

November 2004



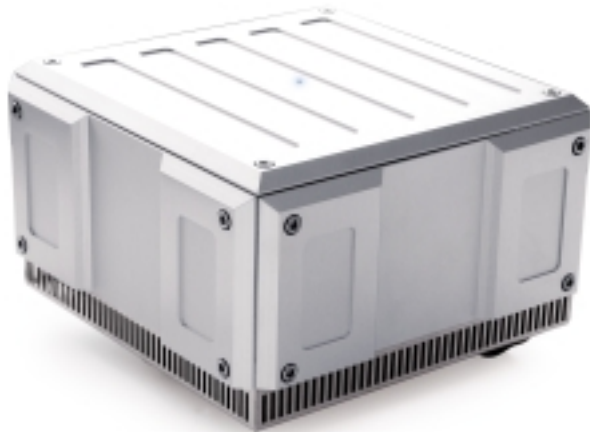
Titan Instruction Manual



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## The company



## A. Introduction

### **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.

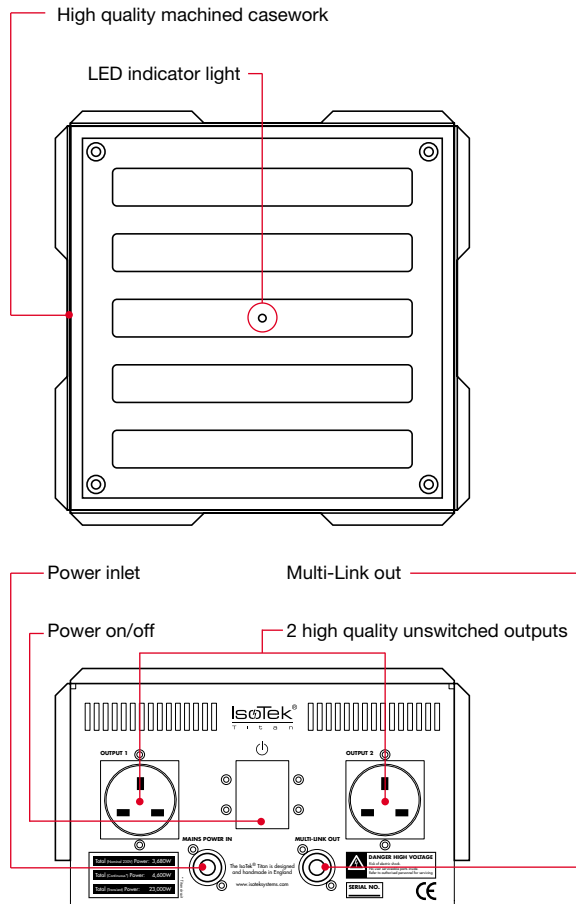
### **The execution**

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

### Top & back of Titan



#### Overview

Thank you for purchasing our Titan high-end power conditioner.

The Titan is our top of the range power conditioner designed specifically for power amplifiers. The complex design also eliminates component from component cross contamination, which is particularly useful when the Titan is used to power two mono block amplifiers. The Titan was designed and developed to be a no compromise replacement for our previous isolation transformer based 'Qubes'. As part of a complete power solution we recommend the Titan be used with either the 'Titan Multi-Link' or 'Nova'. These provide high quality filtration for front end components.

#### Features

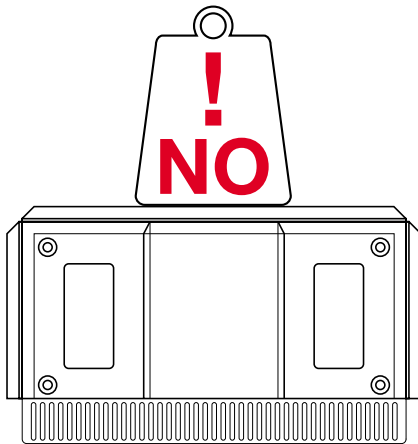
At the rear of the unit you will note two high quality unswitched outlets. These provide an individually filtered supply, thus eliminating components 'talking' to each other or corrupting the clean supply provided by the unit. You will also notice a blue Neutrik power inlet labelled 'Power In' and a grey Neutrik power outlet labelled 'Multi-Link Out'. The blue Neutrik provides the power to Titan via its dedicated power cable. The grey 'Multi-Link' out socket is for an additional dedicated distribution strip, should you wish to expand the units potential.

Although the Titan has been developed with power amplifiers in mind it is possible to expand the sockets available, to cover front end devices, via the Multi-Link feature. Ordinarily you would plug power amplifiers into either output 1 or output 2.

The Titan uses a sophisticated electronic fusing system this allows, almost, unlimited transient power to be achieved. It also gives the unit the ability to be run directly on its own dedicated radial circuit not protected by RCDs, allowed under British regulations as a cooker circuit.

