

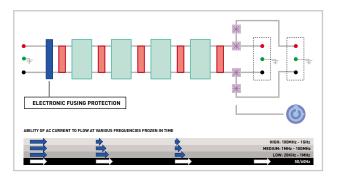


WHAT HI∙FI?



QUITE SIMPLY,
THE MOST
IMPRESSIVE MAINS
FILTER I'VE EVER
HEARD.

HI-FI NEWS





# **TITAN**

The IsoTek Titan uses a radical new nine stage direct-coupled design technology to offer the optimum high current filtering solution.

This radical circuit has been optimised for a high degree of common mode rejection with the highest possible differential mode rejection compatible with massively low insertion losses. Great care has been taken to minimise insertion loss at mains frequency. The new circuit also offers the desirable characteristics of a true balanced supply, especially at high frequencies where it could be debated that it possesses superior performance to its isolation transformer based predecessor.

To further ensure the greatest possible transient response, enough to realise an unlimited peak current draw (23,000 watts potential), two things out of the ordinary have been achieved. Firstly, the minimum constant running ability of the device is rated at over 4,600 watts. Secondly, the unit is fitted with an RCBO. This high tech electronic fusing unit offers huge transient overloads whilst remaining safe.

#### **Specifications**

Number of outlets:	2 + Multi-Link out
Type of outlets:	UK, EU, US unswitched
Mains inlet:	Neutrik
Mains voltage:	110 - 264VAC/50Hz - 60Hz
Maximum current	16Amps continuous
Total power (nominal 230V)	3680 Watts
(Titan Circuit/Transient)	
Dimensions:	.275 x 182.5 x 275mm (WxHxD)
Weight:	12.75 Kg

# **Key Features**

Unlimited transient ability

Suitable for any component, audio or visual

Compact yet elegant design

Expand available outlets via dedicated power strip

High quality resonance deadening compound (RDC) feet

UK, European and US specifications available

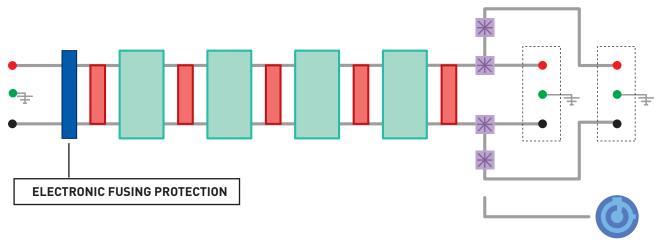




# PRODUCT FACT FILE



# **TITAN**



#### ABILITY OF AC CURRENT TO FLOW AT VARIOUS FREQUENCIES FROZEN IN TIME





#### SHUNT FILTER

These represents the simplest form of filter, which is placed between the live and neutral poles of the mains supply. Most electrical equipment, which is capable of generating noise will have some variation of a shunt filter.



#### SERIES FILTER

A type of inductor, which is placed 'in-line' rather than across, as would a shunt filter. These are very specialised in design as they must have minimal loss at mains frequency. IsoTek have found that 'off the shelf' series filters are not able to offer sufficient bandwidth and flexibility that is required; it is for these reasons why we design and produce our own specification. These specialised components are made to the same standards as those used for British Aero Space applications.



## **DELTA FILTERS**

A sophisticated type of Shunt filter which is connected across the three poles of the mains supply. The Delta filter is the most often described by text books as a practical solution for the worst effects of mains noise. One unexpected benefit is its superiority at radio frequencies. It could be said that a Delta is three different types of shunt filter in one.



#### **MULTI LAYER DELTA FILTER**

For the ideal Delta filter you would use the perfect capacitor. The perfect delta arrangement for capacitors does not exist as all capacitors suffer from some inductance. The 'Multi Layer Delta Filters' work something like a loudspeaker crossover unit one section dealing with low (20KHz - 1MHz), the next medium and the final high radio frequencies.



#### PROTECTION (FILTER)

The protection circuitry will be understood by most people to offer valuable protection to their hi-fi equipment due to transient mains over voltage. IsoTek protection circuits offer a two fold operation, additional filtering, helping the shunt filters deal with high energy overload as well as component protection. This is achieved without destroying musical enjoyment.



### POLARIS-X

It is not realised that source impedance of the mains supply is very low, in fact it is a dream of the electricity industry to one-day use super conductivity (0.0 hms)

Therefore carefully designed circuits, which respect this are capable of causing the electrons to take the easiest route. The analogy would be that water does not run up stream. The IsoTek Polaris-X principle is based upon Kirchhoff's two current laws.



#### GATING

The 'Gating' principles in IsoTek circuits force balance between the various outputs on the medium current side of Mini Sub, Vision and Orion, allowing for an optimum filtering environment. Regrettably this is not possible with high current devices, hence the development of 'Adaptive Gating'.



# ADAPTIVE GATING

'Adaptive Gating' auto senses the requirements of the load in a similar way to an iris of an eye adjusting to light. This system offers a universal system for both high current and low current devices and thus enables a continually fluid ultimate filtering environment.

