



SILTECH
EST. 1983



**ROYAL CROWN
SERIES**

Handmade in the Netherlands

Cable **Royalty**

Meet Royal Crown, the finest range of cables that Siltech has ever made. It harnesses all the knowledge that the company has amassed over the years, together with the best, cost-no-object material.

The result is a series of analog and digital interconnects, loudspeaker cables and power leads that have virtually no character at all. Rather than voicing the cables to sound impressive or euphonic, Royal Crown is as translucent as can be.

This is only possible by paying meticulous attention to metallurgy, insulation, construction and connectors. Every Royal Crown cable employs the very latest, state-of-the-art materials, informed by Siltech's pioneering research into no-compromise cables which started with 1999's Royal Signature Series. The culmination of decades of cable design development, the sonic results are spectacular – and unleash the full potential of great music replay systems.



The **Royal Crown** story

Siltech is one of the world's longest established cable manufacturers, and has been intensively researching metallurgy, insulation and construction for nearly four decades. The results of our rigorous development work are channeled into the products that we sell, stretching back to the original G1 silver conductor.

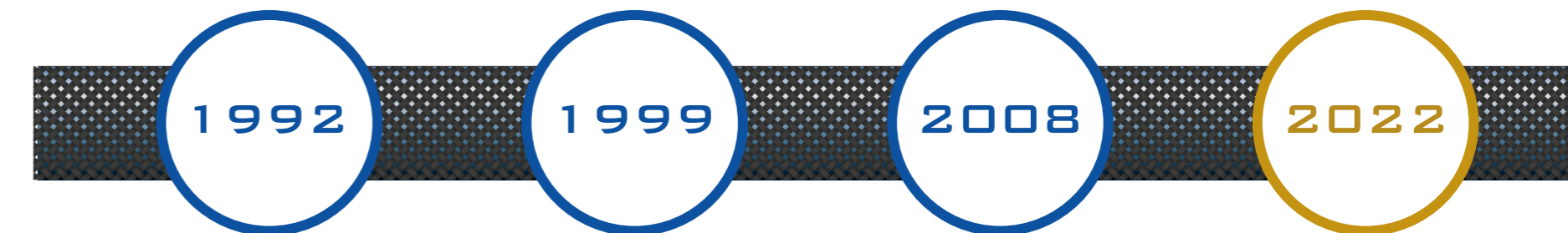
The new Royal Crown series is the latest in a long line of statement cables that Siltech has become famous for. For several decades, chief designer Edwin van der Kley Rynveld has made extensive use of advanced measurement techniques and equipment. This has given him an unparalleled insight into why cables sound the way they do, helping him make better ones.

In 1997 he invented a completely new metallurgy, a unique silver-gold alloy which had exceptional conductivity and, in turn, superlative sound. This was improved upon further with a higher level of conductivity, and named G5. It was at this point that Edwin decided to make what he calls "a super-cable" to beat all others; the result was 1999's Signature Series, which brought together Siltech's then state-of-the-art G5 silver-gold alloy wire, Kapton insulation and special construction to better space the conductors from one another.

A period of constant improvement followed, and led to the new Royal Signature Series in 2008, born of the research done into conductor metallurgy. G6 turned into G7, and so successful was the latter that it stayed in the company's product line for nearly fifteen years. Siltech's flagship cables started to be named after gold and silver mines – such as Compass Lake, Golden Ridge and Ruby Hill. Then the names changed to a simpler system based on royal hierarchy.

The new third generation flagship Royal Crown series is the best that Siltech has ever done, and introduces the finest, newest S10 monocrystal silver conductors, the best insulation package – comprising DuPont Kapton and Teflon insulation – and a unique new 6-layer construction to correctly distance the conductor for ultra low capacitance. This is topped off by superb quality, ultra low loss connectors made with solid silver pins.

Royal Crown brings together new metallurgy, construction, insulation and connectors to deliver spectacular sound. All products in this range boast superlative conductivity and noise rejection for an almost translucent sound. It dramatically raises the bar on what is possible from the world's finest hi-fi systems.



