

Wireworld Starlight Ethernet Cable

12-7-2016 **By Steven Plaskin**

Device Type: Ethernet Cable

Availability: Wireworld Cable Technology Dealers

Versions: STE (Standard Termination), SCE (Crossover Termination). STE versions were used in this review.

SCE Crossover cables are used to connect 2 computers together or 2 or more switches together

Price: \$210.00 / 1 meter , \$270 / 2 meter length

Website: www.wireworldcable.com



Wireworld has recently released a new Ethernet Cable called the Starlight Cat8 Ethernet Cable. David Salz, chief designer at Wireworld, contacted me back in October and asked if I would be interested in evaluating his new Ethernet cable. I could tell that this cable just might be something very special given the excitement I detected in his writing.

The Starlight Cat8 Ethernet Cable supports Category 8 transmission speeds in a flat design that also provides great flexibility and ease of use. The Starlight Cat8 has a patent pending Tite-Shield™ design that uses triple-shielded 23 gauge conductors in a cable that is just a tenth of an inch thick. This new cable design has also simplified assembly with Wireworld's shielded RJ-45 plugs.

THE DESIGN

David Salz provided us this information concerning the design of his new Cat8 Ethernet Cable:

The Category 7 cabling standard was created to satisfy the demands of 10 Gigabit Ethernet. Even though media networks tend to run below that speed, cables that support higher speeds have been found to improve the quality of audio and video streaming. Those improvements are possible because streamed signals suffer from data errors that cannot be repaired by the error correction systems that preserve normal file transfers. The proposed standard for future networks is Category 8, which will support speeds of 40 Gigabits per second.

Category 8 performance is difficult to achieve with conventional shielded twisted pair designs. The primary challenge is minimizing crosstalk (mixing) between the four signal channels. To control crosstalk, conventional cables twist the four pairs of conductors and use one foil shield on each pair. An overall two-layer shield reduces outside interference.

Twisting the conductors reduces crosstalk, but it also tends to make the conductor lengths uneven, which causes timing errors called skew.

Furthermore, conventional twisted pair high speed Ethernet cables are also quite stiff. The conductors in Wireworld's Tite-Shield design are not twisted at all. Instead, they are arranged as four parallel channels with a dense three-layer shield on each conductor pair. These shields isolate the four channels so effectively that twisting is not required and conductor length differences are eliminated. This patent pending flat design minimizes both crosstalk and skew, providing leading edge performance, simplified assembly and excellent installation flexibility. The cable also utilizes Wireworld's proprietary Composilex 2 insulation to minimize triboelectric noise, which is especially helpful when used in vibration prone home theater environments.

Conventional round high-speed Ethernet cables are stiff and require special tools to assemble. They also can't bend around sharp turns without losing performance and any excess length creates large coils. In contrast, Starlight CAT8 Ethernet is a flat flexible cable that fits under carpets, bends around corners, coils effortlessly and can be assembled with a simple wire cutter or knife. Starlight Ethernet also has a fresh new look in a bold red color that complements high tech décor. As network speeds have increased, the cables that can keep up have become stiffer and more difficult to install. Wireworld developed the Starlight Category 8 Ethernet cable to overcome those issues with a flat flexible design that goes where you want and is also easy to assemble. With next generation performance and versatility, Starlight Ethernet provides consumers and IT professionals with new installation options and lasting value.

SPECIFICATIONS:

Design: Tite-Shield Technology: 100 Ohms

Signal Conductors: 23AWG | 0.26 sq. mm

Conductor material: Silver-clad OFC

Insulation: Composilex 2

Plug Contacts: 24K Gold-plated

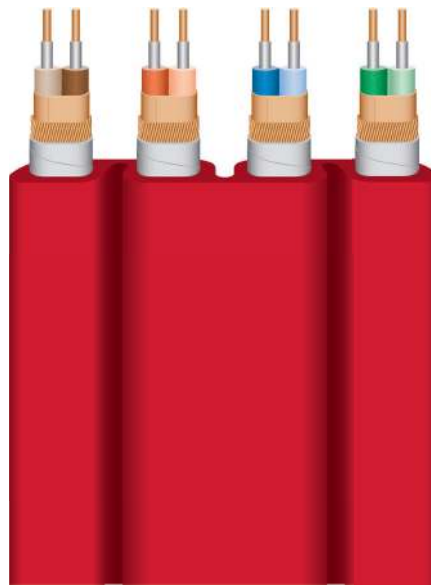
Two Versions: STE (Standard Termination) and SCE (Crossover Termination)}

ASSOCIATED COMPUTER COMPONENTS

I employed a new Asus G701VI laptop running Windows 10 Pro 64 / AudiophileOptimizer to run Roon Server and act as my Roon Core to stream to a Sonore microRendu. The Asus G701VI possesses an overclockable Intel Core i7 6820HK processor with 32 GB DDR4 2400Mhz SDRAM and a very fast PCIe Gen3 X4 NVMe SSD. This laptop has 3 USB 3.0 ports as well as a Thunderbolt port (USB type- C). An NVIDIA GeForce GTX1080 with 8 GB VRAM processes

video. This powerful video processor allows significant CUDA offload processing for the HQPlayer. The Asus laptop was plugged into a Shunyata Research Hydra DPC-6 v2 distribution center to firewall the noise generated by this computer from contaminating my AC line.

