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SA Equipment

Siltech Royal Signature Series Cables
Double Crown Empress, Emperor and Ruby Cables.
Cable system for a \$1,000,000 system... If I had all the money in the world.
Review By Wojciech Pacuła

My personal confessions... To be honest, am rather fed up with constant explaining to the laymen, the beginner music-lovers / audiophiles, all the mockers and other people interested in *the Cause* or fighting with *the Cause*, why I've paid for the cables in my audio system almost as much as I did for the system itself! Have voted with my own money and purchased all the cables, nothing was a free gift! Color me a very happy man too. My reason for doing that is that each time I changed an interconnect, a speaker cable or a power cord, I could hear a



definite sonic change and in some cases an improvement. And I have stuck to that. Before making a final decision I'd listen to the same cable in other audio systems, out of which the most conclusive have been listening sessions with my friends in the **Krakow Sonic Society**, an association that came into existence in 2004 for one purpose only – to collectively evaluate audio products, accessories and music albums.

Over the many years of my professional career, first as a sound engineer in a recording studio and on stage and then as an editor of audio magazines, I have been continuously learning. It has been an ongoing process which I hope will continue until the end of my life. The transformation of a "sound man", someone coming from the pro audio world, into an audiophile was painful and sometimes humiliating. For it would often turn out that my accumulated knowledge, repeatedly based on negation and a constant lack of time for proper rehearsals, was only good to be trashed. One of the most important lessons I learned back then was this: any cable that transmits the audio signal, including mains voltage that is fundamental for audio, changes it irrevocably.

To anyone who works every day with microphone lines and hence at the signal level comparable to that from a phono cartridge (I mean condenser microphones), with cable lengths of 50 meter, 100 meter and more, it comes as a shock. A shock replaced immediately by denial and aggression. For that's the average cable length from the scene to the control room. Often more. In an (analog) patch bay alone there is a few hundred meters worth of wire. Some twenty connectors along the way. And here someone dares say that a 0.5 meter length of cable causes changes...

I had my first and most important lesson of humility some 18 years ago. The Słowacki Theatre in Krakow (Poland) where I worked as a sound engineer played host to a concert of the Krakow Philharmonic

Orchestra conducted by the famous Polish composer, Krzysztof Penderecki. He was accompanied by his team he always travels with, which records all his performances.

The first surprise for us were digital tape recorders – two 96 kHz Pioneer DATs coupled with each other. At that time it was a real revolution! This was not, however, what was most interesting for me; I was particularly intrigued by thick cables terminated with cans that coupled the DATs and external A/D converters (unfortunately I do not remember the brand). Since each day we used AES/EBU cables, usually from Klotz and for special occasions from Canary, I was most curious. Seeing a dumb look on my face, the recording engineer sat me down in her chair and recorded two fragments of a rehearsal that was just taking place, first using – as it turned out – a MIT cable and then a standard Neutrik cable. I think she had a blast looking at my face when I put the headphones on (Beyerdynamic DT-990 Pro, 600 Ohm version that I actually bought for myself straight away) and compared the two fragments. Again, shock is the most appropriate word. For me, it was a "boundary experience" after which nothing has ever been the same as far as the cables are concerned.

Another part of my learning journey has been independent experiments, which started back in the recording studio and continue to this day. An 'experiment' based on auditioning still remains the only reliable source of information on how a given cable handles the audio signal. All other conventional methods, mainly measurements, do not give an answer to this question. While there is a chance that the program run jointly by Nordost, Acuity Products and VertexAQ under the aegis of the [Knowledge Alliance](#) will bring positive results, we are still far away from that. Knowledge accumulated through this type of tests and from reading around has led me to the place I am now. Which is where we can talk about the most expensive cables available without an ironic smile but with cautious curiosity instead.

