

# the ToneQuest

*The Player's Guide to Ultimate Tone* Report™  
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## ÷ by 13

We hope that all of you can some day experience the magic that occurs when you are plugged into and amplifier with a skilled technician or builder shape-shifting the circuit before your very eyes as you play. We have had the opportunity and privilege to do just that many times with two of the best amp guys we know — Todd Sharp and Jeff Bakos — and it's an experience you don't forget.

Fredric Taccone is the creator of ÷ by 13 amps, but long before he built his first amplifier, Fred had the good fortune to work on and contemplate the internal design and tone of nearly every important amplifier ever built. Along the way he documented his work, noting subtle modifications and tone-tweaking techniques he developed, often in concert with many of the top session guitarists in Los Angeles. Over the years, his life as an amp tech evolved into a creative partnership with these players, all of whom had long ago embarked on their own personal Quest for Tone. They would describe what

they wanted, and working together with Fred, they would obsessively test every variable possible in search of the magnificent and mighty note, until one of the L.A. tone heads — Rusty Anderson — said, "Fred, why don't you just build me an amp?" And ÷ by 13 amps have been steady rollin' ever since. Enjoy...





produced a ton of edgy bite, where humbuckers and P90's really feasted on the compression of the EL84's and cleaned up nicely with the guitar volume cut. Of course, your results (actual and perceived) may vary... Mark Johnson has tended to mirror our take on the two amps so far, but he is also strictly a slide player working in open tunings, and the considerations for that style of playing can't be universally applied to others. We suggest that you take advantage of the opportunity to work personally with Fred Taccone on your ultimate choice of amplifiers. Fred *knows* how to consult with players effectively, and his track record speaks for itself.

### *Icing on the Cake*

Both of our review amps are designed to run on two or four output tubes, and the 'half power' setting is every bit as toneful as full power. Consider this carefully, because unlike typical pentode/triode 'half power' circuits, this one produces no compromises in tone. It really is like having two amps in one, and with the ability to run the 2x12 cabinet as a 1x12 at half power, you could realistically stretch that to *three in one*.



÷ by 13 amps are flawlessly built and finished. Each is equipped with a fan that can be turned off and on to cool the rectifier tube, and the transformers are works of art reminiscent of vintage Woden, Albion and Partridge trannies.

Speaker and amp cabs are birch ply from Finland, and each amplifier and cabinet are shipped in cloth covers with an embroidered ÷ by 13 logo. You'll have to be patient — the wait for a ÷ by 13 will surely increase with the publication of this issue, but your ultimate reward will be a lifetime of very heavy inspiration. **To**

÷ by 13 Amplifiers, 310-547-1313  
www.dividedby13.com



For too long, guitar cords were taken for granted as nothing more than a necessary and often vexing bridge between guitar and amplifier. Traditional 1/4 inch, molded plastic military phone plugs were notoriously unreliable until companies like Whirlwind began using Switchcraft jacks with removable plastic sleeves to provide access to the solder connections for repair. In our experience, however, even the best cables being made 20 years ago simply didn't hold up well on the road. Coil cords were about the only new development in cable 'technology' until the '80s, when Whirlwind developed the diamond-shaped tip that has become an industry standard, yet, few if any guitarists and sound technicians were considering the tonal properties of cables. There were exceptions, however, as told by Stevie Ray Vaughan's amp tech, the late César Diaz, in his August 2000 ToneQuest interview:



*"When we were doing the In Step album, I had an endorsement with Monster Cables. I took these cables to Stevie and he said, 'I hate these things.' I asked him, 'Why, man? They are the best cables in the world!' He said, 'They pass too much electricity.' Those were his exact words, and I'll never forget*

*them as long as I live. He sent me to the local Radio Shack and told me to buy every gray coil cord they had — not the black ones — only the gray ones. I got them and ran them through my meter and they added almost like .05mfd to the signal chain. It was like having a tone control, and the brightness and harshness of the Marshalls were eliminated. There isn't a single picture of Hendrix where you see him playing with a straight cable. Why? This is something I brought up to Eric Johnson — whether he heard me I don't know, but it could be the second coming of coil cables..."*

