

# FURUTECH

PURE TRANSMISSION



 NCF®



## NCF Clear Line AC Power Supply Optimizer

It takes just a moment to hear the difference that Furutech's NCF Clear Line can make to your audio or video system.

Why just a moment?

Furutech's Nano Crystal<sup>2</sup> Formula, also known as NCF, has resulted in a number of truly innovative and effective products over the past few years. NCF features a special crystalline material that has two distinct properties—it generates negative ions that eliminate static, and it converts thermal energy into far infrared.

When combined with nano-sized ceramic particles and carbon powder, these crystals become the ultimate electrical and mechanical damping material. Created by Furutech, NCF is found exclusively in Furutech products and nowhere else.

Now, Furutech has introduced perhaps the simplest way to implement NCF technology into your home—NCF Clear Line.

NCF Clear Line is an audio grade passive AC optimizer, small enough to hold in your hand, that instantly enhances the quality of your power supply. Simply plug the NCF Clear Line into any vacant receptacle on either a power distributor or wall outlet. For best effect, use the NCF Clear Line on the same AC line/supply as your system, preferably at a receptacle adjacent to your system.

It only takes a moment to hear the improvement in the sound. You won't have to switch back and forth repeatedly in order to "discover" an improvement. It's right *there*.

You'll immediately notice improvements in the depth and focus of the sound stage, harmonics and tonal balance with NCF. Low frequencies are cleaner, with a greater sense of definition made possible by a lowered noise floor.

Then unplug the NCF Clear Line from the power receptacle. You'll immediately miss those sonic improvements. You'll want them back.

In home theater applications, you will also hear these same distinct results. Just as importantly, you'll see the difference in your video quality. All you need to do is plug the NCF Clear Line into your home entertainment system and the improvements will be instantly noticeable.

Sharper. Clearer. Yet more natural and easy on the eyes.

It only takes a moment to take your listening or viewing experience to the next level with Furutech's NCF Clear Line. Find out for yourself.

- Improves resolution, focus and 3-dimensionality of performance
- Eliminates noise increasing signal to noise ratio boosting information and detail in sound reproduction
- Improves resolution, depth and dynamism of images and video
- Multi-material hybrid construction: Carbon fiber housing (shell) with superior resonance damping properties
- All conductor parts rhodium plated and treated with Furutech's Alpha Process

### **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 therefore power and signal transfer.

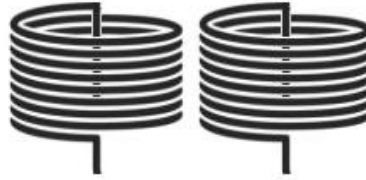
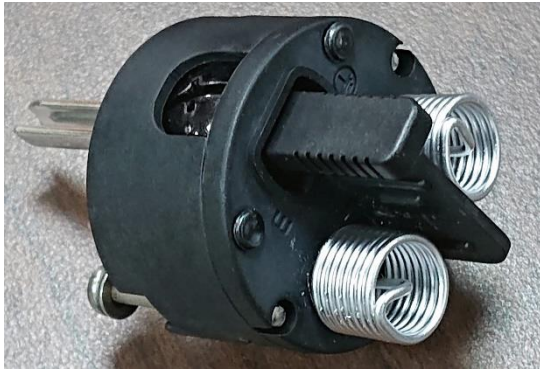
Step two in the Alpha Process exposes these same parts to the patented Ring Demagnetization treatment. Ordinary high-power magnets used for this purpose often increase magnetic effects; they leave some areas more magnetized than others. This patented process uses controlled attenuation to completely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

### **Technologies:**

1. The NCF Clear Line body is formed with nylon and glass fiber incorporating nano-sized ceramic particles and carbon powder for their additional "Piezo Effect" damping properties. As well as Furutech's NCF (Nano Crystal<sup>2</sup> Formula) which eliminates static, "interconverts" thermal, mechanical, and electrical energy and damps vibrations.
2. Furutech's NCF Clear Line utilizes enameled " $\alpha$ (Alpha)-OCC Air Coil" passive wire coils to improve power quality and system sound performance. Each  $\alpha$ (Alpha)-OCC Air Coil in the NCF Clear Line has been designed to complement the performance enhancing characteristics of Furutech's unique NCF (Nano Crystal Formula) anti-