Technical Specifications

The industry associated with audio cables and power cords has been blamed for cynicism. It is believed that all wires and even whole cables are manufactured in a few factories in the world, mainly in Taiwan and China, and then only branded and confectioned in the West. Profit margin on such prepared cable can be as much as 1,000%. Let me state it briefly: in vast majority of cases it is true. That is why we need to look through various offers and choose those that are based on real metallurgy, genuine research and high quality work culture. One of the long leaders in all these categories is the Dutch company Siltech, manufacturing its products from start to finish in the Netherlands. Cables from this family based manufacturer are characterized by using (almost) entirely silver with the addition of gold. It was only the least expensive Explorer line made entirely of copper and launched this year to change that. However, all other previous and current cables from Edwin Van der Kleij have been silver.

It all started nearly 30 years ago, in 1983, when the first generation of cables was presented, initially based on Swiss technology (anniversary coming next year!). Although Mr. Van der Kleij is a professional metallurgist who knows what he's doing, it took the company the next 10 years to develop its own conductors used in turn to manufacture cables. The G2 cables referred to above used longer silver



crystals, thereby significantly lowering their (measured) distortion. The G3 Series launched in 1997 was truly groundbreaking in that it was the first to use silver alloyed with gold, filling the space between the silver crystals and thus further reducing distortion. Five years later we saw the G6 Series based on an even higher purity alloy. A year earlier the manufacturer presented the S6 Series phono interconnects with amorphous (non-crystalline) silver and gold alloy. The newest Siltech formula, the Generation 8 (G8) is a pure mono-crystal silver wire used in top models from the Royal Signature Series. Siltech calls this technology Mono X-tal.

Top Siltech cables use conductors with a rectangular- rather than round-shaped cross section, in which they resemble Acrolink cables (the latter, however, use exclusively pure copper; now 7N and 8N). Edwin Van der Kleij has selected only two dielectrics, rarely seen elsewhere: Polyether ether Ketone (PEEK) and Kapton from Dupont. The former is characterized by its outstanding mechanical properties and is extremely resistant to damage. Siltech employs it not only in its cables, but also in the proprietary SST connectors. Kapton has been chosen due to its stability over time and temperature changes. It also has very desirable electrical properties. The cables have a patented proprietary design called X-balanced, with two layers of Kapton. The Double Crown Emperor cable uses eight conductors with a rectangular cross section made of mono-crystalline silver, each insulated with Kapton. It's that thicker part of the cable, terminated with a beautiful laser-engraved cylinder shaped metal interface bearing an individual number (the cables are manufactured on request). The connectors are coupled to it with a short length of the G7 silver and gold alloy cable. The SSP005 spade connectors are made of the same material (G7). A power cord and an interconnect are similarly made, additionally fully insulated with a complex shield. The interconnect is terminated with the SST plugs and the power cord with the FI-50 and FI-52 Carbon Rhodium connectors from Furutech.

The cables arrive in simple cardboard boxes, lined with rigid foam. At that price level one would expect custom made metal suitcases, delivered personally by the company's owner. I am not kidding. On the other hand, the cables are pretty damn heavy and thick which indicates a lot of silver and gold used to manufacture them. With the current market prices for these precious metals (feel free to check for yourself) the cables must cost as much as they do, not any less.

Audition Methodology

- An audition with the A and B known; ABX tests, which I checked several times on different groups of music lovers, have little to do with reality, mainly because they require very short music samples and our brain apparently does not have enough time to refocus and interpret the changes
- Music samples are 2 minutes long, which is the minimum time I am able to refocus my attention onto something else; longer samples tend to put me off my stride
- I always use exactly the same system of reference; in case of cables it consists of:
 - Acrolink Mexcel 7N-DA6300 interconnect (1 m)
 - Tara Labs Omega Onyx speaker cable (3 m)
 - Acrolink Mexcel 7N-PC9300 power cord (2 m and 2.5 m)
- Do my best to have other comparable-class products for a cross-comparison; even if I do not have them for a direct comparison, and try to project what I've heard against my reference cables onto newly tested products; in this case such cross-comparison cables were :

- Tara Labs The Zero, The 0.8 interconnects
- Acrolink Mexcel 7N-S20000 speaker cable
- Harmonix X-DC350M2R-Improved Version power cord

· Only albums I know and like listening to are used for auditioning. These reflect my eclectic music taste as I hate so called "Samplers"

