

# Wireworld Digital Cables

*This review first appeared in the March 2014 issue of hi-end hifi magazine fairaudio.de of Germany. You can also read this review of Wireworld in its original German version. We publish its English translation in a mutual syndication arrangement with the publishers. As is customary for our own reviews, the writer's signature at review's end shows an e-mail address should you have questions or wish to send feedback. All images contained in this review are the property of fairaudio or Wireworld- Ed.*

**Reviewer:** Ralph Werner

**Sources:** Luxman D-05, Logitech Touch, Readynas Duo NAS-Server, HP Notebook, M2Tech Hiface, Benchmark DAC1 USB

**Amplification:** Octave HP300 preamp, Musical Fidelity M8 700m power amp, Denon PMA-2010AE integrated

**Loudspeakers:** Dynamikks Monitor 8.12, Thiel SCS4

**Rack:** Creaktiv Trend 3

Power delivery: fis Audio

**Cables:** Ascendo tri-wire, Dynamikks Speakerlink, Ecosse ES 2.3, Zu Audio Libtec; Ecosse, Vovox, Mundorf Cable and other interconnects

**Review component pricing:** Toslink Nova \$49, Toslink Supernova 7 \$199; coax Silver Starlight 7 \$249, Gold Starlight 7 \$499; USB Starlight 7 \$199, Silver Starlight \$299, Platinum Starlight \$600

"Oy. Another cable review. And on digital cables!" I can hear it already, the forum action. To season this spicy stew, we'll even include optical cables. Take that misters just zeros and ones. Off you go. Cheerio.

Though those folks do have a point. Digital signal is about zeroes and ones. In theory. In practice these two states are represented by voltages. With coaxial S/PDIF they aren't that big, around 0.5V. With the globally most supported AES/EBU studio standard, that's about 10 times higher. Its symmetrical operation also means higher immunity to external influences though in a domestic environment our shorter lengths probably don't benefit. In... er short, digital data are represented and transported in the analog domain.

That's hifi 101. From this follows very logically that the change between the two voltage states occurs very quickly but not infinitely so as the mathematical ideal would have it. The transition between zero and one has some 'analog head room' or better put, it occurs over time. Now the question becomes, how long does a one remain a one and no longer a zero? The higher the transmission bandwidth, the steeper the edges of the square waves representing the digital ones and zeroes can rise and fall to shrink the 'in-between' down time. The low bandwidth of 'just' 6MHz for Toslink gets routinely invoked to explain its inferior performance versus electrical transmissions which can reach 500MHz.

The issue thus aren't errors with ones and zeroes. Those usually arrive correctly as themselves. The issue is whether they arrive on time or not. As Wireworld put it whose cables are the topic of today, computers can transfer digital data without losses since they send them in robust chunks which don't rely on specific timing between sender and receiver. Digital audio signal meanwhile are constant data streams that are highly exposed to interference. To avoid losses the digital processor must handle the signal perfectly synchronously. Variances of the desired clocking frequency can cause sonically detrimental jitter. This can have numerous sources. One of those is the transmission medium aka the digital cable with its connections,

impedance variations, potential signal reflections et al. That's the going explanation on why those cables can sound different.

So much for theory. Basic listening has even the occasional dogmatist surprised. Into this arena step the well-respected US cable firm Wireworld who recently overhauled their entire portfolio with the new Series 7. If I didn't lose track, that lot includes 17 different models. And no, they didn't send us all of 'em—no AES/EBU for us—but still a sizeable bunch. And that's what I'll report on today: select Toslink, coax and USB cables from Wireworld.

