



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.

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