

IsoTek®



PRODUCT REVIEWS

Building the foundations for great sound



Awards



2015 Hi-Fi Choice
Recommended
IsoTek EVO3 Sigmas



2015 Hi-Fi Choice
5-Star Winner
IsoTek EVO3 Sigmas



2015 i-fidelity.net
IsoTek EVO3 Aquarius



2015 Fidelity magazine
IsoTek EVO3 Aquarius



2014 Lite Magazine
Recommended
IsoTek EVO3 Polaris



2014 Lite Magazine
Recommended
IsoTek EVO3 Premier



2014 Lite Magazine
Recommended
IsoTek EVO3 Mini Mira



2014 Hi-Fi Choice
Recommended
IsoTek EVO3 Optimum



2014 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Sigmas



2014 Hi-Fi Choice
5-Star Winner
IsoTek EVO3 Optimum



2014 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Titan



2013 HiFi Pig
Recommended
IsoTek EVO3 Premier



2013 Hi-Fi+
Recommended
IsoTek EVO3 Elite



2013 HiFiCRITIC
Recommended
IsoTek EVO3 Premier



2013 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Elite



2013 Hi-Fi Choice
5-Star Winner
IsoTek EVO3 Premier



2013 Hi-Fi Choice
Recommended
IsoTek EVO3 Premier



2013 Hi-Fi Choice
5-Star Winner
IsoTek EVO3 Polaris



2013 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Genesis



2013 Hi-Fi Choice
5-Star Winner
IsoTek EVO3 Premier



2013 Hi-Fi Choice
Recommended
IsoTek EVO3 Premier



2013 Hi-Fi Voice
Product of the Year – 3rd Place
IsoTek EVO3 Aquarius



2013 Tone Audio
Product of the Year
IsoTek EVO3 Super Titan



2013 Hi-Fi Choice
Recommended
IsoTek EVO3 Polaris



2013 Hi-Fi Voice
Product of the Year
IsoTek EVO3 Genesis



2012 Hi-Fi News
Highly Commended
IsoTek EVO3 Genesis



2012 Hi-Fi Choice
Recommended
IsoTek Ultimate Set-up Disc



2012 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Solus



2012 Hi-Fi Voice
1st Place Winner – IsoTek
Accessories Brand of the Year



2011 Hi-Fi Plus
Highly Commended
IsoTek EVO3 Aquarius



2011 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Aquarius



2011 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Super Titan



2011 Hi-Fi Choice
Recommended
IsoTek EVO3 Solus



2011 Hi-Fi Voice
1st Place Winner
IsoTek EVO3 Aquarius



2011 Hi-Fi+
Best of Best
IsoTek EVO3 Aquarius



2010 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Aquarius



2010 Hi-Fi+
Highly Commended
IsoTek EVO3 Aquarius



2010 What Hi-Fi?
Best Product
Ultimate Guide to TV
IsoTek GII Vision



2008 Hi-Fi Choice
Best Buy
IsoTek EVO3 Sirius



2008 What Hi-Fi?
Best Cost-No-Option
Ultimate Guide
IsoTek GII Titan



2008 What Hi-Fi?
Best Allrounder
Ultimate Guide
IsoTek GII Mini-Sub



2008 Hi-Fi World
5-Globe Winner
IsoTek EVO3 Sirius



2008 Tech Radar
IsoTek EVO3 Sirius



2008 Hi-Fi Choice
Silver Award
IsoTek EVO3 Sirius



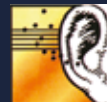
2007 Hi-Fi Choice
Editors Choice
IsoTek Audio Grade IEC



2007 Hi-Fi Choice
Category Winner
IsoTek GII Sigmas



2007 Sound & Vision
Category Winner
Hungary
IsoTek GII Mini-Sub



2006 T.A.S.
Editors Choice
Nordost Thor by IsoTek



2006 Hi-Fi Choice
Category Winner
IsoTek GII Sigmas



2006 Hi-Fi Choice
Product of the Year
IsoTek GII Sigmas



2006 Hi-Fi Choice
Category Winner
IsoTek GII Sigmas



2006 What Hi-Fi?
IsoTek Full System
Enhancer CD



2005 What Hi-Fi?
IsoTek GII Titan



2005 Hi-Fi News
Category Winner
IsoTek GII Titan



IsoTek is the world's leading brand of specialised power management products for hi-fi and home cinema systems. The company's founder and managing director is Keith Martin (pictured above), a man whose vision has led to dozens of awards from respected audio critics worldwide.

www.isoteksystems.com

Introduction

Launched in England in 2001, IsoTek is the world's leading brand of specialised power management products for hi-fi and home cinema use. Its product range includes high-performance mains cables and connectors, plus a range of performance-enhancing power conditioners focused on the specific requirements of individual systems. IsoTek products are distributed in over 45 countries, and have earned numerous accolades from specialist audio and AV publications worldwide.

A number of third-party manufacturers use IsoTek products for development and/or demonstration purposes, including Arcam, Denon, Genesis, Marantz, Monitor Audio, Nordost, Onkyo, Pioneer, PMC, Roksan and TEAC Esoteric. All IsoTek products are designed for purpose, manufactured in Europe and built to last.

“Not all mains conditioners are created equal... IsoTek has built itself a reputation as a purveyor of mains conditioners that actually improve (as opposed to just alter) the sound”

Hi-Fi World

“IsoTek is the UK's biggest name in mains filtration”

Hi-Fi Choice

“The leader in mains conditioning products”

Hi-Fi News

“IsoTek treats mains-related problems with a seriousness that has to be seen (and heard) to be believed”

Hi-Fi World

IsoTek Systems Ultimate Set-Up Disc

If you are a regular reader you may well have a version of this disc in your possession. A cut-down version was cover mounted on the November 2011 issue of *Hi-Fi Choice*, so if you missed it this piece might have you kicking yourself because it's choc full of useful material for getting a system precisely set-up. What the full retail version adds are three stereo imaging test pieces and a pair of frequency range test tracks which are very worthwhile features.

Essentially we're talking about speaker set-up here; there are channel and phase tests to ensure that the source, amp and speakers are correctly connected, but the rest of the 'tune-up' tracks are all about achieving true 3D stereo imaging. Of course, you don't get stereo imaging if channel and phase are wrong, so those two are an important part, albeit one that is covered on plenty of previous examples. To be honest this is not the sort of disc I usually try out, but a respected colleague in the industry said that it was very useful for setting up speakers in difficult rooms, so I gave it a spin...

In use

This disc has a number of useful tracks to assist with achieving strong stereo imaging, all of which are preceded by a spoken description of the result you should expect. The first critical one is track four, which is for loudspeaker position and adjustment. It features a voice and castanet to check relative loudness and tonal balance for each channel, and also places the same sounds at a position halfway between the centre line and

the individual channels to assist in achieving correctly symmetrical imaging.

The soundstage test is probably the most useful one for finding the correct position of loudspeakers with, as it's fairly clear whether or not the sound is coming from the various indicated positions, such as outside each speaker or a quarter of the way across the soundstage. In my system I found that one channel needed to be moved slightly outwards to get the right result.

The voice and castanet continues for the rest of the test tracks; first up being a 360-degree sweep where the castanet is walked around the room, albeit without any footsteps. This is a novel effect, if a tricky one to adjust the system for best results with.

An unusual and useful disc, made all the more helpful by the info available on the website...

The stereo image depth tests, numbers one through three, are made in a reverberant acoustic and combine the aforementioned sounds moving together and relative to one another. It's rather like the demonstration records made in the heyday of stereo, but without steam trains or journeys into sound – you can't have everything! At least the chap doing the talking has lovely diction.

The final two test tracks are of tones that slowly increase in frequency for one and decrease for the other; this reveals if there are any significant tonal aberrations in either the room, the loudspeakers or your hearing. It's a bit like the speaker response sweeps that are used in some quarters to measure loudspeakers, except you don't get a readout, and instead have to spot the variations with your ears. These would be useful for finding bass humps that a bit of loudspeaker movement could offset, however sometimes bass requires something more drastic to restrain it.

The final six tracks are samples from different artists in the Opus3 catalogue, these include Eric Bibb, Eva Taylor and the Omnibus Wind Ensemble, whose rendition of Frank Zappa's majestic *Dog Breath Variations* always gets my vote. Opus3 recordings are consistently excellent – I've written about several of the albums that are sampled here in the past and always in glowing terms.

This is an unusual and useful disc, made all the more helpful to the newcomer by the information sheet that is available to download from the IsoTek website. This tells you what to do if the results do not tally with those that the voice tells you should be audible, which is always the tricky bit and makes this a set-up disc proper and not merely a demonstration of what the system can achieve. **JK**



DETAILS

WEBSITE:
ISOTEKSYSTEMS.
COM

OUR VERDICT



soundbites

ISOTEK ULTIMATE SYSTEM SET-UP DISC

This disc from power supply specialist IsoTek has a few rather unusual features. There is an assumption made by the manufacturer that you already realise that your speakers should be mounted with the tweeters at ear height, in your normal listening position, with the listener sitting at the point of a triangle with the speakers at the other two points. Beyond that, no audio knowledge is required. The instructions are simple, and the test tracks are well thought out and make their point obviously. The spoken voice is accompanied by a castanet which carries a surprising amount of sonic information – it allowed me to identify a slight timbral imbalance on my upstairs system and proved easy to focus on. This proved useful during the 'Soundstage' and 'Stereo Image Depth' tests.

The most unusual of the tracks involved the sound seeming to complete a 360 degree sweep around the room, including appearing to go behind the listener - I am happy to report that both of my systems passed satisfactorily. Further on are a series of ascending and descending frequency tones spread across ten points between 20Hz and 20kHz. I was most pleased to discover that the Quad/ Kelly set up upstairs produced the 20Hz quite clearly and solidly (I also felt it through the seat, despite the Kellys standing on 50mm thick granite plinths) albeit with some reduction in perceived volume level compared to the 43Hz tone which succeeded it. The final six tracks are choices from releases on the Opus 3 record label, each chosen to demonstrate a certain aspect of the sound, be it spatiality, rhythm or dynamic range. They range from Bach's 'Tocatta and Fugue in D

Minor', to 'Tiny Island' by Vaquero, recorded in a church, and involving a rainstick and a steel guitar. I found this disc to be well thought out and practical in the track choices offered. Another must for the toolbox! **TB**

[Contact: www.isoteksystems.com]



“An unusual and useful disc, made all the more helpful by the info available on the website....”

Hi-Fi Choice

IsoTek IEC connector

TYPE Mains connector

CONTACT @ www.isoteksystems.co.uk

We're a little shy of reviewing any kind of mains DIY components as mains electricity isn't exactly something one wants to mess with. Still, just putting a plug on a cable is hardly rocket science and one of several reasons why this connector appealed to us is that it is very easy to fit without those embarrassing slip-ups that lead to blue flashes and awkward explanations. All mains cables thicker than 6A flex are a pain to work with, but IsoTek has provided both ample space for any amount of wire and a cable inlet that will accommodate wires as much as 14mm thick.

In fact, cables with up to 20 square mm of copper could comfortably fit in the high-pressure clamps (locked down using a sensible-size screw head), and the overall cable clamp will securely grip anything down to bell wire, making this an IEC for all cables. It uses gold-plated copper and the body is made of tough polycarbonate plastic, which resisted cracking despite our best impression of a ham-fisted electrician in a hurry.

And is it worth the trouble? The answer does rather depend on the cable you're trying to terminate. If it's bog-standard 3A flex then, frankly, no, you'll be hard-pushed to know the difference. If it's super-thick tweaky audiophile wire, you'll not be able to do a comparison with a standard IEC because the latter simply won't fit. But we did manage to find a mid-size specialist mains cable to try, which was enough to convince us that IsoTek's pricey connector (in fairness, the top Wattgate costs more) offers a subtle but worthwhile effect in tightening up the sound, particularly the stereo image. Sceptics may scoff, but the proof, as they say, is in the listening! **HFC**

Richard Black



VERDICT

CONCISE OPINION
IsoTek's connector offers real sonic benefits over standard IECs - a great gift for the hi-fi that has everything!



62 HI-FI CHOICE | June 2007

“IsoTek’s connector offers a subtle but worthwhile effect in tightening up the sound, particularly the stereo image. Sceptics may scoff, but the proof, as they say, is in the listening.”

Hi-Fi Choice

Isotek Full System Enhancer CD

Isotek Full System Enhancer CD

Deterioration of sound quality in an audio system that has been running for any period of time is usually attributed to component degradation or contamination of connections. One potential cause for audio deterioration, only recently being taken seriously, is the build up of magnetic fields in components and cables. While demagnetising (or flux busting) m-c cartridges is an established maintenance technique, this kind of treatment for other components is still rare.

A recent addition to the limited range of products designed to aid with this task is from mains specialist Isotek, in the form of its Full System Enhancement CD.

The disc comprises three tracks: the first is a burn-in track with limited LF extension and the second a burn-in track with full bandwidth. Both are computer-generated tones designed to burn in components faster than would be achieved using a traditional music CD and either track can be left



on replay in your player and played at normal volumes. The third track is a demagnetisation track, and has again been designed and produced by computer, this time to remove magnetic fields that build up in molecules of ferrous materials in the signal path.

Starting with the burn-in tracks, these work extremely well. With a component that I had been told would take 50 hours or more to burn-in the

use of the disc meant that the unit showed no improvement in sound quality after 24 hours. In short, use of the disc meant that the component reached optimum performance twice as fast.

As for the demagnetisation track this proved to be an eye-opener, with improvements in both high-frequency clarity and image focus. While its use didn't exactly result in a transformation in performance, gains were substantial.

If your system has been in use for six months or more, then the low cost of this disc and the ease of its use makes it a must buy. ■

David Allcock

Hi-Fi News verdict

The low cost and effectiveness of this disc makes it an attractive proposition for anyone wanting to ensure the continued optimum performance of their system and ease the running in of new components.

“If your system has been in use for six months or more, then the low cost of this disc and the ease of its use makes it a must buy.”

Hi-Fi News

“This could well be the most cost-effective audiophile tweak in existence”

6 Moons Online Magazine

IsoTek EVO3 Polaris and Premier

IsoTek is on a mission to convince those of us that appreciate sound quality that the condition of the mains is equally as important as the components we use to reproduce sound. The argument is that without electricity there would be no audio reproduction, it is intrinsic to everything that CD players, turntables and amplifiers do. The theory is that if you put in dirty power you will get out dirty sound.

The likelihood of polluted mains is greater now than it has ever been. The main culprit is the confounded computer – most of us have them at home and they are renowned for emitting all sorts of nasties into the mains. The other scourge of good sound is RFI, airborne interference created by the wireless networks that so many of us depend on today. That too gets into the power lines, and if you use a home plug to send broadband around your home you are surely making matters even worse.

To combat this, IsoTek has been building serious power conditioners for quite some time, but they are expensive things and many are yet to be convinced of their worth. The company has introduced the EVO3 products so that we can find out what benefits might accrue without spending too much. EVO3 consists of an extension block and a power cable at entry level prices but with high quality build. This is not mere hyperbole either, these components offer remarkable value by comparison with the competitors I've seen.

The EVO3 Premier power cable plugs have solid copper connectors with 24k gold plating, the cable itself uses silver plated six nines oxygen free copper (OFC) conductors in a Teflon FEP dielectric, the sort of thing that also makes an excellent audio cable. The cables are pressure terminated and encased in a moulded plug assembly.

The EVO3 Polaris is a six outlet distributor that removes common mode and differential noise, with a claimed reduction in RFI of 30dB. Each outlet is independent to avoid cross contamination and internal wiring is also in silver plated OFC with a PTFE dielectric. You need to buy a separate power cable to connect it to the wall but it's very nicely put together and looks a lot better than most as well.

Sound quality

I tested these components with a Leema Tucana integrated amplifier and Metrum Acoustics Hex DAC, the source was a Naim Unitiserve, but it takes a while to boot up and so was left out of the loop. Firstly I changed from a regular black mains cable to the Premier on the amp, using my existing Russ Andrews extension block. This resulted in a distinct cleaning up of the sound, one that notably lowered the noise floor which let through more high frequency sparkle and more of the acoustic in the recording. That seemed pretty impressive but what I didn't expect was for the timing to get better as well. Moving the DAC from standard to Premier cable had

a marked benefit for dynamic range, a consequence of lowering the noise floor, as well as a refinement and a general opening up of the soundstage. Going back to the standard cables made things sound coarse.

Moving from the Russ Andrews extension to the Polaris with standard cables was also beneficial with more space, lower noise and greater resolution becoming apparent. To get a better idea of the potential of this extension I also dug out a cheap Duraplug extension block and contrasted that with the Polaris, the improvement was unsurprisingly even greater with an increase in timing precision, depth of bass and a much greater sense of musical flow. I also compared standard and Premier power leads from the Duraplug extension and discovered that their benefits were not as clear-cut as they are with the Polaris or Russ Andrews. In other words if you can't connect the system directly to the wall then the Polaris is the thing to get first.

These two products work well on their own but the sum is clearly greater than the parts. There is a cumulative effect in using both together that makes a striking difference to the overall performance of the system. They really open up the soundstage and let you hear more music because noise is reduced. This was the effect that they had on a DAC and amp that already have some serious power supply regulation onboard, so I would expect the change to be even greater with more affordable equipment. Highly recommended then, and particularly good value for money in these straitened times. **JK**

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ISOTEKSYSTEMS.COM

OUR VERDICT



SOUNDBITES



ISOTEK EVO3 PREMIER MAINS CABLE

Last November, Hampshire based mains specialists, IsoTek, introduced a new affordable mains cable called the EVO3 (Evolution 3) Premier.

The core of the cable are three 2sq mm conductors made from 99.9999% OFC

which are silver coated. This is covered in an extruded Teflon dielectric and given a rotational twist to aid EMI and RFI rejection. A cotton filler reduces microphony and adds internal strength. Between this and the flexible, heat resistant PVC outer sheath is a paper wrap.

The moulded IEC and three pin mains plugs were specially designed and manufactured by IsoTek, and boast solid copper conductors coated in 24ct gold.

Using the cable to power a Leema Acoustics Agena phonostage, replacing a first generation IsoTek cable, the effect was transformative. The older cable had a raw honesty in its presentation. This one had at least the same honesty behind it, but was more sophisticated. I found that there were improvements from tonal colour to its substantiveness. It felt weightier yet more agile, and more fluid and detailed.

Changing over to using it to power the Leema Antilla CD player, I again found an

improvement. This time the EVO3 Premier replaced a Merlin Cables lead. In this case the sound had more open and obvious detailing. The Merlin had a smoothness that was very pleasant, but with the Premier I could pinpoint the start and finish of a sound with greater accuracy.