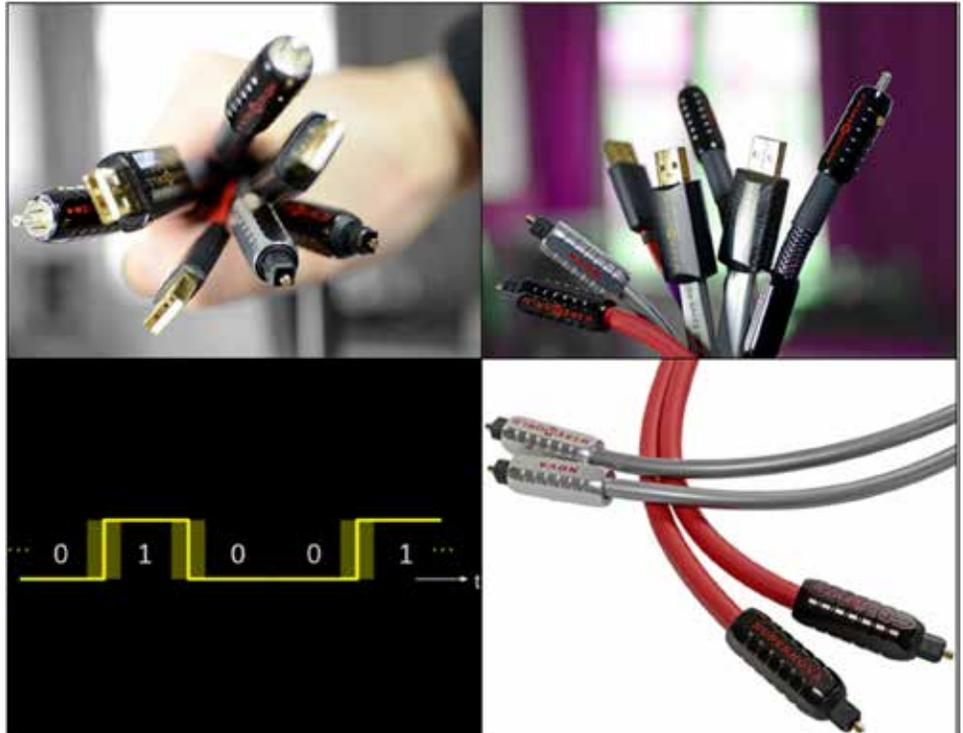
Wireworldly optical. Toslink has a bad rep. Cited culprits are insufficient bandwidth and mediocre connectors. The latter makes perfect sense to the most basic hifi expectations. The notoriously loose fit of cheap plastic nubs doesn't curry much confidence. But since we transmit light, does a bit of wobble really matter? And how about perfect galvanic isolation which could make a decisive difference in Toslink's favour? If the electrical connection of a given source seems circumspect, an optical option could well make sense. To put it mildly, personal expectations on audible differences between plastic fibre cables were – well, very mild. That is until I got my mitts on an Audioquest Cinnamon to compare it to a Mediamart freebie. "That's so not possible!" was my first reaction. It had higher resolution and better soundstaging. It also was more dynamic and frisky, albeit also more direct in the mids which wouldn't suit all systems. I had a hard time correlating those differences to a silly length of glass fiber. Inconceivable - but ever since part of my personal hifi tool box. Wireworld's 'grand' Toslink now goes by Supernova 7 and demands €99 per meter. Its internal architecture of 388 borosilicate glass fibers with mirror-polished ends for transparency and dynamics to satisfy the most demanding listeners is how

the confident Yanks describe it.

Wireworld Supernova 7 Toslink. The mirror-polished ends painted a crooked grin on my face. I was visualizing highly qualified workers polishing away under a microscope like dishwashers preparing for a high-society feast. But the concept wasn't as out there as it might seem. Competitor Audioquest also talk of precision-polished glass-fiber ends. The rationale seems to be less stray

music and/or personal taste. The Wireworld seemed more correct or at least more socially adapted if not quite as crisp and cracking.

Cross interrogation with an Aqvox coax showed something similar. The Wireworld's treble was a bit softer. The soundstage didn't feel quite as generous as with the S/PDIF but the performers seemed more tacit. That quality was really good with the Wireworld. It also had a bit more



light losses for a cleaner signal. What does that sound like?

Different from my Audioquest. And better too I had to admit. Which given 2 times plus the cost was fitting. On resolution and stage illumination particularly in the depth domain, both were essentially equal and superior to a generic. But I couldn't fail to notice that the Wireworld put more body on individual sounds where the Audioquest played it flatter. The Supernova 7 also was tonally better balanced and in the treble perhaps minorly defensive where the Cinnamon can pop harder in the presence region. This conveys tonality and dynamic brio but can backfire when it doesn't suit a system, your

bass shove (which I liked) if a tad less definition. A lovely observation was that something quite similar was available for a quarter the dosh without swapping brands. Enter the more basic Wireworld Supernova at €49/m. It was nearly as good. Nearly. I slurped my milkshake from a €0'000 system. That revealed differences. The cheaper Nova wasn't quite as transparent at the stage edges, depth suffered a bit and resolution particularly at the frequency extremes stepped down. But if ancillaries aren't of the costly sort, Wireworld Nova does a very good job when Toslink is on the menu.

