

## Computer Audio Design CAD USB cable review

Ever since computer audio became an integral and very important part of high quality music reproduction, the notion of USB cables has changed quite a bit. Things that were once ignored because they were thought to have no influence on the data (and hence music) transmission are now being considered with utmost care and attention to the detail. A typical USB cable does not only transfer bits but also electricity to those external devices that need it and usually, the wires carrying the data and the electricity are running really close to each other, potentially causing a harmful effect on the former. While already the average computer data stream is not easy to transfer without losses (read: Bit Error Rate), the zeros and ones containing music proved to be as much if not even more sensitive to the quality and execution of the transporting medium. Things like jitter and digital distortion that are introduced by the computer are transformed into the digital square wave and carried further by the transmitting cable.

Even without delving deeper into the issues of the digital music reproduction it is obvious the requirements to reproduce music “properly” (whatever that means) in the digital domain are even more difficult to met than in the analog domain. And someone once said: “Analog has analog problems but digital has both: digital and analog problems”.

## Nomen est omen

Computer Audio Design is a British manufacturer which has received quite an enthusiastic response in the audio community with their CAD 1543 DAC and their USB cable seems to be on the same pathway. The CAD USB cable is shipped in two configurations: either with or without the +5V line that some DACs might not require. The one that was sent for the review had +5V line incorporated but the power transmission line is separated from the data transmission line and as we already know, this should ensure the clean path for the latter.



There isn't much info to be found on the CAD USB cable webpage but after some investigation I have discovered that Scott Berry the man behind Computer Audio Design, has spent five years perfecting it and has patents pending for its constructional design.

## **Build Quality and Construction**

While the innards of the CAD cable construction shall obviously remain a secret, judging from the outside, the cable appears to be neatly constructed. The USB connectors on both sides are quite bulky, meaning some attention should be paid to ensure the mechanical rigidity of the cable/USB port connection.

## **The Sound**

In the course of several months I have informally tried a handful of interesting USB audio cables and the CAD USB cable revealed itself as a stunning performer. If I would be forced to use as few words as possible to describe its sound, I would say: effortlessly natural with monumental authority.

The CAD USB cable served a sonic presentation that seemed utterly natural, relaxed and even analog in comparison to the other USB cables. Everything seemed less “mechanical” and artificial with an uncanny ability to handle nuances in a highly sophisticated way. The timbre of instruments and voices took a big step forward in becoming reminiscent of the real thing. Certain piano tracks that I thought were recorded badly and sounded somewhat metallic, were here reproduced with a most welcome dose of natural warmth. The upper mid and high range were reproduced very delicately and convincingly. Some instruments or percussion sounds appeared from a much deeply positioned point in the extremely layered depth plane.



The sense of power, weight and definition in the lower mid and bass registers was phenomenal, the resolution and separation of the midrange and the treble range was likewise on the same level.

Everything sounded extremely coherent, self evident and believable.

## The Music

Jon Balke is a Norwegian jazz pianist whose album “Book of velocities” (ECM, 2007) I frequently use to hear what audio components do to reverberation and note decay. The track “Scintilla” serves this purpose very well and through the CAD USB cable it came out most convincingly reproduced to date. The percussive piano string attacks seemed to extend forever and possessed breathtaking immediacy.

The British guitarist Jon Gomm is one of the rare musicians that was able to further explore the musical worlds discovered by the late Michael Hedges. Hedges himself revolutionized the way acoustic guitar was played; various tapping, slapping techniques along with the use of open tunings found their way into very refreshing compositions. After he died, a number of young guitar players emerged that were all highly inspired by the innovative approach of their role model. John Gomm is one of them and in addition to the previously mentioned techniques, he also alters the sound of the acoustic guitar with the aid of some electronic effects and the end result is very attractive or better say, downright spectacular. On an ultimate (big speakers) audio rig, his guitars are monumental in holographic appearance (size) and perceived frequency response. The low bass tones extend to below 30Hz which ensures an almost scary musical experience. His “Secrets Nobody Keeps” album (2013) is one of my

all-time favorite ones and is all filled with amazing guitar performances as well as his great singing. Already the first track "Telepathy" takes you to an incredible musical journey that keeps you gobsmacked until the last note on the album fades away. With the CAD USB cable in place I have witnessed a breathtaking musical performance that is actually difficult to fully describe: it would have to be experienced to be believed and appreciated. Of course the familiar musical pieces weren't reinvented but they were certainly shown in the most convincing manner. Everything, from subtle movements of fingers across the fretboard, to punchy slaps and tapping on the strings and guitar body that made you feel the guitar will explode or the soft, lyrical parts, were reproduced better than ever before and simply more believable. I keep mentioning how believable the overall sound was but the fact is that in order for something to sound believable, a number of conditions must be met and judging from my experience that's not easy. Compared to the other USB cables I have felt like they are missing the musical essence, not being able to fully recover it.