The Royal Crown range

Siltech's finest ever cable range replaces our highly acclaimed Royal Signature series. A clean-sheet, no-compromise design, it covers every popular audiophile application, from analogue and digital interconnects, to power cords and loudspeaker cables.

The new flagship Royal Crown range sits above Siltech's Explorer, Classic Legend and Crown Prince series of cables, and is designed to provide no-compromise, cost-no-object performance. It comes in three different versions:

Single Crown is the most accessible line, yet still features our best S10 monocrystal silver metallurgy, 6-core Hexagon construction, Kapton/Teflon insulation package and full range shielding. Double Crown builds on this with even better topology – providing more space between the conductors – and Triple Crown is Siltech's no-holds-barred, ultimate cable.

All Siltech cables have extremely long service lives, and offer 'positive ageing' as the conductivity of silver improves over time – so they keep getting better with age. This explains the exceptionally high residual prices of older Siltech cables, which remain higher than any others on the market. Siltech's superlative sound and build quality never goes out of fashion, and Royal Crown is timeless.



Royal Crown conductors

The Royal Crown series is the culmination of many decades of work on 'silver technology', the very thing that gives Siltech our name. Born of four decades of specialist research into cable metallurgy, our aim was to create the finest possible audio cable conductor.

Ever since Siltech was founded in 1983, our flagship cables have used solid silver conductors, and these have been progressively refined. Sometimes, small incremental improvements have been made, and at others radical changes carried out. The S10 monocrystal silver conductor used in Royal Crown is the latter. It's the best we have ever created, the embodiment of all knowledge amassed over forty years to deliver the highest possible performance.

Siltech's first generation conductor – which appeared in 1983 – was 99.99% pure solid silver. This metal has better conductivity than any other and – unlike copper – doesn't degrade over time; indeed it actually improves. Further evolutions of this metallurgy followed, offering longer crystal lengths which reduced the number of gaps between the silver atoms. This in turn improved the wire's electrical characteristics, and thus sound quality.

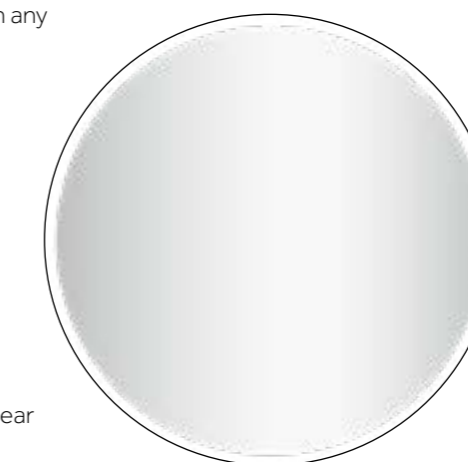
Later developments led to our famous silver-gold alloy, first called G3 (for 3rd generation of metallurgy) and later improved upon multiple times to reach the current G9. By injecting gold near

the crystal boundary of the silver conductor, boundary errors have been dramatically reduced and microscopic cracks lessened. Over the years, Siltech has greatly improved the silver-gold alloy conductors used in Classic Anniversary, Classic Legend and the Royal Signature series – the immediate precursor to Royal Crown.

Although this has brought great sonic benefits, nothing can surpass conductors where they are not present in the first place. Enter our new S10 monocrystal silver – the tenth generation of Siltech metallurgy – used in the Royal Crown series.

This is the pinnacle of our cable design and manufacturing. The single continuous crystal metallurgy eliminates boundaries for the lowest possible distortion. Its increased conductivity – up to 112% of regular silver wire – leads to an extremely low-loss conductor for a lower noise floor and higher power handling. Using our own specialist measurement techniques, Siltech has been able to assess the impact of barriers within conductors and come up with new manufacturing methods to eliminate imperfections in the metallurgy.