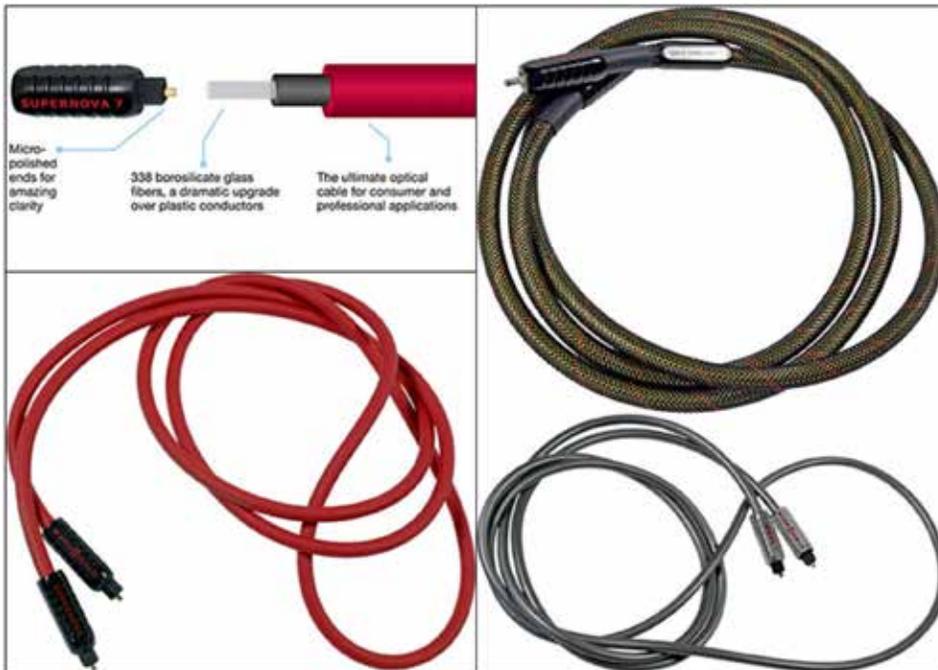
Wireworld's coaxiality. The most common S/PDIF format is coax.

My cable of choice for the past few years has been the ca. €65/m Aqvox. Against the Supernova 7 'twas matter of taste. Depending on dynamic jump factor or overall coherence, you'd favour one or the other. But Wireworld obviously has its own coax contenders. Six altogether if I counted right. German distributor Grämkow listens to the second from the top, the Gold Starlight 7. At €99 he finds it brilliant. My care package also included the 'silver' €49/m Starlight 7. Silvery and golden star light share

"Poor Little Rich Boy" from her Soviet Kitsch album. Not only does the songstress play the piano, she slaps and tickles her piano bench for some percussive accompaniment. It's a noise that seems to root into the recorded flooring at LF and also makes for a terrific transient check, i.e. a good test for all loudspeakers. "That can't be right!" I cursed under my breath once the Gold Starlight took over transport duties between Squeezebox Touch and Luxman player/DAC. This percussive noise felt

to seem a tad more direct but as such also smaller, more compact and not as lit up in the farther reaches. The Wireworld also painted vocals with more detail and inflection.

I followed up with Mop Mop's "Jua Kiss" opener to their Isle of Magic album. It's basically just a brief scene setting of a jungle atmosphere with bird cries and chirps, a rainmaker and half a dozen other percussive noises broadly distributed across the stereo panorama. This too played to the Wireworld's strengths. These noises felt more real and cleanly separated to make for the better sorted stage. "Freer of fogginess, less diffusive" say my notes. If you're into fast transients and ultimately clear staging, Wireworld's Gold Starlight 7 is a solid recommendation. And the Silver? Fundamentally very similar but a bit more sonorous in the midband. Sadly with a bit less body and plasticity than the costlier Gold. Sadly with a bit less stage depth. Sadly with a bit less transparency. Sadly not quite as defogged. In the direct A/B it lacked the final degree of audiophile extra which distinguishes the Gold. But the Silver remains a good cable and has the better price/performance ratio. But twice the coin still does buy audible advances.



geometry. Wireworld's crafty word smiths dubbed it DNA Helix Design to describe stacked Composilex 2 isolated flat conductors which are twisted at a predetermined rotation like a DNA strand. Which begs the question what Composite 2 is. Both models also get a dielectric which minimizes tribo-electrical effects over conventional materials. Wow. So what distinguishes the Silver and Gold models? Gold runs on silver, silver on copper. Seriously. The four inner and twenty outer conductors of the Gold Starlight 7 are pure silver, the Silver Starlight 7 gets silver-plated copper.

