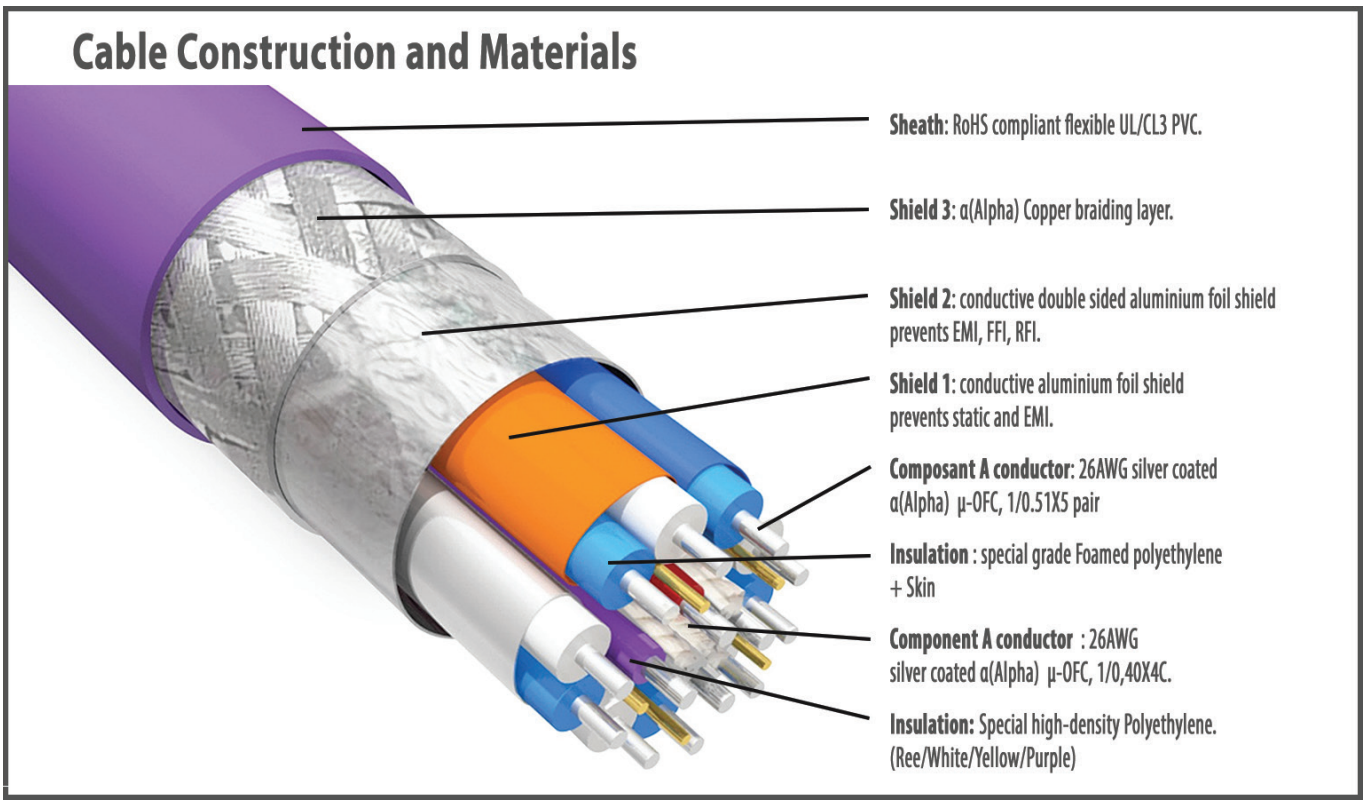
BRIGHTER AND MORE VIVID COLORS, UNEQUIVOCAL SOUND IMPROVEMENT !

By GEORGE DE SA

These days, I've been around the house more than ever. It's winter in Canada and also the precautions of COVID have demanded it. The good side is that I get more time for my hobbies; music and movies being included in those. With more of my leisure now time in-front of a screen, I've been interested in improving that experience and getting the most I can out of my home entertainment system. I have my **Samsung** 85" *UHD* TV, a *PlayStation*, a *UHD* cable box, *4K* A/V receiver and full speaker setup. I'm satisfied with where I am with all the components, so now I've turned my attention to the dressings, the loom or cabling that is. Since all the audio and video signals in my home theatre are channelled through *HDMI*, I was interested if upgrading my *HDMI* cable(s) might yield any benefits. Would there be a noticeable difference and more importantly, if any, would it be positive?

Furutech released its *HF-X-NCF* Ultra High-Speed *HDMI v2.1* cable in September 2021. It is the latest and greatest *HDMI* cable produced by the esteemed Japanese audio product manufacturer. A company specializing in high-end audio/video cable and connector manufacture, as well as audio products. As the name indicates, this is an *HDMI* cable designed to meet the most current *HDMI* version specifications, allowing you to take advantage of all the bandwidth, connectivity, and image capabilities that the format allows. For those of us who have dropped some significant cash on upgrading our components, be it a TV, projector, gaming system or A/V receiver, the **Furutech** *HF-X-NCF HDMI* aims to deliver that signal unimpeded, in fact, optimally. But aren't all *HDMI* cables the same? This has been the source of some heated debate. Many argue that all *HDMI* cables are the same, I won't take on that argument here… I'm a lover not a fighter.

