Connecting Power
IsoTek is an English company making award-winning power optimisation products and high quality power cables for hi-fi and home cinema systems. Our highly specialised mains conditioners actively clean the power obtained from your wall sockets before it reaches your hi-fi or audio visual system, and our range of power cables further enhance this improvement. Our solutions cover a wide range of systems and deliver significant upgrades in performance at competitive prices.

IsoTek is recognised as the leader in clean-power technology, a fact reinforced by multiple industry awards and the use in development or demonstration at audio events by the following highly respected consumer electronics brands; Arcam, Denon, Genesis Advanced Technologies, Marantz, Monitor Audio, Nordost, Onkyo, Pioneer, PMC, Primare, Roksan and TEAC Esoteric.

IsoTek was born with a singular aim: to create a better solution to the problem of poor mains quality, which restricts the performance of audio systems. This has been achieved through rigorous research and genuine innovation.
Award Winning Cable Designs

“IsoTek’s **EVO3 Initiium** is now our all-rounder default mains cable choice, and comes highly recommended as a result.”
**Hi-Fi+ Magazine**

“The IsoTek **EVO3 Premier** power cable is a bit of a no-brainer as far as we’re concerned – the benefits of high-end power cable design, but without the high price. Recommended!”
**Hi-Fi Pig Magazine**

“The **Sequel** is well built and keenly priced and gives source equipment in particular a performance boost.”
**Hi-Fi Choice Magazine**

“The **EVO3 Elite** provided a rich, detailed playback with tightened focus giving the frequency more command of the soundstage... a top quality cable.”
**Hi-Fi World Magazine**

“The **EVO3 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.”
**Hi-Fi Choice Magazine**

“If you have one of IsoTek’s EVO3 power cords, **Ascension** does a lot more of the same and is the logical ultimate step. Highly Recommended.”
**Hi-Fi+ Magazine**
Understanding conductor quality

Electrical conductors have loosely bonded electrons in their atoms called free electrons. In good conductors, electrons are able to flow easily from atom to atom. Poor conductors have closely bonded electrons making flow difficult, and also possess higher resistance. The lack of oxygen in a copper conductor is the main reason for the improvement of its plasticity, electrical conductivity, resistance to corrosion and hydrogen embrittlement; hydrogen makes them brittle.

In any normal industry, 99.9% pure would be considered excellent. However for electrical conductivity a 99.9% copper conductor is not good. If the impurity is phosphorus, conduction can be reduced to as little as 70%. For this reason, copper that is 99.9999% (6n) pure is generally considered a minimum standard for state-of-the-art electrical applications.

Tough Pitch Copper (TPC) is typically found and used in the most basic standard power cables. It is an inexpensive basic copper wire conductor, melted and cooled in open air resulting in around 300~500ppm of oxygen content. If oxygen is present then many impurities from oxides will exist as inclusions within the material. The presence of these impurities reduces conductivity and electrical performance.

Oxygen-Free Copper (OFC) has substantially no oxygen, and is free of deoxidants. It must be produced under closely controlled inert atmosphere conditions. The level of other contaminants present are kept to a minimum due to the absence of oxygen. With lower impurity levels, higher conductivity is achieved. Hydrogen is also driven off to eliminate hydrogen embrittlement. Embrittlement is the seemingly impossible effect of trapped water in the copper structure. This structure reduces the absolute conductivity due to porosity. Thus an OFC should be considered a minimum standard.

Ohno Continuous Casting (OCC) was developed in 1986 by professor Ohno of Chiba Institute of Technology in Japan. It is a process for the manufacture of single crystallised copper through heated mould continuous casting. This process results in OCC rods of pure copper, which have a copper grain structure of over 700 feet long. Being free from impurities, single crystal and of low electrical resistance with non-crystal boundaries, it’s an ideal material for rapid transmission, and thus perfectly suited for high technology applications such as high fidelity audio products.