*Well, that hasn't happened, (we unearthed some of our old Whirlwind Cobra coil cords — great if you're playing Uriah Heep covers through a 100W Sound City) but a lot has happened in the design of guitar cables, speakers cables and yes, even power cords since the Cobra first appeared.*

You'd have to be a little nuts (and flush with cash) to experience every high-end cable made for guitar today, and the list of manufacturers is growing daily, including Alessandro, Analysis

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Plus, Canare, Cardas, Cobalt, Cornish, DiMarzio, George L's, JPS Labs, Klotz,

Mogami, Monster, Planet Waves, Requisite Audio, Two Rock, Van den Hul, Van Evers, and more...

Tony Farinella founded Evidence Audio in 1997, and when he approached us about reviewing his cables, we responded with an interview request. Why? Because when it comes to 'designer' cables that vary in price from \$40 - \$350, we've been skeptical. Yes, we've been using George L's for years. Great stuff, although it can twist into a snarled mess if you move around



much on stage. We have used and torn up a ton of inexpensive Rapco cables, and we described the startling clarity of the Two Rock cables that Steve Kimock first demonstrated for us live. Lately, we have been impressed with the quality and durability of Planet Waves cable (D'Addario), and similarly priced (\$20) custom Canare cable

with Neutrik connectors bought on eBay from Roebuck Cables (Nick Stephens). See [www.webpages.charter.net/nickystephens/roebuckcables.html](http://www.webpages.charter.net/nickystephens/roebuckcables.html). But since we always try to treat your money as if it were our own when we make recommendations on gear, we have been reluctant to recommend that you throw down large on guitar cables — until now.

To provide us all with a proper perspective, we directed a few questions to Tony Farinella, founder of Evidence Audio, and his responses were instructive and enlightening. Our review follows Tony's interview.

**TQR:** How did your initial interest in electronics and sound develop? Was it based more on electronics, music or both?

I'd credit my grandfather for the exposure and/or genetic predisposition for electronics related to music. He always had a guitar, mandolin or ukulele in each room of his house, but the living room had something magical to me — a stereo with a McIntosh receiver and JBL speakers. These were somehow

far more interesting than the television. Listening to the stereo was a destination activity. We put on records... and listened. In his house there was reverence for music. In his garage there was a reverence for electronics. The man had many wonderful toys and would open them up to show me how they worked. The passion rubbed off and stayed with me through my teens as I mowed lawns to buy everything electronic related to sound. I studied everything available to figure out how to get the best sound possible for my dollar. Whether for making music or playing it back, I had to have the answers on what to buy or how to build it.

**TQR:** What were some of the early projects you pursued?

I remember at eight taking apart my first record player. It was white, and inside the case was a 2" paper cone speaker where the magic came from. I found I could attach additional speakers to the red and white wires leading to the first and get sound out of those as well. I strung five little speakers across the room to envelop myself in sound. Things got pretty quiet after five speakers for some reason — even at full volume.

**TQR:** How and when did you begin to focus on cables in particular?

Cables were interesting to me from the beginning of my hobby. The simple fact that all that music could be carried over a pair of wires was amazing to me. The process was invisible. Speaker cones moved and VU meters danced. But wire just sat there and did its job. Nobody talked about wire. You just found what you needed, stuck it between the fancy stuff and forgot about it.

When I finished college, I started work at a company making wire for the home audio market. With regard to product



development, the company and I had the same value system: for whatever budget is available, make a product that

changes the signal as little as possible. Make a product that is demonstrably superior and the rest is just window dressing.

**TQR:** Describe the research that you have conducted on various cable designs and materials. What are the significant sonic shortcomings of typical, mass-produced cables?

