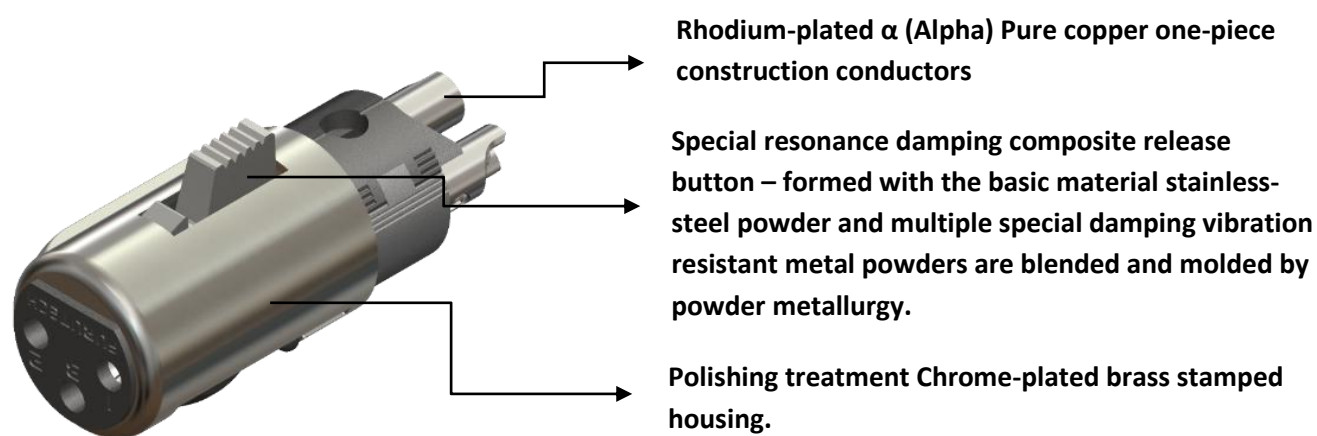
Step two in the Alpha Process exposes these same parts to the patented Ring Demagnetization treatment. Ordinary high-power magnets used for this purpose often increase magnetic effects; they leave some areas more magnetized than others. This patented process uses controlled attenuation to eliminate magnetization for immediately more vivid and colorful improvements. Ring Demagnetization further enhances conductivity of all treated materials.

ALL metallic parts used in Furutech products go through the Alpha Process treatment to keep all connectors, conductors, and metal parts in a perfect stress-free, stable, and highly conductive state.