I also tried it on the Leema Tucana II amplifier (150W). It did a reasonable job but the sound felt as though there was a little bit of restraint in it. Used on the less demanding Rotel RA-04 amplifier (40W) I found it benefitted the sound.

This lead seems to offer a level of performance that can compete effectively with considerably more expensive cables. It works very well with low current equipment, and with low powered budget amplifiers. I think it is so effective and such good value for money that I now have three. **TB**

IsoTek
www.isoteksystems.com

Isotek EVO 3 Mains Cable

by Jerry Jacobs



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OUR VERDICT



I hadn't planned to review this cable at all, but one was supplied by David Brook at Mains Cables R Us (MCRU) as part of the package with the excellent LongDog Audio VDt1 DAC that I recently reviewed here. Swapping out this mains cable for one of my own favourites produced an unexpected diminishment in sound quality. "Hmm", I thought, "interesting".

Solidity and control, dynamics and resolution, clarity and precision. All seemed to benefit from this cable on the LDA DAC.

At or so for a 1.5m length, reasonably flexible

How can mains cables affect the sound of a component? - I have no idea, but experience demands me to accept that they do.

and looking very well made and presented, this cable is by no means expensive as such things go.

It's available in any configuration of plugs you care to think of, including high current, Schuko, Figure-8, UK 3-pin, US 2-pin etc

Technicalities

Three 2 sq mm conductors made from silver-coated 99.9999% OFC (oxygen free copper) are used to carry the current. The dielectric covering is extruded Teflon and the conductors are given a rotational twist to improve RFI rejection.

A cotton filler reduces microphony and bolsters the internal strength of the cable and a paper wrap is used to secure the construction prior to the application of the flexible PVC jacket

The moulded IEC and three pin mains plugs are designed and made by Isotek, and the solid copper

conducting components are coated in 24ct gold.

Comparisons

Ah, the 'sound' of mains cables. One of the more contentious issues in hifi! How can mains cables affect the sound of a

component? - I have no idea, but experience demands me to accept that they do. I could list a discouragingly large number of mains cables that spoil a component's sound for me.

I tend to keep several brands, each with their own sonic characteristics that suit some components but that do not necessarily synergise with others.

Reviews

Here's a comparison between the Isotek cable and a couple of my established favourites

Nordost Magus (re-branded as Blue Heaven at around

for 1m) has been one of my 'keeper' mains cables for quite a while. As well as looking great with its lovely deep blue outer sheath, it also performs admirably sonically! It has a slightly relaxed but fluid take on the music; there's a natural flow and tonal richness that is very appealing. In comparison to the Isotek, though, it seems a bit too laid back, less tonally neutral and missing out on some of the excitement, boldness and solidity of more rhythmically propelled music.

The Isotek EVO3 Premier sounded closest to my old MusicWorks mains cable, the latest version of which retails at around for a 1.8m length. Similarly controlled and dynamic, it was actually quite difficult to tell them apart on small to medium scale music. When the music really gets going, though, and with higher powered amps like my 250wpc Krell, the benefits of the more expensive cable can be heard as a further expansion of dynamic freedom and heft. With a lower powered amp like a Topping TP-60 27wpc t-amp, or with low powered source components, differences of this kind were marginal at best.

Summary

All 3 of the power cables mentioned here are fine examples of the cable maker's art, and I would happily commend any and all of them to you. The Nordost has a bit more 'flavour', and that may suit your system or preferences. The MusicWorks is similarly neutral, defined and explicit as the Isotek, and is capable of taking a high powered amplifier's dynamic freedom even further - but it also costs several times as much!

So, the Isotek EVO3 Premier power cable is a bit of a no-brainer as far as I am concerned - the benefits of high end power cable design, but without the high price.

So, the Isotek EVO3 Premier power cable is a bit of a no-brainer as far as I am concerned

Equipment used:

Speakers: MBL 116F, Dynaudio Excite X14, Waterfall Audio Victoria Evo Power Amps: Atoll AM-80, Topping TP-60 and Krell KAV-250a

Pre-amp: Restek Consens

Source: Vincent CD S7 CD Player.

Signal cables: RFC Pluto & Oscar's Audio Dark Knight i/c and Tellurium Q Black speaker cables.

Mains cables: Nordost Magus, MusicWorks



A bit of a no brainer says Jerry Jacobs

REVIEW

HI-FI WORLD

New Age

Is Isotek's Aquarius the dawning of a new era in mains conditioning? Paul Rigby finds out...



I've always been suspicious of gadgets and liquids and sprays and boxes which don't appear to do anything but light up in various shades of blue.

However, despite my inherent mistrust and concomitant grumpiness I do pride myself with having an open mind. The result, after testing, has been a reviewer in a constant state of surprise. Yes, cables do improve sonics, demagnetising your vinyl and CDs does make a difference, correct shelving does enhance sound quality, and leggy blondes can put a smile on your face [steady on Paul! Ed.]...

So it was with this growing sense of assurance (although I may have dreamt about the last one), that I tackled Isotek's new mains conditioner, the Aquarius, the official successor to the company's own popular Mini Sub, originally released in 2003.

So what does a mains conditioner actually do? Basically, it gives your electricity supply a wash and brush up, filtering out any spikes, removing noise and preventing any sort of contamination either directly from the mains or from one component to the other (utilising, in IsoTek's case, Kirchoff's Equal Path of Resistance technology). If you believe in that old adage, 'rubbish in, rubbish out', often applied to sources such as turntables and CDs, then look at your mains electricity as the real source of your hi-fi. Once distorting noise enters your system from the mains then your hi-fi is up against it from the off.

The new Aquarius arrives with six sockets, two 16 Amp, high current

outlets for power amps and the like, plus four 5 Amp, medium current outlets for CD players, tuners, et al. Each socket is isolated from each other and features its own filtering system. The medium current sockets also feature Adaptive Gating that changes the degree of filtering dependent on the load. Other enhancements include a new choke design with improved filter stages and updated magnetic materials plus the outer aluminium case (measuring 444x85x305mm and weighing in at 9kg) which, in effect, acts as a Faraday Cage providing enhanced shielding.

SOUND QUALITY

Listening tests took place with an Isotek-supplied Extreme cable that plugged the Aquarius into the mains plus two IsoTek Optimum cables (£190 each) to attach my power amp monoblocks to the high-current sockets and two IsoTek Elite cables (£125 each) attached to the medium-current sockets to plug in my other system components.

I initially span the Jeff Beck reissue 'Blow By Blow' (see classic cuts, p115) on vinyl, and jazzman Brad Mehldau's new 'Highway Rider' (Nonesuch) CD. My initial impression was that a sense of calm suddenly reigned over the whole performance. There was extra focus to the stereo image while extended listening alerted me to new details and information that emerged from both mixes. Bass remained tight but more relaxed, lower frequencies seemed to have to make less of an effort to be heard.

Probably the most notable effect

of the Aquarius was heard on the Nancy Wilson LP, 'Who Can I Turn To' (Capitol). Whenever Wilson extended a note by utilising her vibrato, the Aquarius was able to more easily follow the voice as it moved up and down the frequencies during the vibrato sequence and do it more effectively than the older Mini Sub I had on hand for reference, too. The greater clarity and enhanced, quiet background of the Aquarius allowed the voice to be properly tracked for the first time. Without the Aquarius, an upper midrange bloom tended to mask the vibrato at source.



CONCLUSION

Don't view the Aquarius as a method of solving problems in your current system set-up, but see it as a way of enhancing what's already there. I regard the IsoTek as another step in helping to remove what I consider to be the most critical obstruction to good music in any hi-fi – distortion and its associated noisy cousins. Purifying the musical signal, via improving speaker design, better cables, demagnetising your LPs and CDs, lifting your turntable to an isolating platform or buying a mains conditioner, not only allows your components to really show what they're capable of, but also enhances the appreciation of the music you're playing. That the IsoTek Aquarius revealed previously unheard details from my familiar LPs, says it all.

VERDICT

An effective improvement to a good hi-fi system, this serious product justifies its premium price.

ISOTEK AQUARIUS

FOR
- clarity
- midrange detail
- bass control

AGAINST
- nothing at the price

hi-fi+

EQUIPMENT REVIEW

The IsoTek Aquarius mains conditioner

By Alan Sircom



This product arrived just very slightly too late for consideration for this year's awards. So think of this as a preview for the 2010 Awards, because a mains product really has to do something extremely special to beat the IsoTek Aquarius.

The new 'EVO3' Aquarius sports a pair of 16 Amp, thermomagnetically fused high-current outlets, plus a quartet of 5 Amp, bayonet fused, auto-adjusting medium-current outlets. These feature the company's own 'Adaptive Gating' technology – an auto-sensing filter stage that adapts to the current draw of the load. First appearing in the high-end Nova and Sigmas power conditioners, this is claimed to provide the perfect filter delivery for each piece of equipment connected. It also calls upon IsoTek's new KERF (Kirchoff's Equal Resistance Path) technology developed for the latest EVO3 line of conditioners, said to deliver a more coherent sound, because it spells a very pure, symmetrical signal path through the unit.

IsoTek has also developed a new choke design, with improved magnetic material that is claimed to offer increased frequency bandwidth, 67,500 Amps of instantaneous and repeatable protection and a case that creates an effective faraday cage when closed.

I've been a GII Minisub user for some years. It was the product that above all others made mains conditioning a feature in the UK hi-fi scene, even winning over those most curmudgeonly of mains hold-outs, Naim users. It was keenly priced, sorted out the sound of mid-priced equipment perfectly and was the sort of thing that sat nicely in the equipment rack. I'm not the only GII Minisub user out there, and here's a hint... put it on eBay or trade it in before word gets out about just how good the Aquarius really is.

The whole auditioning process took about 30 seconds. Play piece of music on GII MiniSub. Play it again on Aquarius. Wonder why you were so attached to the GII MiniSub (in fairness, without the GII MiniSub, there would be no Aquarius, but those intervening years of development made their mark). What we have is a sound that is fuller, seemingly louder and more dynamic, rising out of a quieter background. All the things the MiniSub did to music a few years ago... but more so. Over the next two days or more, things get even better. Add in the Extreme power cable

(highly recommended in its own right, and if you buy the two together you shave £100 off the cable price) and things just improve still further. Going back to the original is like going back to hamburger when you've dined on steak. Going back to the original mains is like eating the box the burger came in.

And the downside? Well, the short answer is we're still looking.

Sometimes we worry about 'mk II' products when the original was so good. Will it be a *Godfather Part II*, or will it be a *Blues Brothers 2000*? Fortunately, it's a real treat and a giant leap forward, especially for (soon to be ex-) GII Minisub owners. Very highly recommended. +

TECHNICAL SPECIFICATIONS

Number of outlets: 6
 Type of outlets: 16A UK unswitched
 Standard mains inlet: C20 IEC
 Mains voltage: 100 - 240VAC
 2 x High current 16 Amps
 4 x Medium current 5 Amps
 Maximum current: 16 Amps continuous
 External mains fuse: 5 Amps (13Amps UK)

Dimensions: 444mm x 85mm x 305mm
 (WxHxD)
 Weight (boxed): 9.0Kg

Manufactured by:
 Audio Power Systems Ltd
 URL: www.isoteksystems.com



IsoTek EVO3 Aquarius

• • •

POWER PLAY

Anyone wanting good sound has to keep an eye on every stop along the signal chain. And what is the first stop? The power outlet. But is starting off here really worth it? We will hear.

By Jochen Reinecke Photos: Ingo Schulz, Cai Brockmann



Can it be a sign of old age already? If someone had told me twenty years ago that I would one day write a piece about a mains filter – I would have laughed as I hurried off on my way.

But when editor in chief Cai Brockmann approached me with one of his infamous, bimonthly cold calls to review a new test object, I accepted without hesitation. "Give it to me", was my ecstatic response.

It's bound to happen to every hifi nut eventually. You start saving early on and carefully assemble your loudspeakers and all kinds of components, usually replacing them one by one over several stages, until one day you can finally call the provisional hifi system your own. Then comes the initial fine-tuning. You invest in the acoustics of the living space (you'll also experience your first relationship upheavals in this phase at the latest), experiment with different loudspeaker arrangements, spikes, equipment platforms and support feet, all kinds of LF cables and much more. Most people call it quits at some point, but not everyone.

Some take the shortcut right to hardcore esoterism, investing in "informed" granite slabs, mystical blue electrosmog remediation lights, drawing with black marker around the edges of their CDs, putting up "activated" stickers on their windows, waving expensive magic wands over their cables before listening, and hanging bell-like resonators in the room (this usually marks the official start of the separation, including maintenance payments). Others remain at least pro forma on the science-based path and invest in costly power cables – or in a mains filter, the purchase price for which one could easily buy a record player and have something that could be called useful. This piece of equipment is exactly what I now have at my home. How could it come to this?

Very easily – in the past ten years, I have found (and I needed to, at times reluctantly) that astonishing things tend to happen in the hifi segment. Some tuning measures, though they may sound esoteric, actually do make an audible, reproducible sound improvement. And by the way, many don't – that is worth emphasizing once again at this

MAINS FILTER

junction. It became clear to me that mains current is anything but "clean" (i.e. except for a flawless sine with a constant mean amplitude, it supplies no further harmonics), when a knowledgeable master electrician once lent me an amusing device that allowed me to hear the background noises floating around in the mains current. Sort of like an amplifier for sound coming from the power outlet with a steep notch filter at 50 Hz. Holy smokes! The things you could hear – a hearty burp when the refrigerator started up, a shrill hissing and buzzing when using the dimmer on my halogen ceiling light, a strange creaking when turning on my laser printer – combined with lovely, intermittent musical interference from the radio and waves from the Tempelhof airport that used to reach all the way to Schöneberg.

And since alternating current is by definition foreign when it comes to operating hifi components, all of the transformers, switching power supplies and such built into the components are simply

a crutch. As a consequence, some manufacturers of ultra-premium hifi equipment turn to battery power, as this is the only way to truly deliver "pure" raw power material. If you then consider that what ultimately resounds from our loudspeaker is simply rectified, strained, stabilized current, onto which the music is modulated with considerable effort, it follows that one needs to begin right at the front of the signal chain – right at this very current – in order to achieve maximal sound quality.

This is exactly what the products from IsoTek do. This manufacturer has dedicated itself wholeheartedly to the issue of "clean power". The product portfolio primarily encompasses power cables of the highest quality (and price categories) as well as active and passive mains filters. I have received the IsoTek EVO3 Aquarius – a mains filter with six outlet sockets, which could easily pass as the output stage when viewed from the front. Supplying power is the affordable power cable EVO Premier from the same the company; it not only goes well with the



Interview with Keith Martin, IsoTek



Keith, this device looks like a sophisticated output stage – but it's actually a mains filter. Is that really necessary?

Well, the time and effort we at IsoTek have put into mains filtering is considerable – it might be unparalleled. For example, the EVO3 Aquarius features six filter sockets in the back; inside, each one of them has its own current path which is isolated from the others

– to my knowledge, no other company is doing this. It's actually like an extremely complex power strip in which the connected devices cannot interfere with one another. That's the reason we can't really make it much smaller. And we gave it a "classic" design, which allows it to be integrated in existing high-end systems as easily as possible.

But why should I add a mains filter to my expensive system in the first place? Doesn't the music lose some of its dynamism?

That criticism comes up often, but that's not the case with

IsoTek. We pay meticulous attention to filtering out only the disruptive elements in the current and to maintaining the full dynamics of the music recording. In fact, we can demonstrate the effect of the mains filter with this device here (*he presents a mains noise analyzer*). It allows all of the mains interference signals to be heard as actual sounds (*he demonstrates the difference between "with" and "without"*).

Wow, I didn't expect such a drastic difference ...

Yes, it is quite amazing to see what a clean current can do. It's no wonder that a premium hifi system will show its appreciation with a substantially better performance.

So an electric current that is as "good" as possible is essential for the listening experience?

If I may offer an analogy: No one would think of filling their fancy sports car with inferior gasoline. So why should I expect my premium system to run on contaminated power?

A good comparison, Keith. Thank you for our talk.



1



2

» Aquarius, on the practical side, it is also included in the price.

I have the ideal working conditions and challenges to offer the British double pack: Last August I moved into a new apartment; downstairs, a snack bar is located on the first floor. Apparently, their massive pizza oven packs a heavy load: In the evening when their business is booming, my power is so compromised that even my living room lamp slightly flickers. Things calm down again at 11:00 pm sharp, when the place closes. And now we – finally – have the reason that I wanted this device for a test. Get it?

What does the EVO3 Aquarius do?

On the one hand, it filters out all of the harmonics and interferences from the incoming mains current. It can reduce the types of interference described above – also called RFI by electrical engineers – by up to 60 dB, for instance. On the other hand, it ensures that the interferences generated by the hifi chain itself are eliminated to the greatest extent possible. During rectification and straining of the supply voltages, the power supply units of the components distribute the harmonic impulses "back" into the mains. In other words, a battle on two fronts.

The good news: It actually works, especially for me at home. I deliberately scheduled my test sessions during the times in which the power in my apartment was noticeably strained. And as soon as the EVO3 Aquarius came into the game, the improvement in my chain's performance was astonishingly clear. My CD player is an Audiolab 8200CDO. Its digital signal is led by coax into the BMC PureDac and symmetrically converted via XLR to the Abacus Ampollo output stage. From there, it goes to my reference loudspeakers, the Neat Acoustics Momentum 4i and the Tannoy Turnberry Gold Reference.

But what exactly happens as the EVO3 Aquarius performs its duties? I observed noticeable improvements in three areas. The most significant effect can be seen in the spatial representation. With the EVO3 Aquarius in the loop, there are considerable enhancements. Sound sources can be more precisely located, seem firmly anchored in their position, and are perceived to go a half meter further in depth and fan out more extensively in breadth. This positive effect can be seen in all musical genres and styles. Orchestras have a more precise depth gradation, mixed voices sound considerably more convincing, even chamber music is more enjoyable, especially when produced in such a manner that the space in which it is recorded is "alive" with the music. Hall sounds more natural, refined – it even seems possible to actually imagine the qualities and nature of the place it was recorded (cool, warm, woody, etc.). In Mogwai's song "Take Me Somewhere Nice", for instance, the second guitar after the intro is perceived to be coming from one meter to the right of the right loudspeaker. When the drums come in, it almost seems possible to visualize the room in which the microphone is set.

- 1 Clear the ring: Six outlets are ready and waiting for power-hungry components
- 2 Could be an output stage but isn't: pleasingly minimal, yet premium-quality and substantial design.

