

# MIT® Oracle Z-Cord® Reference *FP* AC Filter Cord

## *The ultimate in networked AC power cords*

The Oracle Z-Cord Reference *FP* features the same proprietary high performance cable as the Oracle Z-Cord Reference. This unique winding topology combines the highest quality silver-clad conductors and the finest dielectrics and adds MIT's patented Filterpole technology. This technology, housed in the same billet aluminum enclosures as the Oracle interconnects, protects the passive parallel networks from sympathetic vibrations, resulting in an AC power cable that exhibits an extremely low noise floor and reduces dielectric distortions to well below the audible level.

The Oracle Z-Cord Reference *FP*'s unique patented parallel circuitry removes all frequencies other than 50-60Hz and improves the power factor so that your components receive 50-60 Hz 230V power (and nothing else) providing absolutely noise free power for noise free sound. The result is greater clarity, dynamics, and imaging at any volume level including extremely sensitive low volume situations.

### *It is the quality of the power that counts.*

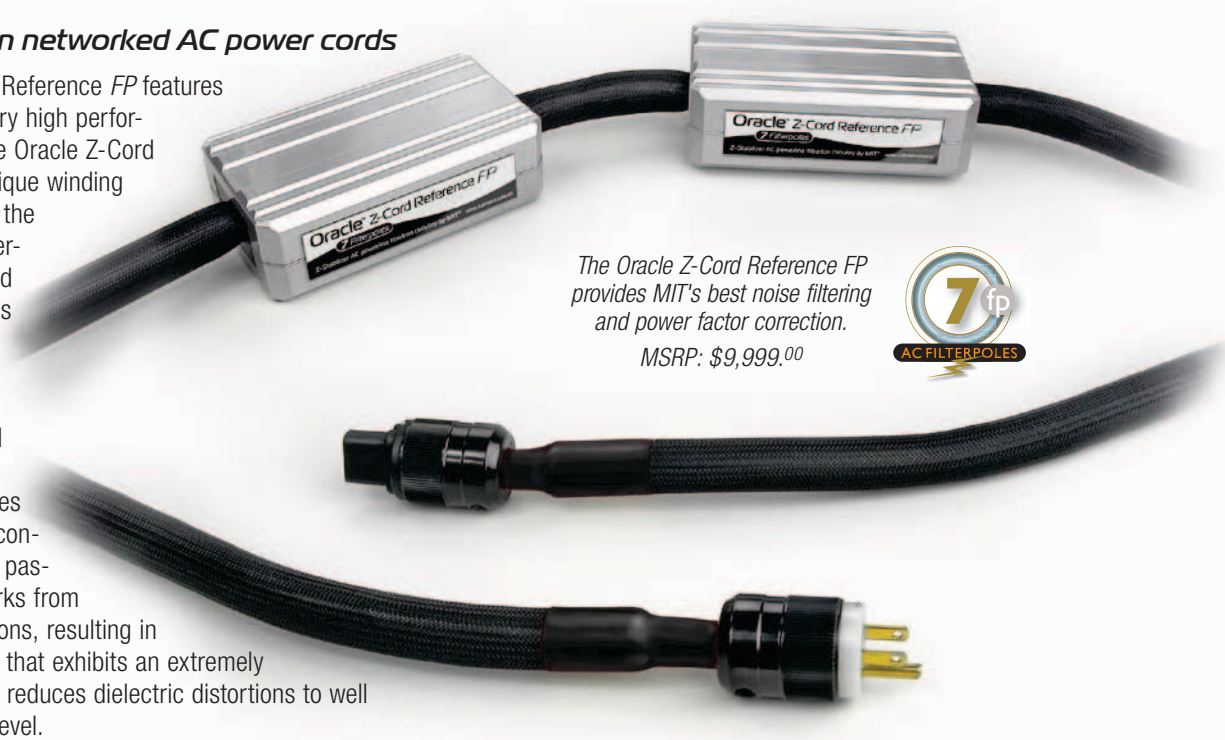
With power comes noise. The very power it takes to drive your audio (or home theater) system can have a damaging effect on audio and video fidelity by allowing noise pollution into your system.

Most audio and home theater equipment is designed to function at 240 volts at a frequency of 50 –60 Hertz. Usually, power lines feeding AV components not only carry usable frequencies (50-60Hz), but also carry frequencies above and below this operative range. It's those uninvited frequencies that inject distortions directly into the audio and video path. This results in distortions you can see and hear. The better the system, the more damaging AC distortions become.

Generally, most appliances plugged into your walls are not sensitive to these problems. When it comes to lights or the refrigerator, the

The Oracle Z-Cord Reference *FP* provides MIT's best noise filtering and power factor correction.

MSRP: \$9,999.00



quality of the power does not really make much of an operational difference. Because of that, normal household power is not stabilized, filtered or conditioned—certainly not for precision audio equipment.

### **Q: How does dirty power affect audio quality?**

**A: With audio components, power line problems will result in:**

- Compressed imaging and sound staging
- Increased background noise
- Unnatural tonality
- Grainy, gritty distortion
- Digital data loss and errors
- Reduced power output

### **Stops Energy Waste**

MIT's Z Stabilizer circuitry also provides "PFC" (Power Factor Correction), by controlling the phase angle of the inbound AC sine wave for maximum efficiency.

**With PFC you will:**

- use less energy for the same work
- prolongs the life span of most electronic components
- never limit current flow

**Features & Benefits:**

- Seven patented, parallel tuned filters operating over the widest frequency range, engineered to remove noise from any 50-60 Hz AC power line. Unlike the common series filter, the Oracle ACII will not limit dynamics, or reflect noise back at the source (amp, etc.)
- Elimination of common mode and differential mode noise for purity of tone
- Designed to fit standard electrical receptacles to work in any system
- Does not inject noise (like series filters do)
- I deal for all digital and all analog components.

**Q: What are MIT Filterpoles™?****A: Poles of Attenuation** (as referenced in The Impedance Domain)\*

A properly built AC filter will not only attenuate unwanted noise on the AC power line, but it will also optimize the power factor.

The best way to attenuate unwanted noise is to create a very low impedance (a zero of impedance across the load which acts as an attenuation pole to the noise) surrounding the frequency (or frequencies) of the undesirable noise. In the case of audio, that would be at any frequency other than the power line frequency. **This is best accomplished by placing a tuned circuit in parallel, around the load. MIT was awarded this patent in November 9, 1993: number 5,260,862.**

**Also important is the Power Factor** which is a (dimensionless) number between 0 and 1. When power factor is equal to 0, the energy flow is entirely reactive, and stored energy in the load returns to the source on each cycle. When the power factor is 1, all the energy supplied by the source is consumed by the load and nothing is reflected back to the source. **MIT was awarded a patent on this technology regarding audio in July 13, 1993: number 5,227,962.**

*\*for additional in-depth information, please refer to MIT Technical Note 101: "Transportable Power in Audio Cables: Energy Storage Elements and the Power Factor", available in PDF format on the MIT website reference library at [www.mitcables.com](http://www.mitcables.com).*

