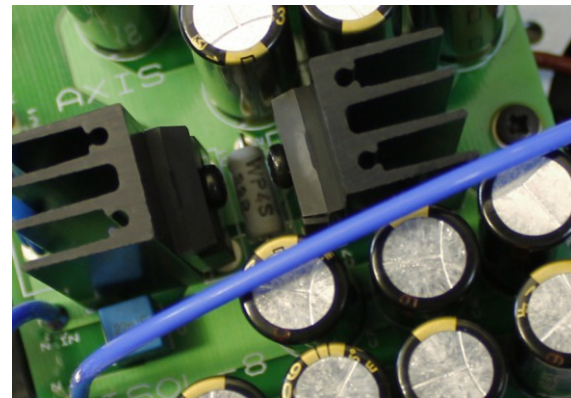


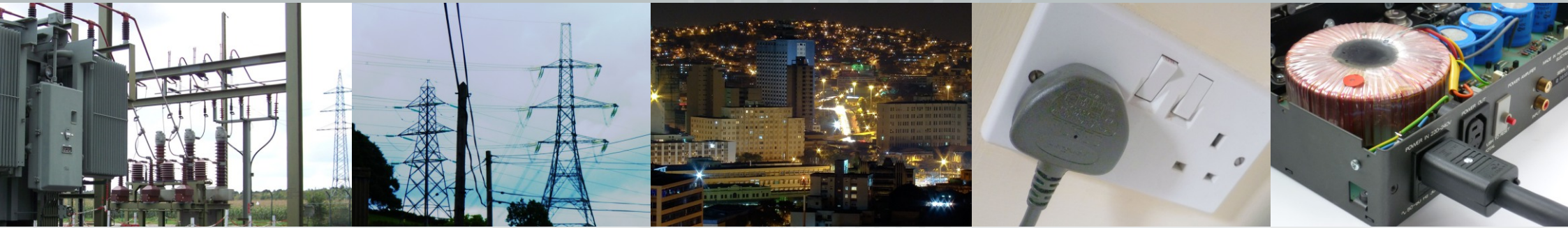
ISOL - 8

Isolate, *ī SŌ-lāt*, v.t. to render free from external influence

POWERLINE



Power: The Primary system component



Power is the primary component, it is the foundation on which your system is built. The quality of the mains supply is the first important issue. Mains borne noise from connected appliances, DC components, harmonic distortion and RFI are all introduced to the grid by other users, ever present at your wall outlet. How this noise affects your equipment is complex and down to many factors and the mains input of your equipment is not where the problem ends. The second issue is the quality of the power supplies within your system's components. These are inevitably not perfect and have a major influence on how your system performs in the real world.

Let's look more closely at the linear and switching power supplies we find in any system component. We see transformers that are able to pass energy in either "direction" over a broad range of frequencies dependent on their design and manufacture. Diode rectifiers create noise as current is pulled hard in packets from the supply to charge the main reservoir capacitors. A typical power supply actually generates noise which must be suppressed. There is also local noise generated by the working circuits themselves. Any attempt to filter all this noise by the internal power supplies will be only partially successful.

Why? Because real world does not even closely approach theoretical ideals. The electronic components used in manufacture to try and deal with these problems are not perfect. For example any capacitor has load and temperature related effects, equivalent series resistance, inductance, and thus self resonance too; all of which conspire to reduce their effectiveness and cause interaction with other circuit elements in unpredictable ways, especially at radio frequencies. Subject even the best equipment to scrutiny and inevitably you will find it has been built to a price. It will have a power supply that has partial transparency to external electrical noise, elements that actually make noise, and finally active circuits that are vulnerable to noise to some degree.

This is where ISOL-8's expertise provides substantial opportunities to release performance through mains conditioning. Performance that has been lost to real world compromises in the design and manufacture of your system; providing a firm foundation of clean power.

Quality, Reliability, Performance

Every system needs a quality power supply to give of its best. PowerLine is a family of compact Power Distribution Units (PDU) and power conditioners that are designed to lift system performance, harnessing ISOL-8's power expertise at an affordable price. In combination with our range of IsoLink shielded mains cables, PowerLine offers a flexible but powerful solutions tailored for those who put performance and value first.

Each PowerLine has a different specification to solve your specific power requirements.

They are all designed and built in the UK with quality components and materials to ISOL-8's exacting high standards.

A 5 year guarantee* (UK only) comes as standard.



Technology

Our comprehensive array of technologies gives you the advantage in the battle against compromised mains power. Each PowerLine has a specific feature set to give it the edge in its intended application.



