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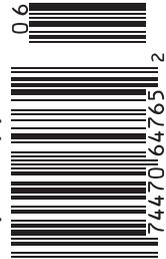
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PERSONAL AUDIO



Wireworld Nano Eclipse and Crystal Cable Next Headphone Cables

What a Difference a Cable Makes

Alan Taffel

Headphones are diverging into two camps: those intended for millennials and those with audiophiles in mind. At one point, it appeared that some models at the upper end could satisfy both constituencies. However, even though good sound is important to both groups, it has become increasingly clear that millennials and audiophiles use their 'phones in different ways, and consequently demand distinctly different feature sets.

For millennials, it's all about portability and smartphone compatibility. That translates to headphones with ear pads that can fold flat, the ability to patch through phone calls, and a cable that includes a microphone for such calls. Millennial-oriented cans may also support Bluetooth, in which case there will also be a built-in volume control, DAC, and amp in the signal path. It goes without saying that serious audiophile headphones eschew every one of these features. Each of them either adds expense without improving sound, or is actively detrimental sonically.

Now, another purely sonically oriented feature has found its way to the latest audiophile headphones: a detachable cable. As when detachable power cords replaced captive cords in audio components, detachable headphone cables enable the use of aftermarket alternatives. You won't find this feature on cans meant for millennials, who prize simplicity. But for audiophiles, choosing and using aftermarket cables are old hat. Furthermore, audiophiles know that aftermarket cables and power cords make a significant difference in the sound of their audio systems. Why shouldn't the same hold true for headphones?

At this year's CES, I noted several audiophile cable companies jumping into this fertile territory, so I arranged to borrow two samples at different price points. At the high end is the Crystal Cable Next, a shimmering, thin strand that oozes quality. In keeping with

the cable's minimalist profile, the terminators are compact and easy to handle. (I found, however, that the terminators didn't work with all of my headphones, so be sure to test that before auditioning.) Crystal put a lot of effort into creating a headphone cable that's thin, light and flexible, yet strong enough to stand up to the tugging and twisting inherent in headphone use. An aramid fiber core gives the cable its strength without compromising flexibility. The transparent outer sleeve is hypo-allergenic and soft to the touch. Inside, the Crystal Cable Next is no less uncompromising. The conductors are a high-purity proprietary silver/gold alloy. Shielding is silver-plated mono-crystal copper, reminiscent of Crystal's high-end interconnects.

If that sounds to you like it's going to add up to something expensive, you're right. All that R&D and component quality pushes the price of this cable to \$750. I gulped when I first heard the price; after all, that's more than many a good set of cans. But then I realized that it's not unusual in the high end for top-tier cables to cost more—sometimes far more—than midrange components. A little calculating further informed me that a set of the best 'phones plus an appropriate portable player (e.g., the Astell&Kern AK380) or a serious headphone amp would easily set a buyer back over \$5k. In that context, a cable at this price point—assuming it makes a significant sonic difference—is not out of line.

Nonetheless, I also wanted to evaluate a more modestly-priced offering. Fortunately, one of my stops at CES was the Wireworld room. There, David Salz treated me a demo of his entire range of headphone cables, the Nano series, which runs the gamut from \$45 to \$450. For me, the sweet spot in the line was right in the middle: the \$175 Nano Eclipse. At this price, the cable is an

PERSONAL AUDIO - Headphone Cables from Wireworld and Crystal Cable

affordable adjunct to even modest headphone/amp/player rigs. Physically, the Eclipse is slim by high-end interconnect standards, yet beefier than the Crystal Cable Next. The cable evinces Wireworld's traditionally high build-quality, right down to its brawny terminators. Internally, the Eclipse is composed of OCC high-purity copper conductors in a DNA helix configuration surrounded by Wireworld's Composilex 2 insulation. Upper-range Nano models substitute silver conductors for copper, but during my CES audition I concluded that that change came with some tradeoffs. Ultimately, the Eclipse won me over with its sound and value.

To take the measure of these cables, I employed them as an integral part of my evaluation of Astell&Kern's new flagship AK380 portable player (see review elsewhere in this issue). My goals were twofold. First, I wanted to determine how much aftermarket cables differed from the stock wire supplied with headphones. Secondly, I was curious as to whether there was a sizable sonic difference between two headphone cables in distinctly different price ranges. The headphones I employed for this endeavor were the NAD VISO HP50 (\$299). Don't be fooled by their modest price; these are superb cans. They also happen to be the best I have with a detachable cable. (I do own more bespoke headphones, but they aren't new enough to have a detachable cable.)