Comparison of OFC and OCC in structure

<table>
<thead>
<tr>
<th>Transversal Section</th>
<th>Longitudinal Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFC 50X</td>
<td>OCC 50X</td>
</tr>
<tr>
<td>OFC 100X</td>
<td>OCC 100X</td>
</tr>
<tr>
<td>OFC 200X</td>
<td>OCC 200X</td>
</tr>
<tr>
<td>OFC 500X</td>
<td>OCC 500X</td>
</tr>
<tr>
<td>OFC 1000X</td>
<td>OCC 1000X</td>
</tr>
<tr>
<td>OFC 2000X</td>
<td>OCC 2000X</td>
</tr>
</tbody>
</table>
The effects of combining metals

If a metal is impure, it’s often because it has not gone through every stage of refinement, due to cost and required usage. Sometimes an impurity is deliberately added, for example zinc can be added to copper to make brass. The significant reason for undertaking this process is that brass is a very tough metal and relatively cheap to produce. It is commonly used in electrical connectors and plugs. However in its typical grade it is far from ideal as an electrical conductor.

Common sense would suggest that mixing two conductors together should result in an average of the two associated conductivities, but unfortunately this is not true.

The graph above shows the conduction of brass for given percentages of added zinc to copper. Most significantly, when only 1% zinc is added to copper, the conductivity of the material is reduced dramatically to 85%. If 30% zinc is added, making a 30/70% zinc-copper mix, conductivity is reduced to 30%.

The most typical type of brass has a 30% zinc, 70% copper ratio. Even though the copper content is 70% it is no longer the prime electrical conductor and is now just part of the brass alloy. Put another way, any advantage that copper had over zinc as an electrical conductor is completely lost.

* International Annealed Copper Standard was established in 1914 by the United States Department of Commerce. IACS is an empirically derived standard value for the electrical conductivity of commercially available copper.

† Siemens is the simple reciprocal of the resistance or 1/ resistance. In scientific terms conductivity is often mistaken for resistance. To be accurate both the conductivity in [units of] Siemens and the resistance in [units of] Ohms have been given.
The effect of a dielectric

It has already been said that conductors have free electrons, and insulators are the absolute opposite. A cable represents the combination of conductor and insulator. Another name for an insulator is dielectric.

Dielectrics are often talked about when discussing capacitors, and the quality is called dielectric constance. Dielectric strength is the ability of a material to withstand electrical fields without breaking down. The lower the number, the better the dielectric strength. These numbers are called the dielectric constance, a vacuum being ideal with a constant of 1.0. A high dielectric constant in cable design is not desirable.

The use of capacitors is evident in IsoTek’s power cleaning circuits. Electrically, on paper in test reports, it is hard to purchase a poor-performing capacitor. Nevertheless, different designs of capacitors perform and sound different. Materials usage plays its part in this.

Whilst not wishing to initiate a debate over this point, responsibility has to be given because audio differences do exist.

Dielectric effects within cables react similarly to dielectric effects in capacitors. Any material used as insulation surrounding the conductor will affect the dielectric constance, and performance. Much has been written on this subject – by Cyril Bateman as well as Nicola Tesla – and while not absolutely identical to IsoTek’s own research, it does show a strong correlation.

Generally, substances with high dielectric constants do not respond well to intense electrical fields. Materials with low dielectric constants are more
stable and perform better. Arguably the best performing dielectric would be a vacuum, but this is something of a practical manufacturing impossibility. Close to this would be air, which represents a practical ideal – it’s a dielectric with low dielectric constant (slightly worse than a vacuum) but also recovers from fault conditions within the specification of intended use. It is important to stress that the dielectric surviving is only important if the conductor also survives.

Cost-effective alternatives to air are FEP (2.1) or polyethylene PE (2.25). These, combined with cottons or silks to maintain performance within the cable assembly, perform well. A very poor choice dielectric for cable design is PVC (3.18), which is unfortunately used in cheap standard power cable designs.