For many years my job was to dwell in minutia. I essentially built a knowledge base on the cause/effect relationship of variables. The process was one of changing one variable at a

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time and listening for hours to that variable. I would document the results and make sure they were consistent and repeatable — not only with my ears, but with those of others. It's important not to jump to conclusions. Psychology can have an impact on what we hear and it is important to pull that out of the process as much as possible. At random, here are some examples of a few variables I might listen to in a day:

18awg solid bare conductors versus 19awg, versus 20awg, etc.

18awg stranded bare conductors versus 19awg, versus 20awg, etc.

Metallic versus non-metallic conducting materials (Polyaniline, Polyacetylene and the like)

20 mils of Polyethylene extruded over a wire versus 30 mils. Nickel plating over a connector versus Rhodium, Gold, etc.

Copper samples from a dozen refineries. Silver. Silver-plated copper.

Directionality of conductors as speaker cables and as power cables (it's reversed).

Solder "A" versus Solder "B"

I could go on, but my point is, if it conducts electricity, I've listened to it. I've listened to it with every possible insulation option, geometrical winding, and connector material. I've spent years changing variables and combinations of variables to understand how to build a cable that causes the least amount of change to an audio signal. I've also made sure that the results I hear aren't part of some fantastic imagination. They have to be heard by anyone. Equally important is the fact that I don't plan to stop listening.

The sonic shortcomings of mass-produced cables? Their shortcomings are mostly related to obscuring detail, artificially coloring certain frequency ranges or collapsing dimensionality. However, they have some benefits; they are cheap and flexible. Those are important requirements for mass-consumption — perhaps more so than having the best possible sound quality. Yet for people who dwell in minutia like I do, the little differences can be surprising, rewarding and worth the additional cost. Pull a guy off the street and demo a better cable and his reaction might be, "Cool, I'll save the money and tell my rich friends." Yet the same demo for someone who has an intense connection with his music and sound might be, "Holy shit... I had no idea it could matter that much." Same demonstration... same magnitude of difference — totally *different* reaction.

**TQR:** How have guitar and speaker cables evolved during the past 20 years from typical 18 gauge 'lamp cord' and the old coil cables for guitar?

They haven't evolved much except in strange little circles where people have decided to break away from tradition and



Lyric HG

try something new. Most of these companies (like mine) are statistically irrelevant. 99% of the cable made is the same, and made in the same way for the past 80 years. Yes, there is a whole other world out there. Much the same with any hobby, we all make the best decisions based on what we know. If you stick with any hobby long enough you are bound to increase your knowledge and stumble across a little company doing something different — with guitars, amps and cables, too. This is that world.

It is a tough fight for the better cable companies, since most cables are all the same stuff in a different jacket. Let's say you're a guitarist just 'curious' about cable. You don't track the specialty magazines, forums, or know where to buy a better tube amp. You grab the first ten cables you can find (if you are really motivated) and start doing some comparisons. At the end of an hour or two you're pretty much convinced they all sound the same. Why? Because they *are* all the same. The whole category suffers a credibility problem because company "A" is charging \$75 to give you the same performance (and product) delivered by company "B" at \$20. On top of that, a lot of the claims made by cable companies push the edge of plausible pseudo-science. Some of the claims are outright laughable.

The situation reminds me of the bottled water business. Have you ever stood in the aisle of a super market and had to choose which brand to buy? Uh, huh. I can't blame anyone for grabbing the cheapest thing they find. With persistence, you'll find friends and dealers who have made cool discoveries and can introduce you to the really good stuff. Sometimes it is more expensive. Sometimes it is the same price as the well known brands, but it always performs better for your dollar. I've said before that with cable, suppliers tend to fall into one of three categories:

Category "1" suppliers are service-based. They put their names on generic product and offer value to consumers and dealers by having a wide product range (speaker/MIDI/mic/instrument/plugs/splitter boxes/etc). The products are low priced and sold in high volume. The cables

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are fully functional, but the companies exist because they offer one-stop shopping for dealers and have a pre-packaged solution for any cable need a consumer might have. Some examples of these companies might include: Gepco, Rapco, Ernie Ball, Hosa, Whirlwind and Liberty.