In this case the comparison was actually more complicated because it had the form of ABAB for the whole system and then ABA for each single component. I listened to a lot of albums, but for the sake of argument let me list just a few:

- Ella Fitzgerald & Louis Armstrong, *Ella and Louis*, Verve/Lasting Impression Music, LIM UHD 045, UltraHD CD (2010)
- Jean-Michel Jarre, *Oxygene*, Dreyfus/Mobile Fidelity, UDCD 613, gold-CD (1976/1994)
- Depeche Mode, *Personal Jesus*, Mute Records Ltd/ Sire/Reprise, 21328-2, maxi SP (1989)
- Schubert, *Lieder*, Dietrich Fischer-Dieskau (baritone), Gerald Moore (piano), "Signature Collection", EMI, 55962 2, 4 x SACD/CD (1955, 1957, 1958, 1959/2012)
- *A Day at Jazz Spot 'Basie'. Selected by Shoji "Swifty" Sugawara*, Stereo Sound Reference Record, SSRR6-7, SACD/CD (2011)
- *Istanbul*, Hespèrion XXI and Jordi Savall, Alia Vox, AVSA 9870, "Raices & Memoria, vol. IX", SACD/CD (2009)
- *Paganini for two*, Gil Shaham, Göran Söllscher, Deutsche Grammophon/JVC, 480 246-5, XRCD24 (1993/2009)
- Beverly Kenney, *...sings with Jimmy Jones and "The Basie-ites"*, Roost Records/EMI Music Japan, TOCJ-9733, CD (1956/2012)
- Bill Evans & Jim Hall, *Intermodulations*, Verve/The Verve Music Group, UCCV-9342, CD (1966/2008)
- Carol Sloane, *Hush-A-Bye*, Sinatra Society of Japan/Muzak, XQAM-1031, CD (2008)
- Cold Cave, *Cherish The Light Years*, Matador Records/Hostess, O:E9212J, CD (2011)
- Elgar · Delius, *Cello Concertos*, Jacqueline Du Pré (cello), EMI Classic, 9559052, 2 x SACD/CD (1965/2012)
- Hilary Hann, *Hilary Hann Plays Bach*, Sony Classical, SK 62793, Super Bit Mapping, 2 x CD (1997)
- Imogen Heap, *Speak For Yourself*, Sony Music [Japan], SICP-1387, CD (2007)
- J. S. Bach, *Sonatas & Partitas*, Henryk Szeryng (violin), Sony Classical/Sony Music Japan, SICC 840-1, 2 x CD (1965/2007)

The reference system consists of: the Ancient Audio Air V-edition CD player, the Ayon Audio Polaris III [Custom Version] preamp, the Soulution 710 power amplifier, column bases the Harbeth M40.1 speakers on the Acoustic Revive Custom Series Loudspeaker Stands. Additionally, during auditions I used the Accuphase A-200 monoblocks, the Amphion Krypton3 speakers and the Mark Levinson No.512 SACD player.

Audition

One of the basic rules governing the world of audio in general, and a part of it known as 'high-end' in particular, is the Principle of Diminishing Returns. This term describes the connection between benefits derived from the money spent and the size of expenditure. In other words, the relation of price growth to quality increase. In audio, a corresponding graph is asymptote-shaped. Assuming that the vertical axis represents sound quality and the horizontal axis the price, the graph will initially rise almost vertically to level out and eventually run almost horizontally as it tends to infinity. Yet it will never become horizontal. Looking at inexpensive audio systems, investing makes sense only to the point where the trade-off between cost and quality increase becomes too large. The point at which one needs to "let go" is a matter of individual decision and depends on audiophile's personal experiences.

However, if we look at it from another perspective and we find ourselves somewhere nearer the upper, leveled-out part of the chart, everything looks completely different. We then realize that every, even the slightest (in percentage terms) increase in quality will come at an ever increasing price. Nevertheless, we perceive these single percent improvements on a different scale. For at this level, improvements do not involve – I apologize for the trivial examples – bass, midrange, dynamics or the like. These are hi-fi, not high-end. Improvements brought about by better, unfortunately almost always much more expensive, products are structural in their nature. The percentage scale used so far becomes pointless as it does not show such changes. Most beginners actually do not even hear them, not knowing what to expect and having no experience with high-end products. In audio, the listener's individual experience is everything. It is a whole different world and even daily participation in live concerts, both acoustic and with amplified PA systems, does not prepare for music reproduced by an audio system.