By using proprietary sophisticated annealing processes, adjusting both the temperature and rate at which our conductors are drawn and how long they take to cool, we produced larger and more consistent crystal structures, reducing the discontinuities in the signal path. The result is exceptional openness, detail and musicality – perfect for the world's finest hi-fi systems. Nothing compares.



Siltech S10 Monocrystal silver
Siltech's continuous single silver crystal metallurgy eliminates microcracks, giving the lowest possible resistance and distortion

Royal Crown construction

Conductor quality is paramount in any audio cable, but it's only as good as the overall construction allows. State-of-the-art metallurgy will not stop a cable sounding poor if the topology, insulation and shielding isn't equally excellent. That's why Royal Crown shows the same meticulous attention to detail in these areas – it's the best that Siltech can produce, on every level.

Royal Crown's flexible new construction spaces the signal conductors out further to reduce capacitance, and sports a new insulation package with wide range shielding to reject as much interference as possible. New connectors with ultra low loss solid silver pins are fitted to most versions of the cables, too. The result is ultra low capacitance and ground impedance, giving dramatically better sound and an even lower noise floor compared to Siltech's previous flagship design.

The new Royal Crown boasts unique 6-core Hexagon construction, which extensive measurements and listening tests have shown to yield higher performance than 2, 4 or 8-core types.

Siltech began using Kapton as an insulating material because it was found to have a super-fast, tonally neutral sound. New research has led us to use a combination of Kapton and Teflon in the Royal Crown; these latest-generation plastics are as hard as steel so do not resonate, yet offer excellent insulation. A very thin layer of the former gives crystalline purity at high frequencies, while two layers of the latter optimise performance in the lower regions of the audio band.



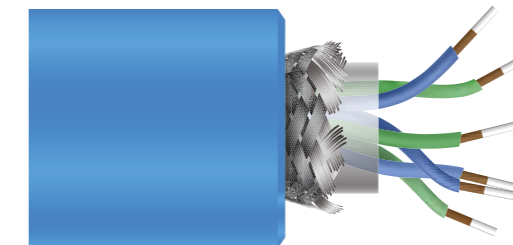
Royal Crown in detail



Microscopic view

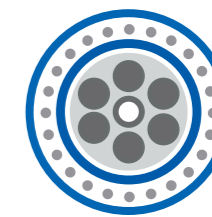
S10 Monocrystal Silver

The latest generation of Siltech's ultimate conductor is fitted, which is the second version of our monocrystal silver and the tenth generation of our monocrystal silver and the tenth generation of Siltech metallurgy. Silver is the best conductor on Earth, and our formulation is between 106% and 112% more conductive still.



Kapton-Teflon Insulation

In order for the S10 conductor to give its best, a special new insulation package comprising Kapton and Teflon is specified. Two layers of the former are fitted, plus one ultra-thin layer of the latter. This gives electrical and mechanical insulation across a very wide bandwidth.



Cross section

6-Wire Construction

Royal Crown employs a unique 6-wire Hexagon construction to correctly distance the conductors and let the insulation and shielding do their jobs. Ultra-low capacitance shielding is used for maximum rejection of external electrical noise. The cable is also highly resistant to external vibration.



Solid Silver Connectors

Almost every variant of Royal Crown is fitted with superlative quality, ultra-low loss connectors made with solid silver pins. Custom-constructed by Siltech, they are extremely expensive, but anything less would compromise the end result in sonic terms and was thus rejected.



Superlative Build Quality

The Royal Crown series is handmade in the Netherlands by highly skilled production engineers, to the highest standards. Each cable goes through a 3-step testing procedure before leaving the factory. Manufacturing cables this way is extremely labor-intensive, but necessary to get consistent, unparalleled quality.

Royal Triple Crown – the flagship

The largest diameter monocrystal silver conductors that Siltech has ever made, in a radical cable topology that's totally consistent. The result is a previously unheard level of accuracy.



Ultimate quality

Royal Triple Crown is the finest cable that Siltech has ever made. Indeed, we would suggest that it's the best in the world, bar none.