### Dielectric Constance of materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Dielectric Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum</td>
<td>1.0</td>
</tr>
<tr>
<td>Air (1 atm)</td>
<td>1.00059</td>
</tr>
<tr>
<td>Air (100 atm)</td>
<td>1.0548</td>
</tr>
<tr>
<td>Fluorinated ethylene propylene</td>
<td>2.1</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>2.25</td>
</tr>
<tr>
<td>Benzene</td>
<td>2.284</td>
</tr>
<tr>
<td>Mylar</td>
<td>3.1</td>
</tr>
<tr>
<td>Polyvinyl chloride</td>
<td>3.18</td>
</tr>
<tr>
<td>Neoprene</td>
<td>6.70</td>
</tr>
<tr>
<td>Glass</td>
<td>10.0</td>
</tr>
<tr>
<td>Water</td>
<td>80.4</td>
</tr>
</tbody>
</table>

Illustrated: IsoTek’s Syncro and Ascension cables.
The term ‘conductance’ describes the ease with which electrical current flows through a substance. An electrical conductor is a material in which electrical charge is carried. Electrons move easily from atom to atom with the application of voltage. These electrons are referred to as free electrons, as they’re free to move.

Conductivity, in general, is the capacity to transmit something – in our context electricity. It’s the ability to assist the flow of current, and the opposite of resistance which also produces heat as a byproduct. Silver is the best electrical conductor encountered in everyday life. Copper is also a good, followed by gold, aluminium, brass and steel. Quantitatively silver and copper seem close, however in the context of audio silver possesses special properties which simple resistance measurements do not show.

A substance that does not conduct electricity is called an insulator or dielectric. A material that conducts fairly well, but not very well, is known as a resistor. Therefore materials usage in the design of an IsoTek cable is paramount, these being carefully balanced to produce the best performing cables at a given price point. The use of the highest purity oxygen-free copper is a base line standard, with more expensive designs featuring silver plating and Ohno Continuous Cast copper. Dielectric materials usage is also adjusted as the budget permits. Termination is again of high importance, with the use of pure copper connectors with gold or silver plating.

Conductivity, resistance and metal treatment

Conductivity of metals

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
<th>Electrical Conductivity† (10.E6 Siemens/m)</th>
<th>Electrical Resistivity† (10.E-8 Ohm.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver</td>
<td>Ag</td>
<td>62.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Copper</td>
<td>Cu</td>
<td>59.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Gold</td>
<td>Au</td>
<td>41.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Aluminium</td>
<td>Al</td>
<td>35.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Brass, 10% zinc</td>
<td>CuZn10</td>
<td>25.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Rhodium</td>
<td>Rh</td>
<td>23.1</td>
<td>4.3</td>
</tr>
<tr>
<td>Zinc</td>
<td>Zn</td>
<td>16.9</td>
<td>5.9</td>
</tr>
<tr>
<td>Nickel</td>
<td>Ni</td>
<td>14.3</td>
<td>7.0</td>
</tr>
<tr>
<td>Iron</td>
<td>Fe</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Tin</td>
<td>Sn</td>
<td>9.17</td>
<td>10.9</td>
</tr>
<tr>
<td>Brass, 30% zinc</td>
<td>CuZn30</td>
<td>7.34</td>
<td>13.1</td>
</tr>
</tbody>
</table>

† Siemens is the simple reciprocal of the resistance or 1 / resistance. In scientific terms conductivity is often mistaken for resistance. To be accurate both the conductivity in [units of] Siemens and the resistance in [units of] Ohms have been given.
Deep cryogenic treatment

To further improve conductor performance, deep cryogenic treatment is employed. This process of cooling metal conductors to temperatures at or below -195°C causes molecular changes to occur. As metals cool, they shrink and crystal boundaries align more closely with one another, increasing conductivity and improving signal transmission. The tightened grain structure stays intact through the slow warming process and is then stable at room temperature, this change being permanent. The advantages of cryogenic treatment are also used in specialised high performance engine components, which require identical grain structure.

