

PowerStation

The PowerStation mains block uses Active Noise Cancellation to deliver a whole-system clean-power solution for high-performance audio/AV systems.



PowerStation

The introduction

Every audio system can be tainted by poor mains quality – a problem that affects many of us, especially those living in towns and cities. The quality of our mains power is further eroded by the abundance of cheap switch-mode power supplies in typical household appliances and the sea of RFI/EMI in which we are constantly bathed. The signals that move loudspeaker drive units are electrical; if the ‘unrefined fuel’ from which these signals are formed – the power we feed our systems – is corrupted, the negative impact on sound quality is inevitable.

At iFi we manufacture a number of highly effective products that reduce ‘noise’ (distortion) in incoming electrical power – both directly from the mains or via USB ports – but the PowerStation is the first to offer our proprietary Active Noise Cancellation in a whole-system, six/eight outlet mains solution.

The retail cost of the PowerStation is US\$499 (ex tax) or €549/£499 (inc. VAT.)



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Power to the people

We have created 4 versions of the Power Station to cater for people worldwide.



UK – 6 sockets



EU – 6 sockets



AU - 6 sockets



US - 8 sockets

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The benefits

- The iFi PowerStation **ACTIVELY** cancels all noise. This means it is able to cancel far more noise across the whole frequency range than a passive product, even across the lower frequencies.
- Additional passive filters have been added on each outlet to eradicate noise from the very highest frequencies.
- Each outlet is independently isolated in its own chamber to prevent differential mode cross-contamination, with the addition of strategically placed EVA (Ethylene Vinyl Acetate) to damp vibrations.
- The PowerStation indicates correct polarity so you can avoid damaging polarity issues.
- It also shows whether your system is earthed. The PowerStation has an earth/ground socket so you can add a ground cable to rid yourself of buzz/hum caused by no earth.
- The PowerStation will not cause a ground loop should you insert an ground cable into the earth/ground socket even when your system is already earthed.
- The in-built Over-voltage Surge Protection protects your system from shorts, spikes and surges in the power supply and potential equipment damage.
- You can use your existing AC iPurifiers with the PowerStation. Separate your digital and analogue devices to ensure even less noise contamination.*

* See diagram on page 4



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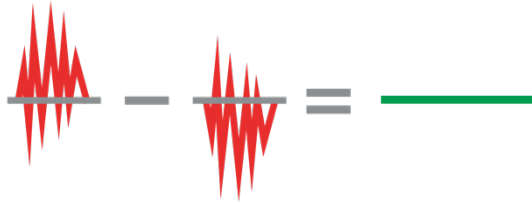
The power of plenty

Just plug the PowerStation into your wall socket and position the AC iPurifiers as in the diagram below. The second AC iPurifier is not compulsory but will have sound busting benefits.



The technologies

Active Noise Cancellation II[®]



The PowerStation's core performance-enhancing technology is Active Noise Cancellation II – the latest version of iFi's proprietary noise-busting tech. Most power 'conditioning' products engage passive noise reduction through a selection of filters and regulators. Whilst this can be effective, it has inherent disadvantages compared to iFi's active system, which uses inverse noise current to cancel out the noise in the mains signal. The way this works is not unlike the technology in noise-cancelling headphones.

Noise in the mains supply occurs at different frequencies, depending on the cause. Passive noise reduction systems are effective at the top end of the frequency spectrum but tend to be less so at lower frequencies. In addition, passive systems need large capacitors to be truly effective, which make the best such products bulky and expensive.

iFi's Active Noise Cancellation II is effective in reducing noise consistently across the entire frequency spectrum, by approximately -40dB. This is coupled to additional passive filtering on each outlet to eradicate noise at the very highest frequencies – typically caused by wireless transmission systems. The result is a mains bar that delivers highly effective reduction of both differential mode noise (caused by conventional switch-mode power supplies, for example) and common mode noise (including interference caused by Wi-Fi and Bluetooth).

The technologies cont.



The PowerStation's smart diagnostics system helps to avoid potential issues by indicating both correct polarity and whether the system has a ground/earth in place. The lack of an effective earth can cause an audible buzz or hum through the speakers, resulting from amplified low-level mains noise; this can be rectified by attaching an optional ground cable into Power Station's earth socket. iFi calls this circuit Intelligent Ground because it will not create a ground loop (a common cause of buzz or hum) even if the system is already earthed.

The PowerStation not only enhances the performance of every connected audio/AV component, it also guards the connected equipment from spikes and surges in the mains supply. Instantaneous and repeatable protection ensures that damage will not occur as a result of power fluctuations, providing valuable peace of mind. If the protection circuit is triggered, the PowerStation will only reboot once it is absolutely safe to do so.