It harnesses every technology that Siltech has at its disposal, in an absolutely uncompromising way. No corners cut, no excuses made. In terms of conductor metallurgy, construction, insulation, shielding and connectors, nothing betters it.

Our S10 monocrystal silver is the greatest conductor available, and when specified for Royal Triple Crown it comes in the largest diameter that Siltech has ever used. The result is the lowest loss and the highest resolution – along with exceptionally low capacitance.

The unique 6-core Hexagon construction is optimised for the S10 conductor, and offers superlative geometric accuracy. Its radical new topology ensures complete mechanical consistency, regardless of how much a cable is curved. It is both longitudinally flexible yet stiff when compressed, and has excellent mechanical damping to resist vibration.

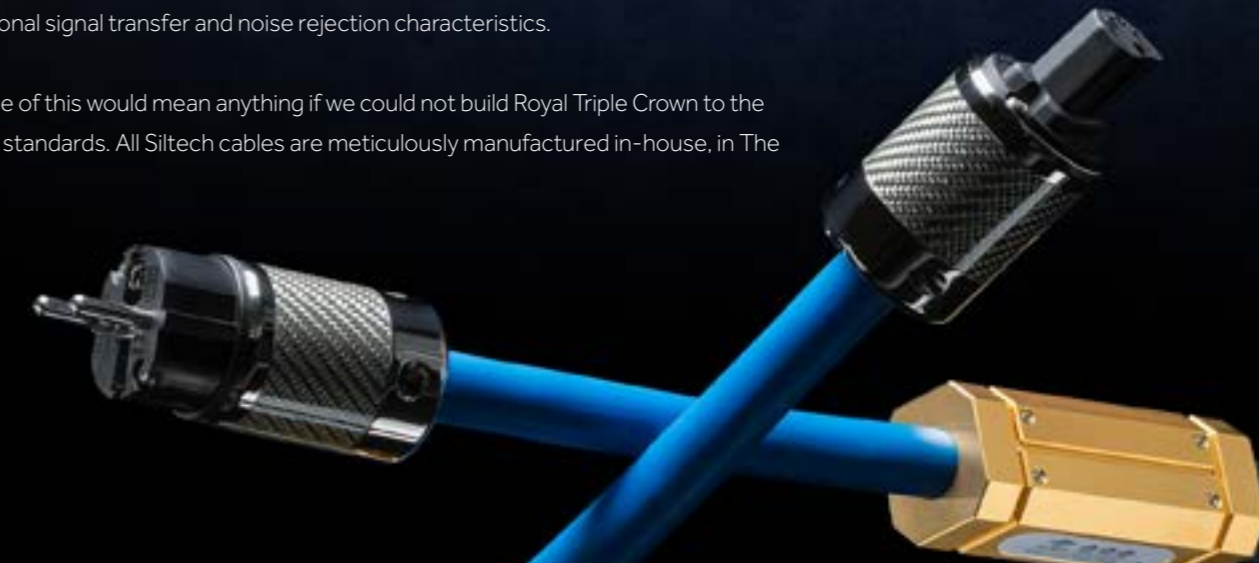
Siltech's special Multicell topology – used uniquely in the Royal Triple Crown – employs a complex matrix of Teflon with air gaps, to give the aforementioned ideal characteristics. The Air Cradle Construction results in an insulation package of ultra low density, for exceptional signal transfer and noise rejection characteristics.

Yet none of this would mean anything if we could not build Royal Triple Crown to the highest standards. All Siltech cables are meticulously manufactured in-house, in The

Netherlands, then rigorously computer tested in the factory. Highly specialised and secret processes are used to produce the S10 monocrystal wire. This is a complex procedure, involving multiple stages that must be done absolutely right. Our cables are then subjected to a special thermal treatment process which further lowers their impedance by nearly ten percent.