Category “2” suppliers offer a more sophisticated product and are typically higher-priced. These companies facilitate their business by adding features which may or (more likely) may *not* improve the performance. However, they have advertising programs, sponsorships, etc. and make a serious marketing effort to promote their features as ‘benefits,’ and people pay extra for them. Some examples include: Monster Cable, Planet Waves and Spectraflex.

Category “3” suppliers exist only because their product is demonstrably superior. They may or may not have high visibility and great brochures, websites and such, but they do offer something very special. Their designs are not bound by conventional thinking. They sometimes give up what the “old school” has mandated as a priority in favor of their *own* priority system (flexibility versus sound quality, for example).

They tend to build products by ear, and through trial-and-error design experience they manage to come up with something that makes you say, “Damn, I guess cable *does* make a difference,” when compared to a Category 1 or 2 supplier. Some examples of these suppliers are Evidence Audio, Two Rock, JPS Labs, Van Den Hul and Cardas.

These companies make cable with nothing but performance in mind, and they tend to deliver. They skin the cat different ways, and people will gravitate towards one or the other as a favorite, but always for good reason. I suppose there is a 4th category as well that deserves attention. These guys don’t really try to break any new ground — they just stick with commonly accepted design principles and engineer them ‘into the ground’ by using very good materials and exceptional quality control. These companies make good sounding cable for the money. Maybe not a “Wow, I had no idea that’s what a chord really sounds like,” type of difference, but still something worth paying extra for. Companies like this

include Canare, Mogami, Belden and Klotz.

**TQR:** To what extent has the boutique hi-fi industry driven R&D for guitar cables?

To a great extent, I think. The market for hi-fi is a lot bigger than for guitar. This means you have a lot more people chasing after details that might result in better performance. The more people you have obsessing over a particular subject, the more likely a new design approach will bubble to the surface. I’ve also been told the guitar market is pretty conservative. Perhaps there is a lot less risk-taking on both the development and consumption sides of the equation. This isn’t to say that any good hi-fi cable can be used for guitar. Put 1/4” plugs on the end of most hi-fi cables and the odds are good you’ll have a mess of microphonics, shielding, durability and other problems. I’ve made some mistakes and learned a lot in the last six or so years working with a broad range of musicians and equipment. But let’s face it... analog audio is analog audio. When it comes to getting a signal from point A to point B with as little damage as possible, I definitely give the hi-fi guys some credit for letting people hear their amps and guitars (and fingers and strings) the way they were meant to be heard, if mostly on the playback side of the equation.

I don’t see many ‘guitar’ companies as Category 3 providers as defined earlier. Category 2 suppliers? All the way. Some of the best. But the only Category 3 cable supplier I mentioned above that is a pure guitar play is Two-Rock. I’m psyched for the guitar market that they did something different to get better results from cable (and succeeded). I love it when companies aren’t afraid to buck tradition and push the envelope.

**TQR:** Would it be accurate to say that guitar cables can be designed with a specific sonic ‘signature’ with more or less clarity, high-frequency, mid-range or low-end emphasis, noise reduction, etc.?

Absolutely. Hey, that just gave me an idea for a cable-modeler project. You see, I can pretty much make a cable do what you want. Fat bottom end? De-focus the mid range? Add some dimensionality? Little more sparkle to the highs? I can just throw that onto a DSP and sell people 10 cables for the price of 3. Seriously, however, I hate the idea of cables as *tone controls*. That’s what the knobs are for. Or pedals... do you really want to invest so much into a rig and have it masked or dialed out by a cable? My philosophy is that cable should “disappear.” It should be installed and never thought of again with regard to tone. Tone is in the fingers, wood and other gear.

I try to make cables that don’t stand out and get your attention but are instead, balanced and useful regardless of what the associated equipment is and if a player’s priority system should fluctuate. We all have our ‘moods’ when it comes to

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tone. Re-wiring a system is not an option when our mood changes. Just pass the signal folks, don't mess with it.

