

"Music gives a soul to the universe, wings to the mind, flight to the imagination, and life to everything..."

– Plato –



### Diamond Series 2: Cutting Edge Value

#### "Shine bright like a diamond..."

– Rihanna –

Crystal Cable has been making beautiful analogue and digital interconnects, power leads and loudspeaker cables for two decades. Our new Diamond Series 2 builds on this tradition with a superb sounding, high value cable range – in the super slim, attractive and user-friendly form that audiophiles have come to expect.

The original Diamond Series was nothing less than a game changer in the audiophile cable world. Before its introduction in 2009, no one had thought it was possible to deliver so much performance in such a beautiful, compact and userfriendly package.

Now, with the Diamond Series 2 range, our core values are retained but even higher performance has been achieved. This is only possible thanks to the constant research and ongoing development that takes place at Crystal Cable, in our relentless pursuit of excellence. Now better than ever, the range has even broader appeal.

Not only is it a radical improvement over the original Diamond Series in terms of sound, but it represents exceptional value for money. Now more people than ever are able to invest in Crystal Cable quality. Superb performance in a compact, attractive and affordable package, that's the essence of our new range.

Such quality has only been possible thanks to the huge investment in research and development that we have undertaken over the years. The vast knowledge base amassed during the creation of our flagship Art Series has been harnessed to deliver stellar levels of performance, in this more modestly priced cable range. Our unique understanding of metallurgy, conductor design, shielding and insulation has delivered a product of which we are immensely proud. It's one thing to make the best cost-no-object cables, it's another to provide much of their quality at a substantially reduced cost. All Crystal Cables are built to extremely stringent standards, with an exhaustive quality control regime at our own factory. The result is a highly robust product that delivers great performance throughout its long life. This is reflected in our resale values, which are some of the highest in the hi-fi industry.

Central to the dramatic improvement in performance of the Diamond Series 2 range, is our latest SG2 silvergold alloy conductor. The result of decades of research into metallurgy by Crystal Cable, it provides the twin benefits of considerably better electrical characteristics than conventional silver conductors, in a more physically compact and discreet form. And thanks to the conductor's positive ageing characteristic, the sound actually improves the more it is used. The result is superlative performance from a cable that takes up far less space than conventional designs – which is precisely what many modern cable buyers demand nowadays.

The Diamond Series 2 range retains the core values that Crystal Cable has become famous for, whilst delivering even higher performance. These strikingly attractive pieces, with their beautiful, jewellery-like appearance, are offered in a wide variety of guises to suit many applications. Each sounds as good as it looks, and will continue to provide excellent performance over the years thanks to our superlative manufacturing quality here in the Netherlands. Please do audition this beautiful new cable range if you possibly can. As the old saying goes, diamonds are forever...



## Silver-Gold Alloy: Our Secret Combination

#### "I see music as fluid architecture..." – Joni Mitchell –

In a sense, quality cables are like great symphony orchestras – everything starts with the conductor. That's why Crystal Cable's Diamond Series 2 has at its heart our exclusive and bespoke SG2 silver-gold alloy metallurgy.

One of the key factors that mark out our designs as special, is the use of our own, meticulously researched conductor metals. Our aim has been to design and manufacture an alloy of the highest possible conductivity, with the lowest possible impedance. This in turn makes for lower ground distortion, and purer sound. Even the capacitance of this new cable has been reduced, too.

The Diamond 2 series is the first use of our new SG2 conductor, which is a dramatic improvement over its predecessor. Superb quality silver-gold alloy runs continuously from connector to connector, giving exceptionally good conductance. It proved a complex technical challenge to produce consistently, but yields clear sonic benefits. SG2 eliminates microcracks in the silver conductor's crystal boundaries by injecting gold atoms to fill them in. This reduces boundary distortion and further improves the sound. In this latest generation of Crystal Cable's metallurgy, almost every property of the conductor has been improved even including cable runin times. Although it cannot match the elite perfection of the monocrystal silver conductors used in our flagship Art Series, it delivers exceptional performance at the price. This metallurgy is our very own, not shared with other manufacturers, made to our protected specification.

Our SG2 silver-gold alloy is the result of twenty years of research and development, during which time we formed a massive knowledge base on the behavior of different types of conductor. Only with this experience was Crystal Cable able to come up with an ultra pure formulation that delivers stellar performance at the price. It will be difficult to improve upon, as the last advance took twelve years.