The end result is verified by a comprehensive series of electrical measurements, performed automatically on each individual cable – as opposed to less accurate random sample testing. Every one is high voltage tested at 1,200V, and this includes all components within the cable, including the connectors. Multiple tests are performed, including impedance and capacitance – the latter using advanced analytical methods. Digital cables are also tested on a special TDR machine, for ultra precise measurement of high frequency impedance.

Only by doing things this way we can guarantee the quality, performance and longevity of our products – and justly claim that Royal Triple Crown is the finest audio cable that money can buy.





"Designing cables is a true art.
Material science is our fuel.
That's the Siltech way."

Meet the maker – Edwin van der Kley Rynveld

Edwin van der Kley Rynveld is a professional audio engineer with a restless, enquiring mind. As Siltech's CEO and chief designer, this has proved vital for perfecting our unique range of high-performance audio cables. "I thought that if you can't measure something, it doesn't exist", he says. "But I decided to listen, and found that cables made striking differences – and that it varied according to their construction. So, I started serious empirical research. I made my own test equipment, which was better than anything else around at that time, and never looked back."

He continues: "I could measure about 150dB down, which is still about the practical limit even now. This allowed me to see what was happening at the noise floor, which I was able to correlate – to a degree – to different cable conductor types and shielding materials. When Philips closed one of their Dutch laboratories, we bought all of its test equipment. It was very powerful, and a fantastic chance for Siltech to dig really deep into the science of audio cable design. This research helped us tremendously. It is a common belief that you can't measure cables, but you absolutely can – you just need to know what to look for and have the tools to do it."

"The other side of this," reflects Edwin, "is the assertion that you can predict fantastic sound just by measurement. Unfortunately, it's just not that simple. It's like cooking – if you have a good meal, you can be pretty sure that you have good ingredients in there. But you need to know what these are in the first place and understand why they're working well together. Siltech's road is not going by trial and error, that's not our way."

"Many details are still not set in stone," says Edwin. "One discipline is magnetic research, which is very much an unknown for most people, but this is an area that Siltech excels in, and where we try hard to keep ahead of our competitors – thanks to our hard science background. Rather than cooking with our eyes closed, we test as much as we can. Others may have a lucky strike, but we need to find the reason for subjective differences in sound. Are we always successful? No, but we've been doing it for over three decades now and our method is generally highly effective."

"Siltech does fundamental scientific research that few such specialist companies can. We have PhDs analysing metallurgy, directions of currents, magnetic fields and insulation material effects – and seeing that there's always much to learn. In high end cable design particularly, there are many details that seem to count but not all are categorised, let alone understood. We're so proud of our team of engineers, who are as fanatical about perfection as me."

The Siltech team's ability to combine the best scientific research with four decades of materials and design experience, has resulted in the Royal Crown series – the greatest synergy between technology and musical expression.



CEO
Siltech

Royal Crown analog interconnects

The Royal Crown series of analog interconnects offers cost-no-object construction quality using the very finest materials.

First and foremost, the S10 conductor is the best that Siltech has ever made. Our previous G9 generation used gold to fill the boundaries in the silver crystal structure, to improve conductivity. The latest S10 moves to a wholly monocrystal silver structure, with no boundaries to fill in. Its better conductivity gives superlative levels of transparency, detail, depth and musicality.

To reap the full benefits of this state-of-the-art conductor, Royal Crown uses 6-core Hexagon construction. This symmetrical wire distribution is more efficient than other types, making for lower inductance. The analog interconnects sport Kapton and Teflon insulation with special air gaps, and wide range shielding for reduced capacitance. Signature resonance damping is employed to minimise the effect of microphony upon the cable, and in turn, the electronics that are connected to it. Improved connectors are also fitted.

The series includes interconnect versions and specially designed tonearm phono cables, and a choice of Royal Single Crown, Royal Double Crown and Royal Triple Crown levels. As you progress up the range, conductor thickness and spacing increases for even better sound.

Royal Crown digital interconnects

As with Siltech's analog cables, Royal Crown series digital interconnects are made to the very best standards, with absolutely nothing left to chance. Build quality is superlative, with the finest materials used.