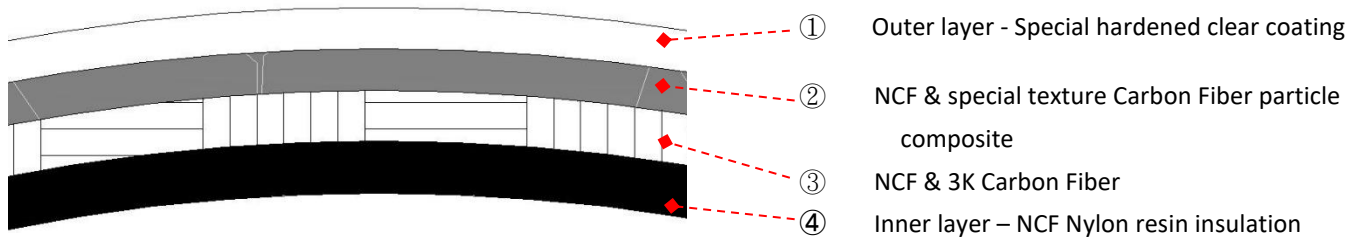
static and resonance damping material. The results, Furutech's NCF Clear Line will eliminate noise, remove static and improve the overall quality of your power, taking the performance of your system to the next level. (Passive: N & L poles are not connected and do not form a circuit).



3. The NCF Clear Line body and housing are secured with special T10 tamper-proof stainless-steel screws and washers. Factory tightened to the optimal torque value for best sound performance.



4. The NCF Clear Line housing lining ring has been formed from special resonance damping Nylon and Furutech's NCF material and the barrel housing constructed of 4 layers of Furutech's hybrid NCF carbon fiber



5. The internal air chamber is pressure sealed to for additional damping effects

6. The NCF End Cover is formed from special heat resistant nylon and Furutech 's NCF material with molded channels to increase the surface area of the NCF material by 76% for improved effectiveness – ultimate resonance damping for improved tonal balance.



## Features and Materials:



1. **NCF Body (multi-material hybrid structure):** NCF formulated nylon resin
  2. **Coils:**  $\alpha$  (Alpha) Pure-Copper Rhodium-plated Conductor electrodes and passive “Air Coils” constructed with  $\alpha$ (Alpha)-OCC enameled wire coated a silver color resonance damping material.
  3. **The special T10 tamper-proof stainless steel self-tapping screws and washers**
  4. **Housing:** 4-layer hybrid NCF carbon housing composed of an outer hard clear coat over a NCF textured carbon fiber particle composite layer with another layer of NCF and 3K carbon fiber layer beneath that. Inner surface is NCF Nylon insulation. The best of damping and insulation materials improve frequency extension and tonal balance.
  5. **The internal air chamber** is pressure sealed to for additional damping effects.
  6. **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 76% for improved effectiveness – ultimate resonance damping for improved tonal balance.
- Enhance the clarity of musical performance and stereoscopic sound field.
  - Eliminates noise increasing signal to noise ratio boosting information and detail in sound reproduction
  - Improve the depth of the picture and improve three-dimensionality and dynamism of video playback.
  - Multi-material hybrid construction: Carbon fiber housing (shell) with superior resonance damping properties.
  - All conductive parts are rhodium plated and have undergone the Alpha Process.

## Specifications

- Outward size: L 88.4 X W39.5 mm approx.
- Net Weight: 69 g approx.
- Suggested burn in time 24 hrs.

※The pattern for each NCF Clear Line housing (shell) is different. The unique pattern is due to the texture of the composite carbon fiber material used in its construction. The pattern has no impact on the performance of the product.

Product name	Product Introduction	Jan Code
<b>NCF Clear Line-US</b>	AC Power Optimizer	<b>4580370444049</b>

*All metallic parts are treated by \*FURUTECH  $\alpha$  (Alpha) Process (Super Cryogenic & Demagnetize Treatment .)*

FURUTECH CO., LTD. [service@furutech.com](mailto:service@furutech.com)

 **NCF**® is a registered trademark of Furutech Co., Ltd. Japan