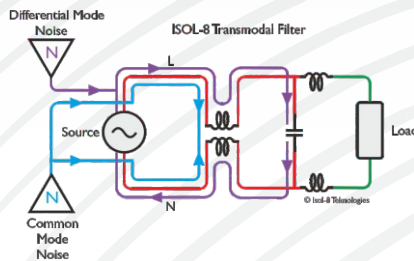
Dedicated Filter Design:

There is no truly effective "one size fits all" solution. Each DAC, power amplifier or LCD TV, has a different power usage characteristic and therefore a specific set of power requirements.

This is why each of our products tailors its filter complement to its intended application, maximising performance.

Transmodal Filtering (PowerLine Ultra and 1080 only)

All mains filters are not created equal. ISOL-8 Transmodal filters are designed to combat all major types of transmitted electrical noise, both differential and common mode. Asymmetrically present in Live and Neutral conductors, differential mode noise is costly to effectively attenuate and is often simply ignored by many other mains conditioners.



For further details see the technical sections of our web site or click on the links on the headings.

Axis DC Blocking (PowerLine Axis only)

Any mains waveform that is not symmetrical in energy content will contain a DC voltage component. The AC transformers fitted to your equipment's power supply are compromised by DC, partially saturating their magnetic circuit.

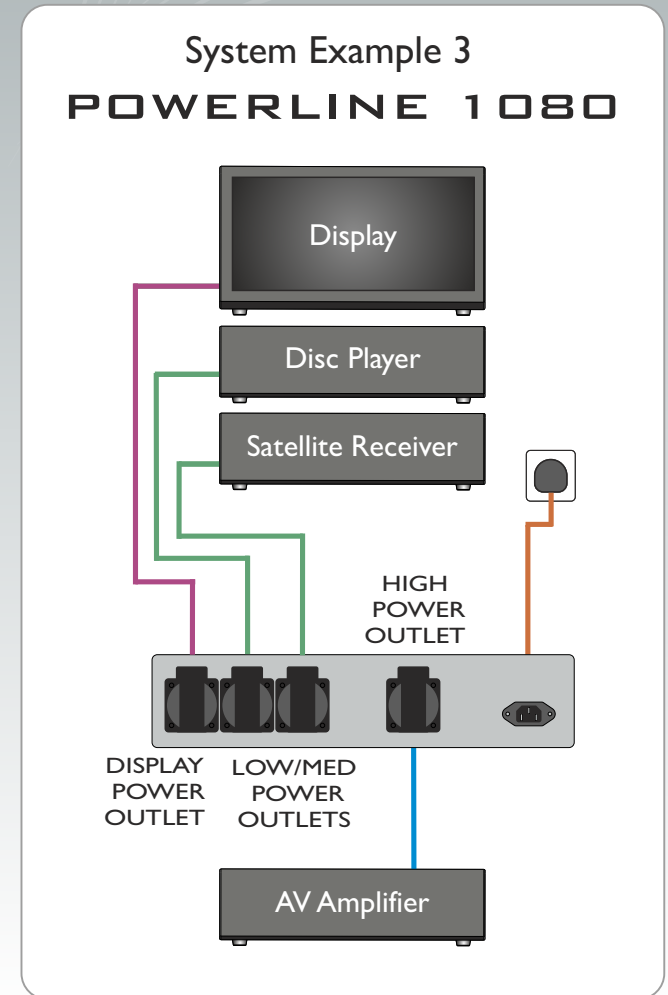
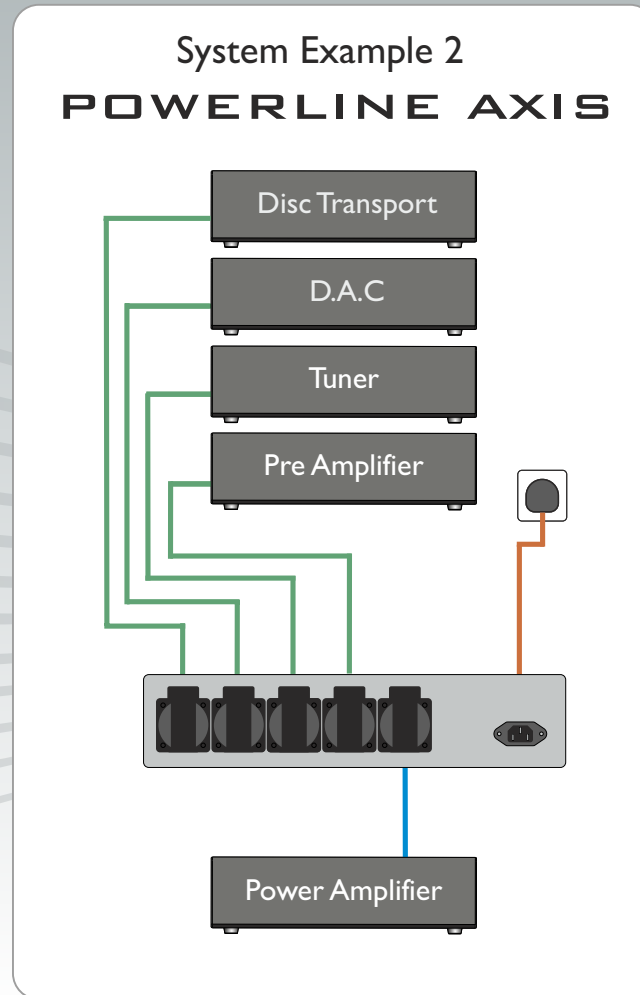
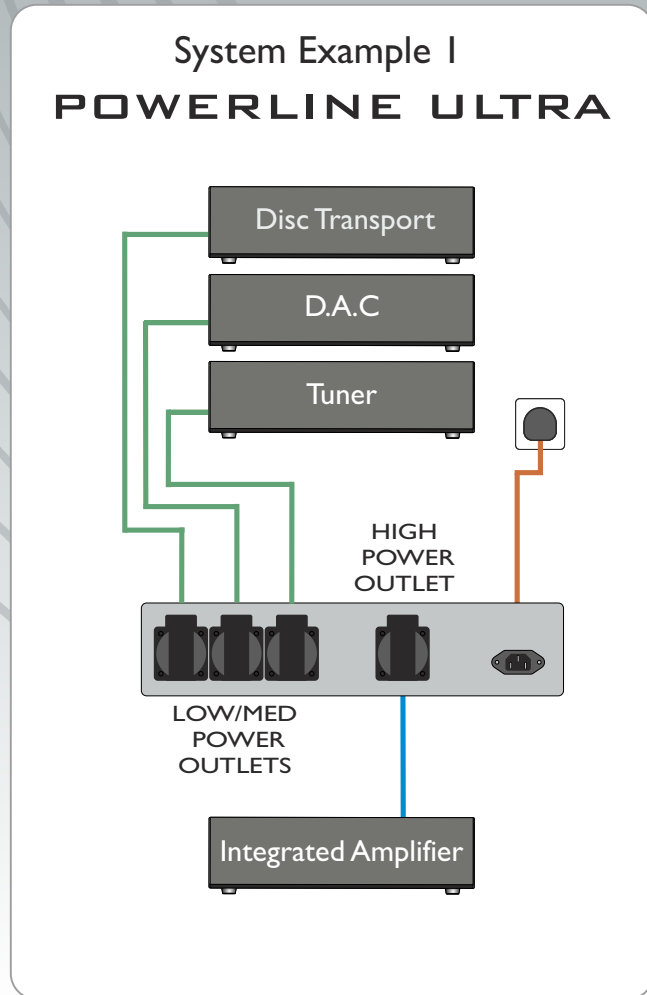
The ISOL-8 Axis circuit eliminates this common mains problem, suppressing acoustic hum and liberating system performance.

