

Isotek®

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NOVA

Nova features an optimised direct-coupled six stage primary and five stage secondary filter circuit specific for front-end components with each outlet individually filtered. This complex circuit also includes unique 'adaptive gating'. The gating principle was first introduced in the GII Mini Sub to provide an ideal operational environment for the circuits responsible for eliminating product cross contamination. Adaptive gating allows Nova to auto sense and then adjust the level of filtering required dependent upon the nature of equipment connected. For example, a plasma screen will have different requirements compared to a DVD player, both in terms of filtering and power draw. Nova will adapt automatically to ensure the optimal level of filtering and current is available for the ultimate in performance.

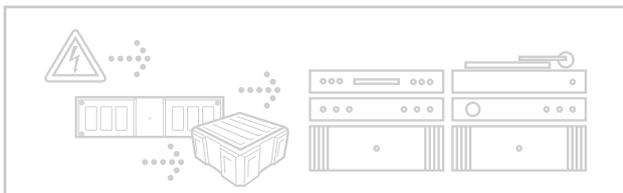
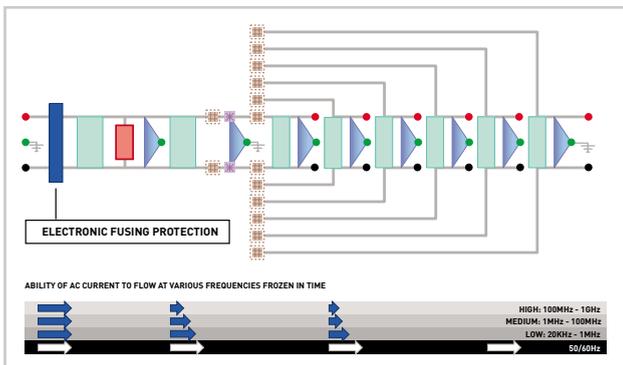
The electronic protection circuit insures the utmost safety whilst eliminating fuse contacts (a well know source of sonic degradation). Although specified for front end applications, the circuit coupled with adaptive principles allow a total power draw of up to and including 3680 watts. Therefore in some situations Nova is an ideal one stop solution without transient limitations.

Specifications

Number of outlets:6
 Type of outlets:UK, EU, US unswitched
 Mains inlet:Neutrik
 Mains voltage:110 - 264VAC/50Hz - 60Hz
 Maximum current16Amps continuous
 Total power (nominal 230V)3680 Watts
 Dimensions:435 x 135 x 355mm (WxHxD)
 Weight:20.00 Kg

Key Features

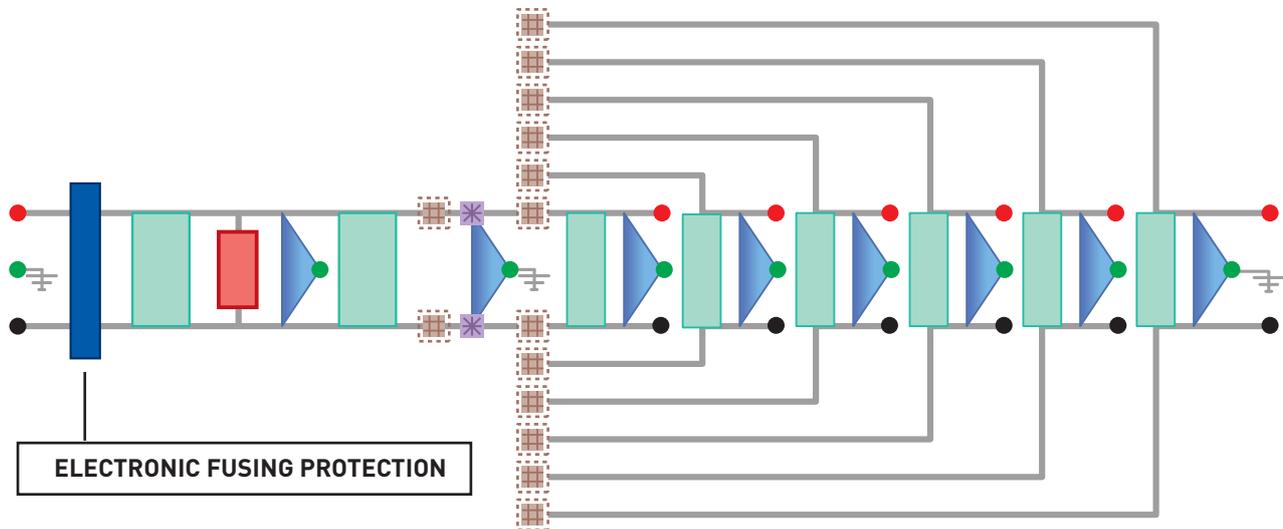
- Auto sensing adaptive circuit for ultimate performance
- Suitable for any front-end components, audio or visual
- Elegant rack width design
- Six individually filtered adaptive outlets
- 'Soft' start, ideal for AV installations
- High quality resonance deadening compound (RDC) feet
- UK, European and US specifications available



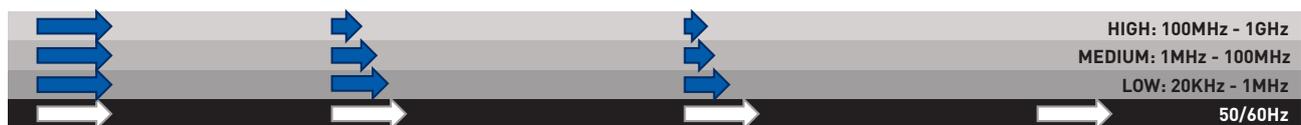
PRODUCT FACT FILE



NOVA



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 Ohms).

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.