**TQR:** Do the same considerations apply to speaker cable?

Yes. It's a little different, however. In order to get a large enough cross-sectional area of copper (gauge), a single solid conductor small enough to avoid the effects of skin-effect won't cut it. What I do is use multiples of individually insulated solid core conductors to increase the overall size of the cable, while avoiding the electro-mechanical effects of strand interaction. Another difference is that the quality of the insulation material is less critical — 'quality' in terms of the dielectric constant or coefficient of absorption. The quality that seems to play a bigger role is mechanical stiffness. This is why I don't foam the insulation material on the speaker cable. What works better for a line-level cable actually *penalizes* a speaker cable. Other than that, I find the same rules of strand-interaction, geometry and conductor material quality apply.

**TQR:** What is the best length for guitar and speaker cables — shorter the better?

Shorter *is* better. I just tell people to use the shortest length that is practical. There is nothing wrong with using a 35 foot guitar cable if that is what you need to use. I make them that long, and I'm happy for my customers in that they aren't using 35 feet of junk instead.

**TQR:** What are the unique features and benefits of your cables in particular, compared to others?

My cables are designed with the idea that no cable is good. They all suck, and some suck less than others. No cable can actually 'improve' the sound quality; it can only make it sound 'less bad' than another cable that changes the signal for the worse by adding colorations, obscuring detail, dynamics or dimensionality. Some of the key features of my cables are the fact I use solid-core conductors instead of stranded. I use a particular copper which sounds better than most others. In addition, I don't use the shield as a conducting path. Instead, I use identical conductors for positive and negative and float the shield at the guitar side. Trying to quantify the influence of each unique feature can be grossly inaccurate, but I'll toss out the following weights of responsibility for why my cables sound different from most:

Solid leads avoiding strand interaction: 30%

IGL Copper: 25%

Twinax vs. Coax geometry: 20%

That leaves about 25% that I'll attribute to many other small factors including solder, plugs, dielectric management, secret sauce, etc. They all add up. So how do these features impact



sound? Since the ultimate goal of these cables is to have no sonic signature at all, hopefully they sound like *nothing*. One of the better ways to describe the effect of the cables is to describe how other cables sound in comparison. You will notice that most of the problems caused by other cables are additive in nature. This is true of most equipment.

Specific to the midrange and high frequencies: Stranded cables and cables that use certain types of copper and silver will have exaggerated mid-range and higher frequencies. At first this noise can trick you into thinking there is more detail. However with careful listening, you can tell that the detail is actually an irritating edge or distortion on the sound. By comparison, the Evidence Audio cables are not 'dark' or 'dull.' A more likely impression may be that they are 'laid-back.' All of the detail and high frequency information is there with nothing added. While most other cables have an edge that grabs your attention, the Evidence Cables simply disappear and let you and your equipment get to work. If you want to grab someone's attention, there are other ways of doing it that won't destroy your clean sound.

With bass lines, articulation is pretty easy to notice. At first, stranded cables may appear to present more bass, but it is often just exaggeration of the harmonics resulting in a 'slow, fat' bass without articulation and punch. A solid conductor cable will hit with the bass note very hard, and release as fast as your fingers do from the strings. I'll sit down next to someone who's comparing cables, and while a stranded cable sounds thicker, I don't feel it in the floor. With a solid cable I feel the bass more in the seat of my pants and hear it less. It's *there*; it's just more visceral and fast when you play it clean.

Dynamics and Detail: A byproduct of the distortions caused by stranded cables is that all the extra content added into the signal obscures the subtle detail of the original signal. Compared to a cable with solid-core conductors, stranded cables sound a little blurry and out of focus. In addition, dynamics are flattened and compressed. Dimensionality also suffers in comparison with most cables. With a good cable, the notes and chords really bloom from the cabinet. They are three-dimensional and you can walk into them, stand in the

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middle and soak it all in. With an inferior cable, it's like staring at a painting instead of a hologram.