Spike and Surge Protection (PowerLine Axis, Ultra and 1080 only)

The mains can exhibit short term voltage spikes and surges. These events can cause damage to unprotected components. ISOL-8 protects your valuable investment with an energy absorbing network, clamping dangerously high voltage peaks so you can enjoy peace of mind.

Flexibility

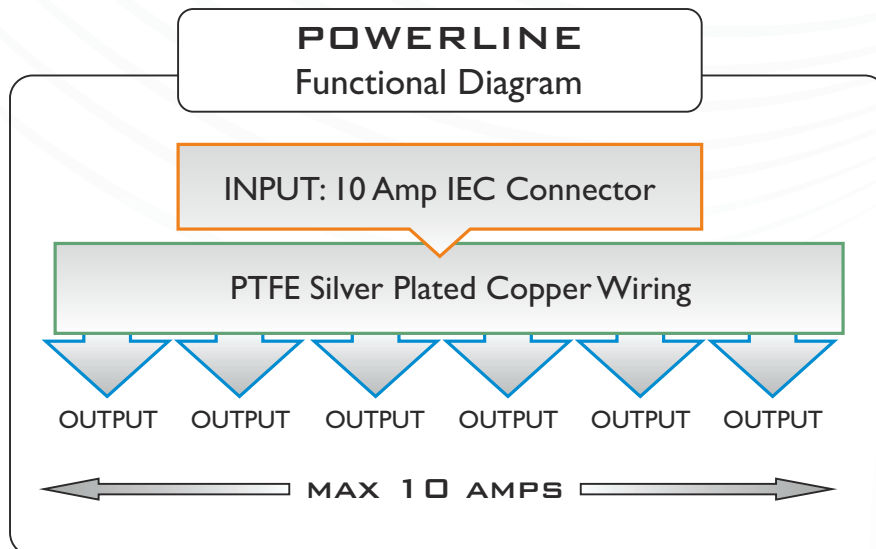
The PowerLine family has an effective solution to supply, protect and enhance your HiFi or AV system.