However, what I can say is that there have been technical changes to the *HDMI* standard over time, with definite different versions implemented over the years; let me summarize them. In 2002, we had *HDMI 1.0* (1920 x 1080 60p / 4.95 Gbps), then in 2013, there was a leap forward with the introduction of *HDMI 2.0* (4K/60p / 18 Gbps). Most recently in 2017, the *HDMI 2.1* format (4K/120p, 8K/60p / 48 Gbps) was introduced, giving us the *8K* capability for truly impressive giant screens here now for some and hopefully soon available to the many. Depending on the video signal you are running, you might get away with *HDMI 1.4* cables today; however, if *4K* content is what you ensure you have optimized then you might want to consider the version of your *HDMI* cables. This can be a rabbit hole, and I'm not here to end the debate but perhaps, if you spent thousands on the new *4K HDTV* and additional money on your A/V receiver and video source, you might want to give some thought as to whether its time to replace, if not to upgrade your *HDMI* cables. Personally, I lean to matching the manufacturer stated version of *HDMI* cables to the highest version that any of my components in my system is capable of, be that TV, source, or A/V receiver. With that in mind, let me now tell you about the **Furutech** *HF-X-NCF HDMI* cable, a cable designed to deliver without reservation, on the full potential *HDMI 2.1*, 8K/60p offers.



What seems to separate Furutech from other brands

The new *HF-X-NCF* Ultra High-Speed *HDMI* utilizes **Furutech**'s proprietary *Nano Crystal² Formula* (*NCF*). The company holds that their *NCF* formula utilizes a crystalline material with two primary benefits; first, it generates negative ions to eliminate static and second, it converts thermal energy into far infrared (I'd read this as heat dissipation). **Furutech** goes on to explain that their *NCF* is combined with nano-sized ceramic particles and carbon powder, given their 'piezoelectric effect' damping properties. This *Nano Crystal² Formula*, **Furutech** believes is the ultimate electrical and mechanical damping material; eradicating vibration and static noise, and thereby improving sound, picture resolution and colour vividness, with blacker backgrounds.

Technical Information about this specific cable

The **Furutech** *HF-X-NCF HDMI* cable is rigidly built, while preserving flexibility. It is constructed with a 26 AWG silver-plated *µ-OFC* main conductor. Contacts have a thick gold plating and double layer aluminium foil shielding is used for each twisted conductor, together with a third copper braiding layer, to prevent static, *EMI*, *FFI*, *RFI*, and thereby, eliminate noise and crosstalk. The damping and insulation materials include special grade high-density, foamed polyethylene. An anti-resonance sheath is used to further reducing electrical and mechanical resonance. Finally, all the metal parts undergo Furutech's trademark two-stage α (Alpha) two-step cryogenic and demagnetization process, to ensure optimal performance and the company's goal of 'pure transmission'. The *HF-X-NCF* Ultra-High-Speed *HDMI* version 2.1 and capable of *8K*/60p; *4K*/120p/48Gbps, the claim to fame on this is its *8K* capability, which offers some future proofing. It is *UL/CL3* flame resistant and *RoHS* compliant, with a diameter of 8.5 ± 0.2mm and comes in finished lengths of: 1.2 M (3.9 ft) / 2.5 M (8.2 ft) / 3.6 M (12 ft) / 5.0 M (16 ft), with prices on these being US $228 / C $268; US $347 / C $408; US $449 / C $527 and US $577 / C $678, respectively, as of Jan. 2022.

Looking at the cable itself, I found the build quality to be very good, with finished ends feeling solid and hardy, and apparently high quality gold plating on terminations. The cable, though relatively thick was admirably flexible and also would hold the shape of a bend. The overall appearance and feel though was nothing more than ordinary, which I expect is a necessity to ensure its *UL/CL3* rating.

Listening conditions

I auditioned the cable in my main home theatre with my **Samsung** 82" *4K UHD* TV, **Anthem** *MRX 740 AVR* and **Bell Fibe** *4K* cable box. I also had a friend run it in his home theatre to compare results. I used the **Furutech** *HF-X-NCF HDMI* between my cable box and TV to evaluate video and then separately, between my *HDTV* and *A/VR* to evaluate audio. All video evaluations were done with streamed *4K* source material and in comparison, to a generic *HDMI 2.0*, as well as a **Monster** *4K HDMI 2.0* cable, serving as references.

Let's get started with the evaluation

To evaluate the video performance of the **Furutech** *4K HDMI* cable, I began with some well-watched **Netflix** content that I'm very familiar with. I first put pulled up

the fabulously beautiful *Our Planet* nature documentaries, for its *4K* video content. My family and I are mesmerized by the visuals and like most, hooked on **David Attenborough**'s deliberate and entrancing narration. Something that immediately struck me, was an increase in color intensity when using the **Furutech** *HF-X-NCF HDMI* cable. Colours had a more vibrant and striking appearance, while not crossing into over-saturation. The grass looked greener… and it wasn't even the neighbour's; however, the *HF-X-NCF* remained within the boundaries of naturalness, nary a hint of exaggeration. In fact, the colours seemed natural, less monotone, having additional complexity. The overall brightness of the image remained the same as far as I could see, with the result being an image that was more engaging and lifelike. Looking at a mass of pink flamingos, the overall hue seemed unchanged, yet the variations in the pinkish orange tones seemed have more pop.