Conventional silver conductors feature microcracks between the crystal boundaries inside, which reduce the conductivity of the metal – in turn increasing distortion and adversely affecting the sound. SG2 silver-gold alloy gets round this by injecting gold atoms near the crystal boundary of the conductor. Filling in these microcracks reduces boundary distortion and dramatically improves the sound.



## DuPont Kapton<sup>®</sup> & Teflon<sup>™</sup>: Superlative Shielding

Having the best possible conductor for the job is essential, but it is completely wasted if the insulation and shielding package isn't of an equally high caliber. Crystal Cable Diamond Series 2 uses the finest materials possible at its price point, to bring much improved rejection of Radio Frequency Interference – which would otherwise sully the conductor's superb sound.

The choice of materials and construction for this cable comes from work done for our flagship Art Series range. A large investment was made to determine what delivers the best noise rejection and grounding. Different cable geometries, conductor thicknesses and types of soldering were all evaluated, and tested exhaustively. A database of our findings was made, so that the results of each approach were thoroughly recorded – from the metallurgy and shielding to the insulation and connectors.

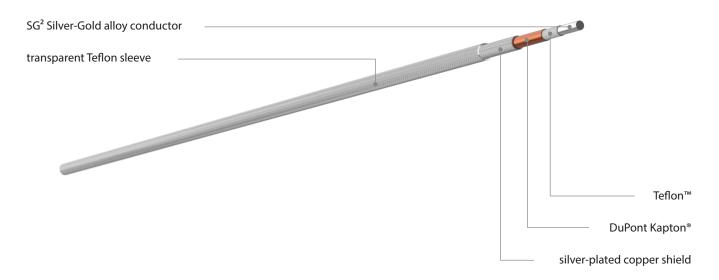
The new cable has dramatically reduced ground impedance over the original Diamond Series, giving a much better signal-to-noise ratio. It sounds quieter, less brittle and more natural than its predecessor – and in some respects dramatically outperforms it. Indeed subjectively, it comes surprisingly close to our most high end models in some ways – despite being far more affordably priced. Such a high level of quality is only possible due to Crystal Cable's massive knowledge base.

The new Diamond Series 2 is far from inexpensive to make, however. This is because our design team, headed by Edwin Rynweld, specified some of the finest materials used in audio cables today. Measurements have shown that genuine DuPont Kapton and Teflon have the best properties for shielding, and are superior to cheaper generic types of the same material. And as with all our cables, it is made in the Netherlands at Crystal Cable's own factory, to exacting standards. No corners have been cut, and the result is the best possible performance at the price.

Diamond Series 2 embodies Crystal Cable's core values – exceptional sound, unsurpassed quality and beautiful looks, plus superior ease-of-use due to the compact form factor and low weight. In addition to this, our cables will continue to perform to very high standards long into the future, thanks to the excellent quality of manufacture and materials used. Like its illustrious predecessor, this new range has a combination of talents that's very hard to beat.

#### **Diamond Series 2 Construction**

cross-section view of single coaxial cable





## The Crystal Cable Difference: Beauty in Sound

"The true beauty of music is that it connects people. It carries a message, and the musicians are the messengers..."

- Roy Ayers -

Crystal Cable products are designed to be as easy on the eye, as they are on the ear. This isn't to say that sound quality is a secondary consideration – on the contrary, it's absolutely central to what we do. But our unique approach allows us to build analogue and digital interconnects, power cords and loudspeaker cables that look as pleasing as they perform.

As well as visual appearance, the form factor of our cables is a central design criterion. They're made to be as compact and inconspicuous as possible, so they don't impose themselves on the domestic listening environment, or detract from the appearance of a high end reference system. They're also more pliable than other



premium cables, so can be placed neatly behind electronics or easily routed to loudspeakers.

This makes Crystal Cables a far more practical proposition than most high end designs, many of which announce their presence in your listening room in no uncertain terms – and may even require you to rearrange your hi-fi system in a way that suits them. Our products enhance your domestic listening space.

This is only possible thanks to the vast amount of scientific research work that we have done, over the past twenty years. Exhaustive testing of conductors, shielding and insulation, closely linked to intensive subjective listening sessions headed by the founder Gabi Rynveld – herself a highly accomplished, classically trained pianist – have lead us to employ the best possible metallurgy and thermoplastics. Being founded by a professional concert pianist sets us apart from others, in everything from our company's philosophy to our testing methodology. It puts the joy of music at the forefront of everything we do.

