

the ToneQuest

The Player's Guide to Ultimate Tone Report™

Tony Farinella, Evidence Audio...

THE TRUTH ABOUT AUDIO CABLES



Along with guitar pickups, no other topic of discussion is potentially more confusing or steeped in fog and hype than the subject of audio cables. We asked Evidence Audio founder Tony Farinella to lift the veil from this grossly misunderstood topic, and he succeeded brilliantly. You'll also notice that he scrupulously avoided any temptation to shamelessly hump his own work, which is precisely why we asked him to clear the air

on this important topic. We have used Evidence guitar and speaker cables for years, and while we certainly could blather on about them in a 'review', it seemed far more useful and informative to cut to the chase with an authoritative, unbiased and articulate overview. Pay attention, and Enjoy...

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TQR: In terms of construction and technical ‘advancements,’ can you summarize and describe the evolution of the construction of guitar and speaker cables? I can remember when Whirlwind was the ‘premium’ cable in the late ‘70s, then Monster appeared, and now a lot of companies sell Mogami with Neutrik connectors, etc.

I suppose there has always been a ‘premium’ cable out there, it’s just that ‘premium’ has meant different things. Whirlwind was and is a premium product born to address the reliability issues of cheap, molded cables. They took well-built cable from Belden, well-built plugs from Switchcraft, and more than thirteen seconds to assemble the two, resulting in a marriage you could count on. Back in the day, “well-built” was the premium, and Whirlwind deservedly owned that market and still does by a good stretch. They tweaked their premium with R&D on their own cables and plugs, centered around reliability, noise rejection, and even sound in as much as keeping the brick wall effects of capacitance filtering outside the audio spectrum. In many ways The Leader™ simply embodied the refined ingredients of the Belden/Switchcraft



recipe. If someone tells me his top priority is reliability, I tell him to get a Whirlwind.

Yes, then Monster Cable appeared. They appear everywhere, eventually. Rechargeable batteries... Xbox 360 cables... Wireless headphones... AC cables for your washer and dryer (I’m serious). Of course everything they do is premium. Premium™ even. Early on they took a position that their cables are tailored for sound, if not quality. Well, perhaps quality, actually... If you wanted the “qualities” of a cable for Rock music, or Jazz, Monster Cable offered the solution for that problem. They are the experts at inventing problems and then ordering the factory to produce the solution. Mogami and Canare with Neutrik connectors? Great combination. Sort of Whirlwind’s initial approach – take something reliable, well-built, reasonably forgiving on the basis of sound and package it for the people. That is certainly a premium product and welcome alternative to cables that fail frequently, or have such inferior construction that you lose inspiration to play sooner because something doesn’t quite feel or sound right. These well-built cables are a sort of “import” version of Whirlwind, and a great option to get the job done.

It wasn’t until quite recently that “premium” came to mean a holistic approach to fostering a quality “sound and feel” experience from the use of a uniquely designed cable. A few were dabbling with this notion of *premium in parallel* in the



mid-’90s, and a couple of products came about that allowed the definition of ‘premium’ to include remarkable (if subtle) improvements to sound quality. It’s a tricky thing to isolate and evaluate with a trustworthy methodology the audible variables that go into a 10-foot cable. It’s a lot easier to just compare guitars and amps. I was fortunate to end up in a sandbox where

I had access to everything needed to study the components of cable and wire as they relate to sound. Hopefully, the results have contributed to changing the definition of ‘premium’ to include an absolute focus on the “ear/brain” response to what connects our gear together.

Still, one man’s ‘premium’ is another man’s regular unleaded. One player might need ‘premium’ convenience, another ‘premium’ flexibility, another ‘premium’ sound, another ‘premium’ colors. The nice thing is, once you decide what’s important to you, you can find something today you may not have found 20 years ago.

TQR: Can you explain the negative characteristics of traditional speaker and guitar cables in terms of construction, and sound?