More than colour, there was apparently some reduction in noise in the images with the **Furutech** *HF-X-NCF HDMI* in use. Fine details such as the downy fluff of the chicks had just a touch more clarity and definition. Also, referring again to that large flock of flamingos, there separation of the massed elements was increased. The flamingo flock looking less like a coral-coloured blanket with the individual movements of the birds being more apparent.

Another film I watched was the 2013 sci-fi, *Gravity*. Though this was 1080p rather than *4K* content, I wanted to see if the **Furutech** cable might make a difference, when just handling HD rather than *UHD* content. About twenty minutes into the film, on the scene where the hero, **Matt Kowalski** (**George Clooney**) first picks up the heroine, **Ryan Stone** (**Sandra Bullock**) in tow, there is a move from the backdrop of the blackness of deep space in the background to that of our friendly planet Earth. Viewing this scene with the *HF-X-NCF* cable, there appeared to be a very slight increase in the visibility of the faintest stars on the black background, providing improved depth. During the close-up on the astronaut's white glove, the fabric appeared slightly more vibrant with the *HF-X-NCF* versus the comparison cables. The differences / improvements here were small and more apparent in the *4K* content evaluation. With a friend, we watched some *4K Reference* content on **YouTube**. There is some stellar video content there, which is perfect for back-to-back comparisons. In short, similar perceptions, with increased colour vibrancy, some noise reduction lending to a slightly greater perception of detail. Looking for improvements in blacks and shadow details, there was nothing that could be seen at least with the content / setup used.

The audio aspect of this cable

Next up, was the evaluation of the **Furutech** *HF-X-NCF*'s sonic performance. Using music from **YouTube** via the *HDTV* and into my

A/V receiver, I connected my **Grado** *SR325e* headphones to the headphone output, allowing me to listen for audible differences. Listening to **Halie Loren**'s album, *Heart First*, and the track *A Woman's Way*, it was apparent that the brushes across the drum skins were clearer with the **Furutech** *HF-X-NCF* cable. The **Furutech** *HDMI*, rendered the recording with more air and openness and a greater sense of the recording space. Instrument separation was also improved with the Furutech *HDMI*, in play. Halie's voice had additional vibrancy; it was more lifelike and less veiled. The bass was denser and more dynamic and there was greater texture revealed with the **Furutech** *HF-X-NCF* in place. Listening to the accordion and the guitar playing together, along with the upright bass, I could hear a clear improvement in instrument differentiation. Whereas the comparison *HDMI* blurred and commingled the instrument, in particular the guitar and accordion, the **Furutech** *HDMI* maintained their separation and timbral individuality. It was easy to hear these improvements that **Furutech** *HF-X-NCF* brought to tone, timbre, texture and clarity. Were these differences small? Individually yes, however in sum, the **Furutech** *HF-X-NCF HDMI* revealed the music in a more realistic, intricate, and engaging manner. Moving to the track, *Black Crow*, by **Angus & Julia Stone**, I heard similar results. Improved bass texture, crisper and clears cymbals, denser kick drum with reduced overhang as well as greater reverb. I also found that with the **Furutech** *HF-X-NCF*, the raspy texture of **Angus**' vocalizations was more audible.

General conclusion

So, there you have it, my impression of the **Furutech** *HF-X-NCF* Ultra High-Speed *HDMI v2.1 HDMI* cable. Its an example of a well engineered and constructed *HDMI* cable that has been designed and tested to meet the most current *HDMI* standards, while delivering optimized performance not only in video but also in audio. If you have a *4K* or even *8K* setup, you would do well to consider the **Furutech** *HF-X-NCF HDMI*. More so, if *HDMI* audio is something you use for your music listening, the **Furutech** *HF-X-NCF HDMI* may be a cable you just can't live without.

GENERAL INFORMATION

Price : 1,2 m (3,9 ft) : 228 $ / 268 $ CA ;

2,5 m (8,2 ft) : 347 $ US / 408 $ CA ;

3,6 m (12 ft) : 449 $ US / 527 $ CA ;

5,0 m (16 ft) : 557 $ US / 678 $ CA

Warranty : 12 months for any manufacturing defect

Distribution : Furutech Canada,
T. : 1.416.704.0105,

https://www.furutech.com/distributors/america/canada/

Mediagraphy

Video

Netflix, Our Planet, 4K ;

Gravity, 4K format, Warner Bros. ;

YouTube, 4K format contents

Audio

YouTube films ;

TVHD format contentes ;

Halie Loren, Heart First, Justin Time, JTR 8573-2 ;

Angus & Julia Stone, Black Crow, Nettwerk Productions