

soundstring cable technologies

Generation II Cable Systems

as reviewed by Will Wright



It used to be so simple. You'd go to the hardware store and have them measure out a length of zip cord, preferably the heaviest gauge, and take it home for speaker cable. To be clever, you could double up on the runs to increase the effective gauge. That was it. Equipment power cords were

permanently attached; interconnects were usually the ones that came with the gear, although you could find some slightly more substantial cables if you tried, or make your own with electronics store parts.

Man, how times have changed! New cable companies and product lines seem to spring up constantly. Ever more exotic designs and prices abound. Early in the evolution of this product category, cable parameters provoked much discussion and controversy. Inductance, resistance, and capacitance were widely discussed, as were choices of dielectric, shielding techniques and cable geometry. Some companies researched areas such as characteristic impedance and skin effect, which are still very controversial, as some will argue that these effects do not apply to cables designed for use in audio applications. Speaking of controversy, even magazines that routinely use equipment measurements as part of the review process don't do cable measurements. This might be because no one seems to agree on either what to measure or what significance to place on those measurements as they relate to sound quality.

In a normal business model, the retail price for a product is determined by cost of R & D and manufacturing, including overhead and company profit margin, etc. Add to that wholesale price the percentage of markup to retail, and there you go. Not so in the cable industry. Try to imagine what could possibly make a one meter pair of interconnects retail for \$16,000, or speaker cables for \$30,000. Yet there seems to be a market for even the stratospherically priced cables. Along with the high prices, there seem to be ever more outlandish designs with equally outlandish performance promises.

I've been studying this phenomenon for some time and think I have discovered a near ideal cable dielectric that stands to revolutionize the cable industry as we know it: BACON! Yes, you read that correctly. Everybody loves bacon. Imagine it, a crisp yet meaty presentation with slabs of bass and savory strips of sizzling treble plus a fully fleshed out soundstage. For the purposes of system synergy, the sound can be tailored to the fat or the lean side of neutral. What audiophile could resist? I'll make a fortune. I just need some financial backing to create prototypes and I'll be on my way. Once I've established the superiority of my bacon cables in the world market, I'll introduce phase two, Active Bacon. Even electrons love bacon.

On the other hand, wouldn't it be nice if things were simple again? Do we really need power cords that have 'power cords', interconnects that have networks or cells and speaker cables that require batteries? Each level of complication comes with additional baggage that increases the likelihood of added noise, routing issues, support, etc. Some of these products border on cult or fetish. Perhaps for some it is all part of the ritual. Isn't it supposed to be about the music?

Swine Not?

While you are chewing the possibilities, I'd like to tell you about a new cable line that is already available. Back in 2008, I wrote favorably about Soundstring's initial offerings. I felt that those cables were good sounding, well-engineered, and reasonably priced; I still use them. About a year ago, I was contacted by Len Miller, one of the principals at Soundstring, about a new product line, referred to as Gen II. This time around they've expanded the line to include HDMI cables, digital interconnects and double run speaker cables, plus a lighter weight power cord, referred to as Digimax that is designed for low current sources such as CD players. Externally, the most notable difference between Gen I and Gen II is the color and type of jacketing. They are still using the same XLR connectors, spade lugs, and those handsome RCA connectors with the wooden bodies. The Gen II power cords, however, are using Furutech plugs and IEC connectors. These are very attractive, well-made connectors. The "Gen I" power connections were of quality, molded rubber, and provided excellent tight fitting connectivity, so I'll assume that Soundstring believes these new connectors provide superior performance. In terms of sound quality, the connectors used in high quality cabling can be as significant as the cable itself, in my opinion. Samples of each of these products were provided for evaluation. This new line was expected to be available in July of 2010, and I was working toward

publishing the review to coincide with that date. As it turned out, circumstances contrived to change the schedule. I'd like to begin by touching on the company itself by including an excerpt from one of my email exchanges with Len Miller, President & C.E.O. of Soundstring Cable Technologies, LLC.