MAINS FILTER

In terms of high-frequency representation, my chain can deliver considerably more with the EVO3 Aquarius as well. This is especially true when it comes to drums and percussion instruments: Cymbal, rattler, shaker, sizzler – they all sound remarkably more detailed, and it's easier to differentiate them from one another in their timbre – even the cowbell sounds positively more metallic, more bell-like.

Last but not least, there is also a bit more to enjoy in terms of bass. Obviously, the mains filter can't provide any tonal modifications (that would be questionable from an electrical point of view, and you'd also have to worry about the mental state of the reviewer if he said it could). But the impulses seem to me to be crisper and more refined. This can be heard beautifully in Linton Kwesi Johnson's "Reggae Sounds": The bass drum appears to have a more immediate effect, the bass lines sound groovier and purified.

In short: The IsoTek EVO3 Aquarius is worth its salt in every respect. It enhances the system with an undoubtedly audible upgrade, while giving its owner the good feeling of not having purchased it based on esoteric nonsense but on an immaculate design that can be relied upon. Pure genius!

redaktion@fidelity-magazin.de

IsoTek EVO3 Aquarius

Mains filter

Input: Mains inlet (C19 IEC)

Outlets: 6 mains outlets (2 x 16 A, 4 x 5 A)

Mains voltage: 100-240 V.

Total available power: 3680 W

Total transient power: 18400 W.

Delivery contents: IsoTek EVO Premier power cable (unit price: € 99)

Finish: Silver or black

Dimensions (W/H/D): 44,4/85/30,5 cm

Weight: 9 kg

Warranty period: 2 years

Price:

IDC Klaassen International

Am Brambusch 22

44536 Lünen

Phone 0231 9860285

www.idc-klaassen.com

PERFORMANCE EVO3 AQUARIUS

audioemotion audioemotion.co.uk
CHECK OUT OUR GREAT SELECTION OF PRELOVED STOCK

I have often wondered what they feed thoroughbred race horses with. I bet it isn't carrot tops and potato peelings, that's for sure. Nor would I imagine they fuel Formula 1 racing cars with petrol from the local supermarket either. The same goes for Hi-Fi systems; feed them on a poor mains supply and they are not going to run at their optimum performance.

What does a "mains conditioner" do then? In simple terms it gives the electricity supply a jolly good tidy and smarten up, taking out surges, spikes and fluctuations, removing noise and induced radio frequencies, neutralising them so they don't enter your Hi-Fi components. "I don't have any of that" some may say, but you would be truly shocked just how much the electricity supply varies in voltage and sometimes frequency too, plus these days the National Grid is being used for digital data transfer, not forgetting either that many home broadband systems operate via the mains in the house wiring, not confined either solely to the house itself that has it installed, because some will leak back into the supply lines. Thermostats and motors found in fridges, washing machines and central heating controls are notorious for causing unwanted clicks and whirring which can be clearly audible through a Hi-Fi system. If you live near an industrial estate or a farm you might get all sorts of nasty artefacts reflected back into the mains supply. Add to that some DC offset where direct current voltages appear within the AC waveform, imbalances where either the positive or negative cycles are curtailed (this happened in my previous house) and as you can see, a mains conditioner clearly has it's work cut out standing sentinel over what can be transported inwards via the mains supply. Therefore I don't regard a mains conditioner as an accessory or a luxury, I regard it as essential and hence have had one in my own system for a number of years and wouldn't be without one now.

However, I have also heard some mains conditioners in the past that managed to squeeze the life out of the music and suppress dynamics to a marked degree, so I will be paying particular attention towards that trait during the evaluation.

Construction

Built into a substantial case, this is a solid piece of engineering. Measuring 444x85x305mm and weighing in at 9kg it is the right size to slot into a standard sized rack. When powered it has just two small faint blue LEDs in the central backlit panel which are not distracting, so it's rather nice having a power indicator lamp telling you it's switched on, rather than TELLING you it's switched on with a glaring light – a nice touch. The power switch and safety outcut is underneath the chassis just off centre to the front right. It is a bit of a fumble getting your fingers in beneath the case to locate the switch, but given that the unit should be permanently powered up then it isn't such a major issue for the rare times you may need to reach underneath for it.

On the rear of the unit is six 3 pin UK mains sockets, two of which are deemed high power outlets for use with components such as amplifiers and power amplifiers that can deliver 3,680 watts continuously per socket and the remaining four are for lower current draw units like CD players, DACs and phono stages, etc., able to supply 1,150 watts continuously per socket. The sockets are of good quality and grip the plugs well. IsoTek say that each individual socket is monitored for power consumption and are isolated from each other so a heavy current demand on one socket will not detriment the others.

Power inlet is by a 3 pole 20 amp C-19 IEC connector. IsoTek thoughtfully provide a power cable suitable for the role with the Aquarius and it isn't just any old power cable of indeterminate or generic parentage plonked into the box, it is one of their own products, namely an Evo 3 Premier. As it is included as part of the Aquarius package I will give a brief description of it here and Hifi Pig's own Jerry did in fact carry out a brief review of this cable back in December of 2013.

The Evo 3 Premier is only supplied as a 1.5 metre length, which should be more than adequate to fit the majority of installations. Conductor material is 40 strands of 99.9999% OFC silver-plated conductors with Teflon (FEP) dielectric with a 2mm² diameter. Connectors are custom made 24 carat gold plated and to IsoTek's own design, which is a refreshing change from the norm.

Retail price of the IsoTek Aquarius Evo3 as detailed here is circa £1,200.00.



Sound Quality

Or rather, how it doesn't sound. The sound quality heard through my Hi-Fi system wasn't directly attributable to the IsoTek Aquarius itself, more the profound effect it had on the performance of the other components attached to it and allowing them to work unhindered by mains borne pollution. Because of that the "Sound Quality" rating I have given at the end of the review is only a notional figure, as it should be by rights much higher if it was a standalone sound producing component, as opposed to affecting other components in the chain as mains conditioners are wont to do. Even so, it is still given a 9.1 out of 10 rating, a more than respectable score nonetheless, given the context of it's function.

The Aquarius was tried with 3 different amplifiers; a valve amplifier, an all digital amplifier and a conventional transistor output amplifier, plus two CD players too, so all of them benefited immensely from the cleaned up mains supply it provided, so practically any device should derive gains from using the conditioner in the system.

Background became totally silent, with not even the tiniest amount of hiss when the amplifier's volume was cranked up to maximum, whereas it was there before the Aquarius was introduced. I heard no hums or buzzes either.

Of course, part of my brief was to analyse whether or not the Aquarius was compressing any of the dynamics and I would be paying particularly close attention to that, given my previous experience with other mains conditioners. Pleased to report that I couldn't detect any compression effects at all, in fact the system was even more dynamic than hitherto without the Aquarius being installed and never once felt that it was running out of available power at any time.

The sound just opened up and flowed with absolute ease from the speakers, fine details had acquired a polished refinement, presented in an endless stream of new found details, so it was no effort at all to hear all of the tiny nuances in the recording without having to strain to hear them. Bass too acquired a palpable firmness and solidity without any trace of boom or overhang at all. Drums and bass were immense in scale yet under perfect control at all times. Of particular note however was the sound stage and imaging which really was holographic in every sense of the word and it was effortless in placing musicians and instruments into fixed points in space with an ethereal quality to them, being surrounded and enveloped by an inky blackness. In short, I believe the IsoTek Aquarius simply unshackled my system and let it do what it does best, with the benefit of having what the Aquarius doing what it does best, forming a perfect symbiotic partnership.

Conclusion

So, would you feed that thoroughbred race horse with carrot tops and potato peelings? Would you fill up a Formula 1 car with supermarket petrol? No you wouldn't answer 'yes' to either of those questions and the same goes too for your Hi-Fi system with the mains quality you feed it.

I will say it again so there is no doubt, I believe a mains conditioner is an essential component and provided the conditioner you choose doesn't compress or curtail the dynamics and lets the music flow out your system without any hiss, hash, mush, or extraneous noise in effortless and untroubled ease, then the outlay is worthwhile in sound quality gains. On that basis, the IsoTek Aquarius Evo3 easily meets all of those important performance criteria and I am convinced that IsoTek have also sprinkled some "Ingredient X" in there as well, because it performed for me way better than I had expected it to, comfortably beating my long term resident mains conditioner with aplomb.

Therefore I give the IsoTek Aquarius Evo3 mains conditioner an unequivocal recommendation.

Build quality: 8.9/10
Sound quality: 9.3/10
Value for money: 9.1/10
Overall: 9.1/10



Recommended for: Any Hi-Fi system, enabling it to perform at it's best.

Dominic Marsh

As is customary with Hifi Pig, whenever a product scores 8.5 or more then a second review is called for, so after Dominic's scoring ratings, it was handed over to Dan for him to conduct the follow up review.

I've had many mains products in my time, ranging from simple basic to more complex filters and conditioners, regenerators, balanced power transformers and isolation transformers.

What I look for in a mains routing system is a unit that imposes no sonic signature on the sound and simply allows the equipment to work closer to its full potential. The Aquarius is a product that gets a tick from me.

The unit is extremely well made, has a substantial aluminium case and great looks to match. Available in various socket output types it will cater for all, regardless of plug choice or country of origin.

In the box, accompanied with the unit is an EVO3 Premier mains cable with gold plugs, an extremely welcome addition over a stock throw away cable which comes with most units regardless of price.

I ordinarily use Schuko sockets so a quick change over to some MS HD Power plugs and the Aquarius was easily swapped into my system and fired up ready to go.

My initial take on the sound was very pleasant and music seemed to be able to breathe very well indeed giving a spacious and 3D soundstage with a black background listened for an hour or so until I had other things to take care of that day and appreciating and anticipating an even better result from the unit later that evening once it had the time to settle in and warm up etc.

Later that evening I returned to the music and played some acoustic material I was very familiar with. I can't really say that I felt the sound was much better than earlier the same day. The sound was spacious and engaging, the soundstage was definitely carved out from the black background and a sense of effortless prowess was a stand out feature of the Aquarius in my system, easily giving the impression that the unit was allowing my equipment to work more efficiently.

Imagine a calmness over the sound that can be definite, solid, bass confident and delicate and you are on the right track to understanding how the Aquarius works in the system.

Listening to vocals, especially female vocals triggered my brain to note that the upper midrange was less forced than using a direct wall or simple mains extension to power the system and other cheaper filter type units which generally always have a sense of compression or squeezed dampening of the dynamics, contrasted very to the Aquarius' sonic appeal.

The dynamic range obtained with the equipment being fed by the Aquarius was very exciting, dramatic and enthusiastic. Orchestral movements had vigour and explosive expression, Electronica was very beat driven with slam and subtle more intricate dynamics of delicate acoustic work was sublime.

It was easy to be seduced with what the Aquarius was achieving in the system and when the review was discussed with Keith Martin GM at Isotek, we discussed sending an extra power cable that could be seen as an upgrade to the already included Premier. Keith suggested we take a look at and a listen to the EVO3 Optimum with a Furutech 1363 (G) and Isotek's own copper 24ct Gold plated Furutech style IEC connector.

Plugging the Optimum into the system wasn't a revelation but it was for sure a strong upgrade that was easily discernible over the Premier. Where the Aquarius allowed the equipment to work at a greater potential, the Optimum allowed the Aquarius to work at a better potential. Was there a different characteristic to the sound? Yes, there wasn't a different tonality or sonic signature but there was definitely a better characteristic. The most standout addition to the overall sound field for me was an increased openness in the midrange, vocals had better projection and were a little smoother and controlled, allowing male vocals to be more masculine and female vocals to command more power and delicacy.

Bass notes also gained a degree of stability and shape, mellowing the upper bass to come through with a little more detail, giving a perception of more strength to the undertones of the midband. Treble remained much the same yet had an addition of smaller micro details being a little more easily depicted especially when the music got busier. The Optimum isn't cheap but it's combination with the Aquarius did allow for a further improvement to the overall feel and dimension of the sound.

Conclusion

The Aquarius is a strongly made unit which offers all the benefits of a shelf sat extension block in a sleek looking package. But that doesn't mean anything if its performance isn't strong.

The Aquarius offer no sonic signature of its own, simply put it will allow the system components to work much more towards their full potential, allowing for better sound staging a quieter background and more ease, control and strength to the overall sound.

The included EVO3 Premier power cable is a fantastic touch and works incredibly well with the unit. Adding a better mains cable though such as the EVO3 Optimum as tested in the review will rep further benefits again.

Build Quality – 8.7/10

Sound Quality – 8.9/10

Value For Money – 8.8/10

Overall – 8.8/10

Recommended for an ability to enhance the overall performance of a system without imposing on the equipment's sonic signature.

Dan Worth





A believer in mains power conditioning, Tony Bolton considers the issues tackled by IsoTek's Solus Evo 3 mains power conditioner.

The mains power that comes into our houses is something that we all take for granted, expecting it to confirm to certain parameters regarding voltage and the frequency of the alternating current. These aspects are controlled by the energy companies that supply your electricity, but there are issues over which they have no control that can adversely affect the sounds coming from your hi-fi. These can include RFI (Radio Frequency Interference) and extraneous noises from the power supplies from common household products such as fridges and computers.

For the last decade Hampshire based IsoTek have been developing equipment that goes a long way to ameliorating, if not entirely solving these problems, and their latest design is the Solus Evo 3, under discussion here.

As the name suggests this is the third generation of units to bear the Solus name. This one uses technologies, such as IsoTek's proprietary KERP and Polaris-X that have already appeared in some of the Company's more expensive products. The former, Kirchoff's Equal Resistance Path, equalises resistance across all six of the mains outlets at the back of the Solus whilst Polaris-X shunts AC mains borne noise to earth without compressing the dynamic range of the music. There is also a Unique Individual Differential Gate filter network to eliminate cross-contamination between the outlet sockets.

The Solus also provides protection against mains spikes and surges with up to 22,500

Amps of instantaneous protection on tap. The unit will deliver up to 2300 VA allowing quite substantial power amplifiers to benefit from its filtering. Internal wiring is silver plated oxygen-free copper. All of this is housed in a 444 x 105 x 305mm (w x h x d) steel casework with a brushed alloy fascia. The units are available in either black or natural aluminium.

Setting up is simple. The Solus is placed in a suitable position, preferably on a shelf so that the ventilation holes underneath are not blocked, the chosen equipment is plugged in to it and the mains supply is connected to the IEC socket at the back. A blue LED will then glow at the front to signify power is present. (It is worth noting that IsoTek refuse to supply cheap off the shelf mains cables with their products, so discuss the choice of suitable cables with your retailer.)

Mains borne noise is one of those things that we are not aware of until we listen to a system without it. The immediately obvious advantages are a lower noise floor, giving the impression of darker, blacker silences in between notes, and the shape of the notes themselves are tidier. The opening attack of a sound, and its decay are more accurately described, sometimes being faster in their opening, and tailing off more naturally, while sounds that start quietly - the opening drum roll in Greig's Piano

Concerto, for instance, seem to start earlier, last longer and the impact of the final strikes, melding with the opening piano chords, have far greater impact.

I found that the odd extraneous noises that can interfere with FM radio listening all but disappeared, and the sound, as with that from CD and LP, seemed to have far greater presence in the room. I also found that although the overall volume of, say an announcer's voice seemed slightly reduced, the difference between the quiet and loud bits of music seemed considerably greater (a quick check with my iPad mounted SPL meter revealed that the volume was exactly the same).

The Solus can be used either on its own or in conjunction with a Titan, leaving the power amps to the latter and the source components to be fueled through the Solus. This seemed to provide a little more air and definition around the more delicate noises such as triangles and small percussion instruments.

Overall an excellent product that provides a substantial upgrade to the sound of your entire system. Rather than upgrade individual components I would recommend listening to your system through a Solus. You may well be surprised at just how good it actually is, and how much our polluted mains detracts from its performance.



VERDICT ●●●●●
Provides effective cleansing of the mains supply at an affordable price - recommended.

ISOTEK SOLUS EVO 3 MAINS CONDITIONER
IsoTek Systems
www.isoteksystems.com

FOR
- noticeably lower noise floor
- improved attack and decay of notes.
- smoother and tidier presentation of music.
- prevents cross-contamination between components.

AGAINST
- nothing I can think of.

Electric tech



Want clean mains to power your hi-fi? IsoTek's range of passive mains conditioners promises you all that and more, says **Jimmy Hughes**

The quality of the mains supply directly influences the sound produced by your hi-fi. If your mains is contaminated with noise (and it is!), the sound will lack transparency and clarity, making the music seem congested and lacking in dynamics. The solution? Invest in a good mains conditioner. IsoTek offers a wide range of products, from the mighty Super Titan (see *The Collection 2011*), to smaller more affordable solutions like the new EVO3 Solus at This unit sits above the entry-level EVO3 Sirius mains bar and replaces IsoTek's GII Solus, which according to the company, offers higher specifications and improved performance, with no increase in cost.

No noise

The EVO3 Solus incorporates a Delta filter network to cancel common mode and differential noise. In addition, newly devised differential filtering is individually applied to all six mains outlets to prevent cross-contamination between components. Noise on the mains supply is only one of the problems you're trying to tackle; there's also the risk of individual components themselves (power amplifiers, for example) generating their own noise and further contaminating the supply. So isolating all six mains

sockets is an important feature. Silver-plated oxygen-free copper cables are used internally, and the EVO3 Solus also protects your equipment from unexpected voltage surges and power spikes. There's an IEC mains input and six 13-amp unswitched mains outlets – which (given a typical hi-fi set-up) should be sufficient for most user requirements. During use the unit runs cool and makes no mechanical/physical noise so far as we could tell and there are no annoying buzzes or humming sounds to speak of.

Modest price

Build quality is reassuringly solid. The casework is made from mild steel, with an aluminium front panel and cosmetically, the finish is good. Internally, the various components are mounted on a single printed circuit board which is resin-potted. While this helps keeps things like mechanical resonance in check, it also makes it virtually impossible see what components have been used, and prevents IsoTek's competitors from ascertaining the precise nature of its circuits! Given the EVO3 Solus's relatively modest price, when compared to IsoTek's massive Super Titan model, the former offers very good value. Inevitably, of course, it's not as good

DETAILS

PRODUCT: IsoTek EVO3 Solus
Origin: UK
TYPE: Mains conditioner
WEIGHT: 5kg
DIMENSIONS: (WxHxD) 440 x 310 x 100mm
FEATURES:
 • Six 13a mains outlet sockets
 • Each socket individually isolated
 • Silver-plated, oxygen-free copper cabling
 • Cancels both common-mode and differential noise
 • Protects against voltage spikes and power surges
DISTRIBUTOR: Soundfoundations

WEBSITE: isoteksystems.com

as the bigger unit, but it provides more than a taste of its benefits at a fraction of the price. And, every little helps!

