

### PURE SONIC INNOVATION



## Hello

As we hurtle through 2018 towards an

uncertain post-Brexit future, there's one fact upon which we can rely: the quality of the mains electricity supply is only getting worse!

Numerous pollutants create 'noise' within the mains supply. Differential-mode noise, for example, is exacerbated by the switch-mode power supplies that are common in many devices, from computers to kitchen appliances. Meanwhile, common-mode noise is everincreasing, with mobile phones, Wi-Fi and Bluetooth bathing us in a sea of airborne interference.

If you're unsure why you should care, as the owner of a beloved hi-fi or home cinema system, consider this: the first input is electricity. It flows through the system, used by each component in turn to create the signal that moves the speakers' drivers and delivers the pixels on screen. What we hear and see is

fashioned from, and by, mains electricity - it's the raw material from which the 'art' is created. Because of this, the quality of electricity we feed our systems has a profound effect on performance.

That's why IsoTek's clean-power products are an essential part of any high-performance system - they unleash its full potential, making sound and picture quality more vivid, more engaging, better defined.

As ever, this edition of PULSE aims to give you an insight into the latest goings on in the world of IsoTek, including news of our latest component launches (p2) and an overview of our unique cable range (p4). Enjoy it and until next time think power, think IsoTek!

Keith Martin

Founder & Managing Director, IsoTek

IsoTek 🖻 continues to wow critics









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## **All-new Nova**

IsoTek's best-ever 12-outlet power conditioner is simply stellar

### **A Serious Problem**

- ▶ We are bathed in a sea of RFI and EMI, corrupting the electricity supply and degrading sound and picture quality.
- All the electrical items in our homes (and our neighbours' homes) affect the supply and erode performance.
- As the electronic devices we use proliferate, the quality of the electricity we feed our systems continues to slide - and it's only going to get worse.

### A Powerful Solution

- IsoTek is the world's leading manufacturer of clean-power products for audio and AV
- IsoTek's unique technologies enhance sound and picture quality by delivering ultra-clean and stable power to audio and AV components.
- IsoTek products deliver class-leading protection from lightening strikes and power surges, and extend the lifespan of electronic components.

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# NEWS

# EV03 Ascension rises to the occassion

As we head to press, we've just heard that IsoTek's top-of-the-range EV03 Ascension cable has won another prestigious award – this time at the Rocky Mountain International Audio Fest in Denver, Colorado.

The Ascension took the gong in the mains cable category in the Rocky Mountain International Press Awards 2018, beating other nominated cables from AudioQuest, Crystal Cable, Nordost and Shunyata. The awards are determined by a panel of judges from top audio magazines and websites spanning Europe, America, Asia, Australia and South Africa, making it a uniquely global accolade.

"This is a tremendous honour," said Keith Martin, IsoTek's founder and MD. "When a panel of judges that includes the likes of Stereophile in the US, Hi-Fi+ in the UK and Audio Technique in Hong Kong/China says your product is the best of the best, you know you're on the right track!"

EVO3 Ascension

# IsoTek's super Nova

IsoTek has redesigned its legendary Nova mains conditioner to create the ultimate single-box clean-power component to service large, multi-component audio and AV systems.

Evolved from the circuits of the original, multiaward-winning GII Nova that launched more than a decade ago, the new EV03 Nova boasts no fewer than 12 independently filtered power sockets – eight medium-current outlets for front-end components such as disc players, servers, processors and preamps, and four high-current outlets for power amps, subwoofers and active speakers.

The high-current outlets incorporate an adapted version of the Direct-Coupled technology from IsoTek's mighty EV03 Titan mains conditioner, delivering fully optimised, low-impedance power with a maximum continuous output of 3,680W. The remaining eight outputs benefit from IsoTek's Adaptive Gating circuitry, which auto-senses the load to provide the ideal clean-power environment for all connected components.

The new Nova also features KERP (Kirchoff's Equal Resistance Path), a technology developed for IsoTek's latest EV03 generation of products. KERP ensures equal resistance and power delivery to

all outlets, providing a pure, coherent signal path throughout the unit.