"Soundstring is owned by me, my first cousin Andy Miller, and Michael Holton. I have personally been involved in the manufacture of insulated wire and cable products since 1964 when I joined my father in the business a year after I graduated from college. Andy has been in the business since the early 1970s when he joined my father's two brothers who owned and ran a similar business that concentrated on the manufacture of all types of power wires, power supply cords and many inter-related products. Both companies were started in the mid-1940s and are among the oldest continuously run and privately owned wire and cable manufacturing companies in the country, serving wholesale electrical and electronic distributors and jobbers, the military, the automotive and medical industries and hundreds of original equipment manufacturers (OEM's) that use our wires, cables and power cords as an integral part of their manufactured products. Andy and I took over the day to day running of each company upon the retirement of the three Miller brothers in the early 1980's. Michael Holton joined Andy about 20 years ago and has become an integral part of his business as well as being our partner in Soundstring. In 2005, we decided to combine and consolidate our businesses under one roof to save on all the overhead and operational costs, and to consolidate the running of Soundstring. My factory was located in the Lower Hudson Valley of New York, about an hour from Andy's factory in CT. We streamlined, consolidated and combined operations under one roof in a 35,000 square foot building at our present location in S. Norwalk, CT. We run the original businesses plus Soundstring from there. I concentrate mostly on Soundstring and oversee much of the manufacturing for the combined operations of all three companies. Michael has daily responsibility for sales, purchasing and scheduling. Andy is also involved in sales and purchasing, plus he handles all of the financial aspects of all three operations. We all attend and work together at trade shows, development of new products, pricing, web site content, etc. Outside the business our families are close and we get together fairly often."

"My experience in the manufacture of all types of insulated wires and cables taught me a lot about metals, insulating plastics, voltage, signal flow, inductance, capacitance, loss characteristics, impedance, ohm-age, velocity of propagation, etc. That is why I am mainly responsible for new product development at Soundstring. Knowledge is "king" and it enables me to be creative in designing and constructing new products that can potentially enhance overall sound quality and component performance for all types of sound systems. One of the things I learned from over 45 years of experience is to keep designs and constructions relatively simple. Exotic materials and designs are way too expensive to produce and don't equate performance with value. As manufacturer's, we need to sell "quantity" as well as quality, performance and affordable pricing. When we set up to manufacture a Soundstring product, we have to run from 25,000 feet to perhaps 100,000 feet at a time to keep production and overhead costs as low as possible. Other products we manufacture have production runs in the hundreds of thousands of feet monthly. That allows us to establish selling prices that are realistic and affordable to almost everyone. If we can combine 'affordable' prices with very high quality and performance, we are positioning ourselves to appeal to a wide spectrum of the buying public. Our competitors are not manufacturers. They buy their cables from companies like us that actually produce the wires they sell. They must also have those products cut, stripped, terminated and packaged. If they are not doing most or all of that 'in house,' that adds significantly to their costs and results in higher selling prices. If they are 'hand making' their cables in house, that is also much more time consuming and costly."

Pork be Inspired

Clearly, all this can work to the consumer's advantage by providing high quality at competitive prices. As with many product categories, the cable industry cannot rest on its laurels and remain viable. Companies must constantly look for new ways to enhance the perceived value of their products. One such avenue is to move up market. Though this new line is definitely upscale compared to their

previous line, my impression is that these products still represent a high return on investment when compared to other offerings.



Like many other audiophiles, I cannot resist tinkering with my system. Though initially straightforward, over time my system has evolved in complexity in pursuit of my personal goals, which include dynamics and power handling. I am lucky enough to have a large room, dedicated for listening, and I have strived for realistic portrayal of bass and percussion as well as sound staging. To that end, I am presently tri-amping my system. I have two dedicated circuits behind each speaker position to handle multiple channels of amplification and separate electronic crossovers for each stereo channel. As a result, I have a lot of power cords, interconnects, and speaker cables. The Gen II samples I received were not enough to wire my entire system, so I had to make some choices. Initially, I used the Gen IIs to cable speakers, amplifiers, and crossovers and left the source components and preamp as before. In this first scenario, each cable I replaced was an original Soundstring Gen I, so the differences I heard speak directly to the differences between the two lines.