The Asus Core was remotely controlled by an iPad Air 2 that replicated all of the functions of the standard Roon program. I also used the Roon Server to stream to the on-board Signalyst HQPlayer with all files converted to DSD256, which in turn, were streamed to the microRendu powered by the Sonore Signature



Series Power Supply.

The Asus was placed on a Synergistic Research Tranquility Base UEF grounded with the Synergistic Research High Definition Ground Cable / Grounding Block as was the computer. A G-Technology 16 TB GIRAID Thunderbolt 2 / USB 3 drive was connected to the Asus with an AudioQuest Coffee Thunderbolt cable. The GIRAID Thunderbolt drive was powered by an HDPLex 100w linear power supply plugged into a Shunyata Denali power conditioner. The GIRAID Thunderbolt drive and its HDPLex power supply were placed on a Synergistic Research Tranquility Base. The Sonore microRendu and its Signature Series Power Supply were

also placed on a Synergistic Research Tranquility Base. The Signature Power Supply was connected to a Shunyata Triton v2 / Typhon by a Shunyata Alpha Analog AC cord.

The MSB Technology Analog DAC with Analog Power Base was engaged for DAC duties with it plugged into a Shunyata Triton v2 / Typhon with a Shunyata Sigma Digital AC cord. The DAC and its power supply were placed on a Synergistic Research Tranquility Base UEF.

The Starlight CAT8 Ethernet cables were placed between the computer and a switch and between the switch and Sonore microRendu. I also used AudioQuest Diamond and Vodka Ethernet cables. Both the Wireworld and AudioQuest Ethernet cables are directional for optimum performance.

THE SOUND OF THE STARLIGHT CAT8 ETHERNET CABLE

The Starlight CAT8 is very different sounding Ethernet cable when compared to my AudioQuest Diamond or Vodka Ethernet cables. The Starlight CAT8 is more extended sounding at the high and low end. This cable has a bit of midrange presence that I liked and didn't find to be annoying in terms of brightness. The retrieval of high-end detail is outstanding. The midbass of the Starlight CAT8 is very controlled as is the low end. Dynamic contrasts, both micro and macro, are beautifully rendered and very easy to hear.

The Audioquest Diamond and Vodka have smoothness at the high end that some, no doubt, will prefer. But I find the Starlight CAT8 to be the more revealing cable. The soundstage rendered by the Starlight CAT8 is the largest I have heard extending far beyond the lateral borders of my speakers. There is also very good depth reproduction if captured on the recording.

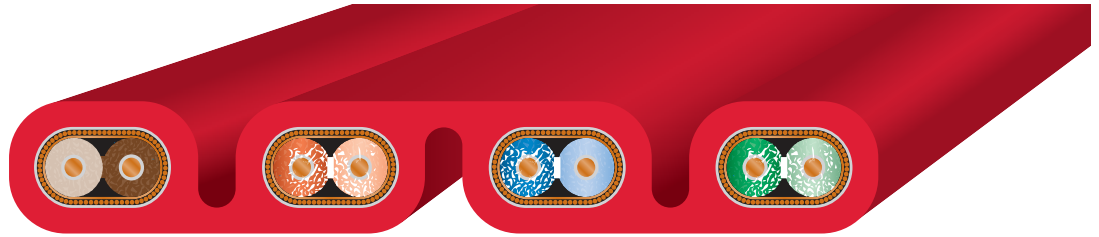
The Starlight CAT8 reminded me sonically of what I heard when I reviewed the Platinum Starlight 7 USB

2.0 Cable. If you like this USB cable, I suspect that you will love the Starlight CAT8.

Incidentally, for those of you that feel that there are no differences between Ethernet cables, I did some comparisons with a CAT6 Belden Ethernet cable and the Starlight CAT8. The Starlight CAT8 trounced the Belden in terms of sound quality.

THE MUSIC

While listening to Fourplay Energy (24/96), I was impressed with the resolution of transient detail and lifelike sense of instrumental body and weight of the music. Even though this was a studio recording, I perceived a tube-like bloom and three dimensionality to the soundstage. There was a micro-dynamic liveliness



that I had not previously heard with my other Ethernet cables.

Norah Jones' new release Day Breaks (24/96) was equally impressive to listen to through the Starlight CAT8. The Starlight CAT8 reproduced a purity and liquidity to Norah's voice that resulted in a relaxed presentation that was easy to listen to for extended periods of time. The Starlight CAT8 was a champ at resolving very fine details without spotlighting.

CONCLUSIONS

In many ways I find the Starlight CAT8 Ethernet Cable to be an

extraordinary performer with the ability to reproduce fine transient detail and dynamics that are lost with other Ethernet cables. The soundstaging capabilities of this cable are impressive and have the ability to be richly layered when called upon. David Salz has come up with an Ethernet cable for the high end computer audiophile that is not only an assault on the state of the art, but affordable as well.

