



Nanotechnology at Your Service

By Benoit Varin

Led by telecommunications engineer Daniel Robidoux, DR. Acoustics is an innovator in the field of high-fidelity audio device interconnectors. It offers multiple high-end solutions in both analogue and digital fields. Clearly realizing the positive impact that conductor technology could bring to musical reproduction, Mr. Robidoux took matters into his own hands by creating his own line of signature cables. DR Acoustics took aim at controlling the collateral vibrations during the movements of electrons in the power cables. Of course, the numerous research

experiments assured Mr. Robidoux would acquire a lot of electrical and mechanical data, which allowed him to create a phenomenal quantity of prototypes before arriving at his first model, the Cassandra. The success of the latter gave him the idea to expand his knowledge onto a full range of cables dedicated to home audio and video.

But DR. Acoustics did not stop there. Noting the positive effect of these proprietary technologies on a set of interconnect cables and wishing to go even further to the heart of

a project aimed at adequately controlling harmful micro-oscillations during electrical transfer, the Quebec designer has developed two models of electrical management units, the Antigone and the Creon. My mandate is to evaluate the performance of the smaller of the two models, the Creon 2.0, which was delivered to me by DR Acoustics along with an impressive 5 AWG calibre Red Fire Ultra series power cable which came with its own carrying case.

Technologies and Physical Observations

The frame of the *Creon* is quite simple, it has only the essentials - an IEC 20 amp plug to connect to the home electrical supply, and a 2-plyg type *U-ground* 20 amp receptacle with a separate chassis grounding terminal. *Furutech* monocrystal ensure the quality of the contact points on these outlets. I must say that we feel very well the exceptional bite of these electric receptacles. There is nothing superfluous, no lights and no digital dial either. What is to be known from the outset is that the *Creon* is, in fact, a passive component and that no capacitor stores loads, and that no coil modulates the (over or under) voltage.

DR. Acoustics sent me a *Red Fire Ultra* series power cable along with the *Creon*. This large gauge cable is configured with a 20 amp female IEC connector and a 15 amp male *U-ground* connector. Once again, *Furutech* ensures the perfect connection to *NCF FI-50* connectors with non-magnetic carbon fiber-stainless steel cylinders that also include a highly advanced vibration damping technology.

Inside the chassis, things remain simple. We can easily trace the electrical layout of these huge conductors welded point to point on the various internal contacts. Of course, between the receptacles, there are the three filters specific to each electrical phase as well as grounding. The filters come in the form of elongated cylinders set with carbon fibre and backed by resin bases that are securely screwed under the housing.

The technology behind the filtration system of these conductors combines three groups of different parameters to create a unique product. It is equal parts mechanical, electrical and even chemical aspects. Indeed in these cylindrical chambers, built of carbon fibre, we find a highly conductive mixture consisting of micro quartz in suspension in a bituminous cationic/anionic emulsion with controlled viscosity. Thus, the quartz molecules remain at a perfect distance from each other in order to maintain their full load potential. Under tension, the end mix will somehow act like a very high efficiency Ferrite core.

Even the size of the cylinders and the volume of their contents have been calculated. The success of the principle lies in this precise amount of material which allows to create a low-pass filter for parasitic ultra-high frequencies affecting the current. To my understanding, these cylinders cannot be smaller or larger.

Applications and Evaluations

I chose to start with the audio aspect of this product evaluation by plugging my preamp/DAC and my power amplifier on the same 15 amp circuit with and without the *Creon* in the chain. Having been afforded a long evaluation period, I had ample time to properly break-in the whole *Creon/Red Fire Ultra* combination. I listened to a lot of music, alternating regularly between connections with the filters in line or directly to the wall.

It is difficult to quickly draw conclusions by talking about improvements on this kind of product, especially when I have in hand said *Creon*, because contrary to an evaluation of a component that is directly in the path of the musical signal, the *Creon* does not affect the sound signature of my system at any time. I even had thought that it can most likely help solidify a precise synergy between my devices. My personal opinion is that to achieve this perfect coherence between the links of our high-fidelity chain, one must protect a certain identity with regard to interconnections. That is why I am convinced that with a complete set of cables built according to the same electromechanical principles from the same manufacturer, the improvement would be even more impressive and just as consistent as were my experiences when listening to my music.

A system with loudspeakers produces large soundstage and, as I anticipated, the use of the combination of the *Creon/Red Fire Ultra* enhances the separation between the instruments. No matter what you listen to, you win without a shadow of a doubt. Obviously, it always helps to strengthen the various tones and it almost seems that the duo dissipates a slight layer of fog. On the song *Four On The Floor* from the *John Scofield Band's Up All Night* album, I have a perfect example of this with the impression that the main guitar is thoroughly distinguished from the backgrounds. I feel that space is restored between the latter and the brass instruments. Once again, the low tones are never distorted, but they find a way to be more carnal and much less "dry" than by plugging the system directly into the wall. But less "dryness" doesn't mean less firmness. On the contrary, the combination between low and bass drum leads us, in a more authoritarian way, on the first beat of each bar, which implies a gain in dynamics in this register, at least on my system.