Transparent sound

In terms of sound quality, what can you expect from a mains conditioning unit like the EVO3 Solus? Well, as you purge the mains supply of noise, you will be better able to experience what your hi-fi system is capable of – you finally start hearing your equipment as it is meant to sound. Obviously, much depends on the quality of the mains to begin with; the noisier it is, the bigger the improvement. The EVO3 Solus enables a cleaner more transparent sound, with increased depth and a wider dynamic range. The music sounds slightly sharper and more immediate, yet at the same time smoother and cleaner, with reduced high-frequency 'edge' and less congestion in complex, busy passages. Also, the quality of sound is more consistent from day to day, hour to hour. The sound will be good, regardless of when you listen, rather than sounding best (say) after midnight.

You're hooked

The EVO3 Solus is a simple effective means of upgrading the sound of your hi-fi; making it sound better and more consistent. You'll get the biggest and most noticeable benefit in situations where mains quality is noisy and contaminated. But, even if your mains supply is reasonably clean, you still hear an improvement. The fact that the EVO3 Solus reduces cross-contamination between components is one reason why. Because mains purity is specific to each location, you need to try the EVO3 Solus in your own home to fully experience the benefits, once you've done so, we're convinced you'll be hooked! ●



Hi-Fi Choice

OUR VERDICT

<p>SOUND QUALITY ★★★★★</p> <p>VALUE FOR MONEY ★★★★★</p> <p>BUILD QUALITY ★★★★★</p> <p>FEATURES ★★★★★</p>	<p>LIKE: Simple, effective device that improves sound quality without fuss</p> <p>DISLIKE: No serious complaints</p> <p>WE SAY: Mains purity has a profound effect on sound quality. The EVO3 Solus will help your hi-fi deliver its full potential</p>
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OVERALL
★★★★★

PERFORMANCE **EVO3 SIRIUS**

TONEAudio

Music.Gear.Style



REVIEW

No.38 June 2011



High-Performance Power Conditioning That Won't Break The Bank

IsoTek EVO 3 Sirius

By Jeff Dorgay

Clean power is one of the most essential parts to any hi-fi system's success. Many audiophiles claim that they already have clean power because they are either close to a generating facility, far away from it, or have dedicated lines; I've heard all the reasons. And I've also heard the most common argument—that a well-designed power supply in an audio component doesn't need additional help.

Unfortunately, if you subscribe to any of these beliefs, you are just plain wrong. I've had the opportunity to audition hundreds of components during the last six years and have yet to hear a single one that hasn't benefited from proper power-line conditioning. Ah, but there's a catch.

REVIEW



The IsoTek EVO 3 Sirius is a great place to start tapping clean power. It won't break the bank, and as your system goes, you can add a second EVO 3 or one of IsoTek's larger units.

I've also had the chance to try countless power products and only found one that follows the Hippocratic oath of "doing no harm" to the signal. Often, it's easy to mistake a lowered noise floor for transient edges being shaved off, or tonality slightly altered, thus accentuating a particular frequency range and making the conditioned sound different—but not better—overall. It's no wonder that after a certain period of time, the system happens to sound better when plugged straight into the wall again, and the honeymoon is over.

But it doesn't have to be that way. A good power-conditioning product should remove distortion artifacts from the AC power line, lower the noise floor, and keep its collective hands off of instrument tonality. And that's precisely what the EVO 3 Sirius does. Following

a brief listen when visiting the US importer, The Sound Organisation, I asked for a review sample. And after a few weeks of listening with various combinations, I am highly pleased with the results.

The Dilemma

Power supply sections are some of the most obvious places where budget hi-fi components cut costs. If you lift the cover on your favorite megabucks amplifier, you will usually find a massive power transformer and banks of filter capacitors that help turn AC power into DC. But these components cost big money and large, high-quality capacitors can fetch hundreds of dollars—each. Ironically, due to their power supply limitations, least-expensive components often best respond to power conditioning. However, more often than not, a person with



a \$4,000 system isn't going to invest in a \$5,000 line conditioner as their next upgrade. (Actually, it wouldn't be a bad idea.)

The IsoTek EVO 3 Sirius is a great place to start tapping clean power. It won't break the bank, and as your system goes, you can add a second EVO 3 or one of IsoTek's larger units. The company also carries a complete line of power cords, which provide additional gain. Yet the EVO 3 is where you want to begin. Sound Organisation president Steve Daniels encouraged me to try the power cords I had on hand and commented, "You'll see a marked improvement no matter what mains cable you use."

The EVO 3 uses a standard 15A IEC power cord, but IsoTek's products are also available for 220/240-volt applications with UK and EU plugs. The model reviewed

here offers six standard 110-volt outlets, all isolated from each other. Maximum current draw is rated at 10 amps, so the unit operates well with all but the largest power amplifiers.

Try This At Home, Kids

Most audiophiles like results that they can quantify and process. Here is an easy test to see if you need power conditioning (you do) and if said conditioning is actually doing anything (it should); the tools and methodology are inexpensive and simple. Procure a 50-foot extension cord and run it well away from your system into another room of your house, plugging one end into your system and the other into a common AC-powered hand drill.

First, listen to your favorite piece of music, preferably a selection with acoustic instruments and a fair amount of "air." Now, turn the drill

on and observe the effect that this has on your system's presentation. You should hear the soundstage compress a bit and a layer of haze materialize as a result of the noisy drill motor. Finally, repeat the process with everything (including the drill) plugged into the EVO 3. Problem solved.

The Lack of Sound

Eliminating noise from the line is the easy part, but the most critical aspects of power-line conditioning concern the preservation of dynamics and keeping complex tonality in check. Listening to a wide range of components, tube and solid state, it became obvious that the EVO 3 did no harm to the signal. Music sounded livelier when the components were plugged in to it rather than directly to the wall. *(continued)*

REVIEW

It's also worth noting that the EVO 3's effect was such that it passed muster with my non-audiophile friends. All detected the same enhancements and described them in relatively the same way. No, this isn't a mere tweak that you'll struggle to hear.

Jesse Sykes' *Oh, My Girl* provided a great workout for the EVO 3. The delicacy of Sykes' complex and somewhat gravelly voice is easy to dilute if the system is not up to speed, and with the EVO 3 removed from the system, her lead vocals (and accompanying twangy guitars) lost substantial dimensionality. While the EVO 3 worked incredibly well with the PrimaLuna Prologue Premium vacuum tube amplifier, it brought higher levels of musicality to the solid-state Emotiva combination (also reviewed in this issue) as well.

The biggest surprise occurred when plugging my dCS Paganini stack into the EVO 3, currently on a dedicated 15-amp line.

Immediately, the sound became "less digital." This characteristic was most apparent and dramatic during the playback of 128kb/sec Rhapsody files. Again, the overall presentation became more liquid and analogesque. Granted, a 128kb/sec bitstream will never sound like an LP. But with the EVO 3 in place, it was much more pleasant and far less grainy.

Plug One In

The IsoTek EVO 3 Sirius provided consistent results, regardless of the equipment used. It will lower the noise floor of your system, and improve dynamics and low-level resolution. Exactly what a power line conditioner is supposed to do. Here's one of the best upgrades you can make. Plus, knowing that you are plugged into clean power simplifies the other aspects associated with fine-tuning. Highly recommended. ●

IsoTek EVO 3 Sirius

MANUFACTURER CONTACT

UK: www.isoteksystems.com

PERIPHERALS

Analog Source Rega P9 w/Sumiko Palo Santos cartridge

Digital Source Denon 3910, Simaudio 750D, Naim DAC, dCS Paganini

Preamplifier McIntosh C500, Emotiva USP-1

Power Amplifier Conrad Johnson MV-50C1, Emotiva UVA-1, PrimaLuna Prologue Premium (integrated), Simaudio 600i (integrated)

Speakers B&W 805D, Magnepan 1.6, Klipsch Heresy III



IsoTek Sirius mains conditioner [Review]

Sirius benefit

IsoTek's new mains block offers tangible improvements

PRODUCT IsoTek Sirius

TYPE Mains conditioner

CONTACT  www.isoteksystems.com



IsoTek certainly didn't invent the mains conditioner (people were selling them before the company started trading), but it has certainly made a big mark in aftermarket mains kit. This must be partly due to the sheer range of products available; at the time of writing, the company's website lists over a dozen models at a variety of prices.

But there are plenty more in the pipeline, including the latest model Sirius, which is part of the new 'EVO3' range. Set to replace the GII products, Sirius is a simple enough proposition, a six-way distribution board, good for ten amp output (2,300-watt) with filtering and protection built-in. Unlike the PS Audio Quintet (reviewed in *HFC* 307), it doesn't include any switching features, but then it is considerably cheaper. It does, however, come with handy wall-mounting brackets.

It might still seem a lot of money to throw at a 'mere' mains accessory. But it's an expense that can easily be justified in the build quality of the Sirius, which is very high. The basic chassis is a substantial piece of aluminium extrusion, on which are mounted high-grade sockets. The mains inlet is a standard IEC type, which IsoTek naturally recommends should be fed via one of the company's own mains leads. The clever stuff is inside, on a modest-looking circuit board which carries all the filtering components.

Arguments rage in the nerdier corners of hi-fi-dom about how best to filter mains supplies. The Sirius adopts a relatively non-intrusive approach, with mostly shunt-connected components that are not 'in the way' of the mains voltage. There are also protection devices capable, apparently, of handling 22,500 amps, a claim we're happy to take on trust in the absence of a sudden lightning strike to use for testing. Rather ingeniously, IsoTek has also come up with a simple, but effective means to provide a degree of isolation from socket to socket, so that mains noise generated by one component does not significantly affect other components

plugged into the same board. This is not always taken into account – certainly not in any of the cheaper mains boards we've seen.

SOUND QUALITY

It is only honest to add to any review of a mains filter or conditioner that your mileage may vary. Subjective results can, indeed, vary significantly from system to system, location to location and even time to time (depending on just how much noise is on the mains and how sensitive the connected kit is to it). But we tried a variety of hi-fi components, in three locations, with the Sirius and were very favourably impressed.

Effects were most pronounced with source components, while power amplifiers – at least, the ones we tried – were less affected, showing just a small improvement in general subjective cleanliness of presentation and image. But we noted a similar improvement to four quite different CD players, each of which seemed to produce sounds from a quieter background when nourished via the Sirius. Small, subtle details were more in evidence and images both tightened up and extended a little further in all directions.

An elderly, but upmarket FM tuner benefited similarly and we were once again slightly perplexed to hear a subtle improvement also from an LP player – this is just the motor and control circuit we're talking about here, quite independent of the phono amplifier. The latter was also given a touch more detail and solidity in its sound, but that's a little easier to explain!

None of the improvements wrought was massive and yet when we fed an entire system through the Sirius, it was given a distinct lift in overall musical performance. We would not hesitate to suggest this as an effective upgrade for any system. It's effective, well priced and clearly makes the case for adding mains products to hi-fi systems. **HFC**

Richard Black

VERDICT	
SOUND ★★★★☆	PRO Well made and practical, this board offers a clear improvement in clarity of sound to a range of components and helps prevent crosstalk between units connected to it.
FEATURES ★★★☆☆	
BUILD ★★★★★	
VALUE ★★★★★	CON Lacks the switching features of more expensive products, does little for power amps.
CONCLUSION We've heard bigger leaps in performance from other mains filters, but they all cost considerably more than this one. Even with 'standard' mains leads, this is a worthwhile addition to a decent hi-fi set-up.	
HI-FI CHOICE OVERALL SCORE ★★★★★	

hi-fi+

EQUIPMENT REVIEW

IsoTek Syncro

by Alan Sircom

The lines between 'better power cords' and 'active electronics' blur with the IsoTek Syncro. Essentially, two sets of IsoTek's Extreme 20A power cable – one with a high-quality, cryo-treated Furutech 13A plug, the other with an equally impressive and similar spec IsoTek-branded IEC socket. In the midst of this is an anti-resonant aluminium cylinder the size of a large beer can. The cylinder contains what IsoTek calls a 'pre-filter'.

The Syncro realigns the power waveform. Modern day electrics do two bad things to the local mains; they pollute it with RFI (tending to make the sound less 'free' and 'open') and they create a 'backwash' from their AC-DC rectification (which ups the noise floor). So, where the AC waveform should have zero voltage, it's displaced slightly (usually about a volt or so), and this displacement is constant over the whole AC cycle. How this manifests in audio terms is low-level mechanical hum (sometimes not so low-level; some valve amps designed and tested under ideal conditions end up with transformers audibly buzzing in the real world), which can translate into microphony... and therefore increased noise. Filters and conditioners tend to treat the RFI problems, but – short of a heavy, expensive regenerator – there hasn't been much to knock out the 'DC on the mains' problem. And – as switch mode PSUs appear on more and more products – this is a problem set to increase.

Syncro knocks out this DC on the mains problem in one fell swoop, by rebalancing the AC sinewave, at once making the system capable of playing louder with less hardness and bringing out the low-level details. This is because it seemed to be better at leading edge attack, but not in an overtly aggressive manner. I have an old and modded HP Pavilion PC that is a perfect test-bed for this; whenever I power it up anywhere in the house, even the sound of my Tivoli DAB clock radio takes a nose-dive, and the big system takes on a raspy edge that is not normally apparent. Plug the Syncro in front of the system and suddenly it's restored to good form even while others are amending their Facebook Wall on the leaky switch-mode PSU of doom.

How big a difference the Syncro makes depends on your lifestyle. If, when you listen to your music, you studiously wait until everyone else has retired for the evening, systematically patrol your house turning off everything electrical aside from the audio system (and breaking into your neighbours and doing the same), then Syncro will make small improvement to the sound. If, however, you have a life and don't feel the need to listen at 3am with the rest of the house – and the rest of your neighbourhood – plunged into the



Dark Ages, Syncro makes a significant step up in performance. When you factor in the way it doesn't hold back the dynamics of a system and helps raise the game of products like the IsoTek Aquarius in the process, it's a no-brainer. IsoTek Extreme power cable is damn fine in its own right, but the Syncro can takes things to a new level.

The acid test of any component is what happens upon its removal. Do you say 'oh well' and put it back in the box, or do you immediately plug the thing back in place. The Syncro is very much in the latter camp. You know that magic audio quality you only get late at night? Syncro helps unlock that sound, whenever you listen. +

TECHNICAL SPECIFICATIONS

Cable: 20Amps, OFC copper with active shield

Connectors: Audiophile-grade, 24ct gold-plated, cryogenically treated

Blocking capacity: 68.000 microfarads

Peak current: 300A / 10msec

Permanent current: 16A / 20Amp peak

Manufactured by: IsoTek

URL: www.isoteksystems.com

soundbites

HI-FI WORLD

ISOTEK SYNCRO MAINS CABLE

Arguably one of the strangest looking (and more expensive) mains cables ever to appear on the market, the Syncro features a pre-filter device situated within an anti-resonant chassis. The point is to synchronise (hence the name) the mains supply to offer the attached component a symmetrical sine wave, realigning the waveform. This is claimed to give a reduction in mains-related noise. To test the new Syncro, I plugged it into a wall mains socket and hooked the other end to power up my IsoTek Aquarius mains conditioner with a series of IsoTek Elite and IsoTek Optimum mains cables running from the Aquarius to my reference hi-fi system. For comparative purposes, I also tried an IsoTek Extreme mains cable to power up

the same Aquarius. The new Syncro is priced at more than twice the price of the Extreme, so is it worth the upgrade?

Sound tests were intriguing because the most obvious aspect of the performance was a major reduction in harshness and 'mush' – an element which was not obviously present with the original IsoTek Extreme mains cable but was noticeable by its very absence when the cable was replaced with the Syncro. The result was a beautifully smooth series of vocal performances which glided over the soundstage, lacking any sort of harsh delivery and making subtle vocal inflections and varying vocal power surges wholly more obvious. All organic instruments now exhibited sparkle and shimmer while the removal of the excessive distortion allowed all instruments,

of whatever variety, time to breathe. Bass, meanwhile, was no longer trying to be understood.

That is, there was now a complete lack of lower frequency strain. With the Extreme cable, bass seemed to be almost artificial in nature, as if it was being propped up by scaffolding. With the Syncro, those same lower frequencies exhibited a shape and structure. A highly impressive piece of kit.

PR

www.isoteksystems.com



“The most obvious aspect of the performance was a major reduction in harshness and ‘mush’... A complete lack of low frequency strain... A highly impressive piece of kit”

Hi-Fi World

“You know that magic audio quality you only get late at night? Syncro helps unlock that sound, whenever you listen.”

Hi-Fi Plus

TRANSLATED FROM HUNGARIAN INTO ENGLISH



Syncro is available in UK, EU (Pictured) & US Specification, with IEC C15, C19 or Neutrik PowerCon

ISOTEK SYNCRO

Having already developed an excellent range of power cables, IsoTek has gone one stage further and re-invented the humble power cord by combining unique and innovative electronics into the design.

The base cable used for Syncro is IsoTek's top-quality Extreme power cord. Featuring triple shielding and 3x2.5mm high-purity oxygen-free copper conductors, this construction safely delivers 20 Amps. The cable is terminated with 24-carat gold plated, deep cryogenically treated connectors.

The real innovation of Syncro is in the large cylindrical black anodized aluminium housing positioned part way down the cable. This construction provides a safe, resonance-free environment for the electronics. These electronics turn the cable into a separate hi-fi component in its own right,

allowing it to block the DC disturbances on the mains supply. This in turn eliminates core saturation in transformers, which can cause them to vibrate. Removing this degradation and re-establishing the symmetry of the two halves of the mains sine wave eradicates this microphonic noise. As a result, the quality of the connected audio or video component is considerably improved.

The primary application for the two-metre-long Syncro cable is to provide the interface between the standard electrical network and various power supply networks, power conditioners, filters or amplifiers.

Sound Quality

To accurately test the Syncro cable, I did not use any power line conditioning or filtering unit in the evaluation process as I felt this would have certainly influenced the results of the auditioning process. I simply compared the unit to a normal power cable, the type you could use to power a computer, as a reference point. No other accessories, tuning tools or auxiliary devices were used.

Changing over to the Syncro cable from the reference brought about an increase in focus and accuracy with far better resolution. Subtle details within the music were revealed from the complex texture of the performance. Interestingly, a magnificently quiet noise floor also dominated the sound stage.

