

More important than you think!

Clean power for the studio and on the road

Power sockets? Boring! Yes, but power conditioners are a bit like cables: an inconspicuous commodity that has a big influence on whether the studio is buzzing or not. Except that these tools can do much more. When audio artifacts occur, synths go haywire, or when the power just isn't enough, there's a good chance they'll provide a solution. But how do you know if you need such a power conditioner? Here we have collected the most typical problem scenarios and the solutions for them for you ... by Marco Scherer

» I live in a house with several people, which causes peaks in the power grid. «

» The power lines in my apartment are very old, which causes voltage fluctuations. «



Fluctuating LEDs, artifacts in the sound or synths that switch off and on again... if they don't even break. Peaks in the power grid can have nasty consequences. With an energy absorption capacity of 540 to 2775 joules, the PG series from Black Lion offers reliable protection against overvoltage.

» Operating many items in the studio generates loud noise. «



Using premium capacitors from Panasonic and Wima, the PG-1 and PG-2's PG-99 filter technology provides filtering that averages 99.7% removal of noise, as opposed to the typical 85% found in other power supplies in the same price range.

» Monitor speakers crackle when I turn them on. «

» If there's a lot of equipment with a high current load, there are fluctuations when turning on. «



The PG-1 and PG-2 have a series of 12 switched, filtered and surge protected outputs on the rear panel - grouped into four groups (Digital Audio, Analog Audio and High Current). The analog audio and high current outputs are activated with a time delay so that your speakers and power amplifiers are always the last to be turned on and the first to be turned off to prevent „power-on crackle“.

» My speakers crackle intermittently. «



Hard Facts: Power Conditioners from Black Lion Audio



PG-P TYPE F: Portable 6 outlet strip with power filtering

- ▲ Six filtered and overvoltage protected outputs
- ▲ Voltage energy classification: 540 joules
- ▲ EU Schuko Type F combination sockets
- ▲ Status LEDs for grounding, overvoltage protection and filtering
- ▲ Solid housing
- ▲ 3m long power cord
- ▲ Dimensions (L x W x H): 245 x 115 x 44 mm



PG-1 Type F MKII: 19" Power Conditioner with current filtering and 8 sockets

- ▲ Multi-Stage Black Lion Audio filtering
- ▲ Panasonic & Wima capacitors
- ▲ Sequenced on and off modes
- ▲ Voltage energy classification: 2775 joules
- ▲ EU Schuko Type F combination sockets
- ▲ Eight individual outputs
- ▲ Voltage: 230 VAC - 10A max
- ▲ Audible warning signals



PG-2 TYPE F: Power Conditioner with 14 sockets and USB charging port

- ▲ 12 time-delayed switched sockets
- ▲ 2 unswitched sockets on the front side
- ▲ 99.7% Average Noise Reduction
- ▲ Optimized outputs for digital audio, analog audio and active speakers/power amplifiers
- ▲ Energy absorption capacity of 2775 joules
- ▲ XLR lamp connectors for lighting
- ▲ Display of the current voltage in real time
- ▲ Status LEDs and audible warning tone

»» **Mixing different methods of power generation can result in unclean power, such as when grid power is mixed with solar power. «**

»» **Other kitchen and electrical appliances or lamps are also connected in my circuit. «**

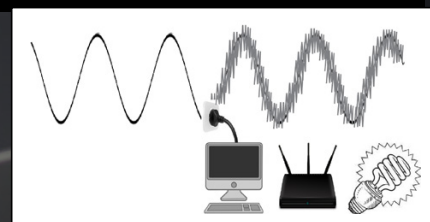


Like an oscillator, clean electricity is based on a pure sine waveform. When generation is mixed with other forms of power generation, less smooth sine waveforms are created and the current becomes „unclean.“ But even when the same circuit is used for audio, lighting, microwaves and other electrical devices, the current waveform is negatively affected. In particular, dimmers of lamps like to strike completely across here. This is where the power conditioners help to „smooth out“ the waveform.

»» **If several plug connections are connected in series, voltage loss may occur. The same applies to longer lines (in the wall and with power strips). «**



Power behaves analogously to WLAN and WiFi: The further away from the source and the more devices are connected, the weaker the signal becomes. The power conditioners help here by providing stable voltage.



Source: www.emfequip.com/dirty-electricity-filters/