Gabi's passion for music is indelibly stamped throughout every Crystal Cable. Our products are designed to recreate the full majesty of music – from its sumptuous tonality and powerful dynamics to its captivating rhythms and emotional intensity. Whatever type of music you love, our Diamond Series 2 range will do it justice.

The use of premium-priced and genuine – not cheap OEM-sourced – DuPont Teflon together with our special geometry is what gives our cables their beautiful, semi-translucent look. It's aesthetically attractive, yet doesn't draw attention to itself in the way that many high end hi-fi wires do. Add to this the superlative quality of the connectors we use, and Crystal Cables look as beautiful as the superb equipment that they're designed to work with.



The exquisite all-round performance of the Diamond Series 2 wouldn't have been possible without the use of technology trickled down from our flagship Art Series.

It would have been cheaper to employ more conventional conductor materials, and plainer shielding and insulation, but the *raison d'être* of Diamond Series 2 is to offer the finest performance at the price. It is our definitive 'affordable high end' cable, conceived to be within the reach of as many audiophiles as possible. It lets you buy into Crystal Cable quality, at a price that's accessible to a wider spread of hi-fi and music lovers.

The aforementioned attention to detail in terms of design and materials use would mean nothing if the end product wasn't built properly. That's why every piece that we manufacture is the same as every other, and each individual cable will continue to deliver excellent performance over time – and thanks to the positive ageing characteristic of the SG2 conductor, actually improves with use. This is no groundless claim, as the very high resale values of our products will attest. The Crystal Cable factory features a mixture of precision machines, expert hand assembly and rigorous computer testing to deliver our superlative quality. The SG2 silver-gold alloy conductor alone requires specialised, secret processes involving multiple stages which have to be done absolutely right to get the performance that we demand. Once assembled, our cables are then subject to special thermal treatment which further improves their sound.

Comprehensive electrical measurements are made to every single cable that we produce, rather than using random sample testing – the latter is cheaper and easier from a manufacturing point of view, but yields lower quality results. Multiple tests are performed, including those for impedance and capacitance, and our digital cables undergo further stringent checks on a TDR machine for ultra precise measurement of high frequency impedance.

Our new Diamond Series 2 is a quantum jump over its already excellent predecessor, with a unique combination of classleading performance, value, looks and build quality. Beauty to the ear and to the eye – that's the Crystal Cable difference.

"Music – the most poetic and precise of all the arts, vague as a dream and precise as algebra..."

- Guy de Maupassant -







### Analog Interconnects

No matter how good your hi-fi system, it's only as good as the interconnects you use. They carry the delicate, low level electrical signals from your source components to the preamp or integrated amplifier. There's simply no getting around the fact that your system cannot give its best, if the wires are holding it back.

Diamond Series 2 is Crystal Cable's affordable high end' range, designed to provide exceptional sound quality at more accessible prices than you would expect. It lets people experience music in a way that's closer to cost-no-object cables. And those sticking to a strict budget can spend more money on their hardware, thanks to the superb price/performance ratio that it delivers.

The specification of each version is superb – SG2 metallurgy, real DuPont Teflon and Kapton insulation and silver-plated copper shielding, in a twin coaxial construction. The balanced XLR versions use a third coax to further lower ground resistance, making it a truly balanced cable with an extremely low noise floor.

As you move up the range, the conductor increases in thickness for even better signal transfer and even lower distortion – with clear incremental improvements to sound quality the higher you go. Just choose the model that best suits your budget, and enjoy getting closer to your favourite music.

RCA & Phono Interconnect cable cross-section microscopic view



XLR Interconnect cable cross-section microscopic view







### Loudspeaker Cables

The benefits of high quality speaker leads have been known since the nineteen eighties. Before this, audiophiles tended to use basic thin-gauge copper wire to connect their amplifiers to their speakers. Nowadays though, things have moved on and everyone agrees that purpose-designed, high current wires sound best. Perhaps this is why so many speaker cables now look the same. Conspicuously thick and often inflexible designs, they can be difficult to install in listening rooms, and appear unsightly when *in situ*.

This where Crystal Cable stands out from the crowd. Our extensive research into materials technology and cable construction – conducted over decades by our scientists – has allowed us to produce slim and beautiful looking cables that complement, rather than spoil, the look of a system. At the same time, for the same reason, our design expertise has ensured superlative sound.