As I mentioned, strand interaction plays a big part of this. Every time you send a signal (electricity) through a wire, it generates a magnetic field around that wire. In addition, when you place a wire carrying a signal next to a wire that does not carry a signal, the signal is transferred from one wire to the other. If both wires carry a signal, the magnetic fields can induce change in the signal on the neighboring wires. A stranded cable is made up of many small wires. As each strand in the conductor tries to carry your signal to the next



The Source Plug

piece of equipment, the signal is changed by neighboring strands. In addition, as the strand winds towards the center of the strand bundle,

higher frequencies will move towards the outside of the bundle crossing between strands and the layers of oxidation on their surfaces.

If you listen back and forth between two pieces of wire that are identical except for the fact that one is solid and one is stranded, what you hear from the stranded wire is what I mentioned above: blurry midrange, slower, fatter bass, and a bite in the upper registers that just doesn't exist with the solid lead. Note-definition and decay can be remarkably different.

The other component is the IGL copper. IGL stands for *Increased Grain Linearity*. It is a copper that has been refined to a very high degree of purity, and in a manner that causes the copper grains to be very long and line up with parallel boundaries. Longer grains in the copper result in fewer grains per foot. Grains aren't necessarily a bad thing, however, it is the space *between* the grains where impurities collect. The IGL refining process reduces the number of grains and makes sure that the grains are aligned in a way that doesn't allow for many impurities to collect. IGL Copper is not only very pure; it is pure in a way that results in better sound. Midrange notes are sweeter and more natural, and the top end is extended without the 'nails on a chalkboard' effect.

**TQR:** How can guitarists sort through all of the hype surrounding high-end cables? What should they focus on in evaluating specs? What are the most important considerations?

Well, hype is not worth sorting through. I really feel for guitarists the way I feel when I'm in the market staring at all those bottled waters. The best thing to do is try to identify "Category 3-type" suppliers. That will narrow it down from

about 100 companies to less than 10. From there the only useful way to choose is to listen and see which cable best matches with your priority system. At least with a Category 3 supplier, you've picked from a company that has devoted a lot of time listening to make a nicer product. Maybe you'll decide to stick with what you are using, but the important thing is that you will have stepped outside the 99% of mass-produced cable that is all built and sounds the same, and given the category, a fair shot at earning your business. No matter which 'Category 3' type provider you go with, you'll be getting something good.

**TQR:** Doesn't the use of mass-produced patch cords in a pedal board negate the benefits of using a super-high-quality guitar cable? Do pedals themselves negate the benefits?

No. This speaks to the theory of the 'weakest link' which does not apply to audio. Your pedal board and everything in it degrades the signal purity to some extent — from the strings to the speaker. It's all about damage control. Each item in the signal path (including cables) causes some fixed amount of



The Source Plug

damage to the signal. The final sound is the result of the cumulative degradation that occurs, and any place you can prevent some of the

damage from happening, the less total damage you'll hear. A visual analogy: Think of each pedal/effect/cable/preamp in your signal chain as a piece of glass — a window. The goal is to look through the 20 windows stacked in front of you and see the view clearly on the other side. In a perfect world, each piece of glass would be clear... every component would pass the signal without degrading it. However, everything imparts its effect and your view is fuzzy, out of focus, or in some cases, tinted one color or another as a result of the dirt on all these 'windows.' Since your view is obscured by the sum of all the dirt on all the windows combined, by taking out just *one* of the windows, cleaning it, and putting it back, your view improves by that amount. So, yes, changing just one cable in a pedal board to a cable that causes less damage can improve the sound. Changing them all improves it more.

**TQR:** Let's talk about power cables... we've heard that they can also make a difference in tone. Frankly, we're skeptical.