Comparing the lower frequencies delivered when using a standard power cord to those achieved with the Syncro was interesting. The cheap cable was okay, but Syncro improved the sound

considerably: bass was deeper, the dynamics were stronger, the attack had extra power and gain with increased accuracy. Eliminating the distortions and making a near perfect sine wave resulted in a smoother sound, while higher frequencies within the music flowed effortlessly from the speakers.

Clarinet reproduction contradicted the dull May weather outside; the sound was fresh and lively, with increased air and space. Cymbals and percussion became more vivid and every instrument gained a more three-dimensional and natural quality. Vibraphone reproduction was clearer and far better presented in comparison to the normal power cord, and it became easier with the Syncro to imagine the real instrument on the stage when closing one's eyes.

With Verdi's Macbeth, I started first with Syncro and then changed back to

the standard power cord. It was immediately obvious that the performance offered less pleasure and satisfaction. My first impressions were a lack of body, less control in the base and a general roughness with less accuracy. Syncro offered exceptional control; replacing it with the standard cable created a disengaging effect with the music. The richness, subtly and magic of the previous performance disappeared, leaving a less enjoyable experience.

Prior to Syncro, the performance of the standard power cord seemed fine. However, going back to it after listening to Syncro, I found it hard to forget the previous, far more enjoyable performance. This creates something of a problem. When you have been privileged enough in life to taste something that is clearly better, it is hard to accept anything less, but this is often the way us human beings react to such things. The creamy delicacy of the

strings disappears, but the more marked difference is when the music becomes more complex; at this point, Syncro's clean, fresh, open and more fluent sound becomes obviously absent.

Returning to the Syncro for Sin Tu Amor's song performed by Andrea Bocelli with Mario Reyes created a far more enjoyable experience, with richer and more complex intonation. With the regular power cord the sound was harsher, with a distinct lack of body. With Syncro, micro-details were significantly clearer and fresher; the resolution was dramatically improved in every respect. The sound had more body, regardless of the musical category; there was a neutrality and confidence irrespective of the components used.

Using a more expensive amplifier, the effect becomes more remarkable. This, of course, sounds logical; but the additional musical information delivered by the more costly amp makes the Syncro's removal from the system even harder to swallow. That said, though the Syncro's price might mean it's not considered for use with less expensive audio equipment, the resulting increase in performance justifies its use with components at all price points.

Recommendation

Used as a replacement power cord, Syncro offers really serious improvements. These improvements are further emphasised if it's used with a power distribution or conditioning system, where the cable can service a whole system as opposed to just an amplifier. Thanks to its sine wave rebalancing technology and revolutionary DC noise eliminating effects, Syncro solves problems with transformer buzz, thus protecting one's valuable equipment and preserving the musical integrity of the system. It's really not a question of whether to purchase, but when – which of course comes down to each individual's budget. But the key point is that Syncro is unique, and uniquely effective; there has never been a proper solution to the problem that Syncro tackles, until now.

The Secret of Syncro

Syncro is not just a power cord – it is so much more. Its effect and quality goes far beyond comparison to other specialist power cables. In addition to the obvious sonic benefits, Syncro also prevents a problem that no other cable can – transformer buzz that results in microphony within the equipment. Inside Syncro's cylindrical housing are electronics that are dedicated to the elimination and removal of DC noise on the mains, which gives rise to the aforementioned transformer buzz. The significant improvements in sound quality delivered by Syncro's electronics will result because of two factors: mains sine wave rebalance and the elimination of vibration (microphony) caused by the transformer.

How Does DC Noise Effect Hi-Fi Equipment?

If the two halves of alternating current are unbalanced, then magnetisation of the iron core of a transformer is generated. This oscillation results in a disturbing buzzing/humming noise and increased vibration in the components within the affected device.

The problem is caused by all products that pull power from just one side of the mains sine wave, not only in your own home but also externally. Hairdryers are a good example, as they run a diode in series, which is a major cause of the sine wave offset. Most hairdryers load the network by about 1000 to 2000 watts at full power; at a half-load position, we can measure with a multimeter whether a particular hairdryer has the necessary internal circuit to offset the mains. If we connect a resistance meter to the disconnected power plug at half-load and measure in one direction, the diode will be in a closed state; we can also measure broken circuits, and in the other direction we can measure the resistance of the working heating wire and open state of the diode.

Connecting the Syncro eliminated the network asymmetry within about five seconds (within a 1-2 volt tolerance), which immediately resulted in silencing the buzzing transformers. We conducted this test with an old hairdryer just before the listening session began and found the Syncro to be highly effective. It's important to note that this problem is not always apparent, but it can appear at any time and for any period. However, using Syncro will prevent this problem, as well as delivering the benefits of a top-class power cable. What's more, Syncro can be used with existing powers conditioning systems from IsoTek. With the electricity supply perfected, we can now just sit back, relax and enjoy the music.

ISOTEK SYNCRO

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EQUIPMENT REVIEW

IsoTek EVO3 Elite power cords

by Nicholas Ripley

IsoTek gets power. Every product the company makes is designed to improve the performance of audio equipment by addressing the power somehow. So, it should be logical that IsoTek is the go-to company for power cords. The current range has a 'good, better, best' approach, and the RVO3 Elite tested here represents the 'better' cable in the three-strong range. The brand has been moving from its previous GII range to EVO3, and in power cord terms, this means a seven-core, silver-plated, 6N, oxygen-free copper cable, with each conductor shielded from its compatriots and the outside world by a Teflon FEP dielectric and a cotton filler. These are then wrapped in mylar, further shielded by an earthed oxygen-free copper shield, then jacketed in an outer sleeve of dark yellow/gold PVC. IsoTek's own 24ct gold plated IEC socket is used at the product end, but Furutech plugs are used for UK wall sockets. The result is a thick, but not inflexible, power cable. I received four cables in all, enough to completely power up my system.

Why EVO3 Elite won me over initially had nothing to do with the cable. I've noticed that my system sound frequently 'goes off the boil'. Sometimes it sounds wonderful, sometimes it doesn't. Through a process

of elimination, I found it is directly related to whether I am listening to music by plugging my laptop into the system. If I'm playing LP or a SACD, with no PC in the system, it sounds fine. Even if I'm not listening to computer audio, simply plugging that PC into the same distribution block as the system compromises the sound. I'm faced with three options; buy a newer preamp (I like the one I already have), stop using the computer, or find a way the system can come to terms with 21st Century audio sources. EVO3 Elite facilitates that last option. I can now use my system with or without a computer in the mix without it sounding poor.

In direct sonic terms, when not considering PC deployment, IsoTek's EVO3 Elite also polishes the sound of a component. I played 'Shadows of Time' by Dutilleux [*Correspondences*, DG], a structurally dense piece of modern classical music, and the sound had greater depth and solidity, the treble became less strident and the bass more forceful, but more importantly – and this sounds off – it was as if the music was standing straighter. The more EVO3 Elite I put in the system, the more these effects helped liberate the music and conversely, when you take them out, the hitherto fine sound of the system became that little bit smaller and more tarnished. Impressive stuff. +

TECHNICAL SPECIFICATIONS

[IsoTek EVO3 Elite power cord](#)

Manufactured by: IsoTek Systems
URL: www.isoteksystems.co.uk

Distributed by: Sound Foundations
URL: www.soundfoundations.co.uk
Tel: +44(0)118 981 4238





ISOTEK EVO3 ELITE FOR 2M

The new Evo3 replaces the GII Elite cable and sits in the range, just above the EVO3 Premier. The Elite features seven 1.25 sq mm conductors made of silver-coated 99.9999% oxygen-free copper (OFC) with a Teflon

FEP dielectric sheath and cotton filler. A Mylar wrap surrounds the conductors, enclosed in an earthed shield of OFC. Termination is via IsoTek's bespoke connectors, with conductor pins made of solid OFC and coated in 24ct gold.

Playing jazzman, Sonny Rollins' 'The Bridge' via my Avid Acutus and comparing the Evo with a basic power lead into the Acutus' power supply, the Evo opened up the tenor sax, providing air and space around Rollins while giving him more time to emote. Bass was now fixed within the stereo image instead of wandering around the soundstage, providing the track with a rhythmic force and grounding. Percussion, meanwhile, was bouncy and vibrant, crisp and responsive

to what was going on. Hall's guitar offered improved timing signatures that provided better focus and detail.

Black Rhodium's Libra was now introduced. At only it provides immense value for money and trumps many cables of a higher price. I plugged that into my Densen B-475 CD player and span Yes' 'The Yes Album'.

Although the Libra tried hard to replicate the epic presence of the band on the soundstage, the Evo impressed because it gave them plenty of elbow room during their performance. The Evo provided a rich, detailed playback. Again, bass was excellent via the Libra but the Evo tightened the focus a few extra notches, giving this frequency more command of the soundstage.

The IsoTek Evo3 Elite is a top quality cable. **PR**

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"The IsoTek EVO3 Elite is a top quality cable."

Hi-Fi World

Clash of the Titans

Tony Bolton tries out the new EVO3 version of the Isotek Titan mains conditioner.

Following on from the recent upgrade of the Sigmas mains conditioner from G2 to EVO3 status, improvements in technology have made their way into the Titan, taking it into EVO3 form as well.

Originally introduced in 2005, the new Titan looks visually similar to its older sibling but contains a whole range of new technologies that have percolated down from the flagship Super Titan. One of these is KERF (Kirchoff's Equal Resistance Path). This was specially developed for the EVO3 products and features equal resistance and equal power delivery to all outlets. The internal wiring has been upgraded from that of the old model and is now made from UP-OCC (Ultra Pure-Ohno Continuous

Cast) high purity copper solid core cabling. This is silver-plated before being coated with Teflon. A fine Teflon tube is wound helically around the wire before it is covered with an extruded Teflon tube, thus creating an air gap between the wire and the tube to form an air dielectric which has virtually no capacitance.

A pyramid of VDR (Voltage Dependent Resistor) devices provide 112,500A of instantaneous protection from surges and spikes. This is combined with the ability to deliver up to 4,600W of continuous power with up to 25,000W transient ability, if the power supply permits this. Alongside there is a nine-stage Direct Coupled conditioning network in a series parallel configuration that delivers extremely low impedance and high current power.

The filter system removes both common mode and differential mode noise with increases of 600% and 20% respectively over the previous model. RFI is reduced by 82dB (50 Ohms standard) down to 5Hz frequency range.

All of this technology is housed in an alloy case that measures 275w x 182.5h x 275d and weighs 17kg. The casework can be finished in either the silver of this example or black. IsoTek's EVO3 Premier power cable, fitted with a 16A C 19 IEC conductor is supplied.

There are two 13A power outlets on one side of the case, alongside the power switch. Beside these there is an IEC mains input and a Neutrik socket for the output to either the multiway six output socket bar that is available



REVIEW

HI-FI WORLD

for or to the Sigmas EVO3 which can be attached to the Titan EVO3 to provide power to source components.

Since the previous model could only use the six-way socket unit, I first listened to the new Titan with the same socket bar plugged in that had been attached to my G2 Titan.

I started listening with one of my favourite CDs, Morcheeba's 'Big Calm', and found myself being pleasantly surprised by the new levels of detail and texture that flowed from the speakers. The bass, in particular, seemed to go far deeper than previously but with added layers of colour and shape to it. Skye's velvety smooth voice also gained layers of detail that made it seem more rounded and naturally shaped, helping to increase the sensation of realism in the sound.

Turning to vinyl produced some real surprises. On one of

“just occasionally a product comes along that is so far ahead of its predecessor in all areas of performance that an upgrade to the new unit is essential...”

my favourite versions of the '1812 Overture' featuring real canon and a carillon adding sonic fireworks, the EVO3 Titan delivered these with so much bass energy during the canon shots that I was almost scared for the safety of the subwoofer cones.

I also fired up the Nakamichi Dragon and found a freshness to the sound of a 40-plus year old cassette that I would never have thought possible before experiencing the new version of the Titan.

After this I moved the Sigmas EVO3 downstairs from the other system and wired it in using the EVO3 Optimum cable supplied for such purposes (the Elite cable is also available).

This time I was really quite gobsmacked at the difference in the sound. The canon shot sounded like

a real explosion taking place in my sitting room, while the carillon rang out loud and clear with the strike of the hammer on each of the bells seeming to be defined throughout their cascade of ringing. Even an elderly cassette showed big sonic improvements with a far more projected image of Dusty in fine form, covering the Little Anthony and the Imperials track 'It Was Easier to Hurt Him'. Morcheeba's CD gained in depth, tonal colour and a seemingly

The Titan EVO3 is supplied with an IsoTek EVO3 Premier mains lead



The blue switch in the middle of the casework acts as the main power on and off control.

MUSIC USED

Tchaikovsky. '1812 Festival Overture Op.49' (Original scoring). Antal Dorati conducting the Minneapolis Symphony Orchestra. University of Minnesota Brass Band. Bronze canon, Douay, France (1775). Bells of the Laura Spelman Rockefeller Memorial Carillon, The Riverside Church. Spoken Commentary by Deems Taylor. Mercury Olympian Series Records. AMS 16010. 1959.

Dusty Springfield. 'Ev'rything's Coming Up Dusty'. Philips. CPP 1002. 1965.

Morcheeba. 'Big Calm.' Indochina Records. ZENO17CDX. 1998.

SYSTEM USED

Clearaudio Master Solution turntable, Magnify arm, Benz Micro Wood SL cartridge. Leema Acoustics Agena phonostage, Tucana II amplifier and Antilla 2S ECO CD player. Nakamichi Dragon cassette player. Chario Ursa Major loudspeakers.

far tighter grasp of rhythm.

Just occasionally a product comes along that is so far ahead of its predecessor in all areas of performance that an upgrade to the new unit is essential, and the EVO3 Titan is just such a product. I thought the performance of the G2 Titan was already first class and am amazed at just how much this could actually be improved upon. The addition of the EVO3 Sigmas to the ensemble took it up another level to the point where I am now unable to contemplate going back to using my system in its previous form. There are some upgrades that, once heard, cannot be lived without and I am somehow going to have to find the wherewithal to ensure that this combination of mains conditioners stays permanently in residence.

I can only congratulate IsoTek on this product. It is nothing short of superb and once you have heard its effect upon a system I am positive that you will be in the market for one as well.

ISOTEK TITAN EVO3 MAINS CONDITIONER



OUTSTANDING - amongst the best

VERDICT

A very successful upgrade of the G2 Titan that is superb on its own but excels when connected to the EVO3 Sigmas

FOR

- very deep and detailed bass
- near holographic imaging
- fluid and natural timing
- micro-details in sound

AGAINST

- nothing, not even price

Sound Foundations.
+44 (0) 118 9814238
www.soundfoundations.co.uk

REVIEW

HI-FI WORLD

Unto the pure

Tony Bolton tries out IsoTek's new Sigmas EVO3 mains purifier and is stunned by the results.



I have been using a GII IsoTek Sigmas mains purifier on my upstairs system since it came on the market, and I was surprised to discover that this was some 8 years ago. Technology, and our usage of it moves on and the Sigmas has been updated, now called the Sigmas EVO3.

Similar in size to the previous

model this new version has redesigned casework which features a screen on the front panel that houses three buttons. The left one causes the incoming mains voltage to be displayed, the right shows the percentage of distortion that is detected on the incoming mains supply, and the centre one switches off the display.

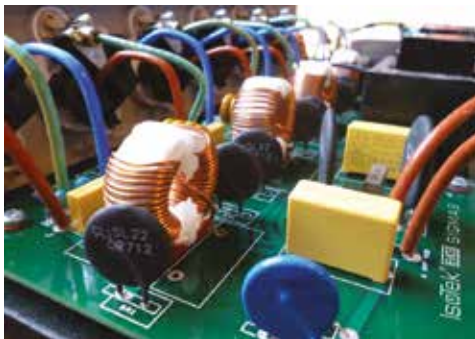
The only other controls are two switches mounted underneath at the front which provide power to the two high power (16 Amp) output sockets situated at the back left hand side, and the four lower power (10 Amp) sockets that occupy most of the rest of the back of the unit. The IEC mains input socket is also at the back on the left. An IsoTek EVO3 Premier power cable is provided.

IsoTek are understandably cautious about revealing too much of what is going on inside the Sigmas EVO3 but provided a block diagram to explain the circuit. Most of this is self explanatory and features the "Direct Coupled" technology from the Company's high power Titan purifier and the "Adaptive Gating" from the Nova, which is optimised

for source components. The former is claimed to provide optimal high current, low impedance filtering to maintain transient and dynamic performance from amplifiers and subwoofers, while the latter auto senses and adapts the current draw through the lower power sockets to the demands of the load plugged into it.

A new technology for the EVO3 series is KERP (Kerchoff's Equal Resistance Path) which ensures equal resistance and power delivery to all sockets. None of these are connected to another to avoid cross contamination of the power feed and each has its own dedicated filter network.

The internal wiring uses IsoTek's newly developed Ultra Pure - Ohno Continuous Cast copper, solid core internal wiring. This is silver plated before being insulated with Teflon. A fine Teflon strand is wound helically around the wire before a secondary Teflon tube is extruded over the top. This provides an air dielectric with virtually no capacitance. The printed circuit board uses 24 carat gold-plated 2oz copper. Power surges and



Normally the internal components of an IsoTek product are covered over but the Company have kindly let us have this internal shot to give some idea of how the inside looks, without giving away any trade secrets.

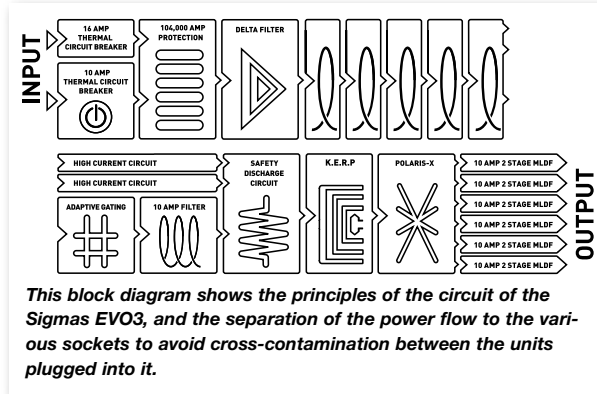
REVIEW

HI-FI WORLD

spikes are catered for with a claimed 108,000Amps of instantaneous protection via a pyramid array of voltage dependent resistor devices.

From the moment I plugged this device in, replacing the Gil version, it was apparent that the Sigmas EVO3 was a bit special. It seemed as though my entire system had received a major adrenaline shot, with a sense of power and control over the music that was akin to a substantial system upgrade.