The Meat of the Matter

I began spinning some familiar discs, starting with John Hammond's *Wicked Grin* CD on the Pointblank label. All songs are produced and written by Tom Waits. Right from the starting cut it was obvious that a lot was going on. There was a very full dimensional soundstage expanding into the room with excellent articulation. Vocals were well focused and showed no chestiness. Instruments seem to occupy their own space on the stage with bloom, but no bloat. The sound was captivatingly clean and fatigue free. I had intended to listen to a few tracks and move on, but had to force myself not to listen all the way through the album. Bass articulation and pitch definition were noticeably improved. Both macro and micro dynamics also seemed much better, exhibiting lots of inner detail. Treble had a bit more bite and extension with welcome improvements in detail and dimension.

Next I played Dire Straits first disc on Warner Brothers, originally released in 1978. Although I could find nothing in the liner notes to confirm this, the CD certainly must be an AAD disc, probably an early digital era transfer. Recording levels were somewhat lower than typical, which may be a good thing, all else considered. Though this recording isn't as open and clean as more recent digital releases, I was still favorably impressed with the overall presentation. I experimented with different volume levels and discovered that even at higher levels things didn't harden or compress. Tones were warm and round and grooved along pleasantly. On the cut "Water of Love", the wood block percussion, though lower in the mix, could still be heard clearly. Pace, rhythm and timing were all coming through.



You'll notice as you read through the listening section that I mix in both old and new recordings. This is intentional as I feel that the way a product deals with lesser recordings is sometimes more telling than how it deals with stellar ones.

Next, I turned to the SACD of Elton John's *Tumbleweed Connection*, a 2004 remaster from Island Records of the 1980 recording. The much improved clarity of this DSD transfer energized my listening room. Thunderous bass, tight punchy kick drum, crisp clean snare and cymbal sound came through effectively, especially in contrast to the previous CD. The vocals sounded a little shouty on some cuts, but based on other listening tests, it seemed to be inherent in the recording, rather than anything the cables were doing. In fact, at this point in the evaluation, I couldn't really find anything about the new cables that wasn't as good as or better than the original Soundstring line.

Epiphany Pork Pie

I began thinking of what I wanted to try next. All my source gear and preamp are connected through a John Curl/Jack Bybee Signature power conditioner. This conditioner has two separate circuits, each requiring a power cord. The two cords are connected to a dedicated circuit through an Oyaide duplex outlet. Bybee's "Quantum Purifier" technology is based on rare earth salts that he learned about when working on submarine sonar, which requires very low noise power delivery. The two power cords I had been using to connect the Curl/Bybee conditioner were original Shunyata Power Snakes, which also use rare earth salts, nicknamed fairy dust, in their construction. I had been using this configuration for several years.

I remember hearing a local audio dealer opine that, when connecting power to your system, it is beneficial to put your best power cord from the wall to the power conditioner for your source components. Although I'd always been happy with the Shunyata cables in this position, I thought it might be revealing to try the new Gen II cords here instead. I made the switch, powered the system back up and gave it a little time to warm back up before listening again.

This time I started out with the opening cut, "Poinciana", from Ahmad Jamal's album *Digital Works* on the Atlantic label. Piano, they say, is very revealing of a system's resolving power. I was in no way prepared for what I heard. Over many years of reading audio magazines, I've come across numerous occasions where a reviewer was touting night and day differences from some change in gear. In every case, it always seemed like an exaggeration to emphasize what was actually a very subtle effect. I have found cable differences to be nuanced at best, regardless of the price. Because of this, I have always attempted to be careful not to overstate equipment performance in reviews. This time, I was literally shocked at what I was hearing from my system. It was as if someone had grabbed the focus ring and perfectly dialed in the sound. Every aspect of the presentation just locked in place. Plainly speaking, I have never heard any cable in any application make such a profound difference.