A balance of parts

Cable design – be it interconnect, loudspeaker or power – must take into account conductor purity, dielectric specification, the conductivity of metals used, geometry of the overall assembly and termination. Performance reduction comes in various forms – in signal-carrying cables it manifests as a relatively benign loss of information, or a tonal change to the character of music. In power cables restrictions occur due to poor conductivity, impure copper, low conductor size and inadequate dielectric choices, especially when combined with cheap termination using low grade brass. Cables should be chosen because they offer the best balance of materials usage at their given price point, to achieve the finest possible performance-enhancing result.

Cable geometry is also critical to overall performance. The relationship between the conductor’s cross sectional diameter, the number or bunch of strands making up the conductor and their relationship within the cable also contribute to the design’s performance. IsoTek cables pay deep consideration to all areas of design.
EVO3 Initium is IsoTek’s new entry-level power cable, designed to offer high quality performance at an affordable price. It’s a must for replacing the standard black plastic power leads bundled with new equipment – which are designed down to a price, rather than up to a quality.
Specifications

Conductor Size: 3 x 2.0sqmm
Conductor Material: 99.9999% Oxygen free copper
Dielectric: Polyethylene (PE)
Dielectric Constance: 2.25
Filler: Cotton
PVC Barrier: Paper wrap
Outer Jacket: High flexibility PVC
Power Rating: 16Amp
Cable Length: 1.5m standard (no custom length)
Outer Diameter: 10mm
Termination: Hi-grade connectors, 90% copper/10% zinc (CuZn10) with robust nickel plating

Suitability

Suitable for entry level CD players, preamps, tuners, power amps, Blu-ray players, music servers, TVs, soundbars and more!

Composition

1. Pure 6N oxygen free copper for good conductivity
2. 2.0sqmm conductors give greater amperage
3. Polyethylene (PE) dielectric allows greater performance
4. Multi-strand cotton filler mains dielectric constance
5. Paper wrap gives barrier and maintains cable structure
6. Flexible PVC jacket

“EV03 Initium is one of the most cost-effective power cable upgrades you can make. It comes highly recommended.”
Hi-Fi World Magazine

“Improves the clarity of the sound, noticeable step up in instrument focus. The EV03 Initium is a great value for money cable with excellent build quality.”
Hi-Fi Choice Magazine

“The Initium is a superbly engineered power cord, its sonic impact is hard to understand given its reasonable price. Therefore the IsoTek Initium gets a clear and deserved ’Price Tip’ award.”
Fidelity Magazine

Cable connector options
EVO3 Premier was inspired by discussions with high-end electronics companies, many of which produce audio equipment retailing for tens of thousands of pounds, yet still supply poor quality power cords that significantly constrain performance. Premier delivers excellent performance but also represents outstanding value-for-money. No compromise has been made in relation to the quality of parts and materials used in its construction.
Specifications

Conductor Size: 3 x 2.0sqmm
Conductor Material: Silver plated 99.9999% Oxygen free copper
Dielectric: Fluorinated Ethylene Propylene (FEP)
Dielectric Constance: 2.1
Filler: Cotton
PVC Barrier: Paper
Outer Jacket: High flexibility PVC
Power Rating: 16Amp
Cable Length: 1.5m standard (no custom length)
Outer Diameter: 10mm
Termination: Audiophile-grade connectors, 90% copper/10% zinc (CuZn10) with 24ct gold plating

Composition

1. Pure silver plated 6N oxygen free copper for better conductivity
2. 2.0sqmm conductors give greater amperage
3. Fluorinated Ethylene Propylene (FEP/Teflon) allows increased performance
4. Multi-strand cotton filler mains dielectric constance
5. Paper wrap gives barrier and maintains cable structure
6. Flexible PVC jacket

