PowerConditioner line filter P16C SE

A component to meet the highest demands!

Product overview of the *mfe* Power Conditioner P16C SE

A component to meet the highest demands!

This turns a dirty, fluctuating line voltage into a clean, continuous stream.
Specially designed for high-end hi-fi systems, sophisticated home and professional theatres.

- 12 specially filtered sockets, including 4 time-shifted power sockets incl. inrush current limiter for power amplifiers, beamer, etc.
- DC-Isolator
- Overvoltage protection
- Active sine correction, active line filter
- Regulated output voltage
- Power consumption max. 16 amps
- Rated power max. 3500 VA
- Graphic representation of the mains input interference and the output voltage on an LCD display, can be switched off

No dynamic losses!

The higher precision of the spatial resolution and reproduction is clearly audible.

The bass range is more controlled.

The sound comparison is always verifiable and reproducible.
The result is immediately apparent after the first bars.

The function of the *mfe* - line filter

To achieve the best sound results of your high-end hi-fi system, optimum power supply is of great importance.

Power disturbances/interference voltages

Our power supply network, specified in Germany with 230 V (permissible tolerance: -15% - ... +10% / 50 Hz +/- 1%), is a very good carrier for network interferences of all kinds, since all loads have the sockets connected to each other. Consequently (as a result of the ever-present network impedance), the mains voltage is influenced by each load according to its current consumption – each electrical device not only draws power from the power grid, many also emit interference voltage to the grid, which spreads for kilometres. If these external interference voltages reach your high-end hi-fi system unfiltered, they will exhibit different effects. Also, the interior fluctuation voltages add up, which are created by the associated hi-fi components as the devices may influence each other substantially. This may include any of the following disturbances:

- Undervoltage due to high load
- Voltage dips due to switch-on processes in case of sudden short-term power consumption
- Flicker interferences, recognizable by brightness fluctuations of lamps
- Overvoltage due to switch-off processes
- Voltage peaks (transients), e.g. caused by lightning strikes
- Periodic harmonics of 50 Hz occur, for example, due to the non-sinusoidal current drain of power supplies with rectifier and charging electrolytic capacitor (traditional design) or phase angle control (e.g. dimmer)
- High frequency, the power grid is a good antenna for electromagnetic waves, which can reach the inside of devices as interference signals via the socket and can easily cause malfunctions.

Sound influence/sound interference

If interference voltages reach your high-end hi-fi system unfiltered, they will exhibit different effects. Generally, obfuscation of the mid-high range occurs, combined with a decrease in the spatial resolution and playback quality, but also clicking and crackling noises are possible. You may notice that your system sometimes sounds better or worse. But you can only hear in a direct comparison what potential is really lost by unclean power.

Troubleshooting/function

In order to avoid loss of sound, the use of a line filter/power conditioner, which is designed for the special field of application, is suitable. Power supply filters from ***mfe*** provide connecting conditions which ensure that fluctuation voltages in the power supply are blocked and that devices are decoupled over the whole audible range and beyond.

Should you have any additional questions on the subject of power supply/line filters, please do not hesitate to contact us.

Features of the *mfe* Power Conditioner P16C SE

The ***mfe*** Power Conditioner P16C SE has a total of 12 connection options for various high-end hi-fi components:

- 4 unregulated, filtered sockets (power sockets) allow the connection of large power amplifiers. They are switched on one after the other and are equipped with an inrush current limiter. The process is indicated by four LEDs.
- 4 regulated, filtered sockets serve appliances with medium power consumption. They are decoupled from the power sockets to avoid mutual device interference.
- 4 regulated, filtered outlets are designed for digital devices. They are also decoupled from the power sockets.
- All sockets are high-frequency decoupled, which is necessary for maximum interference suppression and avoidance of mutual interference, especially with digital devices, even among each other.

If the ***mfe*** Power Conditioner P16C SE is switched on, first proper earthing is tested. Then the phase position/plug position is checked. The device can only be switched on with correct phase position and earthing (also indicated by a phase indicator light) and, after a few seconds, all but the 4 power sockets are switched on. The latter are then switched on with a time delay. The process is indicated by four LEDs.

The function of the ***mfe*** Power Conditioner P16C SE can be traced via an LCD display. The grid interference voltages and the output voltage are graphically alternately displayed. This display can also be switched off.

Hearing comparison

With a hearing comparison, you will be able to determine that the above mentioned fluctuations in power supply are rectified. The higher precision of the spatial resolution and reproduction is clearly audible. The bass range is more controlled. Even with a fault-free grid (practically does not occur) the sound gain is accordingly pronounced due to the decoupling effect of ***mfe*** Power Conditioner

The sound comparison is always comprehensible and reproducible.
The result is immediately apparent after the first bars.

Want to know more?
Simply give us a call!
Tel.: +49 (0) 2432 80726

Equipment features and technical specifications

Casing:	Metal casing, black
Dimensions (WxHxD):	483 x 152 x 390 mm
Front panel:	10 mm thick, silver grey, black, red or champaign-gold anodi zed, central on/off switch, LED displays for operating status, LCD display
Weight: ~ 18 Kg	
12 output sockets:	• 4 Schuko sockets for output stages, sequentially switched, with inrush current limiter, max. 16 A • Schuko sockets for medium loads, max. 6 A • 4 Schuko sockets for digital loads, max. 6 A
DC isolator:	eliminates DC components, noise suppression
Lightning protection:	integrated surge arrester
LCD display:	graphical representation of input interferences and output voltage, can be switched off
Rated power:	16 A / 3500 VA / 230 V ~
Input voltage range:	230V ~ +/- 10 %
Control range:	230V ~ 215 – 245V ~
Output voltage, regulated:	230 V ~ +/– 0.5% (adjustment)
External fuses:	1 x 16 AT / 2 x 6.3 AT
Power connector:	PowerCon built-in connector (Neutrik)
Power cable:	3 x 3 mm² mfe special power cable 2.50 m long, with Schuko plug and PowerCon coupling
Remote control:	On/Off, also manually switchable

Warranty

The warranty period for the device is 2 years

Technical changes and errors reserved!

Michael Franken Electronic - Friedenstraße 4 - 41812 Erkelenz - Tel.: +49 (0) 24 32-8 07 26 - mfe.technology - info@mfe.technology