

Evidence Audio

Specializing in high performance instrument, microphone, and speaker cables for both live and studio applications, Evidence Audio was founded by Tony Farinella in 1997. As one of the most critical components placed in the path of an audio signal, cables can degrade tone by adding unwanted coloration, obscuring definition, and compressing dynamics. Even the best cables influence the sound to a certain extent, and since no cable can actually improve tone, the primary goal of Evidence Audio has always been to produce transparent cables that don't impart their own sonic signature on the sound being generated. Rather than creating products based on marketing hype, Evidence Audio has conducted years of research in cable theory and design to formulate an award-winning series of cables. Unlike most instrument cables that are constructed with stranded wire, at the foundation of Evidence Audio's cables are solid core conductors which preserve clarity, nuances, and articulation. Evidence Audio cables are engineered to faithfully transmit the characteristics of all instruments as signal is passed from its source to its output destination, but they are especially suited for handling the speed, power, and resolution required of bass amplification. Featuring an international list of endorsing artists that includes bassists such as Alain Caron and Stuart Hamm, Evidence Audio cables are becoming the choice of bass players around the world.

In this interview, Tony Farinella discusses his product line of instrument, microphone, speaker, patch, and power cables along with the different ways cables can negatively impact tone and much more.

What led you to creating your own cable company?

I've always geeked out over electronics related to music, both for making it and playing it back. As a kid, I would grab old radios and amps at yard sales to take apart and play with as well as build Heathkits and the like. This interest ran in parallel with a love for music along with lessons on the guitar and piano. Entering the adult world, I was more capable with gear than playing music and started working with a specialty cable manufacturer in a different industry. While there, I spent years in an R&D sandbox and discovered all the different ways various designs/materials/processes have an affect on what we hear in cable. I essentially took what I learned there and re-appropriated that skill set to the musical instrument and studio market with suitable changes as required for the new applications.

How did you feel you could improve upon the dozens of existing cable designs?

First, there are some mass-produced cables which are quite good, and there are some small built-by-hand cables which are quite horrible. It's a real mix. There are cable and connector companies inventing problems and selling "solutions" to those problems when their "solutions" actually make the sound worse. Then, there are companies sticking to the basic, age-old designs but are using high-quality materials and outstanding quality control. They build pretty good cable mile after mile every day.

What I assumed was that there might be a group of people who wanted something better than just pretty good. When I compared what I could build relative to what was commonly available, the only way to find out for sure was to build a lot of it and start to share it with the world. Fortunately, people have responded favorably.

What sort of difference in tone should someone expect to hear when comparing an Evidence Audio instrument cable to the cables produced by other manufacturers?

Describing tone begs for language related to apparent frequency equalization which I don't dismiss but don't put above things often more obvious such as dynamics, feel, and dimensionality. My cables are built around solid core conductors to eliminate the audible effects of strand interaction. All other things being equal, if you compare a stranded conductor with a solid conductor, you'll notice the solid core conductor has the speed, decay, and harmonic integrity more in step with the vibrations of the strings over the pickups. By comparison, a stranded conductor has a slower and thicker sound with blurred harmonics. I try to build cables that get out of the way and don't impart any sonic signature of their own. I want the vibrations of the string to match the vibration of the cone in the cabinet. If a player wants to change the waveform through the use of effects or various amplifiers that suit his or her taste, I fully appreciate that. I just want musicians to hear what they paid for and adjust the sound with settings instead of using a cable as a tone control. Tonally, I do strive for neutrality or a balanced sound where no frequencies call attention to themselves. After the initial break-in period, there is not a night and day difference in tone, but I find the midrange less pushed. It opens up and breaths better for lack of any better description.

Could you explain the general distinction between the Lyric HG and Melody instrument cables?

The Lyric HG is the best cable I can build for a given budget. It may not make sense for everyone to allocate that budget amount for a cable so the Melody is my effort to make something at a lower price point. In order to do that, I have to cut some corners. When cutting corners, I'm forced to build a cable that is not as good, but I always strive to make compromises in ways that are friendly, serve the music, and offer the best performance possible at that price point. The specific difference is that instead of using one ideal IGL solid core copper conductor for the positive connection and one for negative as is done in the Lyric HG, I remove one and use a smartly designed shield for the negative path in the Melody. Shields do not make ideal conductors. In the Lyric HG, I float it at one end so it does not carry the signal. In the Melody, it is attached at both ends. What you hear is the minimized strand interaction of the shield on the signal so that the Melody has a bit of a warming bump in the lower mids. It is ultimately not as transparent or invisible as the Lyric HG as a result, but it still gets so much else right that it is a meaningful upgrade over what is commonly available.

In addition to the Lyric HG and Melody instrument cables, can you tell us about the Monorail, Siren II, and Source cables that are also available from Evidence Audio?

The Monorail is essentially the working bits of the Melody with a smaller jacket. This makes it much smaller, and I recommend it for applications where space is at a premium such as for wiring pedal boards or a rack system. The Siren II is my only speaker cable for connecting amplifiers to cabinets. It builds on the solid core design thoughtfully by using individually insulated conductors that won't interact with each other. A single large conductor has a negative sonic signature of its own so I increase the amount of copper in the cross-sectional area by using six "ideally-sized" conductors in a helical array to handle higher current levels. The helical array is basically a way to get the electrical properties of a twisted pair which are ideal and at the same time increase the space between the conductors to reduce magnetic interaction. The Source is an AC power cable I introduced in 2003.

How does a power cable impact tone even when there is no signal passing through it?