What's more, on this disc and many others, it didn't seem to matter what volume I set. Even at what should have been drive-you-out-of-the-room levels, the sound stayed clean and articulate with no noticeable compression or blare. You wouldn't realize that the volume was up until you tried to talk to someone, and realized that you had to shout to be heard. As to the Jamal cut, there was sinuous bass snaking all around the room, the piano locking into a groove while the percussion just percolated. It was impossible to sit still, even with my jaw on the ground. This was, no contest, the best sound I'd ever achieved. I began to try to explain it away, thinking that perhaps the original conditioner/power cord configuration had just not achieved synergy. Regardless, no way was I touching this part of the setup.

The Recipe

According to Soundstring's Len Miller, the goal for the new product line was to create greater surface area for signal carrying wires and greater overall conductor density to promote better voltage flow for current carrying cables, as well as maintain the highest levels of quality, flexibility and performance combined with affordable pricing.

All Gen II cables are constructed using 6 nines Oxygen Free High Conductivity (OFHC) very finely stranded bare copper. Depending upon the product, this stranding varies between 40 and 44 gauge. Each 12 gauge conductor in the Gen II speaker cables is comprised of 672 individual strands compared to 65 strands in more conventional designs. More strands per conductor increases the circular mil area of the finished conductor.

The increase in surface area this provides allows signals and frequencies to travel faster and more accurately over the conductor surface, creating a more open, accurate and transparent sound, as well as better impedance, lower capacitance and improved velocity of propagation. The increased strand count was discovered to have a power filtering effect and appears to have energy saving side effects. I'm guessing that last may be due to improved power factor.

In addition, the PVC compounds were reformulated for the Gen II series, making them meet UL, CSA and internal flame retardant standards. All the above and proprietary construction techniques combine to make the Gen II line outstanding.

You Want Meat? You Got It!

Although I was completing my evaluation, I had not heard from Soundstring about a product release date, and upon contacting them, was told that there had been some significant delays. In the interim, Len Miller had continued to experiment with his latest designs. The result was two variants on the original Gen II line. First, Mr. Miller discovered that a fire retardant material added beneath the outer jacket had some interesting filtering effects that changed the sound. For this article, let's refer to that variant as Gen II FR. Second, Mr. Miller had created an advanced version of the Gen II power cord, which he referred to as Gen II Special Edition and for convenience; I'll call Gen II SE. He asked if I would be interested in evaluation samples of these cables. Since there had been a delay anyway, it seemed I would have the opportunity to include my experience with these variants with the original Gen II review.

Visually, the Gen II FR samples I was given were essentially indistinguishable from the original Gen II cables, although this might change in any released versions. I was given interconnect, speaker cable and power cord FR samples... so I replaced the original Gen II cables in my system with the FR variants. Initially, I stayed with familiar material, expecting this to help me calibrate my ear to any differences. Selections included Diana Krall's SACD *The Girl in the Other Room* on Verve, the 2002 SACD re-release of John Coltrane's 1964 *A Love Supreme* on Impulse and the Ray Brown Trio's 1990 *Live at the LOA* (Summer Wind) CD on Concord.

Having had such a favorable impression of the Gen II cables, my early listening to the FR variants took me a bit by surprise. The sound seemed smoothed over, lacking the dynamics and punch to which I was now accustomed. The balance of the sound was still okay, but it was just too laid back for my taste. I hadn't noticed any significant break-in with the basic Gen II cables when first put in my system, but the FR sound definitely changed over time. What started out as just too polite soon began to open up and regain some of the best features of the original Gen II samples. Just to be sure I was hearing the full potential of the Gen II FR variant, I borrowed a friend's audiodharma Cable Cooker II and ran in all the cables, including the first samples of Gen II, plus the FR and SE variants.