First let me go on record that what I consider a “negative” quality in a cable may actually be what someone pays \$300 to get out of a new effects pedal. Now, I can step back and cheerfully pay \$300 for that effect pedal, but if my cable does anything like that pedal or any other, then I have failed. Things I specifically categorize as wrong, inferior, and such stem from a fundamental philosophy that a cable is supposed to function as a bypass device. I realize that making music is choosing from a wide palette of sounds and there are no rules to what’s right about the final output, however, some things in the signal path need to be counted on as absolutely neutral in the process. A boring analogy is the cable infrastructure used to deliver content to a television in your home. The cameras are on the set calibrated to the NTSC (or PAL) standard, and you’re at home on your NTSC set counting on an experience akin to sitting behind the camera lens on location. The cable company (cable included) needs to get that signal to your home without constraints on bandwidth, reflections, smearing or other artifacts. It doesn’t matter if you are watching a Black & White re-run of the Honeymooners, or the HDTV season finale of Desperate Housewives – the job of the infrastructure is to get out of the way and put you behind that camera lens! With a guitar cable, the player is what the camera lens is pointed at, and the TV screen represents the speaker cone in the combo amp. If people want to twist the brightness, color and tint knobs and distort reality, that’s fine

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– that’s what pedals and effects are for – but when you set them to the middle position (default/bypass/NTSC standard), you don’t want Eva Longoria to look like an alien, unless you’re into that sort of thing.

In purest form, when a guitarist plugs in direct into an amplifier to play clean, the cable needs to be out of the way such that when the fingers tickle the strings, the speaker cone tickles the air in the room the very same way. Anything that constrains that feel, by compressing dynamics, slowing transient response or coloring the tone is failing miserably. Cables *do* this. I also think a cable fails miserably when it changes what someone paid to get from their \$300 distortion pedal. Or \$50 fuzz box. Whatever colors and brushes you use, the palette itself must not put tint, or dust in the oils.

I acknowledge that people can make beautiful music with any collection of cables and toys plugged in together, but I have made it my mission to *get out of the way*, especially when my cables are used in a studio where “bypass” isn’t a creative choice but a mandate when mixing and mastering. It’s my job to identify what goes wrong in wire and try to stop it as much as practical. That sort of leads me to the specific answer to your question. What *is* it that goes wrong? It’s not always obvious, but when you break it down and dwell in minutiae, you can hear how a stranded conductor inflates the bottom end and slows it down when compared to a conductor without strands, all things being equal. Again all things being equal, when you compare various metals, alloys, and purities thereof, there are some that have a bit of a signature. It can range from an artificial etching on the higher frequencies to a “push” in the midrange that’s absent with other materials. Cables which use the shield to carry signal are fairly handicapped in terms of dimensionality, regardless of whatever else they get right. What you want to hear is more music and not confuse more *distortion* with music. “Louder” can be the absence of compression, which is a good thing. “Louder” can be the addition of distortion to the high frequencies, which is a bad thing. Some cables do one or the other, or both at the same time. The trick is isolating qualities that can be considered positive and figuring out what variables facilitate those



qualities. You can’t build the *perfect* cable, but where you make compromises, you need to err on the side of getting out of the way and keeping the feel alive. The less “sound” a cable has, the better.

TQR: Adding to the confusion about cables is the fact that there seem to be varying levels of ‘high end’ products (such as Mogami, George L’s, CBI, Hosa,

etc). Can the current range of cables being marketed as ‘premium’ be broken down into different types by construction?

I think so. Most companies like to consider themselves premium and put a stake in the ground defining what is premium about their offering. No one likes to position themselves as the “Sub-par Solution... The Home of the Most Low Tone!” How do different companies address construction? I realize this may be a bit facetious, but I think about guys sitting around a table in a meeting to decide what will drive their construction process. Is it years of controlled listening tests on variables and their audible signature imparted to the inner ear, and how these variables address the feel of music in the room as strings are plucked? Or is the dialog more like: “*We need an insulation material so the positive conductor doesn’t touch the shield. What are our options? PVC, PE, PP, PTFE, Silicone? Something else? Our competitors cost more than we do, so what’s the cheapest thing that does the job? PVC? Great! Let’s do that!*” Have these companies listened to the difference between PVC and PP? Do they understand the relationships between propagation velocity and audible smearing? (PVC actually does some friendly things. I’m not knocking it for the money.)

