

# FURMAN



## IT - REFERENCE 16E i

DISCRETE SYMMETRICAL AC POWER CONDITIONER

### FEATURES

- Discrete Symmetrical Power with dual screen technology cancels hum-inducing noise from audio and video
- Five discrete power banks eliminate inter-component interference and noise
- Power Factor Technology provides surplus current for power-starved amplifiers
- Linear Filtering Technology for unequaled audio / video clarity
- Virtually maintenance-free AC surge suppression
- Detachable surge suppression module for telco and cable / satellite connectors

### DESCRIPTION

For over 33 years, Furman has pioneered the development of AC power products for the most demanding audio, video, and broadcast professionals. Though the need for pristine AC power is nothing new, the IT-Reference 16E i's technology and its unique implementation are revolutionary and without peer.

The extreme AC demands encountered in the professional audio/video arena have required technological developments far in excess of typical home theater/audiophile power products. In studios, live sound, and broadcast facilities, breakdown is unacceptable. Equipment failure or poor performance is costly. The same is true of today's home theater. Our solution based technology, extensive engineering expertise, and robust build quality have answered

the challenge of today's corrupted power lines, and led to the creation of our flagship power conditioner, the IT-Reference 16E i.

Today's AC lines are plagued with ever increasing noise. When AC noise couples into your system's critical components, it masks low level signals and cripples performance. This low level content is critical because it relays the crucial harmonics and ambience in audio, and depth and clarity in video. With the IT-Reference 16E i's exclusive Discrete Symmetrical Power, video screens, projectors, CD-DVD players, pre-amplifiers, and scalars are fed linearly-filtered ultra-low-noise symmetrical power. This dramatically reduces AC noise, ensuring peak operation of your critical components. For the first time, you will see and hear your theater or audio system as it should be – uncompromised.

## IT-Reference 16E i (continued from reverse)

The IT-Reference 16E i's Discrete Symmetrical Power features total isolation between the filtered-high current outlets, and the isolated symmetrical power AC outlet banks. This positively breaks noise-inducing ground loops, hum bars, and power supply backwash between critical interconnected equipment, all without compromising electrical safety. Furman's newly refined Dual-Screen Transformers yield the widest bandwidth of noise-reduction possible. This enables the IT-Reference 16E i to uncover unprecedented levels of video and audio detail, while insuring that plasmas, LCD screens, or video projectors are free of AC ground contamination from an audio processor or power amplifiers.

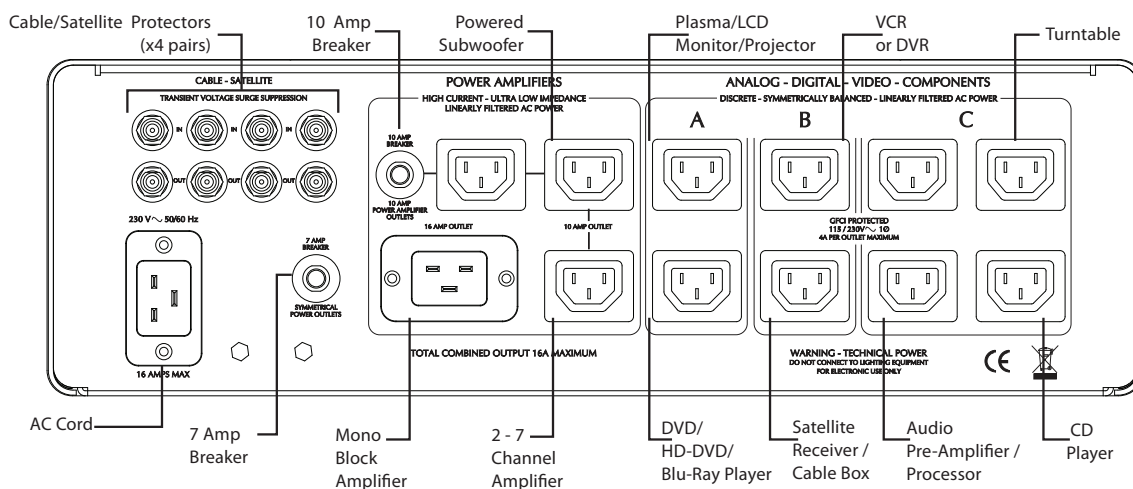
The IT-Reference 16E i also employs our unique Power Factor Technology circuit. For the first time, low-level analog, digital, and video components are not modulated or distorted via the power amplifier's extreme AC current demands. Further, the power amplifier sees a highly filtered, extremely low-impedance supply of AC power. The IT-Reference 16E i, in fact, has in excess of 9 Amps of continuous current reserve (over 80 amps peak charge) for the most extreme

peak power demands. This technology enables power amplifiers and powered subwoofers to work at peak efficiency and reach levels of performance previously unattainable.

No longer will your amplifier's performance be at the mercy of your home's incoming AC power or inferior AC protection/filtering devices. The net effect is as if your power amplifier doubled in power and improved immeasurably in quality.

When employing the IT-Reference 16E i you will immediately notice far clearer, stunningly focused sound and visual images from your system. Video presentation will be crisp and colors true with greater gray and black scale definition, as well as noticeably improved depth and clarity. Sonic transients will be startlingly fast with bass fundamentals that shake foundations with their weight and visceral impact. Mid and high frequencies will bloom with sweet, non-glaring ease while imaging improves dramatically, all the while remaining true to your system's inherent virtues.

## EXAMPLE AC CONNECTION



## IT-Reference 16E i SPECIFICATIONS

### AC Current Capacity

Input - 16 Amp capacity required

Output - 8 - 16 Amp RMS \* (maximum, all outlets combined - continuous)

\* (Due to the Power Factor Technology circuit, available RMS power varies with the reactance of the load (vector). However, this only affects the circuit breaker for continuous RMS current draw. Since power amplifiers will require high transient current demands, the IT-Reference 16E i will never succumb to current compression. Quite the opposite, in fact, it will buffer the power amplifier's power supply, while lowering the AC input impedance, allowing power amplifiers to work more efficiently.)

### Outlets

8 (symmetrical balanced outlets)

4 (Power Factor Technology outlets • 9 amps RMS reserve • reactive load • over 80 amps pk. charge, 3x 10A, 1x 16A)

### Transient Voltage Surge Suppression

230VAC Line (Series Multi-Stage Protection, non-sacrificial with zero ground contamination, 376V peak clamping @ 6000V 3000A input)

Telco, Cable / Satellite (Less than .1dB line loss)

### Shutdown Range

275 VAC  $\pm$  5 VAC

### Linear Noise Attenuation

#### Transverse (Differential) Mode

>20 dB, 1KHz. - 2 kHz.

>40 dB, 2KHz. - 100 kHz.

>80 dB, 100 kHz. - 1GHz.

Linear attenuation curve from 0.05 - 100 ohms line impedance

#### Common Mode

>95 dB, 10Hz. - 50 kHz.

>40 dB 50kHz. - 1MHz.

### Dimensions:

152mm H x 432mm W x 413mm D (standard 3RU without feet)

### Weight:

40 kg.

### Power Consumption:

8.5 Watts for display and control circuits independent of actual load