It seemed to me that I am a seasoned traveler of this land. I believed that the combination of my pro and home audio experience, my frequent visits to concerts and live sound engineering I still do, enable me to move freely in any direction. I was wrong.

At first glance, the Siltech system is not much different from my own. It has a similar tonal balance, dynamics, resolution – it is simply much alike. I think the owners of audio systems consisting of (it's only an illustrative list I know and I like) the NAD C372 BEE amplifier, Music Hall c35.2 CD player and Dynaudio DM 2/6 speakers – even if they notice some differences they will dismiss them with a shrug. For them, it will be the key argument that it is not worth spending money on extreme high-end. And it will be a completely natural and understandable conclusion!

In order to understand what the change is about, to evaluate and appreciate it, one needs to have a totally different mindset. I apologize for being so blunt but there is no need to sugar coat it (on the other hand, patronizing attitude is the last thing on my mind). It's not the point. Extreme high-end requires a leap of something in head. Money is no longer an issue as the price is out of orbit anyway; all that counts is what happens in the space between the speakers.

That's why I have no problem with saying that it is the best cable system I have ever heard. Not 'slightly better' than mine but several classes better. Would I like to swap? - Ha! My answer may be surprising but

only for a moment: No, I would not change the entire system. If we talk about individual cables the answer would be: yes, maybe and not really. More about that later.

Here we enter an area where audio system coherence is number one and our preferences are number two. We can fool ourselves with the idea of "absolute sound" but it's just a mental construct with no real referent. Live music is a different world – don't we remember? In the end, we must choose guided only by our own preferences, needs, taste or aesthetics of the culture in which we grew up or which we adopted. The sound of a carefully-assembled, refined, exquisite top high-end audio system is insane (if it's not, there is no talking about high-end but a stack of audio components) and from the point of view of our imaginary NAD owner is absolutely neutral and natural, no matter what components it consists of.

The sound with the Siltechs is extremely smooth. It's a smoothness of a \$20,000 bottle of wine, an ultra-comfortable limousine or high-quality truffles. These are the kind of associations the Siltech and its sound has for me – and not without a reason. The presentation is well-organized and internally focused, without any "buts." I've never heard anything so good, not to mention better, so I cannot imagine how it could be improved. It is possible, as always, but for now I do not yet know what could be done. I'd have to hear something better to put my finger on something specific.

The portrayal of vocals is incredible. They have disturbing naturalness; are painted with a 3-D body in 3-D air. What's more, since resolution is stunning, the emotional aspect of singing appeals to the listener's – in this case mine – aesthetics a lot more than with other cables. Emission control shown by Dietrich Fischer-Dieskau singing Schubert, or Ella Fitzgerald's and Louis Armstrong's freedom of singing, and even the manner of Dave Gahan's (Depeche Mode) vocal delivery on the acoustic version of *Personal Jesus* (Sire Records maxi-single) attracted my attention and made me listen intently to the smallest voice quiver. I was taking part in an *event*, not just listening to it. A quality leap over my cable system, in itself sensational in this respect, was surprising. Despite the fact that – again – little has changed in terms of hi-fi. What did change, however, was the structure of the presentation.

I think it may be put down to better resolution. Small changes taking place on the instruments outlines, something combing all into one whole, together with accompanying aura (acoustics or reverb added in the studio) translated into a new perspective. I still faced the same recordings, yet presented deeper, more substantially, more accurately.