I discovered a whole new layer of low bass that had only previously been hinted at. Saint-Saens Organ Symphony sounded truly majestic



“.. with a weight to the lower notes that was made of pure granite, yet seemed to have the agility of an Olympic athlete.”



The two sockets (16Amp) in the red coloured area are for high power components such as amplifiers, while source components use the four lower power (10Amp) sockets in the black section. The IEC mains input is on the left.”

with a weight to the lower notes that was made of pure granite, yet seemed to have the agility of an Olympic athlete. Mid and upper band sounds gained in colour, texture and definition, so the complex section towards the end of the second movement, where the orchestra, organ and pianos combine, had a clarity that I have never heard through this system.

Gentler sounds from the Everly Brothers LP 'Beat And Soul' were very well described with a space around the voices that helped the imaging appear nearly three dimensional. Since this is a mono recording I found this level of air and definition to the sound very impressive. The opening track, a cover of Mickey and Sylvia's 'Love Is Strange', had a throbbing beat below the guitars and vocals that drove the music along effortlessly, leaving the vocal harmonies floating through the air.

I also tried running my TV through the Sigmas EVO3 and found that, apart from very obvious improvements to the sound quality, the picture gained definition in the shape of the images. I use the BBC News channel as my default test for image quality since the studio lighting and other variables should, hopefully, be fairly consistent. I felt that colour saturation was improved, with darker shades and blacks seeming to be deeper and more consistently textured. Background detail through the windows behind the presenter were also better defined and there seemed to be a greater sense of the dimensionality of the studio.

I am truly impressed and amazed at how much of an improvement the Sigmas EVO3 is over the previous model. I tried comparing it to the Gil Titan that I use on the downstairs system and found

that the Sigmas was surprisingly close to the bigger unit in perceived performance. The Titan was still better, but the performance gap had narrowed considerably.

Often a new version of a product offers improvements over the previous design but not enough to warrant current owners upgrading. This is one occasion where owners of the Gil version will find such substantial benefits from upgrading to the EVO3 model that the financial outlay can be fully justified. Whether you use it in an audio or AV system, the improvements in every aspect of that equipment's performance are so obvious that it is a complete 'no-brainer'. This product is truly awesome in the effect it has upon a system and can be regarded as an essential purchase.

SYSTEM USED

Linn Sondek/ Hadcock 242 Cryo/ Clearaudio Concept MC.
Luxman E200 phonostage.
Townshend Allegri pre-amp.
2 x Quad 303 power amps.
Kelly KT3 loudspeakers.

MUSIC USED

Saint-Saens. 'Symphony No.3 in C minor, Op. 78. "Organ Symphony". Chicago Symphony Orchestra conducted by Daniel Barenboim. Gaston Litaize, Organ. Deutsche Grammophon Records. 2530 619. 1976.

The Everly Brothers. 'Beat And Soul'. Warner Brothers Records. W 1605. 1965.

ISOTEK SIGMAS EVO3



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

A mains purifier that offers a truly stunning improvement in performance over the previous model that more than justifies its price.

FOR

- wider perceived bandwidth
- improved dimensionality and imaging
- deeper colours and textures of visual images

AGAINST

- absolutely nothing

IsoTek Systems
www.isoteksystems.com

Choice EXOTICA ISOTEK EVO 3 SIGMAS MAINS CONDITIONER



Watt's up?

If you're looking for a performance boost without the box swapping risks, **Ed Selley** thinks IsoTek could have just the solution

The business of upgrading a system that has a synergy between components can be a slightly fraught experience. Even when you stay with the same manufacturers, the arrival of a new product can throw a previously happy relationship between existing products out of line. This can then demand further updates to cure and in some unhappy instances, leave you wishing you hadn't bothered. Equally, if you want a performance boost, you have to look at swapping a component out – or do you?

IsoTek has been in the business of providing another upgrade option since 2001. The company focuses on

the mains supply that a system receives and seeks to improve the quality of the electrical current your system takes in to assist with performance. This is focused on the removal of mains-borne interference. Depending on how power lines are rigged in your corner of the world, your power supply can find itself infested with electromagnetic and radio frequency interference. Even once it reaches your home, the proliferation of Ethernet over mains devices, baby monitors and white goods can throw a great deal of noise back onto your mains.

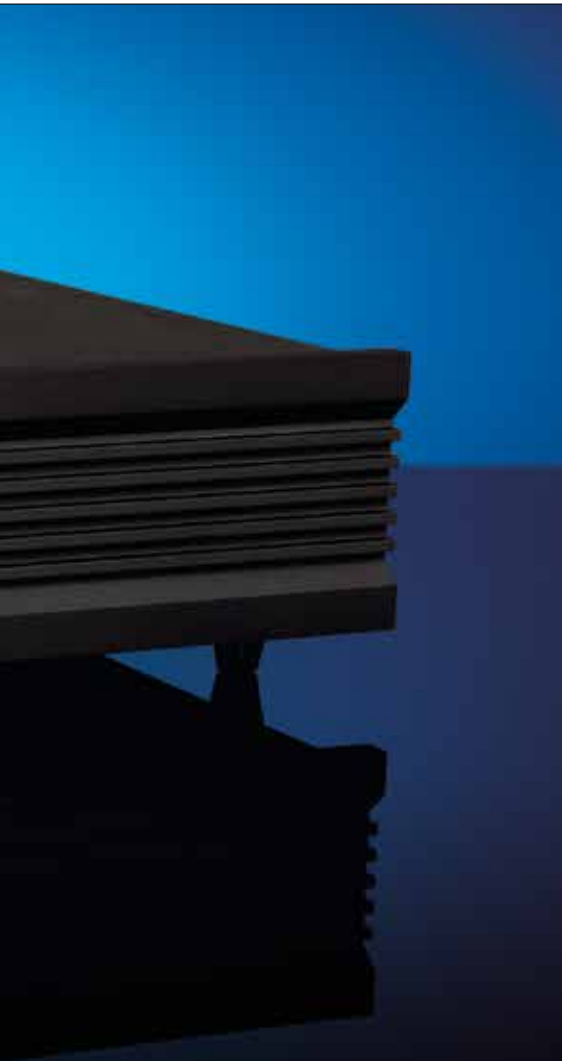
The Evo 3 Sigmas is actually a combination of two IsoTek

components – the Titan, which is designed for power amplification and the Nova optimised for source equipment. These functions are cut down in the Sigmas, but when you take into account what the Sigmas can do, this is more a reflection that the Titan and Nova are determinedly over specified than any sense of cost cutting in the Sigmas. As such, the Sigmas is fitted with six mains sockets. Two of these are intended for high-voltage applications such as power amplifiers, while the other four cater for source equipment.

The amount of power the Sigmas disposes of to do this is impressive. The two high-voltage sockets have a total of 3,680W available to them while the four low-voltage ones have a total of 2,300W on tap. As such, even though the Sigmas is very much in the centre of the IsoTek range, it can handle some distinctly high-end power requirements. The other arresting number from the specifications comes in terms of protection. By using an array of voltage-dependent resistors, it offers 108,000A of protection against surges, spikes and other nastiness.

DETAILS

PRODUCT
IsoTek Evo 3 Sigmas
ORIGIN
UK
TYPE
Mains conditioner
WEIGHT
10kg
DIMENSIONS
(WxHxD)
444 x 85 x 305mm
FEATURES
• Quoted power output: 3,680W (high current) and 2,300W (low current)
• Six output sockets
DISTRIBUTOR
Sound Foundations
TELEPHONE
0118 981 4238
WEBSITE
isoteksystems.com



ISOTEK EVO 3 SIGMAS MAINS CONDITIONER **Choice EXOTICA**

dubious behavioural characteristics connected to the IsoTek, those characteristics shouldn't have an adverse affect on anything else. Internally, it is wired with high-purity copper wiring while the circuit boards make use of gold-plated copper connectors for optimal signal transfer.

This attention to detail extends to the outside of the product, too. The Sigmas is finished to a standard that is extremely good even at the asking price. The casework is solid, exactly assembled and – as much as a power conditioner ever can be considered attractive – aesthetically pleasing with a clean and uncluttered appearance. The only slightly discordant note is the display that will either show watts being supplied or the total percentage of total power that the Sigmas is delivering. This is clear and easy to read, but also extremely bright. With the lights off in the listening room, the effect brings to mind an alien abduction and while it can be switched off, it can't be dimmed which is a little irritating, but not the end of the world.

This is perhaps the only design curiosity in an otherwise very well thought out product. As someone that has used an Evo 3 Aquarius for some time now, one of the most useful tweaks to the Sigmas is that the mains sockets are now at a 45° angle, which makes the 'flow' of cables out the back much easier than the 12 o'clock arrangement of the Aquarius and makes the installation of the Sigmas simplicity itself.

This ease of installation means that the performance of the system in question – a Naim Supernait 2 integrated amp, ND5 XS streamer with XP5 XS power supply, Arcam airDAC and Michell Gyrodec with Avid Pellar Phono stage – goes in with minimal fuss. Given the care Naim lavishes on its power supplies, particularly the external ones, I am

interested to see what the IsoTek can bring to a system of this nature.

Sound quality

The good news is that the impressive technical specification of the Sigmas translates into performance gains and the really good news is that none of these gains change the basic character of the system. The Naim electronics keep their powerful, slightly dark presentation and the excellent detail retrieval takes another step forward as noise levels that were already low simply drop away to nothing. The bass response was never an area I felt

If you are looking for a wholesale boost to your system, the Evo 3 Sigmas is it

short changed in, but now it has a little extra speed and agility over and above what it had before. Soundstage is not a concern of the Naim sound, but the Sigmas manages to create a sense of space to the performance that opens the presentation out without losing the sense of focus and drive that the system excels at. The effect is uncannily like the strapline for Berocca vitamin tablets – my system, but on a really good day.

One of the more unusual aspects of the Sigmas is that the improvements don't seem to negate the effects of other power products. When connected directly to the IsoTek, the ND5 XS streamer is unquestionably better than when hooked up to the mains, but connecting the XP5 XS power supply back up still reaps the benefits that it does when the Sigmas isn't used, and removes almost any sense of 'digital' to the presentation. This does mean that if you are unhappy with an aspect of your

The figures are certainly impressive, but there is so much more than just brute force to the design. Perhaps the most important aspect of the Sigmas – and certainly one that matters to the overall performance – is that it is made up of six individual filters. There is no connecting wiring between the sockets and each one has a dedicated filter network. This means that even if you have a component with some decidedly

That display can be bright, but it can be turned off

CONNECTIONS



- 1 IEC mains input socket
- 2 High-voltage sockets
- 3 Low-voltage sockets

Choice EXOTICA ISOTEK EVO 3 SIGMAS MAINS CONDITIONER

Q&A

Keith Martin

General manager, IsoTek Systems



ES: Is there a cut-off rule of thumb for best use of the high voltage outputs over the low voltage ones?

KM: The question of high current and medium current isn't just power consumption, it is how that power is consumed. For example a plasma will draw continuous current, thus the circuit would be different to that of a power amp (not class A), which needs to gulp current when the music is dynamic. So it's also a question of high-current and low impedance.

The medium-current side of the Sigmas auto adjusts to the load, so if you were to place a CD player (30W typical) next to a projector (300W typical) the circuit would auto adjust to give the best filter environment.

Is there a system price point where you would recommend the Sigmas over the Aquarius and Solus?

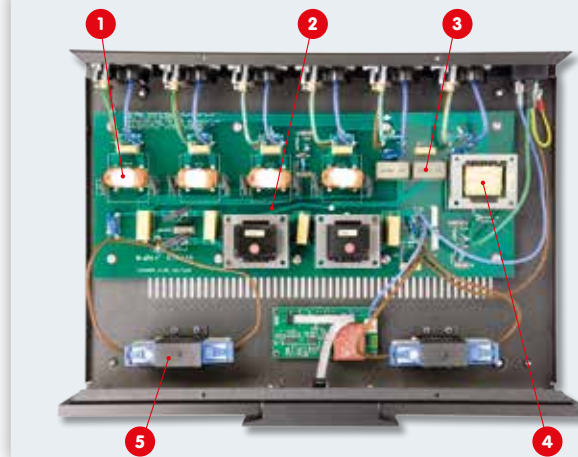
This is always a contentious question. We say between 10-20% of a system's value, however in some demos we've put in power conditioning systems costing double that of the system's value, and the system sounds more than twice as good!

But we'd say you're probably getting 80% of system potential without considering a good, properly designed (for purpose - for audio usage) power cleaning solution. It's similar to purchasing a sports car and not thinking about the road on which you drive it. Logic states driving it on grass won't be as good as flat tarmac!

With the changes to what we connect to the mains, are there best practice principles to follow?

The basic problems of common mode, and differential mode noise are always there. We have increased challenges by the increased use of Class D power supplies that disrupt the mains more (differential mode). The use of more and more electrical appliances in our homes. The use of wi-fi in our homes (common mode), some companies offer products to boost wi-fi signal by turning your ring main into a giant aerial - nice for common mode and RFI. Products will be released to deal with this, which will be backwards compatible with existing IsoTek systems.

IN SIGHT



- 1 Bespoke high-current Common Mode radio frequency 10A choke
- 2 Bespoke high-current Common Mode wide bandwidth 20A choke
- 3 High-quality Evox Rifa paper capacitor
- 4 Bespoke Differential Mode 20A choke
- 5 Thermo magnetic fusing 10A (medium) and 16A (high)

system's performance, the Sigmas is unlikely to correct it and could theoretically exacerbate it - although in this case you'd surely be looking to change the equipment in question before you think of adding a product of this nature.

The other trait of the Sigmas that might be worth taking into account is that while I feel devices that run at standard mains voltages benefit quite considerably from its addition, I am less convinced the benefits on low voltage 'wall wart' type products are as clear cut. The Arcam airDAC I use mainly to allow streaming of the Tidal service to the system doesn't seem to show the same benefits as the main streamer. It certainly doesn't get any worse, but the performance is fairly consistent across connection to a standard mains gantry and the IsoTek. Neither is this limited to the Arcam. The Chord Hugo also behaves in much the same way (although as there are batteries in the Chord, this is less surprising). Given systems that run on lower overall voltages are popping up at higher price points, this might be something to take into account before choosing one.

The news for equipment that uses higher voltages is almost exclusively good, however, and even when the current demands are not very high - the Avid Pellar barely registers on the voltage consumption display - the benefits are immediate and effectively viceless. Neither are they limited to audio. Some tests with a Panasonic plasma TV (which is habitually connected to the Aquarius conditioner) see a small but useful drop in picture noise when connected to the Sigmas, which means that if

you have sockets going spare on your IsoTek, other bits of AV equipment will benefit from it.

Conclusion

The Sigmas is not a magic bullet product. It won't correct glaring errors in the way a system performs and there are conditions - both in terms of product design and your location - where its impact will be lessened, but this should not take away from what it does. If you have a system that performs in the way you want it to and you want to try and make it better, the Sigmas delivers in spades. There are very few products that can deliver improvement across the board to a multiple unit system, but this is very definitely one of them. It is able to wring that little bit more out of a system and given its transparency and immense current delivery should be able to handle a few upgrades if you do decide to push the system further in the future. If you are looking for a wholesale boost to your system, you've just found it ●

HOW IT COMPARES

The Sigmas is most closely competitive with the Iso-8 SubStation (reviewed HFC 344) and both products go about trying to achieve the same role and offer similar functionality. The Sigmas is less expensive than the Iso-8 and the single chassis design is more convenient in terms of placement. Both units are well finished, but the consumption display of the IsoTek, while a little bright is a useful feature to have. Both products have similar provisos in terms of what they can and can't do, but the IsoTek looks like the better value option in this context.

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



LIKE: Offers a boost to performance without changing character

VALUE FOR MONEY



DISLIKE: Less effective on some low-voltage components

BUILD QUALITY



WE SAY: This is a tremendously effective and very well implemented mains treatment system

FEATURES



OVERALL



IsoTek EVO3 Optimum mains cable

IS THERE ANY audiophile who still doubts that power cables make a difference? Even the simple expedient of polishing the pins of a standard mains plug with Brasso will yield an improvement to your system's sound, so the full cable assembly is bound to have a real effect. Logically then, different materials used in them will give differing results, and that's why we're seeing a number of quite expensive, fancy designs now coming out. IsoTek's new EVO3 Optimum is one such product, and replaces the company's previous GII. It's not an inexpensive cable, so it goes without saying that readers with mid-to-high-end systems should be thinking about investing such a sum on a product like this; budget systems can be improved by diverting funds elsewhere.

Silver service

It's a silver-plated copper design, using Ohno Continuous Cast (OCC) copper conductors of higher purity than conventional OFC copper. Three 3.0mm² conductors each have a square shaped configuration of 40 strands, claimed to increase electrical conductivity. Each one gets Teflon FEP dielectric (insulation), and is then twisted to aid RFI and EMI rejection. This is then surrounded by cotton damping to reduce microphony and then everything is double shielded by Mylar wrap and an OFC copper braid, which is given a tough, heat-resistant PVC outer jacket. IsoTek's own audiophile-grade 24-carat gold-plated connectors terminate it; there's a choice of C7, C15 and C19 IEC varieties. It's fair to say that the quality of finish is excellent even at the price, and the cable has a sense of ruggedness way beyond many such products I've reviewed in the past – it looks like this one at least is here to stay!

Given that Hampshire-based IsoTek has made a name for itself making a wide range of well designed and effective mains power conditioners, it's no surprise that the EVO3 Optimum turns in an



extremely impressive performance – even considering its lofty retail price. The improvement it makes over a standard power cable – the sort of kettle lead supplied with your average CD player or amplifier – is profound and should leave no one in any doubt about the importance of getting your mains power in as good condition as possible. Cue up even a relatively lo-fi track like Dub Pistols' *Bad Card*, a brilliant bit of dubstep that sounds like it's been recorded in a bathroom with 8-bit samplers, and the difference is palpable. Where the song previously sounded scratchy, coarse and somewhat disjointed, the IsoTek brings smoothness, space and a sense of unforced ease that's so profound you begin to wonder if someone has switched your silver disc spinner without telling you. The track becomes tonally fuller, but the bass is tighter and more tuneful. The midband opens up in depth and breadth, only to reveal a lot of fine detail – in this case the scratches from the sampled vinyl record – but oddly it's no harsher. Quite the reverse in fact, and this goes for the treble too, which gets sweeter and more spacious.