I reached for the Gold after I'd first recalibrated my ears to the Aqvox, finally spinning Regina Spektor's

far more real, immediate and shocking to be – well, a bit shocking. Why did I have to curse about it? Simply because I consider €60 for a digital wire no chicken feed.

I think that improvements beyond it ought to occur in homeopathic doses to prevent lusting after thrice-priced leashes. Thankfully Grämkow didn't include the big dog Platinum which wants €1499 the meter. Back to Gold. Not only was the attack more in the pocket, the decay too seemed better by trawling deeper into the stage and over a longer span. In short, the soundstage illusion was grander and more impressive than over the Aqvox. On Smashing Pumpkins' "To Sheila" [Adore], its stage began a bit forward

Wireworld USB cables. Because my Luxman D-05 lacks USB (grrrr), I resurrected Benchmark's DAC1 to check out Wireworld's USB leashes. The laptop ran JRiver, the iPad the slick JRemote and off I went. Wireworld's Starlight 7 didn't need dispatch since this relatively affordable €19/m red USB cable already was in fairaudio HQ's frequently used hardware collection. But I'd also gotten the more upscale Silver Starlight at €99/m and the Platinum Starlight for €600/m. Again the two latter share the DNA Helix geometry and mirror their S/PDIF siblings in conductor material – silver-plated copper for the Silver, pure silver for the Platinum. The cheaper Starlight 7 also gets silver-plated copper

but in a simpler geometry dubbed Symmetricon. Boy, Wireworld has names for everything.

And? Relevant differences, again? Quite. First a proviso. It depends on what you strap to such cables whether the changes will be small or more meaningful. With the now aged if still okay but not awesomely resolving Benchmark, I'd play it modest on cables. For that reason I also visited colleague Jörg Dames whose Phonosophie DAC dug more deeply into these differences.

The most affordable Starlight played it slightly warm. There simply was a tick less HF energy at work both over against the stable mates and the €55/m Aqvox USB competition. A very close-mic'd female voice like François Breut's doing "Il n'y a pas d'hommes dans les coulisses" from her *Vingt à trente mille jours* album got declawed and more weighty which can be a win. To avoid boredom one still remains in the front row. I'd say that of the three Wireworlds the red leash has the least pronounced presence region but simultaneously erects its stage closest to the listener. That was a surprise since one would expect the opposite. 'Frontal' and more present upper mids usually appear together. Be that as it may, my colleague and I thought the middle Silver Starlight the tonally most neutral. The 'lower' Starlight played it milder and warmer, the 'upper' Platinum with a dose more energy upward of the higher mids. None of this was drastic but as perceivable nuance a thing to consider.

But tonality wasn't all of it. Swapping to the Wireworld Silver Starlight showed noticeably more contoured bass runs for better intelligibility and thus firmer rhythms to trigger foot tapping. I simply found it more involving. Magnification power increased too. I had more information

on piano hammer falls, even more so on their sustains. The trailing edges lasted longer. By contrast the red cable was the coarser and spatially less sorted and accurate. It also was



the more compact. Climbing Jacob's shekel ladder into the sky, it's always the same. Especially the subdued quiet seemingly marginal signal bits gain in clarity. Reverb clarifies to light up recorded space. Textures refine and individual sounds feel less damped. If you wish to call it more analog, I'd let you. With the Silver Starlight these upwardly mobile trends were clear when ancillaries were up to snuff. Yet the Platinum went even farther. Better resolution, even more spatial recovery. If you chase the absolute, this gets interesting as long as tonal balance suits. For me the vital step was from Starlight to Silver Starlight. To pay double again just to milk a few more drops from the connection... that becomes a very personal decision. Even ambitious high-enders should go far on Wireworld's Silver USB leash.

Conclusion. If your system requires digital cables—with computer fi and network fi those chances have

skyrocketed—Wireworld has plenty of options. The Americans have something for nearly every wallet and format. Today's cables belong into the audiophile's gild-the-lily drawer

to matter once the basic homework of room treatments, speaker and amplifier choices and their proper setup has been put away. Only then it's time to polish things. Which now can become decisive on whether playback feels real, involving and embodied or tastes a bit like stale beer.

Pay more with Wireworld and play harder. The question is merely one of return on investment. With one eye on the wallet and the other on performance, I was particularly taken by their entry-level Toslink (Nova, \$49/m) and the one-or-two down-from-the-top Silver Starlight USB (\$299/m) and Gold Starlight 7 coax (\$499/m). It's really impressive what those can do. Last but not least, the Americans also deal in 50cm lengths. If you don't need more, you needn't pay for excess. And shorter cables tend to be a win also sonically.