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The design

The PowerStation's case is solidly constructed from dark anodised aluminium, as befits a high-quality audio/AV component. Inside, each of the six/eight mains outlets is independently isolated in its own chamber to prevent differential mode cross-contamination, with the addition of strategically placed EVA (Ethylene Vinyl Acetate) to damp vibrations.

PurCopper – a form of 99.9999 per cent pure OFHC (Oxygen-Free High-Conductivity) continuous-cast copper – is used extensively for its superior conductivity. This includes heavy-gauge internal wiring with multi-layered polymer insulation, solid PurCopper busbars and the conductive elements of the AC outlets themselves. It all adds up to a level of functionality and performance that users will not obtain from other whole-system clean-power solutions without spending considerably more.

Sonic improvements delivered by the PowerStation include greater clarity and definition, plus enhanced dynamic and spatial qualities, avoiding the apparent softening of leading edges, timing and dynamics that can occur with lesser mains filtering products.



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Potential Q & As

How long is the power cable for the PowerStation?

The IEC cable included with the PowerStation is 1.5m long. It's exact specs are 3 x 18AWG, and 125V/250V.

Can I use this for my entire AV system – a wide screen TV, AV receiver, 2 x power amplifiers and a Blu ray player, for example?

The unit was designed with this in mind.. The PowerStation will provide them all with clean mains power and get rid of interference as well as protect them perfectly. Please note that the power available would be limited to what is delivered from your wall plug.

Can I use this with both digital and analogue devices?

Yes, you can. The ideal situation is to plug in all digital devices on one side and analogue devices on the other and separate them with an AC iPurifier. This will also act as a noise shield. Noise is reduced, isolated and confined to the respective left/right sections of the AC iPurifier.

Does this need to be plugged directly into a wall outlet, or can it be plugged into another power extension or surge protector?

You can do this but we wouldn't recommend this if you are using it to enhance audio as the PowerStation will not perform to the max.

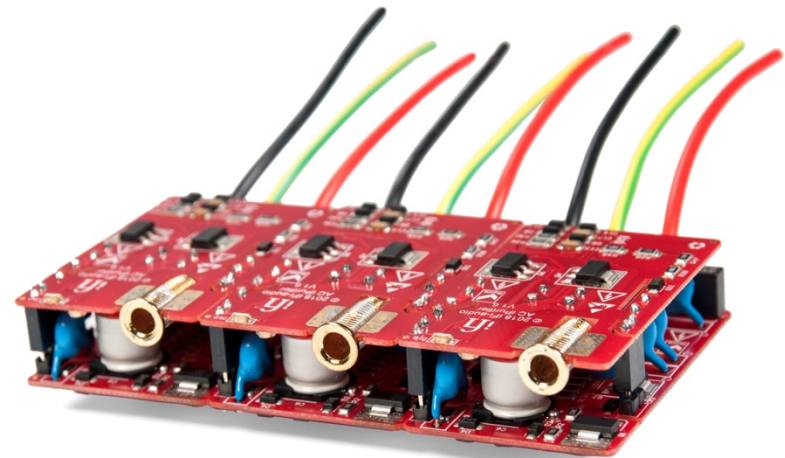
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Features

- Active Noise Cancellation² technology
- Solid PurCopper™ Bus-Bars for power transfer
- Individual noise isolation chambers - for each outlet
- High performance PurCopper™ outlets
- Heavy OFHC Continuous Cast Copper internal wiring
- Polarity and earth diagnostic system
- Advanced surge & transient protection system
- Dedicated chassis grounding system
- 2500W-10A Max 230V~

Specifications

Noise reduction:	>40dB (>100x)
Surge Protection:	max. 30,000A @ 1,000V/10uS
Operating Voltage:	90V - 265V
Dimensions:	478(l) x 96(w) x 76(h) mm
Weight:	1.98kg (4.37lbs)



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About us

iFi was born in 2012 with one goal in mind: to produce 'ultra-fidelity' audio products that push the sonic envelope - whilst still priced within the mainstream.

iFi audio is under our parent company, AMR, Abbingdon Music Research, which designs and produces top-end luxurious audio products. AMR saw in 2010 that customer demand for wireless and portable headphones was expanding as the whole audio dynamic was changing. Thus, iFi was launched.

iFi offers small but prodigious personal audio products thanks to the superior knowledge of AMR's technology. Today, we are proud of our British (and international) roots. We continue to design and manufacture over 35 different products. We are headquartered in Southport, UK with distribution including retailers such as B&H and etailz with production overseas.

We source parts from around the world from manufacturers including AMOS (UK), GE Valves (USA), WIMA (Germany) and TDK (Japan).

High-resolution photos & official logos: <https://media.ifi-audio.com/portfolio/power-station/>

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