The EVO3 Nova not only filters out incoming common-mode and differential-mode mains noise, it also stops cross-contamination of differential-mode noise between connected audio and AV components. No two outlets are connected directly and every outlet has its own independent filter network, effectively operating as twelve power conditioners in one box.

Silver-plated OCC (Ohno Continuous Cast) copper wiring and IsoTek's VAD (Virtual Air Dielectric) technology ensure the electrical signal remains pure and unrestricted, while a massive 135,000A of instantaneous, sequential and repeatable protection safeguards valuable equipment against the impact of power spikes and surges.



The latest addition to IsoTek's entry-level Discovery range takes the award-winning power filtration technology featured in the EV03 Polaris mains block and reduces the number of outlets from six to two – ideal for enhancing the performance of simple, two-component audio systems.

A painstakingly designed delta filter topology ensures class-leading filtration of both commonmode and differential-mode mains noise, delivering super-clean power to both outlets – each independently isolated to prevent cross-contamination of mains noise created by connected electronics. In addition, 13,500A of instantaneous protection safeguards connected equipment via IsoTek's unique, sequential and repeatable protection system.

Unlike many entry-level mains filtration products, which use off-the-shelf components, the EV03 Polaris is designed from the ground up by IsoTek to ensure it is ideally fit for purpose – the culmination of almost two decades of research at the cutting edge of power optimisation technology. Top-quality parts

are utilised throughout, including a hand-soldered, silver-plated PCB, and internal wiring with silver-coated, oxygen-free copper conductors and a PTFE dielectric.

As well as being used solo to provide power filtration for a two-box system – for example, a DAC and an amplifier – the EVO3 Gemini can also be used to increase the number of outlets from the EVO3 Genesis One mains sinewave generator. Simple, affordable and superbly effective, the EVO3 Gemini is a brilliant introduction to IsoTek's unique clean-power technologies.

Get in **Sync** 

Building on technologies first introduced in the Syncro mains cable, IsoTek's new EV03 Syncro Uni contains innovative DC-cancelling electronics that synchronise the mains supply to promote a perfectly symmetrical sine wave.

DC 'contamination' of the mains supply, caused by many of the electrical devices we own, results in a lack of symmetry in the mains since wave where it is displaced from the zero-voltage line. This adversely affects the performance of high-quality audio components, introducing noise to the audio signal and often triggering transformer hum.

The Syncro Uni can be used on its own or as an optional 'pre-filter' device, positioned between the mains outlet and any of IsoTek's mains conditioning components to further improve system performance.

It removes the unwanted and damaging DC component from the mains supply, rebalancing the mains sine wave prior to the filtration of common-mode and differential-mode noise by a conditioning unit, thus providing an upgrade path to further improve system performance.

# **MAKING HEADLINES**

Hold the front page... or rather, page 3! IsoTek's highly acclaimed clean-power products continue to wow the critics – here's a selection of quotes from recent reviews in the audio press around the world

"Performed way better than I expected, comfortably beating my long-term 十大发烧影音器材 In Ton Ball Research Ass resident mains conditioner with ease and then some" EV03 Aquarius - Hifi Insights, UK

"Sound is more dynamic, more alive... a great addition which makes functional and financial sense"

EVO3 Corvus - Hi-Fi Voice.

Czech Republic



SOTEK

"An excellent way to allow high-end components to perform at 100% of their potential"

EV03 Titan One - Hi-Fi Voice, Czech Republic

"Offers a marked improvement in sound quality -outstanding'

HI-FI WORLD

EV03 Corvus - Hi-Fi World, UK

"Tighter, crisper bass lines... more air and space" EV03 Initium – Fidelity Online, Germany

"The improvement over a standard mains distribution block is marked and I don't know of any similarly priced rival that can better it'

EV03 Corvus - Hi-Fi Choice, UK



"Improvements in resolution, space and timing... a state-ofthe-art cable for state-of-the-

