

**The Furutech Floating Field Damper\***  
**Solving the Biggest Problem You Didn't Know You Had**

Noise and vibration are primary causes of signal transmission distortion, and controlling them is vital to achieving stable, minimal-loss AC power transfer. Most audiophiles and video enthusiasts assume plugging a power cord into a wall receptacle is the point at which electrical potentials or disturbances are generated; everyone has created a small spark plugging in a device that was On rather than Off. But research has shown that there are many elements in a connector capable of creating stray electrical potentials such as cable clamps, screws and other magnetic parts.

**Magnetic Floating Field Damping**

Current flowing through a cable and its connector creates magnetic (and electrostatic) fields around them, building and collapsing 60 times per second in 120VAC systems. This magnetic field induces current flow—electrical potential—in small parts like the screws holding the connector shell together which have to be metal for tight clamping. The current flow in these small parts actually creates “floating” magnetic fields around them, and they interfere with the cable/connector’s larger surrounding magnetic field resulting in noise and distortion.

The Furutech Floating Field Damper solves the biggest problem you never realized you had by star grounding the metal parts in which floating magnetic fields are induced by current flow. As represented in the images below, a precisely engineered, sprung metal bridge in the connector body ties the various metal parts together and shunts whatever electrical potentials generated to ground. This significantly lowers noise by reducing distortion for ultra-clean and stable power transfer.

AC connector with Furutech Floating Field Damper



Floating field damper ties the housing to ground, preventing radiated noise voltage from surrounding the connector

Conventional AC connector without Floating Field Damper



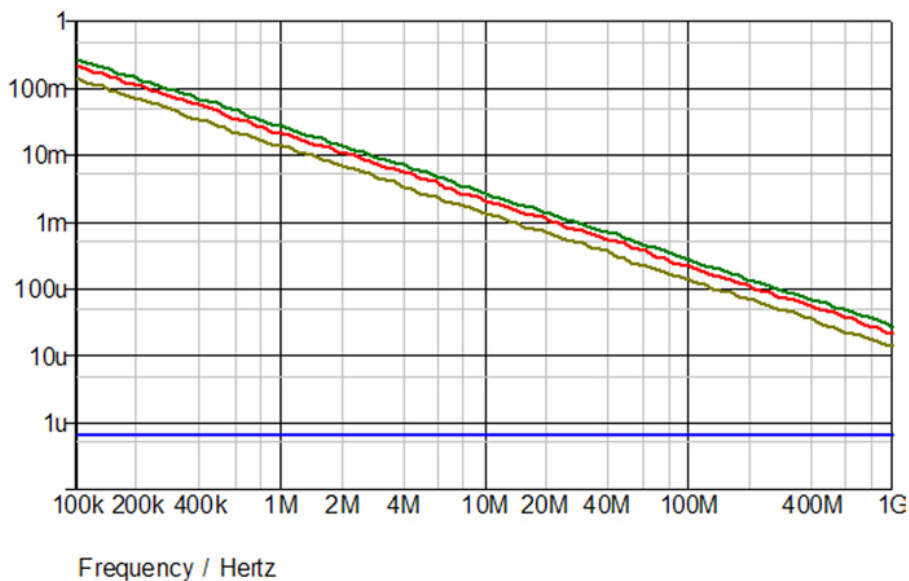
Noise voltage radiated from power source envelopes the body of a connector which is in a floating field state

### ***Innovations Award-Winning FI-50 Piezo Connector Series***

The FI-50 series connectors are crafted from nonmagnetic stainless steel covered with six-layers of piezo-conductive carbon fiber with all metal parts tied to ground with the Floating Field Damper so any noise generated within or around the connector is shunted to ground.

The graph below illustrates the Floating Field Damper curbing noise generated between 100kHz and 1GHz:

1. **Green:** Attenuation of radiated voltage/noise from a power supply line with Floating Field Damper
2. **Blue:** Attenuation of radiated voltage/noise surrounding the housing of the connector with Floating Field Damper



The data clearly illustrates that the Floating Field Damper stabilizes power supplied to sensitive audio components while greatly reducing distortion caused by radiated noise voltages resulting in increased low-level information and distortion free, dynamic and clear sound.

The Jumper System is available in Furutech NEMA, Power and IEC Connectors.

*\* We've renamed our patented Earth/Ground Jumper System to better describe the circuit's engineering and effects. US Patent No. 6,669,491.*