## B. The product

### Weight loading



### Safety

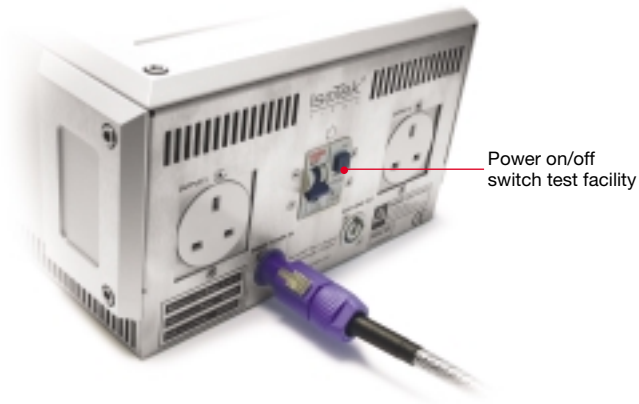
All components are of the highest grade possible and are under stressed, thus giving greater longevity. These are carefully selected then hand soldered onto a PCB with silver solder. The Titan is a direct coupled design which allows for massive power handling capabilities. In short the unit is only limited by the network it is connected to.

In the interest of safety the unit should be placed upon its own dedicated shelf on an audio grade equipment rack. Its discrete foot print also allows easy positioning next to the power amplifiers it supplies. It is NOT recommended that Titan be placed on top of or under other pieces of equipment.

Areas where 'tube' amplifiers are present should not exceed 25 °C. If you are positioning the Titan in the close proximity of such a device please be aware of this factor.

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. Good air circulation is essential to prevent heat build up within the chassis. Do not place the Titan on a soft surface, for example a rug or carpet, which could block the ventilation intakes on the bottom half of the chassis. Do not let any liquids spill onto or objects fall into the chassis. 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.

## Rear elevation of the unit



## C. Installation

### Placement

Ideally the unit should be placed upon its own dedicated shelf of an audio grade equipment rack. Titan may also be placed next to the power amplifier it supplies however if you have to locate the unit on the floor or in any other location other than an equipment rack please refer to the safety section of this manual.

### Connecting Titan to a power supply

Once the Titan is positioned connect the unit to a mains wall socket by the cable supplied. Firstly connect the blue Neutrik end of the power cord into the blue socket on the bottom left hand side of Titan's back panel. Ensure that the silver release catch on the blue Neutrik plug is slightly to the left of 12 o'clock, push in and rotate clock wise until the plug clicks into place. To release pull the silver clip back wards and reverse the action. Now plug the standard UK three pin, European Schuko or American three pin into the wall socket. Switch on the wall socket if it has a switch, and then turn on the Titan via the central on/off switch at the rear. At this stage no other equipment should be plugged into Titan.

### Pre network test

Although every Titan is rigorously factory tested prior to dispatch, one thing we cannot test for is that your home earth/ground connection (yellow and green in European regulations) is functioning correctly. This is very important for the Titan's operation so the following test needs to be carried out.

The supplied 'Network Test Plug' will check the safety of your earthing within your home. Take the Network Test Plug and insert it into either output 1 or output 2 of Titan (UK) or into the Grey Multi-Link output (Europe). On plugging this into the unit Titan should immediatly 'trip' and turn itself off. If you are in the UK and this fails to happen contact your local electrician as it is more than likely that the earth in your home has become disconnected. If you live in Europe, before calling your electrician check the live/neutral polarity of the mains. Simply reverse the mains plug in the wall socket (where possible). Please do not confuse the test facility on the power on/off switch at the back of the Titan. This is merely a test of the switch unit NOT the network.

## C. Installation

### Equipment coupling

Under no circumstances can Titan be run without proper earth/ground protection. Titan must also NEVER under any circumstances be used with plugs which have no ground connection.

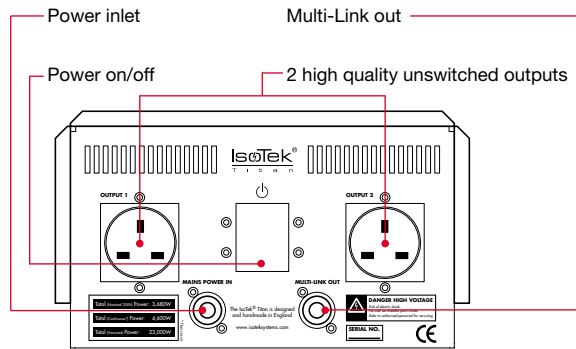
Once you have tested your network, and established a good earth/ground connection you may proceed to connect the equipment you wish the Titan to power.

Turn off all equipment you wish to use with the Titan, 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 Titan / Titan Multi-Link combination.

Now simply turn on the Titan followed by the equipment plugged into it. We do not recommend turning off the Titan after use, and do not under any circumstances turn off Titan at a wall socket. If you wish to turn your entire system off after use, firstly turn off each individual component followed lastly by Titan. On 'power up' please do this in reverse.