Diamond Series 2 speaker cables come in four tiers – Piccolo2, Micro2, Reference2 and Ultra2. All are dramatically smaller and less intrusive than their price rivals, yet offer class leading performance. The further you go up the range, the more conductor material is employed for better signal transfer – but even the entry-level Piccolo2 is a seriously high achiever.

The special twin coaxial construction of Diamond Series 2 speaker cables – with its real DuPont Teflon and Kapton insulation and silver-plated copper shielding – features a single SG2 silver-gold alloy conductor from one end to the other. With no connections in-between, its superb electrical characteristics let your integrated amplifier or power amp do the best possible job.

Speaker cable cross-section microscopic view











#### Power Cables

**Crystal Cable's Diamond Series 2 power cables** use superlative materials and meticulous construction to deliver AC mains to your audio electronics, with the least possible electrical interference or mechanical noise. This makes for optimum sound quality, at a price that belies the performance achieved. That's only half the story however, because they have been specially designed to be much easier to use than conventional rivals, and less visually intrusive too. Indeed, their jewel-like appearance will enhance the look of any hi-fi system, whatever its price.

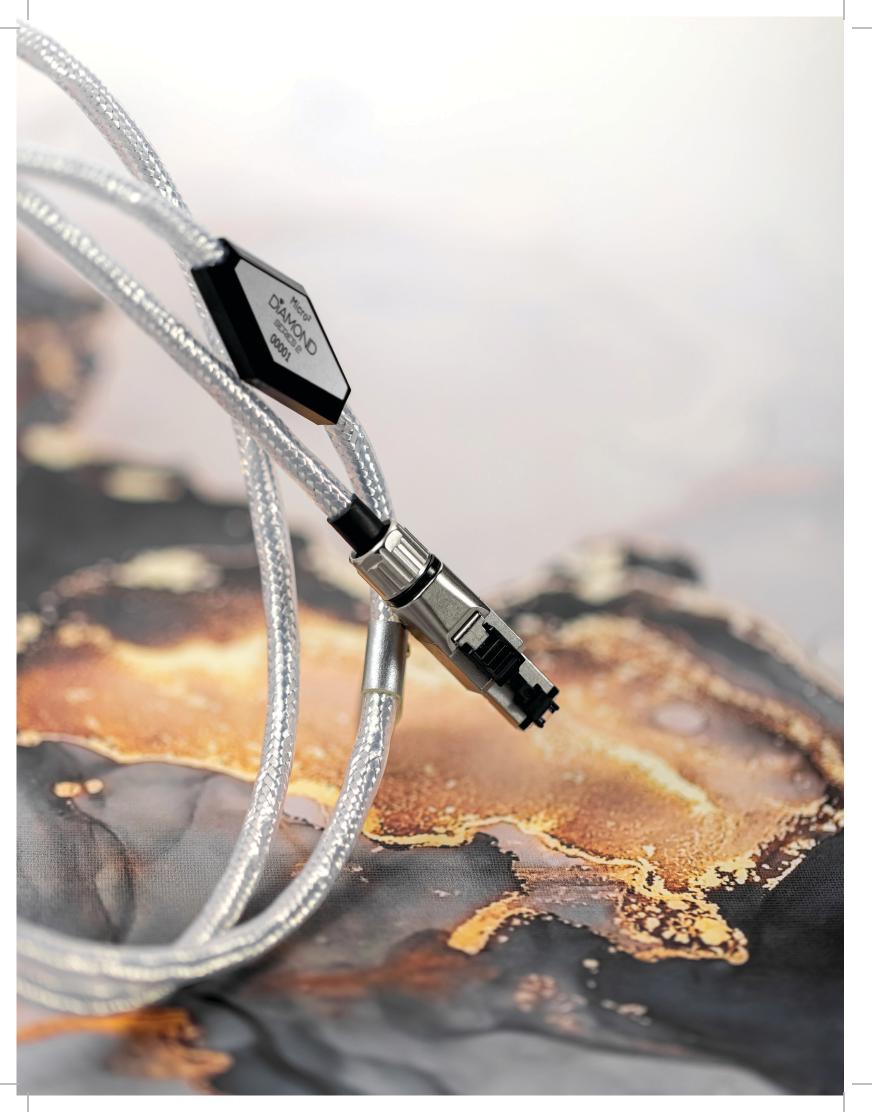
As you would expect, our bespoke SG2 conductors, DuPont Teflon and Kapton insulation and silver-plated copper shielding make for ultra low loss power conduction, especially when used in our special triple coaxial construction. This design is the result of decades of research into cable geometry, honed by exhaustive measurements, testing, and auditioning. In order for any hi-fi system to perform to its highest potential, the power cables it uses must have the lowest possible ground resistance, proper shielding and the correct geometry. Diamond Series 2 delivers all these, in a highly attractive package.