“This lead offers a level of performance that competes with considerably more expensive cables... so effective and such good value for money.”
Hi-Fi World Magazine

“The IsoTek EVO3 Premier power cable is a bit of a no-brainer – the benefits of high-end power cable design, but without the high price. Recommended!”
Hi-Fi Pig Magazine

“A distinct cleaning up of the sound... more space, lower noise, greater resolution and a much greater sense of musical flow... highly recommended and particularly good value for money.”
Hi-Fi Choice Magazine

Suitability

Suitable for midrange CD Players, preamps, tuners, power amps, Blu-ray players, music servers, TVs, soundbars and more!

Cable connector options

- BS 1363
- EU SCHUKO
- US 3-PIN
- UK
- IEC C7
- IEC C19
- AUSTRALIA
- SWISS
EVO3 Sequel

EVO3 Sequel power cable offers increased performance over IsoTek’s multi-award winning EVO3 Premier. Coming in a standard 2 metre length, it features specially optimised conductor strand geometry and active shielding for superior performance.
Specifications

Conductor Size: 3 x 2.0sqmm (increased diameter conductor strands)
Conductor Material: Silver plated 99.9999% Oxygen free copper
Dielectric: Fluorinated Ethylene Propylene (FEP)
Dielectric Constance: 2.1
Filler: Cotton
PVC Barrier: Mylar
Shield: Oxygen free copper braid (OFC)
Outer Jacket: High flexibility PVC
Power Rating: 16Amp
Cable Length: 2.0m standard (custom lengths available)
Outer Diameter: 10mm
Termination: Audiophile-grade connectors, 90% copper/10% zinc (CuZn10) with 24ct gold plating

Suitability
Suitable for midrange and higher performance audio separates, CD players, DACs, preamps, tuners, power amps, Blu-ray players, music servers, TVs, soundbars and more!

Composition

1. Pure silver plated 6N oxygen free copper for better conductivity
2. 2.0sqmm conductors give greater amperage
3. Thicker conductor strands improve performance
4. Fluorinated Ethylene Propylene (FEP/Teflon) allows increased performance
5. Multi-strand cotton filler mains dielectric constance
6. Mylar wrap improves Common Mode noise rejection and maintains cable structure
7. Oxygen free copper braid increases Common Mode (RFI) noise rejection
8. Flexible PVC jacket

“Sequel is well built and keenly priced and gives source equipment in particular a performance boost.”
Hi-Fi Choice Magazine

“The Sequel is a high quality, very rugged power cord. Sonically, the cable provides improvement in nuances and details. If you want to exploit your systems potential, you should try Sequel.”
Lite Magazine Germany

Cable connector options
EVO3 Elite

A true high-end power cable, EVO3 Elite uses a unique 7-core geometry, high purity copper and high purity FEP to deliver astonishing performance. It is the ideal upgrade for source components, CD players, music servers, DACs or preamplifiers. Elite can be used with small-to-medium sized power amplifiers to great effect, but for large amplifiers EVO3 Optimum is the better choice. It offers fantastic bass and treble extension, lowers the noise floor and provides an exceptionally stable soundstage. A class-leading cable at a most reasonable price.
Specifications

Conductor Size: 1 x 3.75, 6 x 1.25sqmm
Conductor Material: Silver plated 99.9999% Oxygen free copper
Dielectric: Fluorinated Ethylene Propylene (FEP)
Dielectric Constance: 2.1
Filler: Cotton
PVC Barrier: Mylar
Shield: Oxygen free copper braid (OFC)
Outer Jacket: High flexibility PVC
Power Rating: 16Amp
Cable Length: 2.0m standard (custom lengths available)
Outer Diameter: 12mm
Termination: Audiophile Hi-grade connectors 99.98% copper with 24ct gold plating

Suitability

Suitable for all high-end audio source components, moderate sized power amplifiers, CD players, DACs, preamps, tuners, Blu-ray players, music servers and more!