PowerLine

The PowerLine family all share the same core design features. An anodised 6mm thick CNC machined aluminum top plate forms an ideal mechanical foundation: non magnetic and non resonant. Input is by IEC connector. Each high quality power outlet has a hinged cover to IP54, protecting unused outlets from dirt, dust and little fingers. Wiring is carefully selected silver plated copper with PTFE insulation throughout, providing excellent power transmission properties.

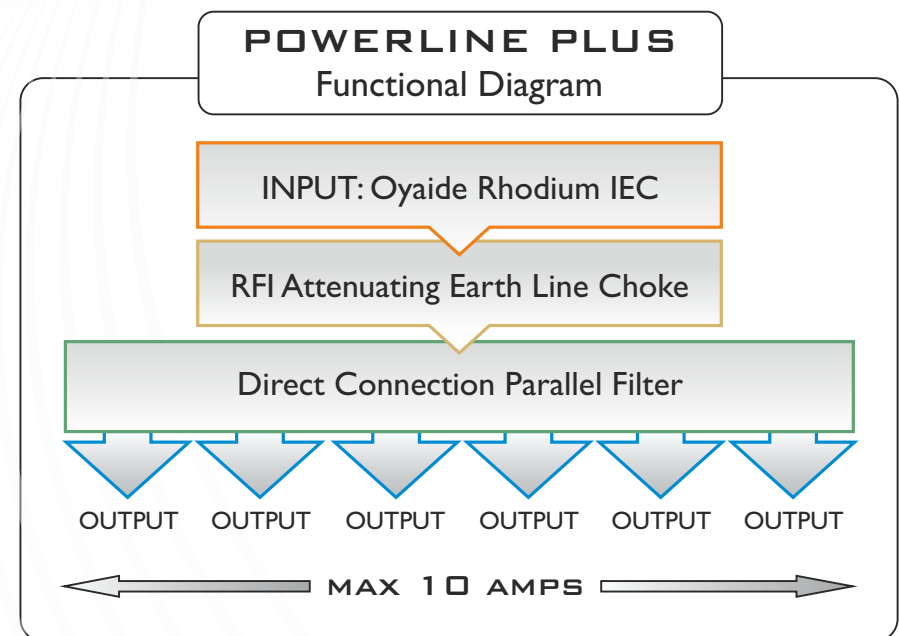
For applications that don't require conditioning the PowerLine will reliably supply your system for years to come.



PowerLine Plus

PowerLine Plus carries a number of features to lift performance still further. Mains earth like all conductors, has a finite impedance at radio frequencies and does behave as an antenna, perfect for capturing RF energy. The PowerLine Plus has an earth line choke custom made with a special high permeability core. This gives massive attenuation of any RF noise in the system earth bus and signal ground.

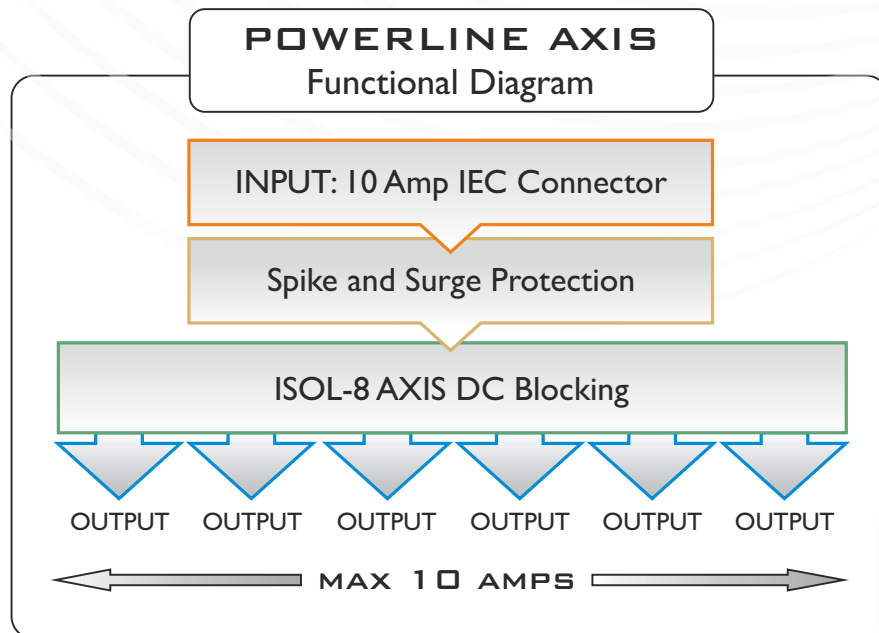
The input connector is a rhodium plated IEC by Oyaide. Finally, a single pole shunt RFI filter is fitted. This allows direct connection of the live and neutral conductors to the load, providing effective noise attenuation without any impact on peak current delivery.



