



Kabelrookie: Silversmith Audio sets a new reference for high-end cables

By Peter Westberg, High Fidelity
(English Translation by Peter Westberg)

Yours truly has, in recent years, tried and tested most of the so-called "high-end" cables that are out on the market. I have spent a lot of time and effort in the pursuit of the perfect cable, but in spite of that fact, I am still always on the lookout for a new item to scrutinize.

About six months ago I discussed cables with my colleague Lars Fredell from the American magazine *Ultimate Audio* and he urged me to listen to cables from a new manufacturer named Silversmith Audio. Lars claimed that they were simply the best he had ever heard. So I

asked Lars to put me in contact with Jeffrey Smith, the person behind the cables in question. Lars Fredell delivered and I soon received a complete set up of speaker cables, interconnects and a digital cable.

Jeffrey Smith graduated from the United States Naval Academy with a degree in engineering. He was later assigned as, among other things, an anti-submarine warfare officer and worked with various types of sonar systems. While in the Navy, Jeffrey became interested in high-end audio. He built his own speakers and started to work part time in a high-end shop to get insight into the audiophile world. Jeffrey gradually began to focus his interest on cables and the complex problems related to them. He began intensive research on the subject and the idea of a cable of his own took form. He made numerous experimental models.

Little by little he formed an exact idea of how "his" cable should be designed. Some of the basis for his cable philosophy Jeffrey gathered from Malcolm Hawksford and from Andrew Harrison/Ben Duncan. These three gentlemen have written articles for *Stereophile* and *Hi-Fi News and Record Review*.

Philosophy

Jeffrey's cable philosophy can be summarized as follows: A cable should be built with a simple design that will eliminate or reduce all known and suspected causes of sound degradation. Jeffrey argues that Hawksford has revealed an energy storing mechanism that he calls indo-inductance or self-inductance (which is something different from inductance in a more general sense) and that this is the primary source for sound degradation in a cable. It is the cause of skin effect. This can either be minimized by the use of a very small round conductor or a very thin ribbon conductor. However, small round conductors have the problem of not being capable of conveying a great deal of current.

Another source of sound deterioration is the dielectric material itself. Solid dielectrics store and release large quantities of energy when the electromagnetic waves pass by and thereby color the sound. A gaseous dielectric stores less energy and its polarizing frequency lies much higher up and so does not color the sound as much as a solid or liquid dielectric. Proximity effect is another source of errors and this is particularly problematic in multi-strand designs. Here it is a matter of one strand inducing current in all the others. This causes time related contamination, phase shifts and lagging transients. According to Jeffrey, these problems can never be corrected in multi strands designs, regardless of the strand or weave geometry. The only solution is to use a single strand per polarity.

Jeffrey's method is to use silver ribbon or, if you like, silver foil. The reason for the use of silver is that it is a superior conductor and that oxidization does not affect its performance. In the case of copper, the opposite is true. Jeffrey uses cold rolled silver where the crystal structure has been drawn out. Silversmith Audio's silver foil is very thin, thinner than the so-called skin depth of a 20 kHz signal.

Cables Characteristics

The speaker cable is $\frac{3}{4}$ inch wide and corresponds to a 13-gauge wire. According to Jeffrey, it can conduct more than 20 amps of continuous current with a resistance of less than .002 ohm/foot. The silver foil is loosely



fitted in a Teflon tube, which is in contact with less than 1% of the metal surface. In other words, the foil only touches the Teflon at its edges. Air is thus the primary dielectric.

The speaker cable has no connectors, as the foil itself is terminated in the shape of a spade. This makes handling a little tricky as the thin foil can be easily bent, making it difficult to attach to some terminals. The cables are very light, almost feather light – they weigh almost nothing. They have relatively low inductance, resistance and capacitance. Each conductor is separately encapsulated, that is you have a plus and a minus cable, which contributes to an especially low capacitance. According to Jeffrey, his cables may have less capacitance than any other cable on the market.

The interconnect and digital cables are designed according to the same basic principles with the difference being that the foil is narrower but the thickness is the same. In this case, the foil corresponds to a 24-gauge wire. The shield consists of a knitted silver mesh of low density, which does not add further capacitance. The shield, which may provide a noise reduction of approx. 120 dB, is floating at one end. My test cables were all balanced and terminated with silver plated XLR plugs from Neutrik. The unbalanced cables have silver plated RCA plugs from Cardas.

New Dimensions

As I mentioned before, securing the cables on certain speaker terminals can be problematic, particularly when using WBT's plastic covered CE-certified terminals, but the Silversmith cable's performance makes one willing to ignore this triviality. I knew from my conversations with Lars Fredell that the cables would be good, but despite that, I was not quite prepared for how good they really were. The Silversmith cables needed only a very short burn in time. A few hours with a system enhancer (by Purist Audio) suffices.

The cables deliver an almost incredible clarity, purity and airy precision. I have never heard anything like it. The only cables, which are sufficiently good to compare, are my reference cables, Purist Audio's Proteus. These cables, which are made by Jim Aud, are enormously musical and detailed at the same time and all the other important parameters are of the highest caliber.

The Silversmith cables, however, are superior in several respects. The foil cables have a self-evident harmonic purity and musical timing far exceeding the norm. Their timing would impress even Linn. Everything stops and starts in a way which feels absolutely natural. The sound is the clearest, purest and airiest imaginable. Detailed? Yes, you can hear details you have never heard previously, and the instrument location on the sound stage is exact. The sound simply expands and flows with natural timbre.

The cable controls the sound all the way up in the treble range. There is never any sharpness or haze. The reproduction is transparently relaxed as far up as one can hear. In the mid range, voice handling is superb. Once again, the sound is crystal clear, relaxed and smooth. In the base area, I initially thought that the Silversmith cable was somewhat leaner in the upper base than both my reference cables and other high-end cables I had access to. Gradually I realized that the Silversmith had the same flat level all the way down and that they actually went down a little further than the other cables. Thus, the cable is as pure in the bottom area as in the other parts of the active frequency range.

The Silversmith transparency is the best I have heard to date and they perform holographic miracles. For example, when playing Arne Domnerius in Antiphone Blues, the sound is so spacey, large scale and musical that it is astounding.

The best cable? Who knows, one can only speak of those one has heard. There are of course many cables I have not heard. My reference cables, Purist Audio's Proteus are old and a new upgraded version is now on the market. I have not heard these as yet.

Conclusion

Clarity, purity and musical timing coupled with super-transparency make Silversmith Audio's cables the best I have as yet auditioned.

Name and designation: Silversmith Audio Speaker cables, interconnects, digital links (XLR)

Construction: Silversmith Audio San Diego

Distribution: High End Formedlingen, tel 08-7764464

Price: Speaker cables 30.000(2950 USD)/2.5 m, Interconnects 16.000(1450 USD)/pair/3 feet, Digital link 8.000(725 USD)/3 feet