Given my experience that cables invariably make a difference, I went into this test expecting both the Wireworld and Crystal wires to trump the NAD's stock cable. Still, I was unprepared for just

SPECS & PRICING

Wireworld Nano Eclipse
Terminations: As ordered
Conductors: Copper
Price: \$175

Crystal Cable Next
Terminations: As ordered
Conductors: Proprietary silver/gold alloy with silver plated monocrystal copper shield
Price: \$750

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how great the difference was. Frankly, I was aghast at how much musical and sonic information was being lost somewhere in the strands of the stock headphone cables. The standard string forfeits so many of the AK380's benefits, it sounds like a completely different unit. For instance, the air pocket around instruments that the AK380 so beautifully and uniquely conjures is completely

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Step up transformer



- Passive step up transformer boosts signal without noise
- Jensen Transformer for unmatched performance
- Hand wired for optimal signal flow and low noise
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"I've been using Hafler for over 25 years and I have never been disappointed. Their performance is outstanding, they are very dependable and their dynamics are just what I look for."

Al Schmitt

Capital Records - Grammy winning Engineer
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PH50 phono stage

for moving magnet



- Phono stage for moving magnet cartridge
- Ultra low noise transformerless design
- Variable high-pass filter to eliminate rumble
- 91dB dynamic range - 0.002% distortion
- Plug and play easy to set up and use



"I installed the Hafler PH50 to the pickup of my Neumann VMS70 cutting lathe. This phono preamp is such an accurate window on the world for me and it can drive a long line with low noise effortlessly."

Eric Boulanger

'The Bakery' - Mastering Engineer
 Imagine Dragons, Neil Young, Colbie Caillat, One Republic

PH60 phono stage

for moving coil



- Phono stage for moving coil cartridge
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- Switchable high-pass filter to eliminate rumble
- Internal jumpers to match cartridge impedance
- Plug and play easy to set up and use



"My Hafler PH60 phono preamp kicks ass! I've never heard my turntable sound that good. Actually, I didn't think it was possible."

Chuck Ainlay

Grammy winning Engineer - Producer
 Mark Knopfler, Taylor Swift, Band Perry, Eric Clapton

Headphone Cables from Wireworld and Crystal Cable - PERSONAL AUDIO

missing when using stock cable. That loss is indicative of all the other micro-details the AK380 can deliver—but doesn't through this cable. Other deficits of the stock cable include a lack of bass weight, curtailed highs, smeared rhythms, and a general glaze over the proceedings. If this had been the only cable I used to compare the AK240 with the AK380, I would never have fully appreciated the latter's superiority.

Switching from the stock cable to the Wireworld Nano made a difference of a magnitude that would be commensurate with a major upgrade of the headphones themselves. It's impossible to overstate how much the Wireworld opens up, cleans up, and tightens up the sound. The Nano Eclipse delivers the full merit of its source in glorious technicolor, with detail, pace, and dynamics beyond reproach. If I must pick a nit, it's that the cable is ever so slightly over-warm in the midrange. I don't know about you, but given the Eclipse's overall fabulous sound, I can easily live with that.

As good as the Wireworld cable is, the Crystal Cable Next is even better—as well it should be for its substantially higher tariff. The Next does pretty much what the Wireworld does, only more of it. After its 100-hour break-in—before which the cable comes off as threadbare—the Next's sound is even clearer than the Nano's, allowing even more timbral, rhythmic, and spatial information to flow through. Decays seem to go on forever rather than fading into a very low-but-still-present noise floor. Bass notes are as taut as a rubber band stretched to the break-point. Accordingly, you

can easily follow the most complex bass line no matter what else is going on. Needless to say, the slight midrange bump of the Eclipse is absent with the Next.

The Next also excels from a usability standpoint. All of Crystal Cable's hard work on this product's form factor pays off big-time. The cable is significantly lighter—less of a drag on the cans—than the comparatively bulky Wireworld. That carefree weight, combined with loose twistability, renders the cable effectively “not there,” which is exactly how wires attached near your head should be.

I fully recognize that pairing a \$750 cable with a set of headphones costing less than half that amount is ridiculous—a scenario never to be seen in the real world. However, this configuration did prove that, given a good source, the sonic capability of the Crystal Cable Next is evident even with modest headphones.

In sum, it seems that cables *do* make as big a difference in headphone applications as they do everywhere else. Now that I've heard what aftermarket cables can do, I will never again consider a set of cans with a captive cord; the question of how much music I was losing would constantly nag me. For those of you who own or are considering buying headphones that support aftermarket cables, either of these two would be an excellent choice. At just under \$200, the Wireworld Nano Eclipse is an absolute no-brainer for any reasonably high-quality personal audio setup. And for those with a state-of-the-art personal listening setup, the Crystal Cable Next will be a state-of-the-art complement. **tbs**

HA15 headphone amp

Solid-state circuit



- 100% discrete electronics for optimal sound quality
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- Thru outputs enables greater connectivity options
- High output to handle virtually any type of headphone
- Choice of unbalanced RCA or balanced XLR inputs



"Hafler amps have been in my studios going on 20 years now. The Hafler HA15 headphone amplifier delivers the same Hafler qualities that I have grown to trust."

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HA75 Tube Head™

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"We have all suffered with the fatigue caused by listening on headphones for long periods. With the Hafler HA75 Tube Head, I am happy to spend hours rather than minutes doing the all-important reviews of my recordings and mixes on headphones, especially at higher levels."

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The Beatles, Pink Floyd, Al Stewart, The Alan Parson's Project

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