



Crystal Cable

Future Dream

The Monumental Achievement of 15 years

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15 years ago (2004), there was a dominating theory amongst audiophiles about audio cables: High end cables are always thick and heavy. If you want to achieve excellent acoustical performance, the cables should be as thick and heavy as possible. Interesting enough, in that year, a renowned high end cable manufacturer overthrew this theory. They used a solid high density core of highly conductive silver/gold alloy and adopted Kapton as insulator. The result is a super light, thin and high performance audio cable. While this result presented a great commercial opportunity, they have a marketing challenge to deal with: Siltech was acclaimed for their traditional large diameter cables but the new cables seemed in the other extreme. Not long after, Siltech took a bold move. They established a new brand called "Crystal Cable". The new cables were marketed under this brand. Interestingly, Gabi Rjinveld, the wife of Siltech's CEO, Edwin Rjinveld, took charge of the new brand and started an enormous venture.

At the beginning, the biggest challenges that Gabi faced was to convince the people from the industry and audiophiles that a small diameter cable like Crystal Cable would bring nothing less than a large diameter cable to audiophiles in terms of acoustic performance. In 2004, Crystal Cable launched their Reference series which consists of power cable, interconnect and loudspeaker cables and many audiophiles were amazed by the power that such thin cables could actually deliver. It's something impossible to tell purely from the look!

The new hybrid technology

After 15 years of non-stop development, Crystal Cable possesses two core technologies that have been very mature. One is the silver-gold alloy metallurgy. The other one is pure monocrystal silver metallurgy. These two technologies are used in different product series.

Silver-gold alloy metallurgy refers to the technique to fill the gaps between pure silver crystal boundaries with gold. These









Technical specifications

■ Conductor: monocrystal silver ■ First shielding: gold and silver alloy ■ Second shielding: monocrystal silver ■ Insulation: DuPont Kapton and Teflon

gaps are typically formed when silver crystal undergoes solidification. By injecting gold in these gaps, the signal can pass through the conductor more smoothly and eliminates the harshness of the sound that is typical among silver cables The silver-gold centre core is helically wound within two thin layers of Dupont Kapton insulator. This technology is currently adopted in the "Diamond" series.

In the higher series "Monocrystal", Crystal Cable adopt a metallurgy technique that can reduce the distortion to a much lower level. The technique eliminates all the gaps between crystal boundaries by means of a single piece of monocrystal. In order to prevent the signal inside the conductor from being interfered, Crystal Cable adopts a coaxial structure in their "Monocrystal" series. The conductor is then wrapped with a layer of PEEK. PEEK is a very robust thermoplastic that has strong resistance to high temperature, mechanically strong and low loss. On top of PEEK layer, the cable is shielded by a layer of pure silver coated mono-crystal copper and gold plated mono-crystal silver.

Having described the background and the history of Crystal

Cable, it's time for us to take a look at their all-new Future Dream series. It's a "limited edition" series that the cable maker created to celebrate their 15th year anniversary. In terms of price point, Future Dream is between the flagship "The Ultimate Dream" and "Absolute Dream". In terms of performance, is it lower than "The Absolute Dream"?

My straight answer is "No!"

In terms of of tonal characteristics, "The Ultimate Dream" and "Absolute Dream" are somewhat different. This is something we will discuss in detail later.

The Hybrid technology

Many said Future Dream is a new member of the Crystal Cable's "Dream" series. This is not accurate. Future Dream is in fact a new series. Absolute Dream and The Ultimate Dream that most audiophiles are familiar are parts of the Monocrystal series. The Future Dream series has 4 members, including power cable, interconnect, speaker cable



Reference system

■ Speaker: Wilson Audio Alexia (speaker cables: Siltech Crown Prince) ■ Turntable: JR Transrotor Tourbillon, Acoustical Systems Axiom, Accoustical Systems Palladian, Acoustical Systems Aquilar, Kondo IO-M (Kondo Ls-41) ■ Phono stage: Kondo KSL-M7 Phono (Power cord: Kondo Avocado) ■ Interconnect: Kondo SFz (Ls-41 version) ■ CD/SACD player: Esoteric K1 (Power cord: Siltech Ruby double crown) ■ Clock: Esoteric G0Rb (Power Cord: Siltech Ruby Double Crown) ■ Power Amplifiers: Accuphase A-200 (power cord: Shunyata Zi-Tron Sigma HC) ■ Preamp: Kondo G-1000 (power cord: Kondo Avocado) ■ Ground box: Tripoint Troy, Entreq Olympus Ten ■ Ground wire: Tripoint sterling silver ground wire ■ K-1 → Kondo G-1000 Interconnect: Siltech Crown Princess ■ Kondo G-1000 → A-200 Interconnect: Siltech Princess ■ Esoteric G0rb → K1: Nordost Odin 2 Digital