Although some still believe that all digital cables sound the same, the difference between average examples and Siltech's flagship Royal Crown versions is profound.

That's because, just like analogue cables, digital interconnects are susceptible to the same problems of noise – Radio Frequency Interference – plus mechanical vibration, ineffective conductors and/or impedance mismatching.

Siltech's unique S10 monocrystal silver is the finest conductor that money can buy, and is purpose-designed to carry high resolution digital audio at the very high frequencies required. This is mated to our special insulation and shielding package – including an improved Superground connection.

Together, these make Royal Crown digital interconnects extremely resistant to electrical and mechanical noise. The result is a stable, ultra low jitter connection between the digital source and digital-to-analogue convertor. This in turn lets the DAC do the best possible job.

Available as Royal Single and Double Crown Digit (coaxial), Royal Single and Double Crown USB and Royal Crown Network versions, they form an essential part of any digital audio front end. Hear the difference for yourself when you get the chance.

Royal Crown loudspeaker cables

When connecting loudspeakers to the amplifier that drives them, everything must be right about the cables linking them. Siltech's Royal Crown series speaker cables do the very best possible job, with no compromises made.

At the heart of the design is our unique, single silver crystal conductor. Silver is the most conductive metal in existence, and this is its purest, most conductive version – with no boundaries whatsoever. The result of nearly five decades of research, Siltech's S10 monocrystal silver is the best that money can buy.

The Royal Single Crown and Royal Double Crown cables use our unique 6-core Hexagon topology, with a combination of Kapton and Teflon insulation, and a TC floating shield for the best possible rejection of electrical noise. An internal air gap acoustically damps the cable to further reduce mechanical interference. The result is an ultra low loss loudspeaker cable with dramatically lower capacitance and inductance than is normal. This effect is even greater with Royal Triple Crown's special multicell construction. Royal Single Crown speaker cable is terminated with G9 silver-gold spades, whereas Royal Double Crown and Royal Triple Crown use S10 monocrystal silver spade connectors.

Siltech's flagship speaker cables are available in Royal Single Crown, Royal Double Crown and Royal Triple Crown versions with increasing conductor thicknesses and air gaps, each delivering class-leading performance at their price points.

14

Royal Crown power cables

ROYAL  CROWN


SILTECH
EST. 1983

Siltech's flagship power cable range comprises three models – Royal Single Crown Power, Royal Double Crown Power and Royal Triple Crown Power. As with the other cables in this series, they boast our cost-no-object S10 monocrystal silver conductors, for extremely high and constant conductivity – which in turn makes for superlative sound.

These are arranged using Siltech's unique 6+1-core Hexagon topology. This more efficient, symmetrical configuration delivers the lowest possible capacitance and inductance. The Kapton and Teflon insulation package has been specially designed to combat Radio Frequency Interference across a very wide bandwidth, as has the Wide Range Shielding. This construction also offers excellent rejection of mechanical vibration, too.

Moving up the range, Royal Double Crown Power and Royal Triple Crown Power offer proportionally thicker conductors and greater air gaps within the cable for even better power handling, lower loss and superior sound. All three models feature Siltech's Superground connection, and the flagship Triple Crown Power uses our special Multicell configuration for even better performance. Special RDC pure silver connectors are fitted.

The finest power cables that money can buy, we invite music lovers to audition Royal Crown series power cables at their Siltech dealer, to experience the improvements they bring.

www.siltechcables.com

15



Every Royal Crown cable comes with Siltech's exclusive NFC tag, which gives it a unique and traceable identity – guaranteeing authenticity. Scan the tag with an NFC-enabled smartphone to obtain product information and register your product for extended, lifetime warranty.

Royal Crown connectors



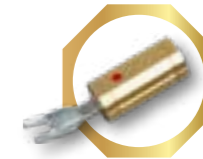
WBT 0610 Ag
WBT angled banana, with pure silver contacts, available for Royal Single Crown and Royal Double Crown.