Diamond Series 2 power cables come in three performance levels – Micro2, Reference2 and Ultra2. Each is far more attractive than any conventional mains lead, as well as being more compact and pliable. This makes for easier cable routing, for a better looking system and listening space. As one goes up the range, more conductor material is employed for greater power handling, offering even higher performance. Simply choose the model that best suits your intended application and budget.

Power cable cross-section microscopic view







#### Digital Interconnects

Electrical interference is just as much a challenge for digital interconnects, as it is for analogue ones. Indeed, given the ultra high frequencies at which they run – it's even more important to provide a stable, noise-free digital data stream from source to DAC. That's why Crystal Cable's new Diamond Series 2 offers three top quality solutions – the Diamond Series 2 USB cable, Micro2 Network cable, and the Ultra2 Network cable – to suit customers' requirements.

Diamond 2 USB is specially designed to give extremely reliable, accurate and distortion-free digital signal transfer, from hi-res computer audio sources to USB-capable digital-to-analogue convertors. It sports two twisted pairs of our superlative SG2 silvergold alloy conductor, with Teflon insulation and silver-plated copper shielding. Terminated with top quality Crystal Cable USB A and B plugs, it's hard to surpass in terms of sheer quality – aside from our flagship Art Series products, of course.

Micro2 Network and Ultra2 Network offer two quality and price options for connecting network-attached digital audio components. They deliver superb performance in a highly attractive, discreet and user-friendly package. The former is more than sufficient for the vast majority of audiophile applications, whereas the latter gives even better signal transfer. Both share Crystal Cable's special SG2 metallurgy, Teflon insulation and silver-plated copper shielding, and come with fully shielded RJ-45 connectors. For the highest possible sound quality, both cables utilize the 100BASE-TX specification which supports a maximum speed of 100Mbps.

See <u>www.crystalcable.com</u> for more information.







#### Diamonds Are Forever

#### "Music can name the unnameable and communicate the unknowable..."

– Leonard Bernstein –

Like all Crystal Cable products, Diamond Series 2 cables are built for a lifetime of musical enjoyment. Our design expertise and technical resources are second-to-none, and this pays dividends when creating cables that must perform to extremely high standards, day in, day out, for decades – under a variety of conditions, in many different types of hi-fi systems.

Although every effort is made to design longevity into our cables, by the correct materials use and construction, it would mean little if we couldn't make them to our exacting standards. That's why we choose to manufacture everything in our own factory in the Netherlands, to a level of quality that we believe is the highest in the audio industry. Only by doing it this way, can we ensure that our meticulous standards are met.

It means that every Diamond Series 2 cable on sale will perform the same as every other, and continue to give many years of listening pleasure into the future. Indeed, because of the way that our specially developed SG2 silver-gold alloy conductor is made, its positive ageing characteristic means that the sound actually improves over time. The older it gets, the better it gets – just like a fine wine.

As part of our commitment to giving our customers the quality they expect and deserve, all our cables come with an NFC (Near Field Communication) tag. Every user can – even without registering - scan the tag using our specially developed Crystal Cable App, to authenticate the cable, retrieve product information and be reassured that it is an original Crystal Cable product.

Creating an account in the app makes it possible to declare your ownership of the cable using a unique code on the certificate corresponding to the product's serial number. Registering the product activates our special lifetime warranty – proof that these Diamonds really are forever. This system makes our cables practically impossible to counterfeit, and provides lasting peace of mind to our valued customers.