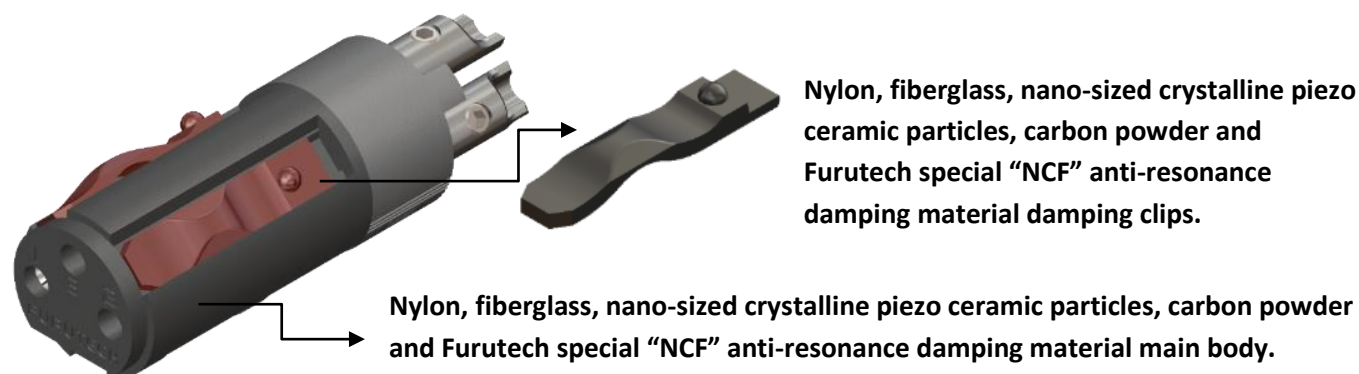
### Features

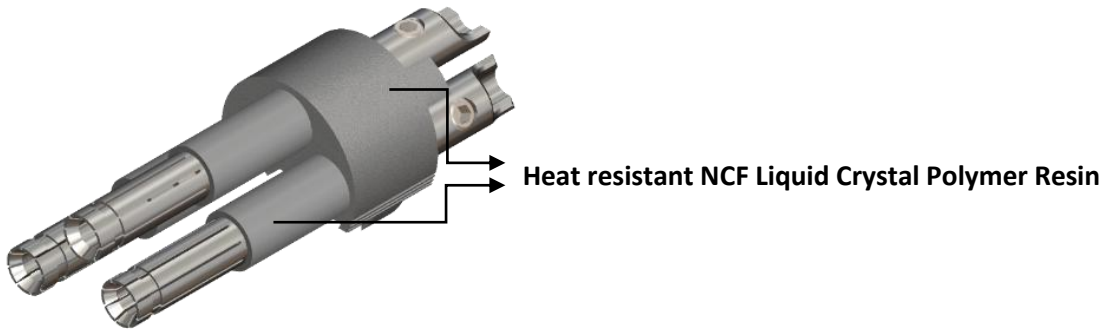
**NCF Clear Line-XLR (Nano Crystal<sup>2</sup> Formula (NCF) Body material and Damping clips)**

#### 1. NCF Clear Line-XLR (F) (CF-602F (R) NCF XLR-P)



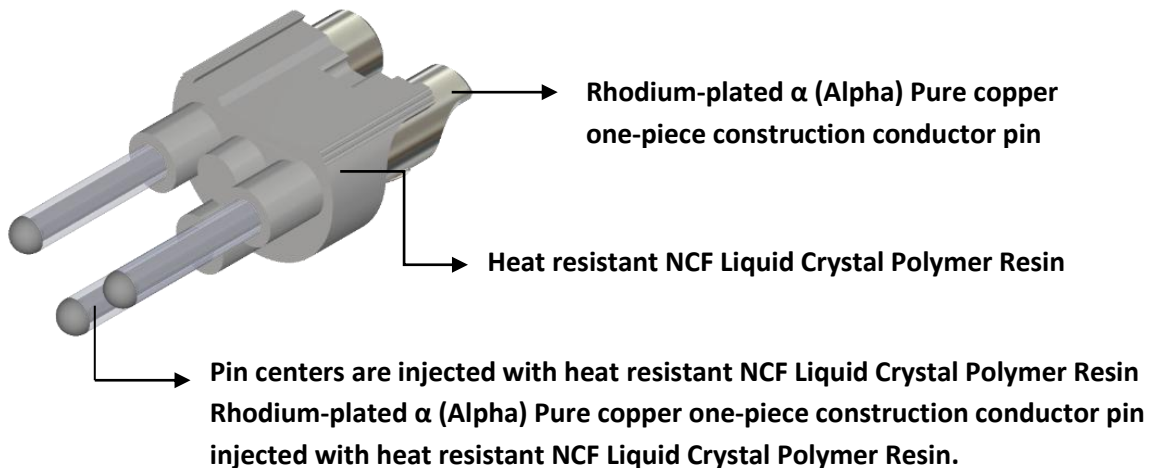
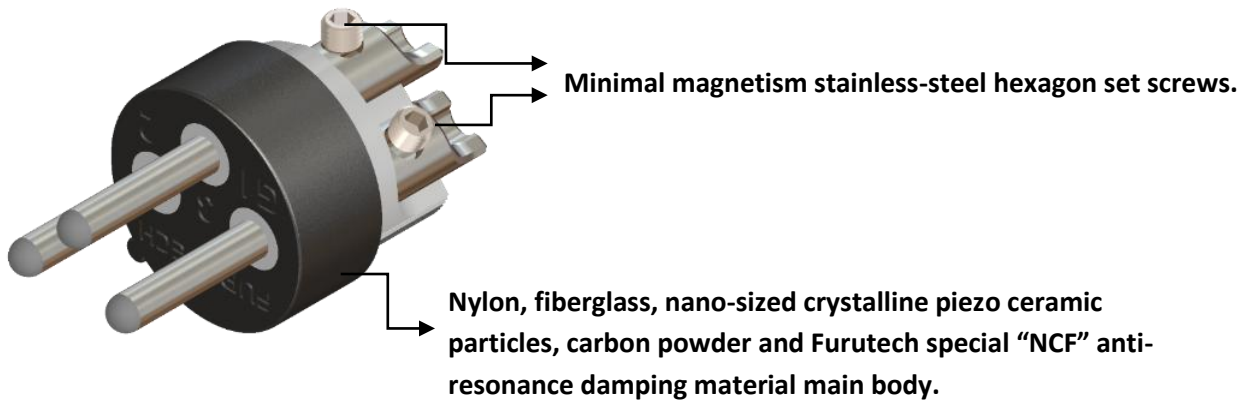
*Specially designed construction with double layer two kind "NCF" material formed main body for optimum heat and vibration resistance.*