Much of the credit for that needs to go to smoothness, resolution and incredible sound saturation, including fantastically displayed lower midrange. My audio system wasn't lacking anything in that respect. Or rather so I thought. As demonstrated by a direct comparison, the Acrolink interconnect, in itself nothing short of phenomenal, sounds rather slim. It was auditioned in several systems, not only mine, and the conclusion was always the same: the Siltech shows a lot more information in that frequency sub-range, does it better, deeper, more



substantially and in a smoother way. While the volume of sound had been large earlier, now it was audible it did not have the correct height and depth. It was shown surprisingly well on a recording seemingly least qualified to evaluate the high-end, the aforementioned version of *Personal Jesus*. It

begins with a rhythm tapped with a hard (wooden?) shoe sole followed by a characteristic chord sequence played on the acoustic guitar. With the Acrolink the rhythm tapping seemed faster, more accurate. After another swap back to the Dutch cable, however, I heard something more – the wooden boards on which the sole was tapping; I almost saw a guy holding a guitar on his thigh and, leaning slightly forward, tapping the rhythm. For I had no doubt that it was only a part of something bigger – although the Acrolink expertly showed the tapping and the guitar, yet they were kind of two separate events, combined by the song structure but recorded separately. The Siltech allowed them to permeate each other.

I had similar feelings about Ella and Louis, and then Dietrich Fischer-Dieskau in Schubert repertoire. These are mono recordings, in which the orchestra or an accompanying instrument are shown in the background and are usually dynamically flat and rather not quite clear. My system tried to bring them out of shadow by slightly accenting sound attack. The Siltech, on the other hand, filled everything with content; sound edges actually seemed slightly softened.

I came to realize that it was a deviation, modification introduced by the Acrolink interconnect, cross comparing it against the Tara Labs Zero interconnect. It is a fantastic cable with very distinctive sonic characteristics. The "Zero" shows the world through rose-colored glasses. It warms and softens the sound – not by much, just a tiny bit, but suggestive enough that everything sounds cool and nicely with it. It's just that everything is very much alike. It would seem, therefore, that it is exactly the same kind of sound as the Empress Double Crown interconnect. But...

They are two different worlds. At first glance, both seem a bit warm but the Siltech's incredible resolution translates into something more than just eliminating problems with recording's sound engineering. I do not mean by that that the top interconnect from Tara Labs is bad. Let me repeat: we are in a completely different asymptote graph place than the simple good-bad distinction. Honestly, I could live with the Zero a happy and full life and if I have the funds, I'll buy it for my reference headphone system to put a crown on it. I had no doubt, however, that both the Acrolink and the Tara Labs are just some approximation of what is on the discs and audio files. And that the Siltech remains across the Rubicon. It is the cable I would swap to here and now, immediately. I will say more: I know I will *have to* buy it. The Empress DC shows the flaws in all other cables; where they lose ground. Conclusion: a must have!

An equally interesting was the Emperor Double Crown speaker cable. What the hell – it's a chunk of fantastic cable. Quite literally – the amount of silver and gold needed to manufacture it could make many a stylish NY woman's head spin! Its sound is amazingly focused and controlled. While the Empress interconnect offered a very large sound volume, the speaker cable cares about its control. Focus, perfection in every detail and excellent color. Listening to electronic music and club climates, based on ultra-low bass as for example *Random Trip* from the Polish label Nowe Nagrania ("New Recordings"; a single disc contains a CD version and 24-bit audio files), you can hear what it is all about. Bass has the energy I know from the best rock concerts, delivered by large stage speakers. Some time ago I was at a concert of Edyta Bartosiewicz, returning to the scene after 10 years, which took place in a small conference room at the Jagiellonian University in Krakow (my *Alma Mater...*). I was sitting in the fifth row, just in front of a large bass guitarist's amp. No home speaker system is capable to reproduce that. Not a chance. Both due to a completely different size of a concert hall and the dynamic range of speakers we use in home audio. Swapping the Tara Labs Omega Onyx for the Emperor, however, resulted in the adding some of that energy to the sound. The amplifier and the speakers remained the same but the presentation was denser and deeper.