PowerLine Axis

The PowerLine Axis provides an innovative cure to the problem of DC on the mains supply. In theory the mains waveform should be pure AC: a perfect, symmetrical sine wave. In practice the waveform can arrive at the end user clipped, distorted and asymmetrical with a significant DC voltage component. The AC transformers commonly found in equipment power supplies cannot, by nature, tolerate significant DC without being compromised.

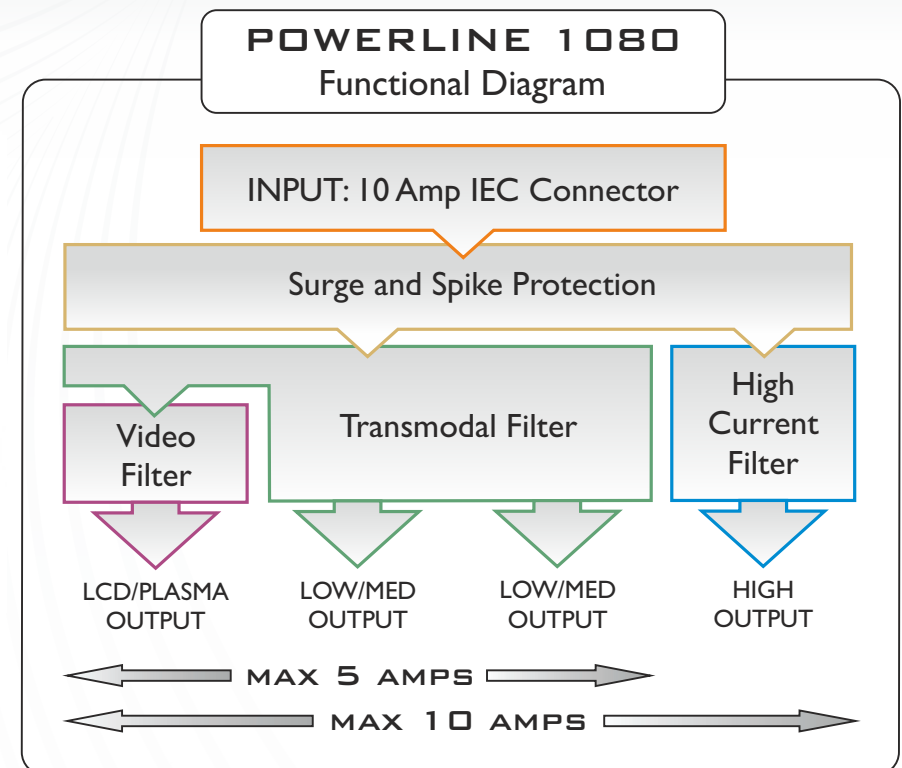
The PowerLine Axis has five high quality outlets served by a network that re-centres the voltage axis of the mains waveform. This eliminates any DC voltage on the mains power supply, suppressing mechanical hum and liberating performance.



PowerLine 1080

The PowerLine 1080 is fully conditioned and optimised for supplying AV systems. One outlet has a dedicated filter to eliminate the noise generated by your video display's power supply, improving picture quality. Another has a filtered high current Direct Connection for power hungry components like amplifiers. The remaining two outlets are served by a filter optimised for source components.

ISOL-8's Transmodal filter technology provides pure, clean power so that your AV system performs at its very best.



PowerLine Ultra

The PowerLine Ultra is fully power conditioned and optimised for audio. One Direct Connection outlet is provided, filtered by a high current shunt filter, and is suitable for high current loads such as amplifiers. The remaining outputs are for source components and benefit from a multi stage Transmodal filter.

Unlike the limited filtering found in most other power conditioners, ISOL-8's Transmodal filter technology effectively attenuates all modes of transmitted and induced mains noise, so you can be sure that your system benefits from the cleanest possible power.