"The soundstage seemed more expansive and better defined... a greater sense 230 of air, enhanced clarity and

EV03 Genesis One -AudioVideo, South Africa

art equipment" definition" EV03 Ascension - Hi-Fi World, UK

"The logical ultimate step in the mains lead chain... If you can't afford it, start saving'

EV03 Ascension - Hi-Fi+, UK

"I am instantly aware of an increase in the spaciousness around instruments... an effective

addition to my setup" EV03 Syncro Uni - Hi-Fi Choice, UK

"Creates a natural and balanced performance, the music stands proud from an inky-black background"

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EVO3 Mosaic Genesis -MY-HiEND, China







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# Powerful connections

Some people question why it's worth spending money on the final couple of meters of power cabling, when the electricity available from a wall socket has already travelled miles to get to that point.

The fact is, those final meters are critical. An ordinary 'kettle lead' like those supplied free with hi-fi components contains only rudimentary conductors and connectors – the bare minimum to ensure the item works. Cables like these act as aerials to EMI/RFI, which affects the performance of audio equipment, and are not built to maintain electrical integrity to the standard required for high-quality audio reproduction.

This is important because mains electricity is the raw material from which the audio signal that drives your speakers is fashioned. If the electricity powering your audio equipment is affected by noise, the sound waves that reach your ears will suffer from consequential distortion.

A high-quality audio power cable is tailor-made to suit the current requirements of audio equipment, from source components to power amps, with special high-current cables for big, current-hungry amps. They are also designed to protect the integrity of the electricity they carry, minimising distortion and preventing the ingress of EMI/RFI. A simple A/B listening test between a standard 'kettle lead' and a specialised audio power cable like those made by IsoTek shows the difference this simple upgrade can make.

Of course, if you really want to maximise your system's performance, you should consider one of IsoTek's award-winning power conditioners. But if you do, don't forget the cables; running a high-quality mains conditioner without power cables of sufficient quality is tantamount to mopping the floor then walking on it with muddy shoes.

### Not all cables are created equal

Cable design – be it interconnect, loudspeaker or power – must consider conductor purity, dielectric specification, geometry of the overall assembly and termination. Performance reduction comes in various forms – in signal-carrying cables, it manifests as a relatively benign loss of information or a tonal change

to the character of the music. In power cables, restrictions occur due to poor conductivity, impure copper, low conductor size and inadequate dielectric choices, especially when combined with cheap termination using low-grade brass.

IsoTek power cables pay deep consideration to all areas of design and construction. For conductors, the highest-purity 99.9999% oxygen-free copper is the baseline standard, with more expensive designs using silver plating, Ohno Continuous Cast copper and even deep cryogenic treatment for optimum conductivity. The size, quantity and configuration of conductors advances as we progress through the range, as does the level of shielding and the materials used for termination.

The result is a seven-strong range of power cables, each one engineered to deliver exceptional performance at its price point. From the low-cost, high-performance EV03 Initium to the extraordinary EV03 Ascension, there's a cable to suit every system and every pocket – simply arrange an audition at your nearest IsoTek dealer to hear the difference for yourself.

### IsoTek's cable range in detail

# EVO3 Initium

- Pure 6N oxygen-free copper for good conductivity
- 2.0sqmm conductors give greater amperage
- Olyethylene (PE) dielectric allows greater performance
- 4 Multi-strand cotton filler mains dielectric constant
- 5 Paper wrap gives barrier and maintains cable structure
- 6 Flexible PVC jacket



- Pure silver-plated 6N oxygen-free copper for better conductivity
- 2.0sqmm conductors give greater amperage
- Fluorinated Ethylene Propylene (FEP/Teflon) allows increased performance
- Multi-strand cotton filler mains dielectric constant
- Paper wrap gives barrier and maintains cable structure
- 6 Flexible PVC jacket