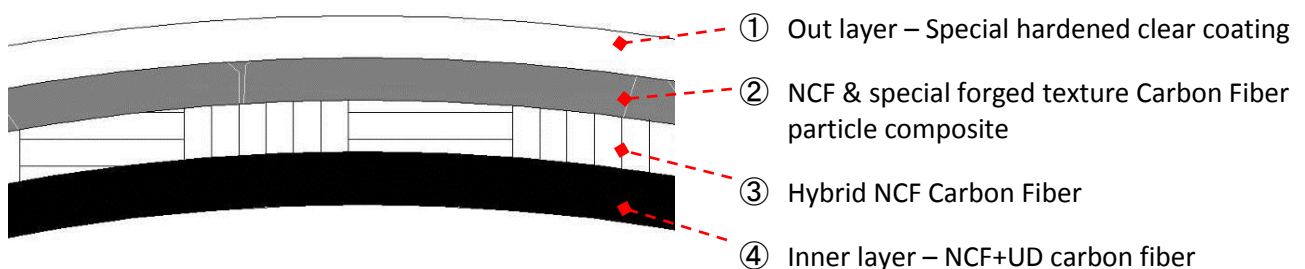


**2. NCF Clear Line-XLR (M) (CF-601M (R) NCF XLR-P)**

*Specially designed construction with double layer two kind "NCF" material formed main body for optimum heat and vibration resistance.*



**3. The NCF Clear Line housing body ring has been formed from special resonance damping Stainless Steel and Furutech's NCF material and the housing constructed of 4 layers of special hybrid NCF forged texture carbon fiber.**





**4. Semi-sealed air chamber - The internal air chamber is pressure sealed to for additional damping effects.**

**5. The NCF End Cover is formed from special heat resistant nylon and Furutech’s NCF material for improved effectiveness – ultimate resonance damping for improved tonal balance.**



NCF End Cover (multi-material hybrid structure): Anti-static and resonance suppressing qualities with molded channels to increase the surface area of the NCF material by 90% for improved effectiveness.



**6. The main body and shell of the product are fixed with special anti-shock stainless steel security screws customized. Factory adjusted to optimum torque value for performance.**

\*(The screws are fixed, please do not disassemble, and modify by yourself.)

**Note:**

- ※ The screws of this product are fixed. Please do not disassemble or modify by yourself.
- ※ We recommend aging for 24 hours or more.
- ※ The pattern of the shell varies depending on the product, but they are all the texture of carbon fiber, a composite damping material. It does not affect product performance.
- ※ Furutech uses non-magnetic stainless steel for some parts. However, stainless steel parts may exhibit weak magnetism due to stresses created during fabrication. It does not affect performance

Product name	Product Introduction	Jan Code
NCF Clear Line – XLR(F) NCF Clear Line – XLR(M)	Line Optimizer	XXXXXXXXXXXXXX

*All metal parts are treated with \*FURUTECH α (Alpha) Process (Super Cryogenic & Demagnetize Treatment.)*

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