# CrystalCable®

#### **Diamond Series 2 Connectors**



**Crystal Cable RCA** Gold-plated RCA connector used on Piccolo<sup>2</sup> and Micro<sup>2</sup>



**Neutrik XLR black** XLR connector with gold-plated contact pins, used on Piccolo<sup>2</sup> and Micro<sup>2</sup>



**ETI-CC RCA** Premium RCA connector with gold-plated contact and ground pin, used on Reference<sup>2</sup> and Ultra<sup>2</sup>



**ETI-CC XLR** Premium XLR connector with silver-plated contact pins, used on Reference<sup>2</sup> and Ultra<sup>2</sup>



Tac-5 straight gold by Clearaudio Straight phono connector available on all phono cables



**Tac-5 angled by SME** 90 degrees angled phono connector available on all phono cables



**CrystalBridge XLR** Special 'bridge' connector with SG2 silver-gold filter inside, to plug in your XLR cable



**CrystalBridge RCA** Special 'bridge' connector with SG2 silver-gold filter inside, to plug in your RCA cable



**Crystal Cable gold-plated** 

Standard gold-plated spade, used

Wattgate Standard AC

Standard power connectors

EU/US/10A/16A

for Micro<sup>2</sup>

on Piccolo<sup>2</sup> and Micro<sup>2</sup>

spade



banana

Crystal Cable gold-plated

Standard gold-plated banana,

used on Piccolo<sup>2</sup> and Micro<sup>2</sup>



**ETI-CC gold-plated spade** Premium gold-plated spade, used on Reference<sup>2</sup> and Ultra<sup>2</sup>



ETI-CC gold-plated banana Premium gold-plated banana, used on Reference<sup>2</sup> and Liltra<sup>2</sup>



**leGO-CC Clear goldplated AC EU/US/10A** Premium power connectors used on Reference<sup>2</sup> and Ultra<sup>2</sup>





**RJ-45 ethernet** Completely shielded high end network connector for Micro<sup>2</sup> and Ultra<sup>2</sup>



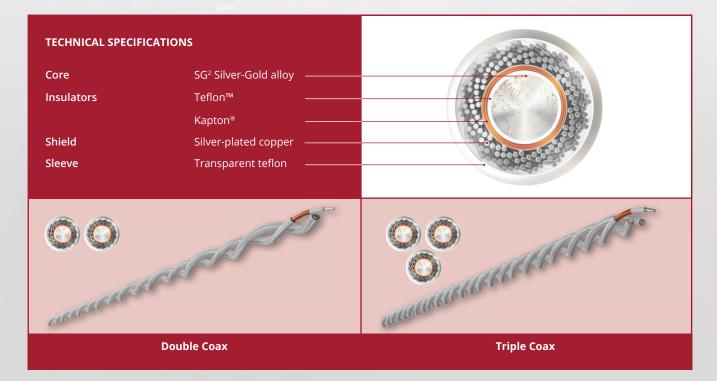
**USB type A and B** Custom matt silver USB connectors for Diamond 2 USB cable

www.crystalcable.com

#### "Music is the silence between the notes..."

- Claude Debussy -





# CrystalCable®

## Crystal Cable Diamond Series 2 Range

✓					
	Conductor	Insulation	Shields	Туре	Cross-sectio
Piccolo <sup>2</sup>					
Interconnect XLR	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 coax	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Interconnect RCA	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	00
Loudspeaker cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	66
Micro <sup>2</sup>					
Interconnect XLR	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	
Interconnect RCA	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	00
Interconnect Phono	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	4 coax	88
Loudspeaker cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	00
Power cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	
Reference <sup>2</sup>					
Interconnect XLR	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	000
Interconnect RCA	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	00
nterconnect Phono	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	4 coax	88
Loudspeaker cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	66
Power cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 coax	
Ultra <sup>2</sup>					
nterconnect XLR	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 coax	
Interconnect RCA	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	66
nterconnect Phono	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	4 coax	
Loudspeaker cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	2 coax	00
Power cable	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	
Miscellaneous					
Diamond <sup>2</sup> USB	SG2 Silver-Gold alloy	Teflon™	Silver-plated copper	2 twisted pairs	
Micro <sup>2</sup> Network cable	SG2 Silver-Gold alloy	Teflon™	Silver-plated copper	2 twisted pairs	
Ultra² Network cable	SG2 Silver-Gold alloy	Teflon™	Silver-plated copper	2 twisted pairs	
Micro <sup>2</sup> Ground Bridge RCA	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 coax	00
Micro <sup>2</sup> Ground Bridge XLR	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	- 6
Ultra <sup>2</sup> Ground Bridge RCA	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	
Ultra <sup>2</sup> Ground Bridge XLR	SG2 Silver-Gold alloy	Teflon™ & Kapton®	Silver-plated copper	3 соах	
Powerstrip	SG2 Silver-Gold alloy	Teflon™ & Kapton®	N.A.	N.A.	N.A.



## ""Music has the power to unite us..."

– Lady Gaga –

Handmade in the Netherlands

www.crystalcable.com