- Pure silver-plated 6N oxygen-free copper for better conductivity
- 2.0sqmm conductors give greater amperage
- Thicker conductor strands improve
- Fluorinated Ethylene Propylene (FEP/ Teflon) allows increased performance
- 5 Multi-strand cotton filler mains dielectric constant
- Mylar wrap improves common-mode noise rejection and maintains cable structure
- Oxygen-free copper braid increases common-mode noise rejection
- Flexible PVC jacket



- 1 Pure silver-plated 6N oxygen-free copper for better conductivity
- 2 1x 3.75, 6x 1.25sqmm conductors give higher amperage aiding power delivery
- Conductor strands group closer and improve performance
- Fluorinated Ethylene Propylene (FEP/ Teflon) allows increased performance
- Multi-strand cotton filler mains dielectric constant
- Mylar wrap improves common-mode noise rejection and maintains cable structure
- Oxygen-free copper braid increases common-mode noise rejection
- Flexible PVC jacket

## IsoTek's cable range in detail

### **EV03 Optimum**



- Pure silver-plated Ohno Continuous Cast copper for exceptional conductivity
- 3.0sqmm conductors give higher amperage aiding power delivery
- Thick square conductor strands group closer and improve performance
- Fluorinated Ethylene Propylene (FEP/ Teflon) allows increased performance
- 5 Multi-strand cotton filler mains dielectric constant
- Mylar wrap improves common-mode noise rejection and maintains cable structure
- Oxygen-free copper braid increases common-mode noise rejection
- 8 Flexible PVC jacket

### **EV03 Syncro**



- Pure silver-plated Ohno Continuous Cast copper for exceptional conductivity
- 2 3.0sqmm conductors give higher amperage aiding power delivery
- Thick square conductor strands group closer and improve performance
- If It or inated Ethylene Propylene (FEP/ Teflon) allows increased performance
- Multi-strand cotton filler mains dielectric constant
- Mylar wrap improves common-mode noise rejection and maintains cable structure
- Oxygen-free copper braid increases common-mode noise rejection
- 8 Flexible PVC jacket
- Cylinder containing DC-cancelling electronics within the cable length

### **EV03** Ascension



- Pure silver-plated Ohno Continuous Cast copper for exceptional conductivity
- 4.0sqmm conductors give higher amperage improving power delivery
- 3 Thick conductor strands group improve performance
- Virtual Air Dielectric (VDA) bridge gives ultimate dielectric performance
- Sealed Fluorinated Ethylene Propylene (FEP/Teflon) tube seals VDA and maintains high performance
- Open cryogenic conductor treatment (-196°C) improves conductor potential
- Individual conductor screening reduces magnetic discharge between conductors
- 3 Mylar wrap improves common-mode noise rejection and maintains cable structure
- Oxygen-free copper braid increases common-mode noise rejection
- FEP air tubes enhance assembly and maximise dielectric constant
- Paper wrap gives barrier and maintains cable structure
- 12 Flexible PVC jacket

To find out more about IsoTek's peerless range of power cables, visit www.isoteksystems.com and download the new cable brochure from the homepage. Or click here now.





ounded in the English county of Hampshire in 2001, IsoTek has grown to become a truly international concern. Its headquarters are now in Switzerland – although the UK office in Winchester remains crucial to its operations – and its factory is in Slovakia. It currently manufacturers 28 products in a range of configurations and sells them in more than 50 countries. It is, without doubt, the world's foremost manufacturer of specialised clean-power products for audio and AV systems, with a reputation that is second to none.

Unlike many of its peers, the company continues to grow at a consistent rate – around 20 per cent year-on-year. Its already impressive 750m² factory is about to add another 485m² by the first quarter of 2019, incorporating a new production line for the CI-focused SMART Power range. Dedicated four-axis CNC machining was added recently and a full anodising plant is currently being built, bringing previously outsourced metalwork processes under one roof.

IsoTek is justly proud of its factory, which is why it occasionally invites press to take a look around. Recent visitors include Hi-Fi+ magazine from the UK and AUDIO magazine from Germany, who got to see the company's painstaking manufacturing processes for themselves. Below is a small selection of photos taken by these two publications during their visits.