Using headphones on the same converter, I find that the improvements are even more palpable. With the *Dave Holland Quintet's You I Love* on ECM records, I am even better able to appreciate the lightness gain in the mid-high range. I personally find that by using a headset, it is in this register that one perceives the most separation. It is quite surprising to note that by plugging my DAC into the *Creon* power management system and switching only the headphone output, cutting off the other circuits, the general orchestration is completely free of any congestion. Even if the bass suddenly becomes more revealing in all listening tests, the balance and the ratio of presence between the instruments remain integral, which, in my opinion, is essential on the part of a device dedicated to current management.



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Video

Video is certainly not an after-thought with the *Creon*. I am fortunate enough to own a professional video monitor, compatible with 4K UHD and DCI standards. This monitor is equipped with high-quality processors as well as a dedicated operating system. Despite the fact that it can internally interpret all professional codecs, I used the monitor only section with an external *Blu-ray* source linked by *HDMI*. The first idea is to be able to use all the signal analysis tools, which allows me to quantify, as far as possible, the *Creon's* performance on my player. I watched several clips in my library and a corporate video release from singer/pianist Katie Noonan. The images are of a superb quality and come from scenes filmed in *ProRes 4K* formatted in 1080p60 on *Blu-ray* disc. My first evaluations are directed to the colors and grayscale. To the eye, it is relatively difficult to perceive the depth and dynamics of different colors when the source is fed through the *Creon*. Using color intensity analysis and using the monitor's *RGB Parade* tool, I see that it displays the same data in the high luminosity sections, but my attention is quickly taken by the flicker that seems

really less intense in the reds when I freeze frame on the darker woodwork in the studio or on the singer's face. This decrease in the fluctuation in the luminous intensity of the reds, leads me to think differently and directs my observations towards the movements and the natural fluidity of the pans. This is where I have the best results with the *Creon*. Not necessarily having seen a theoretical or mathematical difference on the peaks of colors and whites, it is in the definition of shadows and gradients, especially when the camera moves, that one perceives the improvement. Although the variations in my data may seem slight, they should not be underestimated.

When my source is plugged into the *Creon* power management system, I can distinguish more extended lines of a few pixels, especially when I use the tool that overcomes my focal points (*focus peaking*). It should be understood that these tools are highly sensitive to the information affixed to the monitor's pixels. The slightest readable difference, in terms of the focus in these monitoring tools, says very much about the differences in the signal. Confirmed repeatedly, I now have an irrefutable indication that the *Creon* optimizes the refresh of the *I.P.S. Panel* of the monitor as well as the quality of the playback of the source device.

Conclusion

There is a subjectivity part in evaluating this kind of product, regardless of the model and/or technologies used by the manufacturer. Before I even plugged my devices into *DR. Acoustics' Creon*, I was aware that, in some cases, the effects could be difficult to quantify in addition to being very variable to the ear depending on the system used. As for my installations, the *Creon* has definitely improved the sound output of my audio system. But as I mentioned above, it is really during sessions with my headphones that I realized the improvement between the signal and the background noise, even when the amplification is pushed significantly. One of the key points to be specified is that when using power management systems, the sound stage, at any rate, takes a good dose of expansion when the natural placement on the recording allows it. And what about bass and mid-bass, other than say that they are simply breathtaking. Without promoting any boosts in gain, which would break the fragile balance between instruments, the added vigor that still retains its stability is like having the rights to butter and money from butter.

In light of my experiences with my video tests, I believe that the user should especially not leave these applications aside. Using the *I.P.S.* monitor of my display system, I noted more finesse in the color layers and on the shadow details in black levels. No, in my case, I have no more light intensity from my monitor, but it is not a bad thing in itself. I also have to mention that, in general, I have noticed a better fluidity of images during camera movements, especially when these are faster. Unfortunately I do not have the chance to have a projector in hand, but I would have liked to be able to try the experiment with this refined electrical filtration/management system. With what I already know about the performance of the *Creon*, no doubt that those improvements could be worth their weight in gold.

There is a lot of research and development behind the *Antigone* and the *Creon*. Having myself noticed several times, during my career, the benefits that can be obtained when we adequately control the vibrations generated by the electrical current in our electronics, I understand very well the need to look at the problem. I can say that the formula proposed by Mr. Daniel Robidoux has no competition, when it comes time to show us that with good concepts, even nanotechnology can be at our service.

GENERAL INFORMATION

DR Acoustics Creon 2.0 power management system

Price : \$3 495

DR Acoustics Red Fire Ultra Power Cable

Price : \$3 495

Warranty: 20 years, Parts and Labor

Manufacturer: DR Acoustics, Tel.: 514.961.5303,
www.dracoustics.com