“*People want reliable cables. Our competitor’s cables have a flex life of 5.2 years. How do we beat that? Going to a larger bundle of smaller strands gets us 6.8 years? Great! Let’s do that!*” Have these companies listened to strand counts and understand the inverse relationship between strand count and sound quality? Between strand size and sound quality?



“*People want cables they can make without a soldering iron, and labor is horribly expensive. How do we*

solve that problem? Build a cable and plug that screws together in seconds? Great! Let’s do that!” Do these companies recognize the difficulty with creating a gas-tight connection, and consider that some parts of the world experience four distinct seasons throughout the year? In South Korea it is rainy in the Summer and dewy in the Winter. Cables put together one Spring may not sound the same the next. Now don’t get me wrong; this is a brilliant way to conduct business and likely the safest way to prosper. After all, companies are LISTENING TO THE CUSTOMER. It’s the number one rule in business. Listen to your customers and build products accordingly. The funny (or scary) thing is, I ignore customers when I design cables. I listen to the music instead. The result? I’m not all things to all people. Some customers will tell me

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“Hey, your cables are stiff!” To which I reply, “Yes, I know, that’s why they sound good.” Some customers will say, “Hey, your products have a flex life of 4.6 years!” To which I reply, “Would you rather sound good for 4.6 years and I’ll replace your cable if it breaks, or sound bad for 5.2 years instead?”

So while other companies have been listening to customers and building cables that sound worse (but are premium in other ways), I listen to music and build cables that sound better. If I didn’t take this approach, I’d end up building a ‘me-too’ product with no reason to exist. I’d also lose out on the sort of feedback I enjoy and appreciate so much from people who love what they hear. If it wasn’t for the positive feedback, I might as well go into the urinal cake business and argue how urine dissolves my product slower than my competitors. Just not that interesting for me, personally.

TQR: How and where do Evidence Audio Cables fit in this scenario, specifically?



Well, I spoke to the methodology of how my

cables are built. It’s really the process of being music-driven instead of customer-driven, and the fact that (coincidentally) the customers are making music that has created the foundation for my success. It’s a bit of serendipity really; for which I’m very thankful. Try that in another situation and you might not get away with it. The features and construction of my products are actually darn-near irrelevant. The experience they deliver is the interesting and meaningful bit, which are a result of their sound qualities. Hmm... where do I fit in the scenario in terms of sound quality? I hate to say I sound “better.” It’s more a case of getting out of the way and having a player’s brain notice a connection between the dance on the strings and the dance of the air in the room coming off the driver. There are fail-safe superlatives such as “better bass, sweeter mids, open highs” and all that crap (which I’ve used myself) but it’s really an *absence* of a sonic signature that allows everything else in the signal chain to bloom and be heard, as opposed to the cable doing anything right. The reality is just that it’s doing fewer things wrong.

TQR: You have the experience of working directly with artists and technical staff in providing them with cables and receiving feedback as they have converted to Evidence – most notably David Gilmour. Describe the range of cables they are using now and the feedback you have received as they transitioned to Evidence...



For David Gilmour, all the studio and fixed stage cables are Lyric HG. It’s the best cable I make and those (fixed-

stage) applications require no other consideration. For one-off gigs such as Live 8, a Lyric HG cable comes out of the guitar, but where there are many guitar changes or a lot of moving about (The *On an Island* tour, for instance), the Melody comes out of David’s guitar as the only “non-Lyric HG” cable. It’s doesn’t sound as good but is more flexible. All speaker-level cables are the Siren speaker cable, and Phil Taylor has rewired all of David’s cabinets and combo amplifiers with it.

The feedback during the transition has been positive and parallels the feedback I am grateful to receive from everyone. As Phil puts it, “There is less in these cables to detract from the natural pickup instrument sound than any other cable – they let more through in simple terms.”

TQR: Have we reached the end of the road in terms of ultimately improving the performance of audio cable?

Not by my standards. There are still things to be done. Things I know how to do, and things I don’t yet know how. But I’m over here working on it for sure. **To**

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