I know. Pretty freaky. I find the music seems to come from a quieter background. I don't think you'll measure a better signal to noise ratio, but it sure feels like the quiet between the notes is quieter, and when a note hits, it blooms with dimen-

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sional. If you hit it hard, it explodes, and if you hit it soft, it remains soft. Dynamics are definitely a component — control, speed, and a feeling of being connected to the speaker.

Going back to a stranded cable between the wall and an amp (or preamp, effects unit, etc), the presentation shrinks somewhat and loses some immediacy — like letting too much air out of your tires. Coincidentally, my power cable has more in common with the solid core wire that is run in the walls. (In fact, Romex makes for a killer budget speaker cable as well. You can do some cool things with wire available at the hardware store). The shielding in my cable also helps. I also notice differences in conductor material with power cables. I don't understand enough about what is going on to make a good case for this one. I'd be skeptical myself if it wasn't for the time I've spent listening to a million variables with power cords. Any claims I make beyond anecdotal evidence would hurt my credibility more than help it. It is just something I know how to do, so I do it. It's been fun watching people shake their heads when they discover it. I get to re-live that discovery process every time I demo a cable. I'm sure that's my buzz... and why I do this.

**TQR:** What's ahead for Evidence?

I like this Cable-modeler 2000™ idea...

*Evidence Audio, www.evidenceaudio.com 949-306-7390*

## The Cables

*The quest for tone is an endless journey (the trip is the destination), and we're treading on the highest of the high roads now. Having played Evidence Audio cables, we will never hear the tone, attack and dynamic response that exists between an electric guitar, an amplifier and 120 volts of alternating 'wall' current quite the same again. Count us among the converted.*

*Now, a note to you lab rats itching to turn on your meters and break out the calculator: We have little interest in conducting a subjective comparison of a dozen or more cables and ranking them according to some arcane hierarchy. You can measure conductance and graph the results, but ultimately, all we care about is the sound. Still, we all hear things differently. Our review is solely based on repeated listening tests of Evidence Audio cables versus typical guitar cables, speaker cables and AC cords that are readily available at moderate cost to consumers. Now let's cut to the chase.*

We began our initial evaluations with the Evidence Lyric HG™ and Canare, George L's, Planet Waves and Spectraflex cables, all 12' -15' in length. Of course, we noted subtle tonal variations among our 'control' cables, but since they were all



audibly similar as a group when directly compared to the Lyric

HG, we eventually limited our comparison to the Canare GS6 and the Lyric cable, both of which share Neutrik™ plugs. As a general baseline 'control' cable, we felt that any of the cables mentioned above were representative of moderately-priced, high-quality cables available today, and they all provided an excellent baseline tone. If expense was paramount, we'd be happy with them all.

After repeated A/B tests with a variety of Fender and Marshall-style amps and single coil and humbucking pickups, we concluded that the Lyric HG produced a clearly superior *neutral* character. Consider this statement carefully... Until you have experienced the 'neutral' tone we're referring to first-hand, the concept may be difficult to fully comprehend.



The point is, all of the cables we used as 'controls' seemed to be altering the dynamic response and coloring the tone of our instruments in contrast to the Lyric HG. They also seemed 'slower.' How do we know that the opposite isn't true, you ask? Could the Lyric be coloring the true tone of our guitars and amps while the less expensive commercial cables were rendering a more pure, unaffected tone? Well, sure. Anything is possible, but the real issue here is that our guitars and amps sounded better by far with the Evidence cable, and hearing is believing. The Lyric HG revealed a more even and balanced overall frequency response with less emphasis or 'push' in the high frequencies. Just as Tony described in his interview, the tone of our guitars sounded much more 3-dimensional with the Lyric HG. The guitar seemed to be more 'connected.' The commercial cables merely threw colors on the wall while the Lyric indeed seemed to create a 3-dimensional landscape. Presence and attack were less aggressive, and string definition and clarity within complex, 6-string chords were significantly enhanced, with none of the blurring and muddiness that we noted with our control cables. The Lyric HG produced a more complex and transparent tone without sharpening the highs or dulling the bass notes, and bass

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seemed more solid and grounded, even when our amplifiers were pushed into distortion. We were ultimately left with the impression that after years of playing gear that was quite familiar to us, the unaltered tone of our guitars and amps had finally been revealed for the first time. To be honest, it was a startling experience that grew more intense as we introduced the Evidence speaker cable and AC cord into the mix.