At this point, I was convinced that the sound of the FR cables had stabilized and that I was getting a good measure of their worth. The one basic impression that stayed with me throughout these listening sessions was a sense of smoothness compared to my memory of the sound of the basic Gen II. I wasn't exactly sure this was completely to my liking, but upon switching back to basic Gen II cables, I was again surprised. I was expecting a helping of porridge that was just right, but now these cables sound a wee bit brasher than their FR cousins. To my surprise, I ended up leaving the FR cables in my system, with the exception of interconnects from my active crossover to the ribbon section of my

panel speakers. These 60 inch ribbons are known to roll off a bit at the very top end and I came to prefer the balance I was achieving with this one change. Otherwise, I ended leaving the FRs alone.

I'm Special, So Special

Next up, the Special Edition power cords. By this time, I had already used the cable cooker on the SE cords and didn't have to worry about the sound changing as they broke in. I had four samples and used two of these on my Krell amps and the other two from the wall to the Curl/Bybee power purifier. The SE cables possessed all the attributes already discussed for the basic Gen II cables, including good dynamics, articulation, clarity, sound staging and imaging, but they had something more. They gave the sound more weight and foundation without sounding heavy or thick. It was as if a more powerful amp was in use or power delivery had increased in some way. I could not see this added weight in any way but positive, and can't imagine it detracting anything from an otherwise good sounding system.

The SE power cord/Krell pairing was a good match, letting the amps do what they do best, without sounding hard edged as they can in a less than ideal setup. The Krells want to deliver their full power potential and are happiest when they have the current delivery they crave. The SE cords were up to the task.

I noticed less of a difference between the basic Gen II power cord and the Gen II SE cord used in the Curl/Bybee power purifier application, probably because I only have a few source components drawing from this resource and not demanding large amounts of current delivery. Even so, I preferred these cords slightly over the basic Gen II in this application.

The Pork You Save May be Your Own

Can more performance be squeezed out of cable technology? Extremely costly materials and construction techniques probably offer a few percent higher performance, but at a very diminishing return on investment. Certainly, there are those involved in this hobby who can and will avail themselves of the very best, most expensive designs no matter what, but that difference is too small to justify the higher costs to anyone but those few who simply must have the most expensive cables. For the rest of us, it is fortunate that superb alternatives do exist. The Soundstring Gen II series is clearly one of these outstanding alternatives.

As always, listen before you buy. For me, it is difficult not to give a rave review when the results in my own system have netted the best sound I have yet achieved. I am very glad to have had the opportunity to audition this product line and unhesitatingly recommend it. The new Soundstring Gen II series has achieved so much—no artificial flavors, no added fillers and no bacon. **Will Wright**

High Out-put "Gamma-12" Special Edition "SE" Power Supply Cord 6' with Furutech 120V-15 Amp plugs - \$960.00/each

High Out-put "Delta-12" Power Supply Cord 6' with Furutech 120V-15 Amp plugs - \$670.00/each

Low Out-put "DigiMax-18" Digital Power Supply Cord 6' with Furutech 120V-15 Amp plugs - \$630.00/each

"Beta-22/NS" Unshielded and Single Ended 6' Interconnect Cables With Our Patented "Low Mass" RCA's - \$450.00/pair

"Beta-22/S" Shielded and Single Ended 6' Interconnect Cables With Our Patented "Low Mass" RCA's - \$480.00/pair

"Beta-22/S" Shielded and Balanced 6' Interconnect Cables With Neutrik XLR's (24 Kt. Gold Plated Contacts) - \$400.00/pair

"Gamma-2/12" 6' Speaker Cables with Gold Plated HD Spade Terminals, Banana Plugs or a combination - \$580.00/pair

"Gamma-4/12" 6' Bi-Wire Speaker Cables with Gold Plated HD Spade Terminals, Banana Plugs or a combination - \$800.00/pair

Soundstring Cable Technologies LLC

149 Woodward Ave.

South Norwalk, Ct 06854-4798 USA

TEL: 203-853-9300 Fax 203-853-9304

email address: sales@soundstringcable.com

web address: www.soundstringcable.com