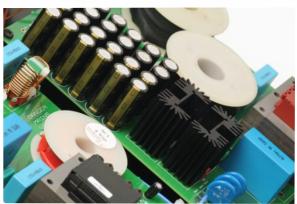
# I S O L - 8

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

### SUBSTATION INTEGRA









## 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.

### One Box Powerhouse

The SubStation Integra is a premium power conditioner that brings the high end performance of the acclaimed SubStation LC and HC together in a single high quality chassis.

A clear step up from the MiniSub Axis in current capacity and performance, the SubStation Integra will provide the optimum power platform for quality systems to deliver their full potential: every time you listen.



The feature set is totally comprehensive, combining all the key technologies that brought such praise for the SubStation LC and HC.

A physically separated high and low/medium current topology is meticulously implemented using premium custom components for truly high end performance. All internal wiring is silver plated with PTFE insulation.

A five year guarantee\* (UK only) underlines the quality we build into every ISOL-8 product, ensuring a lifetime of great performance and reliable service.

### Technology

The SubStation Integra employs all ISOL-8's flagship technologies found in the SubStation LC and HC and brings them together in a convenient one box solution.

#### **Multiple Filter Sections:**

Each system component is not blameless and generates significant mains noise itself. By employing separate filters for each outlet, external noise and noise generated *from within the system* are both blocked. Each filter section can then be designed for its dedicated load and cross contamination from one component to another reduced. The optimum solution.

#### **Transmodal Filtering:**

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.

#### **Axis DC Blocking**

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.

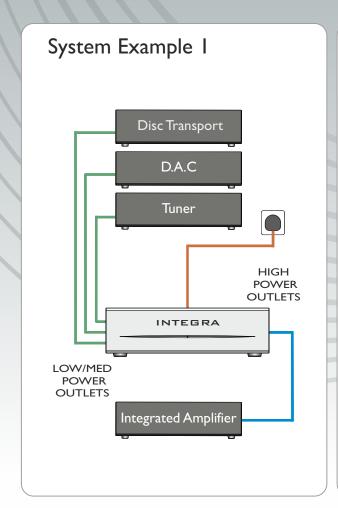
#### **Spike and Surge Protection:**

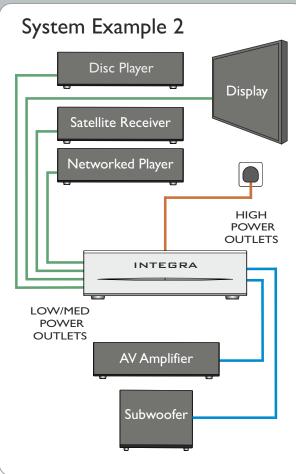
The mains can exhibit short term voltage spikes and surges. These events can cause damage to unprotected components. ISOL-8 protects your valuable investment with an energy absorbing network, clamping dangerously high voltage peaks so you can enjoy peace of mind.

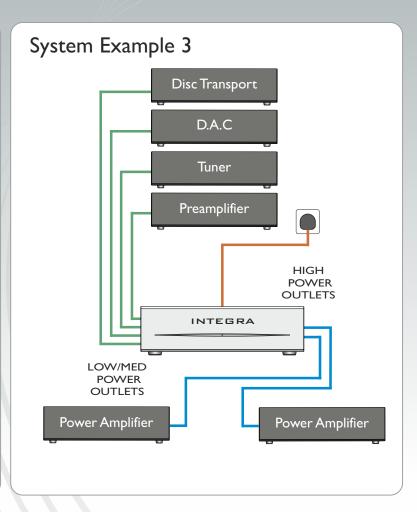
For further details see the technical sections of our web site or click on the links on the headings.

### Flexibility

The SubStation Integra has the power and flexibility to supply, protect and effectively condition almost any high quality audio or AV system.







## SubStation Integra

The SubStation Integra is in essence a scaled and integrated version of the acclaimed SubStation LC and HC.

Inside the premium quality chassis, the high and low/medium power Transmodal filters are fed by a high capacity Axis DC blocking circuit, then physically separated and individually protected by two magnetic circuit breakers. A latching Neutrik 20 amp input connector allows the generous 16 amp capacity to be fully exploited with a suitable power connection. An earth line filter choke completes the Integra's armoury against performance degrading noise.

The SubStation Integra will protect and enhance the performance of any demanding high end system.