Next, we broke out the Siren™ speaker cable, alternately running our '69 Marshall 50W head and '68 4x12 cabinet, Balls M18 head and 2x12 cab, and 1973 Marshall Lead&Bass head and 1x12 cabinet. For comparison, we used Planet Waves and Spectraflex speaker cable. The effect achieved with the Siren cable was identical to our experience with the guitar cable.



Using both Evidence cables enhanced the effect previously described with the Lyric, while removing one or both incrementally diminished it. To be absolutely certain that we weren't imaging this, we changed back and forth between the Evidence cables and our controls, limited the length of each review session to avoid ear fatigue and repeated them over the course of several days. At one point we even took a two week break and returned to compare our results with our notes from the previous sessions. With either cable (guitar or speaker), our tone was less aggressive, clearer, more complex, multi-dimensional and balanced, and the dynamic character of our amplifiers was 'faster' and more immediate.

We saved The Source™ AC cord for last, and its effect was entirely consistent with our experience with the Evidence guitar and speaker cables. Again, the effect of *all* the



Evidence Audio cables is cumulative. Using all three cables will produce maximum results, but that is not to say that any of the Evidence cables are not worth buying alone — not in

the least. Any one of the three was better than none at all.

Now for a few practical considerations... Evidence Audio guitar and speaker cables are heavier and somewhat stiffer than typical cables, but not awkwardly so. They are also 'directional,' meaning that they are intended to be connected with the red jacketed plug end inserted into the speaker jack or the amplifier input (or first effect in the chain). There is a break-in period of approximately 40 hours during which the cables will settle and bloom — just like a new speaker or amplifier. No, we're not kidding.

The AC cord is massive, and we found that the heavy 'hospital grade' plug could easily be jarred loose from the standard 3-prong male connector found on amps with removable power cords, just so you know. Are the benefits of using the Evidence Source AC cord negated by plugging into a quad box or power strip rather than directly into a wall outlet? Depends on your gear... A direct connection is most desirable, but we also noticed an audible improvement in tone and dynamics when we plugged into a standard Ace power strip. If you are concerned, buy a longer AC cord that will reach a primary source of AC in most circumstances.

All of the cables built by Evidence Audio are custom orders, so you can specify precise lengths. If you are handy with a soldering iron and possess a modicum of common sense, Tony will also sell you lengths of cable and Neutrik plugs so you can create your own cables as needed. He also makes patch cords for effects, or you can buy the cable and make them yourself.

Speaker cables for combo amps can also be built (we're headed that way, definitely). In our opinion, every custom amp builder should be using the equivalent of Evidence Audio speaker cable, and we think you should *demand* it. It won't happen until you do. Steve Carr is the only amp builder we can name who uses super high-end speaker cable, and a \$2800 amplifier should arrive with the best speaker cable available, just as a \$2800 guitar shouldn't need a fret job and a new nut when you can still smell the nitro finish curing. We have a saying around here... "Fight for the potatoes!" You see, one day we pulled up to the drive-through window at Popeye's on Ponce and ordered fried chicken, dirty rice and enough mashed potatoes to feed my two kids, who were in the car, warning me that they weren't eating 'dirty rice,' whatever *that* was... Girlfriend in the drive-through window says, "We outta mashed potatoes." But my daughter, Melissa, who has always possessed an uncanny ability to find anything that has been misplaced around the house, shouted, "Dad, I saw them stirring a huge pot of mashed potatoes when we pulled up!" "Fight for the potatoes!" we cried in unison. "Fight for the potatoes!" Girlfriend promptly produced the mashed potatoes — with gravy. *Quest forth... To*

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