

Sigmas Instruction Manual



June 2006 Contents

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A. Introduction

The company



The company

IsoTek was formed in July 2001 with the vision to create high quality mains power distribution units that moved beyond current conventions. Through careful market analysis and extensive research we were able to launch products that moved power distribution forward to be recognised as an integral part of any audio or home theatre system. Our products continue to lead the way in power management systems, our latest GII range galvanises our commitment to pursue excellence at every level.

The principles

We believe all products benefit from their own clean power supply, therefore we advocated the concept of using (smaller) individual filters on each component, with these being specifically designed for their purpose. This dramatically reduces and stops component cross contamination and dispels the belief that one size fits all. Every single component used in our designs is extensively tested for quality, reliability and purpose. Our circuit designs are extensively 'field' tested before coming to market so we can guarantee the widest compatibility with third party products.

The execution

Within the market of premium audio it is vital to offer exceptional performance and value for money. Products must be made to the highest of standards, be reliable and attractive. A manufacturer must offer exceptional service, dealer training, support and undertake the very best in promotion design and literature. If all these elements are in place customers should experience excellence at every stage. Our continual quest is to meet these challenges.

All of our products are professionally designed, manufactured and hand built in the UK, with deep consideration given to both style, functionality, performance and value for money.

B. The product

Overview

Front elevation of the unit

Features

Product name badge

Official GII badge

High & Medium current LED indicator lights

High quality 6 & 16Amp thermo-magnetic fusing featuring power on/off

Thank you for purchasing the Sigmas. The product you now own has taken the award winning technologies from the GII Mini Sub/Vision and the Titan to create a unique high quality full system solution. Sigmas has been designed to offer the very best performance possible in a single box 'plug-n-play' power conditioner. What's more Sigmas can be used for a complete audio or home theatre system. The Sigmas gives an insight into what IsoTek high-end solutions offer. Within the IsoTek product range the Sigmas sits between the GII Mini Sub/Vision and high-end Nova & Titan.

At the rear of the unit you will note six high quality outlets, these are individually filtered to stop components 'talking' to each other or corrupting the clean supply provided by the unit. This is achieved by a series of high quality filters on each of the outputs and a sophisticated 'adaptive gating' system which auto senses the requirement of filtering products connected to the medium current outlets need.

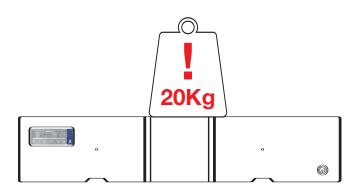
Outputs 1 & 2 (high current) feature the 'direct coupled design' concepts first introduced to the field of power conditioning with the Titan. This allows for almost unlimited transient ability, essential for higher power rated products, such as power amplifiers, integrated amplifiers, some 'tube' pre-amplifiers, projectors and plasma screens, etc. The remaining four are suitable for all other equipment.

The Sigmas adopts the British electric 'integrity of fusing' system. Therefore the 16amp Thermo-magnetic fuse switch must be engaged first, followed by the 6amp. These are located, and can be accessed from the underside of the front panel and eliminate any need to enter the product. IsoTek further enhance 'integrity of fusing' through the use of specialised VDR over voltage protection devices. These are specially selected to offer over voltage safety whilst not effecting audio quality.

B. The product

Weight loading

Safety



All components used within Sigmas are of the highest grade or designed by IsoTek and manufactured to MOD / Aerospace specification and tollerance. All components are under stressed, this gives greater longevity. These are then hand soldered onto a PCB with silver solder. The unit is also fully star earthed.

In the interest of safety the unit should be placed upon its own dedicated shelf on an audio grade equipment rack. Ensure that a minimum distance of 50mm is allowed around the unit for sufficient ventilation. Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table-cloths, curtains, etc. No naked flame sources, such as lighted candles should be placed on the unit.

The unit may be placed on top of or under other pieces of equipment, but do not exceed a maximum weight loading of 20kg.

If you have to locate the unit on the floor we strongly recommend you do not place the unit near heat sources, such as radiators or air ducts. The unit should not be placed in areas which could exceed 25 degrees, for example near vacuum tube amplifiers. Good air circulation is essential to prevent heat build up within the chassis. Do not place the Sigmas on a soft surface, for example a rug or carpet, which could block the ventilation intakes on the underside of the unit.

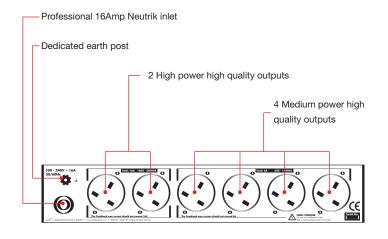
Do not let any liquids spill onto or objects fall into the chassis.

The apparatus must not be exposed to dripping or splashing and no objects filled with liquids, such as vases should be placed on top.

Should either of these events happen immediately switch off the unit at the wall socket, wait for at least one minute, unplug all other cables and return it to your authorised IsoTek dealer for a full service.

C. Installation

Rear elevation of the unit



Placement

Ideally the unit should be placed upon its own dedicated shelf of an audio grade equipment rack. If this is not possible the unit may be placed on top of or under other pieces of equipment to a maximum weight limit of 20kg. If you have to locate the unit on the floor or in any other location please refer to the safety section of this manual.

Equipment coupling

Once the Sigmas is placed connect the unit to a mains wall socket, with the high quality power cable provided. The unit should then be turned on in the following order.