A power cable impacts tone in the same way changing power supplies in an amplifier can impact tone even if the power supply is feeding the transistors or tubes without being in the signal path. Normal power cables are stranded between the wall and the transformer in an amp. The funny thing is the stuff in walls is pretty good! A good DIY project is to grab some solid 12 awg Romex and plugs at Home Depot and screw together an AC cable. It will get you a surprising distance towards what some of the best power cables can do. Enhancing the geometry, materials, and the effects of shielding all help a bit as well.

Can an instrument cable ever improve your tone or do the best cables just affect the signal less with a neutral character?

Basically, it's about damage control. All cables are bad, and none can improve your tone. The best cables are the ones that do the least damage and reveal their qualities by having a "lack" of sound or signature. What you want from a good cable is to hear what your hands are doing. You can switch between two cables. One might sound better but only because it is causing fewer problems. It just sounds "less bad."

Does the length of a cable affect tone?

Shorter is better on paper and the pocketbook, but length is inaudible with active pickups or after a buffer. All cables have a capacitance value which varies and increases with length. Capacitance can filter high frequencies, but with a buffered signal, the frequencies are well out of the audible spectrum in typical instrument cable lengths. What you can hear with passive pickups is the affect of different length cables on the resonance peak of the pickup/input-stage circuit. Most modern cables are low in capacitance and measured by the foot such that with the same model cable, if you compare a 10-foot to a 20-foot, you don't get a huge difference in the cumulative capacitance value. However, this difference can shift the resonance peak up or down a bit which might be to your liking, one way or the other. I wouldn't choose a cable based on its capacitance value. Figure out what length you like to use and then audition various models that meet your budget in that length. Try to pick a few cables that are actually built different so you aren't comparing apples to apples. When evaluating gear, you want to choose from a range of options. Many cables today are simply the same thing inside with a different color jacket.

What is it about Evidence Audio cables that make them so well suited for bass applications?

There are many variables that can change how a cable sounds, and its sound is the sum of all these things. Two things in particular have a greater impact on the perception of bass quality than anything else - strand count and conductor geometry. Sound quality bears an inverse relationship with strand count. The more strands in a conductor, the worse it sounds, notably in the bottom end. By using solid core conductors, Evidence Audio cables hit hard and fast. The bass is extended, and you can feel it. There isn't any modulation of the signal to make it thicker, slower, or sloppy. You can get some of those things if you want them with EQ or cabinet position, but it's best to start with what the string is actually doing over the pickup, and make adjustments with the tone controls or microphone placement. Once you add junk to the bottom end with the cable, you can't EQ it out. The other larger contributing factor is that I don't use the shield to carry the signal in the Lyric HG. When you compare a twin-ax cable with a floating shield to a coaxial cable where the signal path is not symmetrical, the dynamics of the bottom end suffer. Most people never hear the dynamics their rig is capable of for never trying a cable with a symmetrical conducting path. They may swap through various coaxial designs where the shield is used to carry the signal, hear differences, and come away with a clear preference while making wonderful sounding music. However, using a twin-ax really takes the lower octaves to the next level or prevents them from getting compressed in the first place.

Why do you think that bassists who play expensive boutique instruments through high-end amplification overlook the significance of the cables they use to bridge everything together?

I think it's understandable. I did the same thing. We all did. It's probably a small percentage of people who actually consider the significance of cables and take the time to investigate. They'll grab the first half dozen cables lying around and spend 30 minutes plugging and unplugging to see if there are any significant differences. This is an exercise people have gone through for decades, and for decades, there were no significant differences between the cables. The result was a conclusion, derived through valid means, that cables don't make a difference and a lack of desire to ever again revisit the subject. It has only been recently that a few cables with unique designs have started creeping into the market. They are still hard to find, but every once in a blue moon, a special cable is in the mix and a musician discovers, as I did for the first time, that something meaningful can happen.

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Which of your cables has proven to be the most popular in terms of sales?

The Lyric HG is, by far, the most popular cable I make. I don't have many options really, just three for instrument cables. The Forte and Melody are great choices for something more flexible or affordable, but most of my customers put sound quality as their top priority.

Can bassists purchase Evidence Audio cables directly from you or do they need to seek out an authorized dealer?

I ask them to locate an authorized dealer. I have an 8-9 week back log building cables which the dealers account for and can plan accordingly to keep stuff on the shelf. If I built individual orders, it would stretch out many weeks past that, and the wait would be silly.

If a customer needs a particular length of cable for a special application, can you build a custom cable?

A few of my dealers are designated as custom shops. They are as capable as I am of building cables and follow my guidelines with plugs and processes such that you can't tell a difference if a cable came from me or a custom shop. I'm really just building all the 10, 15, and 20-foot cables the world might need, and I leave the custom shops to build everything else people want. So far, it has been a wonderful arrangement.

Considering all the research that has been done on cable design, is there anything that can improve a cable's performance?

There are a few things I know of that can be done with diminished returns. I try to focus on demonstrably better cables where the performance axis intersects the value axis. I could use some materials that triple the price of the cable for 3% better performance, but that isn't very attractive to me. Aside from the known, I am always playing and listening to materials and ideas in an effort to improve performance.

Do you have any plans to expand the current Evidence Audio product line with additional designs?

Perhaps slowly. I like having a small product range that is focused, purposeful, and avoids confusion. There are still plenty of people out there to discover how a good cable can help them interact with their instruments and enhance their experience of making music. I enjoy every day I wake up taking this journey with people, and I have a feeling a part of that is staying small and focused.