Running the IsoTek up against similarly priced power cables narrows the gap considerably, but not completely. Indeed, the EVO3 Optimum has a wonderful

combination of natural musical flow to it, and a delicate, open midband that lets the flavour of the recording flood out. For example, a classic piece of eighties pop like the beautiful Thomas Dolby-produced *Appetite* by Prefab Sprout is rendered sublimely. You can really hear all the different layered synthesizers, even through the wash of sound that is the chorus, and singer Paddy MacAloon's vocals have a lovely, easy quality about them. Indeed, this power cable makes it easier to discern the plaintive feel of the lyrics than other such wires I've tried. Its finesse and insight are normally something you'd expect from the likes of my reference Furutech Powerflux cable, which costs £1,870 for 1.8m. So the IsoTek may be expensive, but still punches well above its price point.

The mains man

An excellent mains cable then, but for higher resolution systems only. Sure, you'll get a nice boost from plugging it into an Audiolab or a Cambridge Audio, but you would do better by spending buying the next model up the range. Those running a well balanced, higher end system will get serious sonic gains, even if they're already using fairly expensive mains cabling. As such, this is well worth auditioning. **DP**

DETAILS

PRICE

CONTACT
07789 307619

WEBSITE
soundfoundations.
co.uk

OUR VERDICT



ULTIMATE EV03 SUPER TITAN



IsoTek Super Titan

The original Titan seemed to be as good as it got – then along came Super Titan

Awesome is a somewhat overworked adjective when it comes to hi-fi. It's routinely applied to products that (while impressive) do not fully deserve such a description. But with IsoTek's Super Titan, awesome is for once fully justified. Its massive size, 'battleship' build quality and amazing performance deserve nothing less.

Looking like a big power amp, IsoTek's Super Titan stands about 30cm tall and measures around 50cm square. It weighs an impressive 30kg and has four power outlets using silver-plated 32-amp Neutrik connectors. It's capable of delivering 9,200 watts of continuous power. Wow!

Transient power delivery is around 35,500 watts, with a constant current delivery of 32 amps. Basically, the Super Titan offers a doubling over the company's highly regarded Titan model; twice the power, twice as much filtering and double the number of power outlets. If that's not truly awesome, what is?

There's no doubt that mains quality is a serious limiting factor when it comes to sound quality. Like contaminated petrol in a car, mains noise and distortion has an adverse effect on performance, meaning your equipment operates below its full potential. The result is poorer sound quality. The solution? A mains purification device that deals effectively with noise issues without restricting current delivery.

Super Titan came into existence because there was nothing being made to partner really big high-current power amplifiers. So, first and foremost, this mains conditioner was designed and built to address this specific need. We used our review sample with a system that included a Musical Fidelity kW750 power amp. This gives a meaty 750 watt output, with more than double this into lower impedances. But, while the kW750 is a large and powerful amplifier, the Super Titan is intended for much bigger fare than this. With its massive reserves, it's even suitable for some of the huge American behemoths.

Now, this might imply Super Titan is a niche product, aimed only at those with big powerful systems and wallets to match. But it's also usable with smaller set-ups. Having such vast current capability means there's almost no limiting effect on available power – a fault that can and does afflict smaller power conditioners.

Having vast headroom means superb transient detail and no restriction of dynamics. While aiming to provide clean, pure mains, IsoTek is committed to designing units that do not act as a limiter in terms of current delivery. Super Titan is the ultimate expression of this approach to design.

But, does one really need a product like this? Is it necessary to go to such extremes? Of course, if you're a rich audiophile with a big system and money to burn, then investing in something like Super Titan won't be an issue. But what about those of us with smaller systems? Do we need one?

SOUND QUALITY

Annoyingly, the answer turns out to be a resounding 'yes'. Certainly, if your mains quality is badly contaminated with noise and distortion, and you have additional items like computers running off the supply, the improvement in clarity

and detail delivered by a device like this will be bigger than you'd ever imagine.

IsoTek's better mains purification devices, like Super Titan, deal with both differential and common-mode noise, along with RFI and EMI. Each mains outlet is isolated, which prevents cross-contamination. This means that self-noise generated by (say) a large power amp will not affect your preamp or CD player. Subjectively, this means you'll hear a cleaner, more solidly focussed sound that has greater clarity and separation. Depending on how dirty your mains supply is, the music will sound smoother and cleaner, yet crisper and more immediate at the same time. The sound will be noticeably more refined and effortless.

We'd say Super Titan will improve the sound of any hi-fi system it's used with. It will allow you to hear exactly how your equipment is performing. Moreover, the improved clarity and separation will allow you to fine-tune your hi-fi system as never before.

"Your music will sound smoother, cleaner and much more immediate"

You'll find that certain 'difficult' or disappointing recordings suddenly sound a whole lot better – in some cases, the improvement will be so great, you'll wonder how and why they could ever have sounded so bad. Lastly, your system will sound consistently good, regardless of when you listen.

Although Super Titan takes up quite a bit of floor space, it's otherwise undemanding. It doesn't get warm during normal use and it's whisper-quiet. Even with an ear close-by, there's no hum or buzz to be heard. So you can place it near to where you sit, without having to worry about mechanical noise or heat dissipation.

Our home mains supply is actually quite clean and we already use a high quality PS Audio Premiere mains conditioner. Even so, Super Titan resulted in an audible improvement. Be warned – don't mess with Super Titan unless you have the cash!

Jimmy Hughes



REVIEW

Darth Insidious

IsoTek Super Titan Power Conditioner

By Paul Rigby

When most audiophiles are ready to upgrade their hi-fi, they immediately look towards the principle components: turntable, CD player, amp, speakers, and the like. It's an obvious move, but is it the right one? Are you, for example, absolutely sure that you're even getting the best out of your current system? While unbeknownst to many users, multiple varieties of distortion prevent stereos from performing at their expected capability.

EV03 SUPER TITAN ULTIMATE



December 2011 147

REVIEW

Providing nine-section multiple filters in a series parallel combination—and doing so in a truly balanced supply—Super Titan aims to remove the noise by cleaning your mains supply without disturbing the natural transient musical information.

Noise arrives in two flavors—differential and common. When your fridge switches itself off, do your speakers make a noise? If so, you've experienced differential noise, or distortion. This form of noise also derives from the less-obvious electronic switching of power supplies. Common noise applies to more subtle variants, and derives from point sources such as radio transmitters. These dual forms aren't related. But both diminish systems' abilities to resolve fine detail. Moreover, you usually don't realize such noise exists until it's eliminated.

Differential and common noise arrive via the live and neutral lines within your mains cable—precisely where the IsoTek Super Titan and its Direct Coupled Design circuit come into play. Providing nine-section multiple filters in a series parallel combination—and doing so in a truly balanced supply—Super Titan aims to remove the noise by cleaning your mains supply without disturbing the natural transient musical information. It also supplies impressive back-up figures that keep everything safe (a rated figure of 4,600W) and a fusing unit that handles enormous transient overloads.



Weighing in at a beast-like 30kg (66 pounds), Super Titan offers a quick and efficient way to gain your first hernia. Spanning 500 x 500 x 300mm, the unit works with its smaller brother, the already established Aquarius. The latter can be used as a standalone power conditioner but reaches new heights when used as part of a team alongside the Super Titan.

"Super Titan is designed for high-current product such as power amplifiers and electrostatic speakers," explains Keith Martin, founder and Managing Director for IsoTek.

"The Aquarius (a six-outlet, full-system power conditioner featuring two high-current outlets rated at 16 amps and four medium-current outlets rated a 5 amps) sits on top and is used for front-end equipment such as CD players. As you go up the IsoTek range, we split our boxes into two for high and lower current, as you would a preamp and power amp." IsoTek is currently working on a rack that will neatly hold the power conditioning boxes in place.

Martin claims the best reason for splitting the power

conditioners into two boxes relates to the different current demands associated with source components and power amplifiers. "Plug your CD player, et. al. into the Aquarius because the CD player will only draw around 35W," says Martin. "It won't demand power in transients, which is what a power amp does. A power amp, when faced with dynamic pieces of music, gulps current and power. That creates noise of its own. So you need the additional bandwidth that the Super Titan supplies for the power amp."

You can also run your turntable and CD player off the Super Titan, but it won't be quite as effective as opting for the two-box approach: You need a different class of filtering for front-end boxes. That's why the Aquarius has two high-current outlets and four medium outlets to provide different filtering. Super Titan is optimized for high-current applications. Indeed, it can handle 32 amps of continuous current.

"We were looking at the nature of the amplifiers coming through on the high end," notes Martin. "Big amplifiers from Levinson, MBL, and such require huge power delivery. With that in mind, we built a true 32-amp power conditioner for the extreme high-end user. The Super Titan will run happily on a normal feed, but having the extra capability matters—we designed this product to be future-proof." *(continued)*



REVIEW

Plugging the Quad 57s into the Super Titan provides noticeably less upper-frequency distortion, revealing soundstage structures I've never before experienced.

Amps and more

IsoTek's monstrous, two-box power conditioning system works just as well in practice as in theory. I chose Skunk Anansie's *Stoosh* as a test CD, and fed it through an Icon CD-X1 CD player within a valve system. My basic reference system presents tight, thumping bass with a dynamic rhythm guitar, smoky vocals, and discernable acoustic guitar and cymbal elements located on the periphery of the soundstage. When the Aquarius mains conditioner is introduced into the chain, the latter yields a more focused soundstage replete with centrally placed rhythm guitar and bass. The downside?

A slight lift to the upper mid-range. Still, the reduction in distortion, improved bass grip, and added acoustic guitar and cymbal effects are promising.

Swapping the Aquarius for the Super Titan (and beginning with only the Icon monoblock power amplifiers connected) transforms the lower register of the system without slowing pace or rhythm. Bass guitar and drums remain sprightly and melodic, with more authority throughout the range. Plucked bass strings possess extended decay and claim deeper extension.

(continued)



REVIEW

Plugging the Quad 57s into the Super Titan provides noticeably less upper-frequency distortion, revealing soundstage structures I've never before experienced. The improved focus produces genuine 3D effects, complete with textural contours and layers. Bass stays powerful and authoritative. But it also assumes its place within the mix with a graceful coherency far preferable to just simply dominating, as it does when the Super Titan is absent. Midrange and treble frequencies are also markedly smoother, boasting excellent clarity. It's as if the music is scrubbed clean and sports a new sheen.

Please note: A tinge of upper-frequency hardness remains when the Super Titan is paired with the monoblocks alone. Connecting the Quads to the Super Titan offers maturity and drastically reduces such hardness, resulting in a rich, deep sound that unveils expressive musical elements.

Used as intended, the full IsoTek system produces an effortless sound—there's no stress or strain to be found. Don't confuse such ease with a lack of dynamics, power, or excitement. On Skunk Anansie's "Hedonism", Skin's lead vocals benefit from a fresh bank of vocal modulations, sounding almost choral. The bass-shy Quad electrostatics present a proud, full lower register full of grip and true authority. Such power affords the bass a grand magnificence and tonal accuracy.

Midrange frequencies also exhibit thrilling transparency, claiming a fuller palette of tonal colors and silkier treble. Every conceivable tremor of Kate Bush's delivery on "Bertie" (from *Aerial*) comes across stacked with emotion and nuance. Moreover, with the IsoTek combination, the soundstage is noticeably more natural and able to resolve low-level detail.

Wash, Condition, and Go

The Super Titan and the Aquarius are sonic wonders. If you haven't addressed power delivery, get to know your system on a more intimate basis and consider adding these IsoTek components. Only then will you discover what your system can really deliver. ●

MANUFACTURER

IsoTek Systems

PERIPHERALS

Digital Source

Icon Audio CD X1

Analog Source

Avid Acutus, SME IV, Benz Glider

Phono

Icon PS3

Preamplifier

Aesthetix Calypso

Power

Icon MB845 Monoblocks

Speakers

Quad ESL-57

Headphones

Sennheiser HD650

Cables

Avid SCT, Avid ASC

EQUIPMENT REVIEW

Isotek EVO3 Genesis

By Jason Kennedy

Power conditioning has got itself something of a bad rap in the UK. It seems to be big in the US, because they only have 110 volts to work with and the flimsiest looking plugs and sockets to connect to it. The mains grid in the UK delivers 230 volts of rock solid power (say the naysayers), and you connect to it with a fairly beefy three pin plug that can cope with rather more than the 13 amps it's rated for. So why do we need anything to improve the power that goes into our kit? The answer is that the increasing amounts of pollution that the computer, wi-fi and general electronica that fills our homes all produces noise that feeds back into the mains. Unless you live up a mountain with 300 solar panels and as many batteries to store the energy, your mains supply is a carrier for alarming amounts of RFI and EMI, detritus, which if the results I got with the Genesis are anything to go by, have a marked negative effect on the potential of hi-fi components.

The Genesis is not a filter, a lot of mains conditioners are just that and this is not a bad thing if it's done well, in fact it's just about the only way to get enough juice to a big

power amp without cramping its style. Instead Genesis is a re-generator, a device that takes the power coming out of the wall and uses it to build an 'optimised' mains sine wave which is fed to the output sockets. Genesis can deliver up to 600 watts, which is enough to run four source components and/or a preamp; possibly some low power amps as well, but it's designed for front end stuff first and foremost.

Inside the substantial and elaborately isolated case, which many mistook for a power amplifier, lies about as much copper and heatsinking as you find in a power amp. This is a substantial device because it runs two independent generation cells as Isotek likes to call them. These create a cleaned up version of the incoming sine wave, which is then amplified by a 300 watt 'generation engine', effectively a class A/B amplifier. Isotek is keen to point out that Genesis works in a different way to most AC regenerators, because it doesn't synthesise the



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EQUIPMENT REVIEW / ISOTEK EVO3 GENESIS

► mains by imposing a template frequency on it (50Hz in the UK) as that approach doesn't remove distortion. Instead it builds a completely new sine wave at the desired frequency, which is then amplified and delivered via transformers with copper foil between primary and secondary outputs to stop any noise and distortion getting through. It's designed to dramatically cut harmonic distortion (THD) on the mains.

I put it to Isotek founder and chief proselytiser Keith Martin that the makers of serious audio equipment go to great lengths to design and build regulated power supplies that deal with the problems inherent in the mains supply, and asked him why Genesis should be able to do a better job. His response was: "We specialise in understanding power and what's going on and that makes a big difference. If you're designing an audio component there are always compromises and it's usually the areas that most people won't notice that are compromised rather than the features or casework, and power conditioning is one of those areas." He went on to say that he spends a great deal of time demonstrating his equipment to audiophiles around the world and has never found a system that doesn't benefit. But he would say that; the irritating thing is that results I got back this up.

Build quality is extremely high on the Genesis. The case is made from aluminium extrusions with an anodised finish that ensures resistance to knocks and looks great. It's a substantial beast too, thanks to the massive output transformers, extensive heatsinking and ISIS or independent system isolation support frame that sits like an exoskeleton around the body of the unit. It consists of aluminium uprights that are spanned by damped acrylic plates top and bottom which are shaped to minimise vibration. It's an elaborate arrangement that increases the units footprint and height quite considerably but does allow it to be stacked atop Isotek's conditioner for power amps the Super Titan.

On the connection front Genesis has a single input for the IEC input cable, an Isotek Extreme power cable is supplied to make the connection to the wall, and four independently connected output sockets, in this case 13A three pin types. The sockets themselves are silver (24k gold in the US) and internal cabling is silver plated, six nines OFC with PTFE dielectric. A proper job in other words which is probably why it works so well.

The improvements that can be wrought with Genesis vary from component to component but there are a few underlying qualities that are always apparent when switching from a decent extension block. The key one is an obvious drop in noise floor which makes low level resolution significantly better. Indistinct sounds are now fully formed, quieter instruments are far easier to identify and follow and reverb and decay extend

"Build quality is extremely high on the Genesis. The case is made from aluminium extrusions with an anodised finish that ensures resistance to knocks and looks great. It's a substantial beast too, thanks to the massive output transformers, extensive heatsinking and independent system isolation support frame."

for considerably longer. This brings significant amounts of the recording's character with it, acoustic spaces are precisely defined and soundstages expand in all directions, it's not at all subtle and very moreish. You have to play familiar albums again just to hear what's been hidden in the noise, it really does revitalise your record collection and I use the term in the broadest sense.

I put the Metrum Acoustics Hex DAC on first and revelled in the clarity of leading edges, this meant that timing improved – which it seems to with a lot of components. Subtleties of phrasing and character came out in John Lurie's voice (*The Legendary Marvin Pontiac – Greatest Hits*) which sounds richer and at the same time cooler than usual, and it always sounds cool. I also tried it with a Canary Audio CD300, a big tube powered CD player that already sounded pretty special but suddenly unearthed loads more space and delivered a far wider image. This was pretty dramatic. It sounded like the noise floor had literally disappeared below the threshold of audibility.

Going back to the Hex and then moving the Naim UnitiServe from standard to Genesis supply was also pretty dramatic, I didn't expect that the server would benefit as much as devices that process analogue signals but I was wrong. Again there was acres more space and far more depth of tone, high notes had real shine and vibrancy because so much grunge had been removed. Now there was a radiance to the sound of Michael Hedges 'Aerial Boundaries' that you usually have to spend a fortune on a vinyl front end to achieve.

Which reminds me, when you switch on Genesis its display tells you how many volts its receiving and how much THD is coming in and how much going to the output. The display turns off after about 10 seconds because it needs to connect in and outputs in order to display the information. It runs quite hot, much as you would expect of a 300 watt amp ►

EQUIPMENT REVIEW / ISOTEK EVO3 GENESIS

TECHNICAL SPECIFICATIONS

Number of outlets: 4
Type of outlets: UK, EU, US, CH, AU, ZA
Mains inlet: C20 IEC High Current
Mains voltage: 230V 50Hz
Maximum current: 16Amps
Total power: 600W continuous
THD: between 0.05% and 0.17% (typical).
RFI reduction: +85dB extending down to zero Hz
Voltage stabilisation: 230V +/- 1%
Dimensions (WxHxD): 500 x 300 x 500mm
Weight: 45Kg

Manufacturer: Isotek Systems

URL: www.isoteksystems.com

Tel: 01276 501392

and has a near quiet onboard fan that comes on when a lot of power is required. I can't say that I heard them once.

Back with the music I dropped Fleetwood Mac's 'Never Going Back' (the highlight of *Rumours* in my opinion) and discovered the way that echo and reverb was used to create the impression of a wall of acoustic guitars from only two. It sounded superb that was for sure. There is always a danger with extra transparency that detail can take centre stage and usurp the music but because the Genesis merely improves the hardware you have its musical capabilities remain as strong if not more so than ever. There were a number of occasions when timing became clearly stronger. Power and dynamics are likewise reinforced, there is less hash so the power is cleaner and this had an unexpected side effect. I started playing at higher levels than usual, not significantly nor deliberately but it became clear at the end of the session that the volume was quite a bit higher than usual. Of course the source material needs to be clean enough to encourage this but with a hi-res file of Samuel Yirga's superb new release Guzo (24/48 on Society of Sound) that is very much the case and I revelled in the sound of his piano and a great sounding rendition of Black Gold of the Sun at pretty serious levels without discomfort.