and phono cable which was just launched in the Munich High End Show 2018. These products share one thing in common. They adopted monocrystal silver as the core conductor and use DuPont Kapton and Teflon as insulating coating. There are two more layers of shields on top of it. The first layer is Crystal Cable gold silver alloy. The second layer is monocrystal silver. The combined use of these two metallic materials in one single product is unprecedented in Crystal Cable and even Siltech. The manufacturer claimed that, even though the techniques of using these two materials independently have been matured for years, the combination is unexpectedly challenging. Achieving synergy between them is even more difficult. Gabi Rijnveld told me that it took 6-8 months just to find out the optimal proportion between the two materials and also the best cable structure. Except the phono cable which is two stranded, all the members of Future Dream series are of four strands. The connectors are the newest NCF family from the well known Japanese brand, Furutech. This includes the power plug, RCA, XLR, spade and banana plugs for speakers.

A whole new world

In order to have a comprehensive test for the new series, Crystal Cable sent me 2 power cords, 2 pairs of XLR balanced interconnects and 1 pair of speaker cables. If I were lazybones, the cheapest way to test these cables would be replacing the whole set in one go and then depicting the difference between them. But the problem is, the result of the comparison does not add much value. I suspect very few audiophiles would replace their cables in this manner. They typically prefer upgrade their cables progressively and selectively. Hence, I choose to bite the bullets and adopt an incremental and progressive approach. It takes more time and efforts but I could shed more light on the performance and tonal characteristics in each of the members.

Before testing the first cable, I spent considerable time to establish the reference by rethinking the best combination of cables for my system. The following is the finalised list of comparisons:

- Esoteric K1 Power cord : Siltech Ruby Double Crown vs. Crystal Cable Future Dream
- · Esoteric G-0Rb Power cord : Siltech Ruby Double Crown vs. Crystal Cable Future Dream
- Esoteric K1 → Kondo G-1000 interconnect : Siltech Crown Princess vs. Crystal Cable Future Dream
- Kondo G-1000 → Accuphase A-200 interconnect : Siltech Princess vs. Crystal Cable Future Dream

Among different types of cables, power cord is arguably the most impactful one. Hence, my comparison started with power cord.

I started with my favourite test CD "The Perfect Sound

2010". When comparing with my reference, the tonal characteristic of Future Dream is somewhat different. Future Dream is more neutral and transparent. Siltech sounds more elegant and shiny. Don't get me wrong. If there is no AB comparison, Siltech sounds extremely neutral too.



I still vividly remember I tried the power cords from both Crystal Cable Absolute Dream and The Ultimate Dream in my home setup before. Both gave me a strong impression of neutrality and transparency. The outline of the acoustical images was very fine and clear. Everything is very three dimensional and the sound stage is very deep. What's beyond my expectation is that these two Crystal Cable products are able to deliver very massive power and muscular bass despite that the cable is so much thinner than Siltech Ruby Double Crown. Now when I listened to Future Dream, I found it sounds notably warmer than Absolute Dream and The Ultimate Dream. It still preserves the virtue of transparency and vivid sound image. There is no sign of muddiness. It is not short of three dimensional spatial sense when comparing The Ultimate Dream, which I think is a very positive surprise. Of course, if I compare it with Siltech Ruby Double Crown, the latter gave finer outlines of the acoustical images and these images are closer to the listener. From experience, the difference might diminish as the brand new cables run in for some time. I would not be surprised if Future Dream comes extremely close to Siltech Ruby Double Crown eventually.



Synergy

Although the replacement of power cord with Future Dream did not make a difference as much as I would expect, I move forward to the second stage - swapping in the Future Dream interconnects.

The first song "Wish me blissful" by Tsai Chin started with smaller "mouth shape" with finer outlines. However, Crystal Cable's signatures - vivid, transparent and layered sound remain. When I played this song or the male voice on the 4th track, the background was incredibly dark. The microdynamics such as the subtle variations of the singer's voice chords was much apparent than before. When I played Brahms' violin concerto in D, the acoustical improvement was even more significant. Each section of the orchestra appeared to be more three-dimensional. The positions of these sections were also very precise and unambiguous. In my opinion, Crystal Cable and Siltech have similar performance in terms of resolution and musicality. Future Dream also inherited these merits from Crystal Cable and delivers impressive resolution and touching music. When comparing with Siltech's Crown Princess + Princess combo, it is hard to tell which one is better. But when playing violin solo, Future Dream seems to have an edge over Siltech combo. If you ask me, this advantage can easily be outweighed by one's preference in tonal characteristics of either brands. Simply speaking, Siltech is warmer and emits a lot of extravagance. Crystal Cable is relatively brighter with

whole lots of energy and punchy bass. The transparency of Crystal Cable is unforgettable. Which one you prefer is really a matter of personal taste.