The apparatus must be connected to an earthed mains socket outlet.

Switch on

With Sigmas facing you turn on the right thermo-magnetic fuse (located under the chassis), this illuminates the right LED. Then turn on the left thermo-magnetic fuse, again the left LED will turn on. The unit now has full power.

Turn off all equipment you wish to have a clean mains supply, unplug the cables relating to these from the wall socket or redundant distribution block you may have been using and plug these into the rear sockets of the Sigmas. Outputs 1 & 2 (marked as high current) have been given a higher power rating and should be used for high current devices, for example power amplifiers, integrated amplifiers, projectors and plasma screens, etc. The remaining four are suitable for all other equipment.

System integration

We strongly recommend that a good quality mains cable is used and this cable is consistent throughout your system. Look for a cable with good conductors, for example oxygen free copper. This cable should also have a high degree of shielding from RFI. All IsoTek cables feature these characteristics.

D. Troubleshooting

Fuse location



Fault finding

One or both of the front panel LEDs is not lit and the unit gives no power.

Check that both thermo-magnetic fuses are switched on, these can be found under the front of the unit. A notch in the front panel gives a visual indication to their position. Remember to switch the right (high current) one on first, followed by the left.

Check that the mains cable is securely plugged into the unit and the wall socket.

Check the fuse within the plug is intact (UK system only).

On rare occasions the fuse at the main distribution fuse box may also need to be checked.

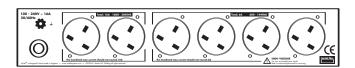
The Sigmas, remains safe even if mains polarity is reversed. However, we would strongly recommend a simple check of mains polarity. Your local IsoTek authorised dealer will be able to supply a product through us to help you establish this. Mains polarity is of particular importance in markets where European Shuko plugs are used.

Always replace fuses with the same fuse type and rating.

Please contact us directly on 01635 291357 so that we can insure that you have the correct fusing.

Front & rear elevation





E. Specifications

Dimensions & sockets

The following information relates only to the IsoTek Sigmas. These are original products and should not be confused with previous or 'copy cat' models.

Number of outlets: 6
Type of outlets: UK, EU, and US unswitched
Standard mains inlet: 16Amp Neutrik Powercon

Mains voltage: 100 - 240V
High current outlets (electronic fused) 16Amps
Watts at 230V 3680W
Watts at 110V 1760W
Maximum transient capability (high current, 230V) 18400W

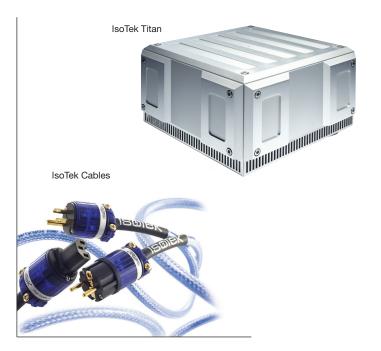
Medium current (electronic fused) 6Amps
Watts at 230V 1380W
Watts at 110V 660W

Dimensions: 444mm x 85mm x 310mm (WxHxD) Weight: 9.5Kg

Please note, the information given in this document is correct at the time of print. Small production changes in the course of improvement through our ongoing research and development policy may arise. If clarification of any point is required please refer to your local authorised IsoTek dealer or visit www.isoteksystems.com where you can download the very latest information.

F. Considerations

Product examples



Cabling

We strongly recommend that a good quality mains cable is used and this cable is consistent throughout your system. Look for a cable with good conductors, for example OFC (oxygen free copper). This cable should also have a high degree of shielding from RFI. Outside of the UK it is not uncommon for cables of 6Amps current capability to be connected to a 20Amp outlet. In practice this seems to be a safe arrangement. However we strongly recommend a cable of the full 20Amps carrying capability be used, with a minimum 1.5mm squared.

Third party products

IsoTek produce their own cable in standard 1.5M lengths. All cables feature high quality connectors, OFC conductors and fully earth shielded. This removes any chance of RFI entering the cable. Four versions are available: Premium and Elite as well as higher current Optimum. IsoTek 24ct high grade connectors are used in the Elite, Optimum designs these can also be purchased individually.

Our GII range of products work well with all third party equipment including varying cable technologies. If 'off-the-shelf' mains cables are used we recommend the use of Ferrite rings to reduce RFI. We also recommend the use of contact conditioners, for example Blue Horizon's Clean-IT (www.bluehorizonideas.com). Isolation devices, feet and cones may also be used. We recommend Clearlight Audio RDC products which we use on our higher end products, for example, Titan.

Upgrades

It is possible to increase the performance of the Sigmas through ideal location and product placement, the use of isolation devices and contact conditioners for example. The Sigmas can also be used to run front-end only equipment with one of our dedicated power amplifier products. For example, the introduction of a Titan for that specific purpose. Full details can be found from your local authorised IsoTek dealer or on our web site www.isoteksystems.com

Please complete & send

G. Warranty

As part of our on-going commitment to the highest standards of customer service, IsoTek offers you the opportunity to extend the standard 2 year product warranty to 3 years, free of charge. Simply visit:

www.isoteksystems.com/register

And follow the on screen instructions. This service will automatically update your details and give confirmation of your registration via email within 24 hours.

IsoTek will not share your personal details with any third parties without your permission.

If you do not have internet access then please forward a copy of your invoice, together with the product serial number and your address to our UK office:

IsoTek Systems, 4 Mozzetta, Kings Head Yard, Winchester, SO23 9HN England.