SSP009
Siltech-made Royal Single Crown Spade connector made from pure G9 silver-gold alloy.



SSP010
Siltech-made Royal Double Crown Spade connector made from pure S10 monocrystal silver.



Triple Crown spade
Siltech Triple Crown RCA connector with solid monocrystal silver contact pin and 4 solid monocrystal silver ground contact pins.



Oyaide Focus 1 XLR
Premium XLR connector, with silver and rhodium plated phosphor bronze contacts. For Royal Single Crown and Royal Double Crown.



SST S10 Black
Siltech-made RCA connector with pure S10 monocrystal silver contacts. Used on Royal Single Crown and Royal Double Crown.



Triple Crown XLR
Siltech Triple Crown XLR connector with solid monocrystal silver contact pins.



Triple Crown RCA
Siltech Triple Crown RCA connector with solid monocrystal silver contact pin and 4 solid monocrystal silver ground contact pins.



Zero Ohm Link
Specially designed bridge connector to plug in your existing RCA & XLR cable, with S10 monocrystal inline high-speed filter.



Single Crown Power
Siltech-made Power connector for Royal Single Crown with gold plated tellurium copper contacts. Available as US/EU and 10-15A plug.



Double Crown Power
Siltech-made Power connector for Royal Double Crown with pure silver contacts. Available as US/EU and 10-15A plug.



AC EUR/UK/US -Furutech FI-50 NCF and IEC 10A Furutech FI-50 NCF & IEC 16A Furutech FI-52 NCF
White carbon power connectors, available for the Royal Crown Series.



Tonearm
Straight tonearm connector by Clearaudio, angled tonearm connector by SME. Used on Royal Single Crown and Royal Double Crown.



BNC
High-end BNC connector, available for Royal Single Crown and Royal Double Crown.



USB type A and type B
Custom matt silver USB connectors used on the Royal Single Crown and Royal Double Crown USB cables.



Network
Completely shielded high-end RJ-45 connector for the Royal Single Crown network cable.

Royal Crown range overview

The Royal Crown range has cables to suit almost every application, from analog and digital interconnects and a ground cable, to speaker cables and power leads.



Royal Crown range overview

Royal Crown Series	Model	Cores	Monocrystal copper	Pure silver-gold alloy G7	Pure silver-gold alloy G9	Pure S10 monocrystal silver	Twisted pair	Star quad	Twisted coax pair	Hexagon	Siltech special Multicell	Kapton	PEEK	Teflon	Air insulation	Wide-range shielding	Cross section
Interconnects	Royal Single Crown IC	6				•				•	•			•	•	•	
	Royal Double Crown IC	6				•				•	•			•	•	•	
	Royal Single Crown Phono	4				•	•				•			•		•	
	Royal Double Crown Phono	4				•	•				•			•		•	
	Royal Triple Crown IC RCA	2				•					•			•	•	•	
	Royal Triple Crown IC XLR	3				•					•			•	•	•	
Ground cables	Crown Zero Ohm Link	3x5				•	•							•			
Loudspeaker cables	Royal Single Crown Speak	6				•				•	•			•	•	•	
	Royal Double Crown Speak	6				•				•	•			•	•	•	
	Royal Triple Crown Speak	2				•					•			•	•	•	
Jumpers	Royal Single Crown Jumper	2x9				•	•							•			
	Royal Double Crown Jumper	2x12				•	•							•			
Power cables	Royal Single Crown Power	6+1				•				•	•			•		•	
	Royal Double Crown Power	6+1				•				•	•			•		•	
	Royal Triple Crown Power	6+1				•					•			•		•	
Digital cables	Royal Single Crown Digit	2+2				•	•							•		•	
	Royal Double Crown Digit	2+3				•	•							•		•	
	Royal Crown Network	4				•	•							•		•	
	Royal Single Crown USB	4+1				•	•							•		•	
	Royal Double Crown USB	4+2				•	•							•		•	
			Metallurgy				Construction				Insulators						



SILTECH
EST. 1983

www.siltechcables.com