Yet, not everything was as unequivocally superior as with the interconnect. The Dutch cable champions events happening straight in front of us. This is why vocals, usually centrally placed in the mix by the sound engineer, exactly on the listening axis, were so beautifully sculpted. Sound stage edges, however, were somewhat less substantial and gave the impression of the whole stage being narrower. It was quite clear against another top speaker cable, the Acrolink Mexcel 7N-S20000. That, in comparison, shows an extremely broad sound stage extending beyond the listening room. The Tara is more restrained in this

respect and the Siltech even more so. There is another area where the tested cable differs from my reference cable: dynamics and freedom.

I have already mentioned the amazing concentration and deliberation with which the Emperor presents any album, haven't I? This is unambiguously a positive but not without consequences. Such is the world of human products and it will always be that way. This type of insanely good control leaves an impression of slightly calmed dynamics and somewhat limited momentum (I'm not talking about sound stage!). Tara Labs is still unrivaled in this respect. In all others the Siltech wins. It has beautiful color, great bass and microdynamics. The Empress color has been set slightly lower but without any adverse consequences. It is a cable I could live with, although I would have to think it over more than once, whether in my system, here and now, with my preferences everything would change for the better. Hence, my conclusion is: maybe yes, maybe not, but fully aware that I deal with a masterpiece.

Of all three cables comprising the tested system, power cord took most of my time. I would plug it in, swap out, compare and swap in again; I continued to spin different albums long after the deadline for sending the material to Steve. I wanted to know with absolute certainty why it was the only component of the Siltech set that did not quite prove in my system. I'll try to sum it up in a few sentences. Its sound – strangely enough, I have the impression that power cords are usually most important in the whole cable system! – is even smoother than that of the interconnect and the speaker cable. The Acrolink Mexcel 7N-PC9300 seems quite bright in comparison for a few moments after you swap it in. Its color is set higher. The Ruby Double Crown has a rather dark color, with a sort of "center" between midrange and bass. This gives the sound certain power and weight as well as calm.



The Acrolink sounds faster by contrast, showing things with more dynamics, without restraint. It lacks somewhat the incredible smoothness and perfect treble color of the Siltech. However, since the selectivity of the Japanese cable seems higher, it gives us more of a live event, not a studied "act" as it is with the Siltech.

The Dutch power cord focuses on each individual music event and perfects it. It seems that everything is under control; actually, not really "seems" – it *is* in control! On my system, with fairly warm speakers slightly highlighting the frequency band around 100 Hz, the level of control offered by the Ruby Double Crown turned out to be too high. I missed some breath and directness, offered in turn by the Acrolink. Hence, on my system the conclusion was: no, not really. Elsewhere, however, it may prove to be the most valuable cable of all the three!

Conclusion

If I had to bring some analogy between the Siltech system and my own reference system, it would be a comparison between an exquisite formal dinner in a famous and highly regarded restaurant in Paris, Tokyo or other cultural center, and an excellent, well-prepared dinner in a nice Michelin-starred bar, an easy setting, let's say in Rome. The former, the equivalent of the Siltech, has its own set of rules, some kind of code of conduct, etiquette. This dinner can be an amazing experience, perfect in every way. After that, everything else will seem bland and shallow. In turn, the wild fun in Rome would be my system. With the help of the Siltech I better understand its shortcomings, and I love it all the same. I also know that something has to change and finally hear what it is. The first one to go is the interconnect.

The cable system from Siltech is a kind of ultimate landmark. Its value lies in a consistent execution of a precise vision of the whole system. One does not need to think about selecting other components because the whole system sounds as a single cable. If I had all the money in the world I would choose it without hesitation, not only because it's an excellent cable system but also a kind of status indicator. Having it on board you do not need to worry about anything; you can look down on everybody else from the position of an aristocrat.

Why, then, after "stripping" it down to its component parts I did not equally enjoy? Well, it's because my background is simple and I like my parvenu pleasures. Such as beer. Such as the music of Depeche Mode. As a feature movie instead of another opera. And that is just what is beautiful about audio - it is like a canteen open 24/7 where everyone can find something for oneself.

Specifications

Type: High-end audio cables

See Siltech website for technical details.

Pricing (in Poland):

Empress Double Crown: \$26,000 for one meter length

Emperor Double Crown: \$62,000 for 2.5 meter length

Ruby Double Crown: \$11,000 for 1.5 meter length

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