Composition

1. Pure silver plated Ohno continuous cast copper for exceptional conductivity
2. 1 x 3.75, 6 x 1.25sqmm conductors give higher amperage aiding power delivery
3. Conductor strands group closer and improve performance
4. Fluorinated Ethylene Propylene (FEP/Teflon) allows increased performance
5. Multi-strand cotton filler mains dielectric constance
6. Mylar wrap improves Common Mode noise rejection and maintains cable structure
7. Oxygen free copper braid increases Common Mode (RFI) noise rejection
8. Flexible PVC jacket

“Elite also polishes the sound of a component. The more 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.”

Hi-Fi + Magazine

“The EVO3 Elite provided a rich, detailed playback with tightened focus giving the frequency more command of the soundstage... a top quality cable.”

Hi-Fi World magazine
Three silver plated Ohno Continuous Cast (OCC) copper conductors form the core of the EVO3 Optimum, with each strand being of a square configuration for tighter bunching. The OCC process offers a vastly superior level of purity with outstanding electrical conductivity, improved flexibility, resistance to fatigue and corrosion. A high quality FEP provides a very low dielectric constant over a wide frequency range.

The three conductors are given a slight rotational twist to aid RFI and EMI rejection, and are then surrounded by a cotton filler which confers internal strength and reduces microphony. The whole construction is enclosed in a Mylar wrap to provide an additional dielectric buffer, before applying an active OFC shield for maximum rejection of high frequency interference. A durable PVC outer jacket gives a high degree of flexibility and mechanical strength.
Specifications

**Conductor Size:** 3 x 3.0sqmm (square conductor strands)

**Conductor Material:** Silver plated Ohno continuous cast copper (OCC)

**Dielectric:** Fluorinated Ethylene Propylene (FEP)

**Dielectric Constance:** 2.1

**Filler:** Cotton

**PVC Barrier:** Mylar

**Shield:** Oxygen free copper braid (OFC)

**Outer Jacket:** High flexibility PVC

**Power Rating:** 30Amp

**Cable Length:** 2.0m standard (custom lengths available)

**Outer Diameter:** 12.5mm

**Termination:** Audiophile Hi-grade connectors 99.98% copper with 24ct gold plating

Suitability

Suitable for all high-end audio components, CD players, DACs, preamps, tuners, Blu-ray players, music servers and particularly power amplification and more!

Cable connector options

“EVO3 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.”

*Hi-Fi Choice Magazine*
EVO3 Syncro

Unlike all other power cables, EVO3 Syncro incorporates a unique DC-cancelling electronic network that rebalances the mains sine wave to the zero volts line, dramatically reducing or silencing transformer hum in electrical components. The Syncro circuit is positioned in a cable that features three cores of silver plated Ohno Continuous Cast (OCC) copper, with each conductor strand being of a square configuration for tighter bunching. OCC copper offers a vastly superior level of purity with outstanding electrical conductivity, resistance to fatigue and corrosion. The FEP dielectric provides very low dielectric constant over a wide frequency range.

The three conductors are then given a slight rotational twist to aid RFI and EMI rejection, and are surrounded by a cotton filler for internal strength and reduced microphony. The whole construction is enclosed in a Mylar wrap, before an active OFC shield is applied. Finally a durable PVC outer jacket offers flexibility and mechanical strength.
Specifications

Conductor Size: 3 x 3.0sqmm (square conductor strands)

Conductor Material: Silver plated Ohno continuous cast copper (OCC)

Dielectric: Fluorinated Ethylene Propylene (FEP)

Dielectric Constance: 2.1

Filler: Cotton

PVC Barrier: Mylar

Shield: Oxygen free copper braid (OFC)

Outer Jacket: High flexibility PVC

Power Rating: 30Amp

Cable Length: 2.0m standard (custom lengths available)

Outer Diameter: 12.5mm

Termination: Audiophile Hi-grade connectors 99.98% copper with 24ct gold plating

Suitability

Suitable for all high-end audio components, CD players, DACs, preamps, tuners, Blu-ray players, music servers and particularly power amplification. Ideally suited to upgrade active loudspeakers and electrostatic panels.

