



A modern assault on noise from Music Interface Technologies.

## New for 2018

Z Powerbar II—MIT introduces an all new "Audiophile Grade" energy distribution system with noise devouring filters plus dual switches to enable additional tuning of PFC (Power Factor Correction).

As changing digital formats emerge with higher and higher sampling rates, clocking frequencies and data correction frequencies a litany of new pollution is rendering older filtration techniques useless to the modern Audiophile. This high frequency noise bothered MIT engineers enough to thoughtfully address this increasingly destructive problem: Dirty Power caused by noise insertion at higher and higher frequencies.



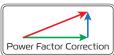
Based on proven parallel noise filtration circuits The Z Powerbar II adds another 12 "filter poles" to increase efficiency from 24 to 36 poles over the original Powerbar. As you would expect, these

additional parallel filters are strategically placed on bands that carry unwanted high frequency noise.

Power Factor can change over the period of the day. Also, your neighbors can inject noise into the power lines you share. Besides the additional filtration, the *Z Powerbar II* has two front mounted switches to adjust Power Factor to maximize efficiency.

When properly adjusted, the effect this device has on AC powering

up each AV component is instantly realized by any good Hi Fi system and easily seen on any HD display. By controlling a broader Power Factor Correction



spectrum of line noise you will experience "blacker" blacks, better saturation of tones and colors and a deepening sense of detail in the shadows. Timbre is natural and space between instruments is enhanced by the lack of this destructive noise. As compared to the Original *Z Powerbar*, the *Z Powerbar II* is key to enabling the retrieval



of spatial information needed to enhance the sense of "being there" and the ability to deliver "clean power" to allow every device connected to reach its full potential.

Isolation is the latest feature included in the *Z Powerbar II*. This is achieved by new Hospital grade ISO duplexes and discreet internal wiring to eliminate a "daisy chain" that serves to minimize or eliminate "cross talk". When audio devices create and insert their own noises, isolation is the answer.

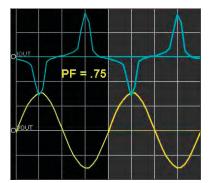
## Always Perfect Power!™





## Features and Benefits:

- Thirty-six parallel tuned filters operating over an Ultra Wide bandwidth, engineered to "attract and destroy" AC noise from incoming 110V, 50-60 Hz AC power sources. (Unlike series filters used by competitors, the *Z Powerbar II* will not limit current or dynamics!). You can plug power hungry amplifiers directly into the Powerbar II serving up to 1800 watts
- 1 Isolated Hospital Grade duplex (red): This pair of outlets are switched on at the back of the unit near the resettable fuse. Once in the "on" position, they remain "always hot" for devices with memory that must remain on when not in use.
- 5 (Orange) duplexes are switched on by the power switch on the front of the Z PB II to power up the individual components. Each duplex is Isolated from others and features Hospital Grade clamping power needed for a solid grip to the blades on large gauge power cords. Will



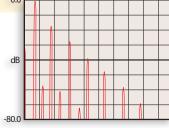
**Power Factor Correction:** Due to stored energy within the load and returned to the source, or due to a non-linear load that distorts the wave shape of the current drawn from the source, the apparent power will be greater than the real power.

• Power Factor correction: Dual PFC switches to tune incoming AC power for maximum efficiency.

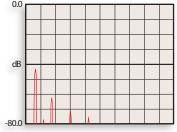
support more than 1.5 lbs at the plug.

- Surge and spike protection: for noise-free A/V performance and improved service life.
- 15 amp 115V or 10 amp 230V breakers with resettable switch.
- Excellent for silent AV power distribution near fluorescent lights and low voltage lighting.
- Includes UL approved power cord (USA).

  Japan units include PSE approved power cord and PSE approved duplex outlets.

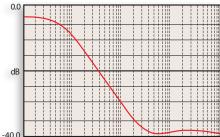


**Before Z Powerbar II:** Power spectral density of the harmonics produced by a well known isolation transformer.



**After Z Powerbar II:** Isolation Transformer of Figure above with Z Powerbar, which provides greatly lowered harmonic levels.

## **Distortion Reduction Curve**



Z Series distortion reduction.

"Understanding Power Factor" — To download or view a PDF version of this publication, simply paste https://www.energy.gov/sites/prod/files/2014/04/f15/mc60405.pdf into your webbrowser's search window.