Although Siltech and Crystal Cable share the same research team, their cables are drastically different in terms of tone and acoustical attributes. At this point. in my reference system, I found the mixture of Siltech power chords and Crystal Cable interconnects did not yield better results of pure Siltech or pure Crystal Cable configurations. But what if I add Future Dream speaker cables into the combination?

A whole new level

Some time ago, my reference speaker cable, Siltech Crown Prince (35th anniversary edition), defeated Siltech Royal Signature Prince with landslide victory. Now here comes a new challenger, Future Dream speaker cable! When a pair of Future Dream speaker cables are added into a system that uses Future Dream power chords and interconnects, the acoustical performance is elevated to a whole new level! Tsai Chin's "mouth shape" has a sharper and clearer outline. The guitar sounds more vibrant. The trailing sound seems lasting for ever. When I played Bach's unaccompanied violin sonata, the hall effect of the recording venue, which is a church, is much stronger. When I played Brahms' violin concerto, the surround sound effect moderately improves too. (Note: Don't forget that Siltech's hall effect is already superb!). In a nutshell, the addition of Future Dream speaker cables significantly enhance the synergy of the combo.



The best is yet to come

My testing on the Future Dream cables was actually finished before the Munich High End show. However, during the show period, I had a dinner with Gabi and Edwin. They asked me what I thought about Future Dream. In front of the CEOs of these two companies, I was very direct and honest about what I thought. They were not surprised at all. In contrast, they agreed with what I said. Then they asked me how I would compare the performance of Future Dream and Siltech in my system. I told them what I have already mentioned in this review. I also emphasised that audiophile would make a choice between these two brands according to personal taste since their sonic performances were so close to each other. If one like Siltech's signature elegant sound, choosing Siltech is a no brainer. If you want to go for absolute transparency and strong sense of three dimensional acoustical images, you simply cannot resist the temptation from Crystal Cable. If you prefer warmer sound, Future Dream would be an ideal choice.

After then, Gabi asked me if I'm interested to check out the all new phono cable in the Future Dream series. This means that I could join Lincoln (Audiotechnique's chief editor) to be the first in HK (or even Asia?) to try out Future Dream phono cable. I said yes in a split of second.

When I went back to HK, I plugged Future Dream phono cable into my Acoustical Systems Aquilar tone arm (with Kondo IO-M cartridge installed and paired with Kondo SFz MC transformer). The phono stage being used was Kondo KSL-M7 phono amplifier. On the foundation of Future Dream power cord, interconnect and speaker cables, the addition of Future Dream phono cable into the second most sensitive part of the entire analogue signal chain (Note: the most sensitive one would

the acoustic performance?



be the wire inside the arm wand of Aquilar). How much improvement would it bring into

I first played the female vocals in "The Wonderful Sounds of Female Vocals" from Analogue Productions. Rickie Lee Jones's "The Moon is Made of Gold" and Joan Baez's "Diamond and Rust" speeded up my heart beats. "How comes I never realise that their singing is so touching?", I couldn't help ask myself. Their "mouth shape" was astonishingly razor-sharp. The middle frequency was very organic and fine grained. The emotion of the singing was like water flooding the entire listening room. At that moment, I wanted to listen all my female voice LP collection once more to see if I missed any subtle detail in the past...



Another impressive thing about Future Dream phono cable is its analytical power. It reveals not only the inner details of the music but also the emotion inspired by the microdynamics. When I played "The Jacques Loussier Trio in Concert", which I usually use to test my analogue system, I heard a lot of details in the transcribed version of Bach's toccata in D minor (transcribed by Loussier) which I never heard before. The piano was very realistic. The drum sound carried a lot of drum skin texture. The plucking of double bass sounded very powerful. The frequency



response of the system end to end is very balanced. There is very little colouration as far as I could hear. When the passage reached the climax, I felt like crowded with other audiences in the concert hall and couldn't help jumping up from my chair!

Conclusion

Although Crystal Cable and Siltech share the R&D resources in the core technologies, their tonal characteristics are drastically different. They appearances are also very contrasting. Their acoustical performances, however, are very difficult to discriminate. To a great extent, which to choose really depends on personal taste and the system's tonal characteristics. However, there is one point worth noting - many high end hi fi cables work best when they are not mixed with other brands. Future Dream is no exception. When I began with just their power cables, their merits were not obvious at all. Later on, when I added their interconnects and speaker cables into the system, the sonic clarity, outlines of acoustical images, three-dimensionality and layering were elevated to a whole new level. At last, I plugged in the phono cable and the synergy effect with the other Crystal Cables is simply unparalleled.