The British rock band Dire Straits certainly needs no introduction, their music was frequently on my listening menu during my youth days. For the sake of some healthy dose of nostalgia, I have listened to one of my favorite songs, "Where Do You Think You're Going?", released on their second album "Communiqué" (1979). This song is a haunting ballad that sends a shiver up my spine every time I play it. With the CAD USB cable, the music was delivered intact and provoked profound emotional feelings. Mark Knopfler's voice sounded impeccably alive and very intimate and to say I was deeply moved, would be an understatement. Am I frequently moved on a deeper level? Not really, such things happen on rare occasions - when the whole system works and interacts on a level possible only with components that are able to surpass the inherent limitations of our systems and deliver the SOUL of the musical performance. Although such moments are not frequent - they do happen.

Another favorite of mine is Sting, whose "Mercury Falling" features a number of great songs. Although I just love the whole album, "I Was Brought to My Senses" and "La Belle Dame Sans Regrets" (sung in French) are my personal standouts. To me, this beautiful music is truly inspiring and emotionally uplifting and through the CAD USB cable it came out not only intact but more authentic than ever before.

I surely would like to mention one really special musician, singer, songwriter, guitarist, producer and DJ: Fin Greenall also known as Fink. He was born in Cornwall and is currently based in Berlin and London. I am especially familiar with his "Perfect Darkness" album (2011) which explores... well, for the lack of better term, darker tones. The opening track "Perfect Darkness" was shown through the CAD USB cable with all the power, dynamic impact and bass weight that one could ask for. The guitar sounded full, sparkling and very authoritative - as it should. I would recommend this track to anyone that wants to test the extent of raw power and energy transfer that is possible to achieve within a certain system. This song is simply spectacular. While on the subject, check also the "Who Says" song, another highlight of the album.

Moving into the realm of classical music, the British composer Gustav Holst's piece called "The Planets", Op. 32, is a seven-movement orchestral suite that certainly needs to be mentioned. In my view this is a magical orchestral work that carries an interesting story. It is a seven-movement orchestral suite written between 1914 and 1916. Each movement of the suite is named after a planet of the Solar System and its corresponding astrological character as defined by Holst.

From Wiki we learn: “The concept of the work is astrological rather than astronomical (which is why Earth is not included): each movement is intended to convey ideas and emotions associated with the influence of the planets on the psyche, not the Roman deities. The idea of the work was suggested to Holst by Clifford Bax, who introduced him to astrology when the two were part of a small group of English artists holidaying in Majorca in the spring of 1913; Holst became quite a devotee of the subject, and would cast his friends' horoscopes for fun.

When composing *The Planets* Holst initially scored the work for piano duet, except for "Neptune", which was scored for a single organ, as Holst believed that the sound of the piano was too percussive for a world as mysterious and distant as Neptune. Holst then scored the suite for a large orchestra, in which form it became enormously popular. Holst's use of orchestration was very imaginative and colourful, showing the influence of such contemporary composers as Igor Stravinsky and Arnold Schoenberg, as well as such late Russian romantics as Nikolai Rimsky-Korsakov and Alexander Glazunov. Its novel sonorities helped make the work an immediate success with audiences at home and abroad.”

OK, that was quite a lengthy introduction but every now and then audiophiles need to be reminded of great music and not only great audio components because it's the music that matters the most and without great music, even the most remarkable, state of the art audio components lose their Raison d'être - the very reason for their existence. A superb system backed up by only a handful of audiophile recordings is...well, inexcusable if you ask me.

So how did the CAD USB cable assist the magnificent music of Gustav Holst? In a word: breathtakingly well. It conveyed all the drama, tension and dynamic impact with remarkable authority and astonishing transparency.

Film scores are always a great source of dramatic, dynamic and simply astounding musical repertoire. John Williams' "Close Encounters Of The Third Kind" are certainly among them.

John Towner Williams (born February 8, 1932) is an American composer, conductor, and pianist. He is considered one of the greatest film composers of all time. In a career spanning over six decades, he has composed some of the most popular and recognizable film scores in cinematic history. Science fiction films are an excellent base for some creative, otherworldly classical music works that provoke eerie sensations. Here, the incredible sonic traits of the CAD USB cable were just put to the greatest effect so far. Sitting in the dark, I could easily forget the medium and just bask in the musical landscapes and experience the spine-chilling feelings provoked by the higher than usual sonic realism. The music was portrayed in a shocking way and demanded a complete attention of my whole body and all sensory processing abilities. Any casual, uninvolved listening stance was completely out of question: the music took overhand and I surrendered myself.



It is intensive moments like this that give meaning to the technological progress and they have the power to enrich our lives in ways not imaginable centuries ago. By all means I'm against the progress that only serves the consumerism; a lifestyle which eventually leads to disintegration of our soul and humanness, so to speak. Only when the technology serves the cultural need - then it is meaningful.

## Conclusion

The CAD USB cable proved to be a great discovery, it places itself firmly in the company of other rare exceptional audio components that, when working together in a harmonious way, give us the pleasure and opportunity to see our hobby (madness?) from a different perspective. On more than a few occasions it proved to be capable of staggeringly real sonic reproduction levels - only limited by the systems` overall limitations and those of the recordings. In my view exceptional audio components are those that inspire us to explore the unknown musical worlds and direct us away from the sound dissecting behavior. The CAD USB cable is absolutely one of them and carries my highest recommendation.