Composition

1. Pure silver plated Ohno continuous cast copper for exceptional conductivity
2. 3.0sqmm conductors give higher amperage aiding power delivery
3. Thick square conductor strands group closer and improve performance
4. Fluorinated Ethylene Propylene (FEP/Teflon) allows increased performance
5. Multi-strand cotton filler mains dielectric constance
6. Mylar wrap improves Common Mode noise rejection and maintains cable structure
7. Oxygen free copper braid increases Common Mode (RFI) noise rejection
8. Flexible PVC jacket
9. DC cancelling ‘cylinder’ within the cable length

“IsoTek’s EVO3 Syncro has an amazing dynamic range which exceeds all other AC Cables we’ve tested.”
Hifi Review HK Product of the Year 2015

“An effective upgrade for EVO3 Aquarius. It also reduces the risk of humming power transformers in components and supports the Aquarius, as the entire system upgrade.”
Lite Magazine Germany

Mains sine wave off set (DC on the mains)

Corrected mains sine wave using Syncro power cable

Cable connector options
EVO3 Ascension takes IsoTek’s power cable design and technical innovation to new heights. Its unique configuration consists of deep cryogenically treated silver plated Ohno continuous cast (OCC) copper conductors, wrapped in an air dielectric with partial FEP contact, before a further extruded FEP sleeve seals the construction. Each of these individual conductor assemblies are wrapped in Mylar with a further OFC shield, before being given a slight rotational twist with FEP tubes of air. Ascension drops the noise floor to an inky-black level, opening up the soundstage with holographic images, atmosphere and unparalleled microdynamics. It sounds astonishing.
Specifications

Conductor size: 3 x 4.0sqmm
Conductor Material: Silver plated Ohno continuous cast copper (OCC)
Conductor Treatment: Deep Cryogenic -196 degrees C
Dielectric: Air with partial Fluorinated Ethylene Propylene (FEP) contact
Dielectric Constance: 1.1
Filler: Fluorinated Ethylene Propylene (FEP) tubes of air
PVC Barrier: Mylar / OFC braid
Shield: Oxygen free copper braid (OFC) individually applied to each conductor
Outer Jacket: High flexibility PVC
Power Rating: 55Amp
Cable Length: 2.0m standard (custom lengths available)
Outer Diameter: 20mm
Termination: Audiophile Hi-grade connectors 99.98% copper with silver plating

Composition

1. Pure silver plated ultra pure Ohno continuous cast (OCC) copper for exceptional conductivity
2. 4.0sqmm conductors give higher amperage improving power delivery
3. Thick conductor strands group improve performance
4. Virtual Air Dielectric (VDA) bridge gives ultimate dielectric performance
5. Sealed Fluorinated Ethylene Propylene [FEP/Teflon] tube seals VDA and maintains high performance
6. Deep cryogenic conductor treatment (-196ºC) improves conductor potential
7. Individual conductor screening reduces magnetic discharge between conductors
8. Mylar wrap improves Common Mode noise rejection and maintains cable structure
9. Oxygen free copper braid increases Common Mode (RFI) noise rejection
10. FEP air tubes enhance assembly and maximise dielectric constance
11. Paper wrap gives barrier and maintains cable structure
12. Flexible PVC jacket

“After 24 hours of running in, it can really deliver the musical goods... This cable really lowers the noise floor and lets the soundstage breathe! EVO3 Ascension is a fine power player. Highly Recommended.”

Hi-Fi+ Magazine

Suitability

Suitable for all high, to extreme high-end audio components, CD players, DACs, preamps, tuners, Blu-ray players, music servers, power amplification, active loudspeaker systems and subwoofers and more!

Cable connector options