I tried the Genesis on all the source products that came through the listening room and in every instance it allowed them to produce significantly superior results. If

I had an active preamp rather than the Townshend Allegri I have no doubt that it would have benefited to the same extent if not more. Genesis is extremely expensive for a power conditioner but the fact

that it can do so much for a system means that you really don't know what any component is capable of if you are just plugging it into the wall. It's also a lot cheaper than a self powered mountain top listening room, and easier to install. +



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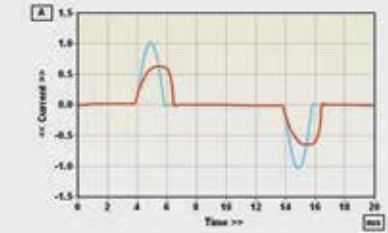
LAB REPORT

ISOTEK EVO3 GENESIS

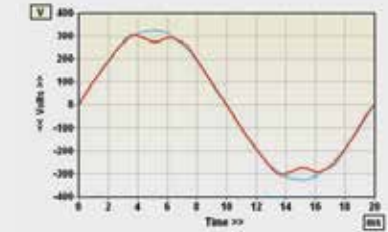
Testing mains regenerators requires some special, custom-built equipment. The first measurement, of charging current waveform, I made using an inline Hall-effect current transducer from LEM Components that can record currents of up to 80A at slew rates of greater than 60A/μs over a bandwidth exceeding 100kHz, while inserting a series resistance of only 0.18mohm. This is built into a box with flying leads terminated in a mains plug at one side and a mains socket at the other, allowing its insertion into the mains feed to any component.

Comparison of charging current waveforms from the wall socket (red trace) and from the Genesis (blue trace) is shown in below [see Graph 1]. The Genesis current pulses are textbook whereas those from the wall socket have a lower peak value and longer duration due to the distorted mains waveform. The distortion measurement itself was complicated by the output of the Genesis being floating – the secondaries of its output transformers are not connected to earth at either end, nor at a centre tap. IsoTek insists that a balanced test circuit must be used, with earth referred to the measurement computer, to achieve the best THD figures, so a balanced attenuator was built especially for the task, feeding a battery-powered INA217 low-noise, low-distortion instrumentation amplifier. Its output was recorded to hard disk as a WAV file via an M-Audio Audiophile 192 sound card for subsequent spectral analysis.

Voltage waveforms from the wall socket (red trace) and Genesis (blue trace) are also shown below [see Graph 2], while the test table lists individual amplitudes of the first four odd harmonics (each referenced to the amplitude of the 50Hz fundamental) plus a THD figure calculated from the first 20 harmonics. As the results show, overall distortion from the EVO3 Genesis is less than a twentieth of that from the mains supply and very close to IsoTek's claim of <0.3%. This, by any measure, is an excellent result. KH



ABOVE: Distorted mains (charging) current waveform (red) versus significantly more linear waveform delivered by the IsoTek EVO3 Genesis (blue)



ABOVE: Mains voltage waveform, from wall socket (red) versus IsoTek EVO3 Genesis (blue)

HI-FI NEWS SPECIFICATIONS

Harmonic	Mains	EVO3 Genesis
3rd	4.35%	0.12%
5th	5.05%	0.06%
7th	2.09%	0.15%
9th	0.92%	0.17%
THD (2nd-20th)	7.05%	0.32%

“I was blown away.”
“As the results show, overall distortion from the Genesis is less than a twentieth of that from the mains supply. This, by any measure, is an excellent result.” **Hi-Fi News**



REVIEW

HI-FI WORLD

Power house

Paul Rigby looks at the Isotek Genesis dual cell mains generator.

DIAGRAM KEY

1. After passing through a sophisticated filter network, mains electricity is converted into DC, which is subsequently delivered to a high-voltage generation engine (300W amplifier). All of the mechanical noise caused by a low-quality mains supply is entirely avoided, as there is no input transformer to vibrate.
2. A high-quality synchronous sine wave generator feeds the generation engine at the same frequency and exact phase as the incoming mains supply. This ensures that no unwanted phase shifts are created between components connected directly to the mains and components connected directly to the Genesis. The phase shift between the mains input and output is zero – it is entirely synchronised with the mains.
3. Current positive feedback in the design allows the Genesis to deliver constant voltage, low distortion and zero phase shift to all connected loads.
4. The output from the generation engine is a pure sine wave with exceptionally low distortion.
5. An extremely high-grade isolation transformer brings the voltage back up to 230V AC.
6. Bright, clear OLED display shows snap-shot measurements for THD, voltage and power consumption. The advantage of this system is to avoid any pollution to output signals via the display circuit through continuous measuring.
7. Sophisticated protection systems include input protection, overvoltage protection and intelligent temperature protection, the latter incorporating a variable-speed, super-quiet fan that only comes into operation if needed.

Isotek treats mains-related problems with a seriousness that has to be seen (and heard) to be believed. New to the top of their wide range of mains conditioning products is the extraordinary Genesis power generator that I had for review. This is a statement product that comes at a lofty no less!

Isotek's boss, Keith Martin, told me the Genesis is, "...the world's first dual-cell power generation system." So, rather than scrubbing your mains clean, as a power conditioner does, the Genesis creates a new, clean, sine wave, synchronised to the incoming mains. This is then amplified by two 300W amplifiers and stepped up through transformers to a precise 230V output.

For mains power, such a signal is a sort of Holy Grail. "An industrial electricity generator will give you a THD (Total Harmonic Distortion) of around 2-3% which is not good. To get a THD down to a preferred 0.3% is very difficult. Others have claimed such figures but we have independent tests that prove it. In fact our THD is always less than 0.2%, in general terms, and in the critical fifth harmonic it's down to 0.06% which is extremely low. Rebuilding the mains is not a new concept, but to do it with a low distortion figure is hard."

Whenever you play music through your hi-fi, your system has to cope with noise in the power line such as: common and differential mode noise, power surges and spikes and asymmetry.

Whatever rubbish you throw at the Genesis, it will take that garbage, turn it into DC and rebuild from new a complete, full 230V sine wave

with incredibly low distortion. As such, your equipment will be working in the most optimal way. It will be receiving the best possible power with 600W headroom; CD players and DACs, for example, only draw between 35W and 50W.

"We didn't want to do what some companies do which is to rebuild half of the main sine wave or create a perfect sine wave template to match to and call the product a 'generator'. We wanted to rebuild a sine wave completely from scratch.

Yes, it costs a lot of money but it is an incredible solution that no-one else has done. Looking at the specs of the competition, no-one is doing it like us or with such low distortion."

Ah, the price. Well, you have

four sockets, intended primarily for front-end source items, although low power amplifiers and electrostatic loudspeakers that consume less than 600 Watts are suitable.

The Genesis is not meant to be used with high-power power amplifiers. That's what the Super Titan is for. Ideally, you sit the Genesis on top of the Super Titan and use both as a complete mains supply for the hi-fi.

On the front of the Genesis sits a bright clear OLED display that shows input/output voltage, input/output THD, power consumption of the connected audio equipment and the power status of the generation engines. It all looks very technical and impressive.



to keep the price of the Genesis in perspective. It's not designed for your iPod, after all. It has been made for high specification equipment and for those people who want the best that can possibly be achieved. It's an aspirational product like a Ferrari or an Aston Martin. That's how you need to look at the Isotek Genesis (and its sister, the Super Titan, for that matter). It demonstrates what can be done.

There is a main power switch plus two other power switches to start each half of the Genesis in order to save energy if only half of the Genesis is required. On the rear you have a C20 power socket (to take the high load of 16A) plus

Protection and monitoring circuits are fitted, plus fans that switch in if necessary. There's even an output filter network, Isotek's block diagram shows.

SOUND QUALITY

I initially hooked up my reference system to a basic electrical distribution block of the type you might pick up from a hardware shop for a few pounds. Playing the vinyl version of Frank Zappa's 'Bamboozled By Love', the music sounded a tad disorganised through the block. The upper mids were strident, guitar was piercing while vocals could shriek on crescendos. The sound stage was incohesive and displayed midrange

REVIEW

HI-FI WORLD



bloom while the bass and midrange were not clearly delineated.

The Genesis cured these ills. The soundstage filled with space, and both calm and discipline reigned. That didn't mean the music lost fluidity or flair, far from it. Guitars sounded aggressive, but detailed too. A widened dynamic spectrum provided the instrument with more character. Vocals found their place within the mix, stopped blaring and started informing.

I then plugged my Icon power monoblocks and Quad electrostatics in to a Super Titan mains conditioner and connected that to the Genesis. This firmed up bass. The stereo image also became firmer and more clearly centred, while cymbals now displayed lightness and a layered metallic sheen.

I then compared the Genesis with Isotek's last, best front-end solution, their excellent Aquarius. While the sound was very good indeed, a testament to the Aquarius' design, the Aquarius is very much a power conditioner. When compared to the Genesis, the sound was a little flat in the midrange and a touch plump in the upper bass regions.

The Genesis' ability to remove 'distortion' from the playback also meant that the Aquarius wasn't as clean in its sonic representation. Of course, you would expect – nay demand – such results considering the vast difference in price, but it was reassuring to hear the difference, nevertheless.

I have to emphasise the Super Titan's part in the Genesis' success,

however. Using Genesis or Super Titan alone adds greatly to a system's sound quality I have found from my experience with them, but music benefits when both boxes are hooked together.

Playing Yehudi Menuhin's 'Mendelssohn and Bruch Concertos' on vinyl, it was evident just how much silence there was behind the solo violin with the Genesis in place and how much Menuhin was compromised by the noise floor without it; the delicacy and fragility of his violin was more evident.

Compared with the Aquarius, the backing orchestra was truly involved via the Genesis, acting as a partner to Menuhin, not just sonic wallpaper behind him, while the Genesis was revealing of individual instruments within the orchestra, especially during high tempo sequences.

Turning to Horace Silver's 'Cape Verdean Blues', via my B-475 Densen CD, this jazz LP provided far more coherence via the Genesis, when compared to the basic power block, with a dramatic reduction in the noise floor. All of the musicians played at ease it seemed, free from background noise and distortion. Instrumental separation was impressive while individual instruments exhibited character and poise.

Similarly, against the Aquarius, the Genesis showed improved transparency, the edges of each instrument exhibiting better delineation, separating it from the silence surrounding it and from other instruments.

CONCLUSION

The Genesis shows you how important the mains electricity is in determining sound quality. In the hands of the Genesis, the mains electricity becomes a force for good. It provides a vibrant, exciting listen that shines a light on all aspects of a music mix. Here is a statement product that shows what is possible, setting standards in mains synthesis.

"You sit the Genesis on top of the Super Titan" says reviewer Paul Rigby, for the ultimate in mains conditioning and generation. The Super Titan feeds large power amplifiers; the Genesis handles all else.



ISOTEK GENESIS



VERDICT

The Isotek Genesis enables you to hear – really hear – your hi-fi system, possibly for the very first time.

FOR

- clarity
- low distortion
- detail
- dynamics

AGAINST

- size
- weight

Soundfoundations
+44 1276 501392
www.soundfoundations.co.uk

Clean-up Campaign

There are mains conditioners and then there's the Isotek Super Titan, says Paul Rigby...

There are mains conditioners and mains conditioners; for everyone who's had a good experience there'll be someone claiming a bad one. So you've got to take each product on its own terms, in your system, and not arrive at any preconceptions. This said, Isotek's name precedes them; if there's one company that's made its (fine) reputation from mains-related products, this is it. They do a lot of live demonstrations at hi-fi shows, where time after time, they demonstrate the efficacy of their products. This prompted me to review this, the Super Titan, a flagship of their range.

At it's right on the edges of what even high end audiophiles would regard as acceptable, so for me it wouldn't be a case of it doing a bit of good here and there; to justify its price it would have to work wonders! Happily, I have a high end system (although even in this context quid is pushing it), so I duly installed it and listened with interest...

It certainly looks the part; it's a beautiful thing in its own right, and massive weighing a beast-like 30kg and spanning 500x500x300mm, in no small part due to the fact that it has to deliver 32A. It builds upon the current Titan model but offers twice as much power and doubles the filtering capability: offering a group of four, seven stage, filters to help remove differential noise (the noise from your fridge, for example) and common mode noise which is a more insidious distortion that you only often notice once it's gone.

Designed to work as a sort of pre-power conditioning combo with the current Aquarius conditioner, the reported ideal configuration for sound quality is to plug your power amp (or monoblocks) directly into the Super Titan, the rest of your

front-end into the Aquarius and the Aquarius itself into the Super Titan. The point of the Super Titan? To deliver clean and consistent power. So what does it sound like?

SOUND QUALITY

Initially utilising Skunk Anansie's 'Stoosh' as a test CD on an Icon CD-XI CD player within a valve system, the listening tests began with the basic reference system presenting a tight, thumping bass with a dynamic rhythm guitar, smoky vocals with discernible acoustic guitar and cymbal elements on the periphery of the soundstage.

Next, the Aquarius mains conditioner presented a more focused soundstage with now, centrally placed, rhythm guitar and bass. The downside was a slight upper midrange lift but the reduction in distortion, improved bass grip and more acoustic guitar and cymbal effects held promise.

My monoblock power amps were then plugged directly into the Super Titan chassis. My reference system has never displayed such a wide and deep soundstage; bass power was immense, almost visceral, while Skin's sometimes subtle vocalisations proved that the upper midrange and treble were particularly nuanced and delicate.

Finally, the monoblocks remained while the front-end loaded Aquarius was connected to the Super Titan. What I heard surprised and shocked me because, up until this point I was presented with more and better

fireworks. The Super Titan removed that. For the first time, I was listening to the music and not the hi-fi. That focused soundstage of the Aquarius-only rig sounded false, in retrospect, and the basic reference sounded relatively veiled and lacking in bass power. Now, the soundstage had a more organic arrangement while each instrument could be heard clearly. In fact, I could have easily written the bass guitar part on a piece of paper; it was that lucid.

Via my Avid Acutus turntable, Ella Fitzgerald's performance on Speakers Corner's 'Cole Porter Songbook' was simply arresting. In standard reference mode, her performance was relatively stodgy, slow and tired. Post Super Titan, Fitzgerald revealed sparkle, a crisp enunciation and elegance. Also, a tremendous instrumental separation was drained of distortion by the Super Titan and, within the resultant gaps, new detail was revealed.

CONCLUSION

Power conditioning has always been of value, but with the Super Titan, it has finally come of age. Here is a system that never imposed itself upon the music. Here, in fact, the music was king, not the hardware. Yes, the Super Titan might cost a pretty penny but this is one of those high-end components which is actually worth every penny – providing you've got them in the first place!



HI-FI WORLD

VERDICT

Beautifully built and presented, this is an extremely effective mains conditioning device – but so it should be at the price!

FOR

- tonal accuracy
- incisive detail and clarity
- bass interpretation
- 3D soundstaging

AGAINST

- price!

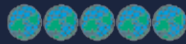


The power cleaning specialist

IsoTek's unique technologies win more awards than any similar brand. Below is a small selection of accolades from around the world...



"I was truly amazed at how much of an improvement the EV03 Sigmas is over the previous model. This product is truly awesome and can be regarded as an essential purchase."
IsoTek EV03 Sigmas – Hi-Fi World



"I can only congratulate IsoTek on this product. It is nothing short of superb."
IsoTek EV03 Titan – Hi-Fi World



"Accessory of the year 2013"
IsoTek EV03 Genesis – Hi-Fi Voice



"What I heard surprised and shocked me – for the first time, I was listening to the music and not the hi-fi... Tremendous instrumental separation, drained of distortion... Beautifully built and presented, this is an extremely effective mains conditioning device, worth every penny"
IsoTek EV03 Super Titan Hi-Fi World



"A distinct lift in overall musical performance"
IsoTek EV03 Sirius – TechRadar



"This power cable is a no-brainer as far as I am concerned – the benefits of high-end power cable design, but without the high price. Recommended!"
IsoTek EV03 Premier – Hifi Pig



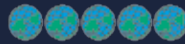
"Very highly recommended"
IsoTek EV03 Aquarius – Hi-Fi+



"I was blown away... As the results show, overall distortion is less than a twentieth of that from the mains supply – an excellent result"
IsoTek EV03 Genesis Hi-Fi News



"Best Accessory 2013... Combining radical ideas to vault-like build quality, electronic and mechanical noise is eliminated from your system with the Super Titan"
IsoTek EV03 Super Titan TONEAudio



"Excellent value for money... A great real-world product that is useful and inexpensively upgrades your system"
IsoTek EV03 Sirius – Hi-Fi World



"In every instance it produced significantly superior results... You really don't know what any component is capable of if you are just plugging it into the wall"
IsoTek EV03 Genesis – Hi-Fi+



"We would not hesitate to suggest the Sirius as an effective upgrade for any system"
IsoTek EV03 Sirius – Hi-Fi Choice



"A statement product that shows what is possible, setting the standards in mains synthesis... The IsoTek Genesis enables you to hear – really hear – your hi-fi system, possibly for the very first time"
IsoTek EV03 Genesis – Hi-Fi World



"Your music will sound smoother, cleaner and much more immediate"
IsoTek EV03 Super Titan Hi-Fi Choice



"A real buy recommendation for owners of better TV sets or high-quality projectors that still want to tease out the very best image quality."
IsoTek EV03 Mini Mira Lite Magazine, Germany



"The EV03 Optimum turns in an extremely impressive performance. The improvement it makes is profound and should leave no one in any doubt about the importance of mains power."
IsoTek EV03 Optimum Hi-Fi Choice



"This product is truly awesome in the effect it has upon a system and can be regarded as an essential purchase"
IsoTek EV03 Sigmas – Hi-Fi World



"[You hear] more space, lower noise and greater resolution... An increase in timing precision, depth of bass and a much greater sense of musical flow"
IsoTek EV03 Polaris – Hi-Fi Choice



"A top quality cable"
IsoTek EV03 Elite – Hi-Fi World



"The Big Daddy of power conditioners... It's like upgrading your whole system"
IsoTek EV03 Super Titan – Hi-Fi+



"The Aquarius is brilliant"
IsoTek EV03 Aquarius Record Collector

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