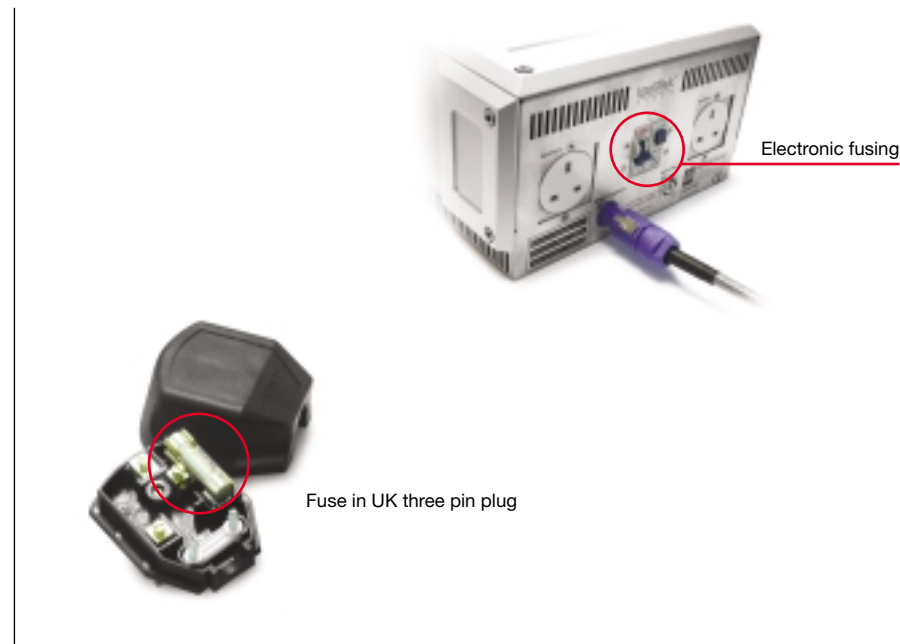
### System integration

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.



## D. Troubleshooting

### Fuse location



### Fault finding

The top LED is not lit and the unit gives no power.

Check that the RCBO power on/off switch is on.

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

Check the fuse within the plug at the wall socket is intact.

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

The Network test fails to trip the Titan on/off switch.

In the UK market mains plugs are polarised (live is always live, neutral is always neutral) however in other markets this is not the case. If this test initially fails in Europe, before calling your electrician check the live/neutral polarity of the mains. Simply reverse the mains plug in the wall socket (where possible).

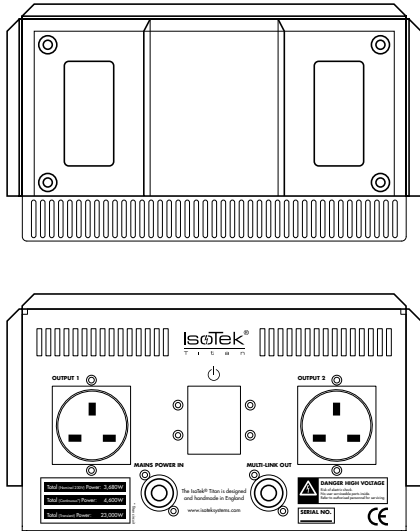
If it fails in the UK then it is more than likely that you have a poor or disconnected earth. This will need to be fixed prior to using Titan.

It is not unknown although rare that polarity can be mistakenly reversed. Get the electrician to check this as well.

The Titan must be used in a situation of correct mains polarity with proper earth/ground connection.

## E. Specifications

### Front & rear elevation



#### Dimensions & sockets

The following information relates only to the IsoTek Titan. These are original products and should not be confused with previous.

**Number of outlets:** 2  
 + Neutrik 'Multi-Link' output

**Type of outlets:** 13A UK unswitched  
 European Schuko  
 US polarised three pin

**Standard mains inlet:** Neutrik

**Mains voltage:** 110 - 264VAC  
**Maximum current:** 16Amps continuous

**Total power (Nominal 230V):** 3680 Watts  
 Titan circuit, continuous: 4600 Watts

**117 volt specification (Nominal US voltage):** 1800 Watts  
 Wattage potential Titan circuit: 2340 Watts

Transient 10 mile seconds: 23,000 Watts\*

**Fusing:** Electronic overcurrent device 16Amps  
 30 mile amps earth leakage protection. This allows for use on radial circuits not protected by RCDs, allowed under British regulations as a cooker circuit.

**Dimensions:** 275mm x 182.5mm x 275mm (WxHxD)

**Weight:** 12.75Kg

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.

\* Please note Titan is only limited by the incoming voltage hence lower wattage potential for units used in the US. There is no implied advantage of European model over US model, it is all related to voltage.

## 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. Three versions are available: Premium, Elite & Super Elite. High grade Furutech connectors are used in the Elite & Super Elite designs.

Our new 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 Caig ProGold or DeoxIT. 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 Titan through ideal location and product placement, the use of isolation devices and contact conditioners for example. The Titan can also be used with either the Titan Multi-Link or dedicated front-end Nova power conditioner. Titan can also be run on its own dedicated supply for more information on this please refer to an authorised IsoTek dealer or visit our web site [www.isoteksystems.com](http://www.isoteksystems.com)