| Home | Blogs | Videos | Forums | User Groups | Tips and Tutorials | Portfolios |

Inside Out

Get an uncensored look at our products and the people who make and use them.

Robert Scovill On The Audio identity Crisis; Are You An Audio Liberal or Conservative?

Only published comments ·   Nov 12 2010, 01:03 PM ▾ by Robert Scovill

Filed under: Live Sound, VENUE, Robert Scovill

Analog or Digital I wonder?

Oh man, it's so good to be home after a long summer of touring. While traveling the US this summer it was great to meet so many new people and be reconnected with many old friends. But ya know what? It drove home to me that the world we currently live in, specifically the United States, has become, a challenging place to have an opinion or a view point. You have to defend it at every turn. With the explosion of the world wide web and the ease of communication that allows the presentation of any and all ideas with the differing opinions that come with them, where we find ourselves living in is a country clearly divided by it's ideals. The cultural divisions in the US today are pretty stark and there's no better example of it than in today's political landscape.

I mean look at the intensity of one of the most basic debates. There are seemingly endless arguments about the intent of our founding fathers with regard to what this country stood for at it's birth, and what it will stand for in the future. How can it be so mysterious when they composed actual documents that set the course for the country's future; The Declaration of Independence, The Constitution and the Bill of Rights. How can it be so contentious? Isn't it written down? I mean, ask the "Red" guys and they will say the fathers meant "one thing", ask the "Blue" guys and they will surely say they meant "another thing" then ask the "green" guys or even the "tea" colored guys and they say something completely different all together. We even have a supreme court who's job many times is to interpret it all for us. And if that wasn't enough, throw in the "fair and impartial" talking heads from the media who love nothing more than to "whack the hive" and you have all the makings of ideological grid lock. I mean, how can this be? How can we possibly expect to know where we are going as a country if we can't even collectively agree on who we were, who we are now, and what has actually transpired in our past and where we will go as a result?

So you're saying to yourself, "What the heck? ... Have I accidentally stumbled on to Ann Coulter's blog site? Scovill has obviously cracked! …Someone has obviously locked him in a tour bus with 24 hour cable news and he now thinks he's going be the next Glenn Beck" … I mean, what the …?

Okay okay, easy now … I haven't cracked and I assure you I have NO desire to be the next Glenn Beck, Keith Olbermann, Bill Maher or any other laughable, cartoon character pundit for that matter. That said, I do love a good metaphor lumped in with a good debate and that's what today's blog is all about.

Given that we've just come off of the mid term elections and also, that I've just finished up the annual AES Convention and trade show this week in San Francisco – or "audiogeekapollooza" as I have now titled it – I thought I might just try to tie it all together in one big ole blog!

As audio geeks, I guess AES is really kind of our version of a political convention. And for many years now, the audio constituency has been entrenched in the front lines of an ongoing debate about our own identity as audio pros and the ideals that go along with it. i.e. "are you an analog guy, or a digital guy?" Clearly it's now analogous to saying "are you a liberal or a conservative?" don't you think? This debate has been running hot and heavy in professional audio for some time now, primarily in music production. And many wear their audio identity or "party affiliation" as a badge of honor and are in turn staunch, unwavering supporters of one or the other and they vow to never "cross the isle" or break the party line. Me, I say I'm and audio guy, pro analog and pro digital. Yep, I'm a PC and I'm a Mac as well. I own and operate both PCs and Macs — and as a matter of fact my new MacBook is also my PC via the miracle of Parallels for Mac! So ya see, I guess that alone clearly makes me a moderate …

So as stewards of all that is audio, our challenge moving forward might be; how do we really recognize, understand and most importantly teach what the founding fathers of pro audio had in mind for our future audio quality? I mean, do our current efforts and choices pay homage to them while at the same time serve the listeners we currently aim to please? Are we at times guilty of simply using the romance of our golden analog past to falsely promote our own stature and credibility by conveniently bashing anything that is "new". Hmmm, that sounds kind of "conservative" doesn't it? Or conversely, do we blindly embrace anything new, merely because it is new, regardless of whether it actually does service to the standards that those before us set? Well, that sounds kind of "liberal" doesn't it?

Much like the political debates, op-ed abounds on the internet which is chalked full of informed as well as uninformed opinions, powerful lobbies of manufacturers and users, hi profile pundits, endorsers, critics and downright arrogant know it alls. (Clearly our industry could use it's own Steven Colbert or John Stewart to provide some comedic context don't you think? Now that would be awesome!) But as opposed to me leaping up to the virtual lectern and spewing my own opinions on which format – analog or digital – I think is "better" (yaaawn … zzz…zzzz…zzz) I'd rather submit a few deeper concepts for you to ponder and add to your repertoire when making either the "conservative" or "liberal" argument.

But first, a couple of amendments to the Professional Audio Constitution. PAC Amendment .775; subsection db; paragraph fs states: "Digital equipment will eventually replace Analog equipment". Look far enough into the future my friends, and it's going to happen. The proverbial digital genie is out of the bottle and by now she is way too fat to stuff back in - and by the way; yes, that is fat with an "F", not a "Ph".

But fear not all of you with analog tears in your eyes, because PAC Amendment 1.228v; subsection db; paragraph u states: "With specific regard to music production, analog audio quality and the pleasantries that it presents to the cochlear devices attached to the sides of our pointy little heads should NEVER be forgotten, misplaced or thrown under the bus (I like the pun there) under severe penalty to the enjoyment of said music production".

Now, make sure you read that second rule closely. It does not say Analog audio equipment and the qualities they present.

Certainly one of the wonderful things that digital audio has provided for us is a healthy dose of context when measuring it against what we actually love and oft times miss about analog audio. I mean, for music production, more often than not, what we seem to really want is analog audio quality; meaning audio rich with harmonics and subtle (sometimes not so subtle) distortions without all of the hiss/noise, or the need for complex alignment procedures, maintenance, upkeep and performance decline with a slow and protracted, frequently inconvenient mortality rate over time.

Ya know what? Digital audio appears to be getting closer to that promise all the time, especially with the scores of analog emulation that continues to be developed by stalwart analog manufactures. Read some of the reviews of the new HEAT feature that Dave Hill from Crane Song fame has recently designed into the new Pro Tools systems and you'll get an idea of what I'm hinting at – and it's only the beginning folks. If it all continues to steam ahead, digital could wind up with a healthy dose of cool if it can become a true chameleon. Meaning; we can coax it into changing colors and have it take on any audio quality we want it to have. As I've preached in some of my VENUE seminars I love this idea, especially for live sound, where I can now take something that is purely digital and with harmonic rich analog emulation, make it sound more analog than actual analog. i.e . have exaggerated analog qualities that actually wouldn't be achievable with real analog gear. Conversely, I can't really take something purely analog and coax it to produce all of the positive attributes digital audio. No better example of that than being able to use tape saturation emulation with in a live mix now days. Once you hear it, you'll never go back.

This is a beautiful and very important thing for the future of digital, because guess what folks, we don't only listen to music that was created with the latest technology. No, we regularly experience the entire history of music via the gift of recordings. Obviously with a recorded medium we can experience that music over and over again. We can literally time travel via music. The yummy thing that comes with this is, that as we listen to and study music from our past, we are actually training our ears to hear and sonically interpret instruments and voices in a specific way. We get used to it sounding a certain way. As a result, analog audio quality is deeply imprinted on our hearing DNA and we regularly yearn for it whether we even realize it or not. For example, whether you believe that like Turner or Jackie Brenson wrote Rocket 88, (recognized as the first song to use distorted electric guitar), is not important. What is important as an audio geek is that you understand why that distortion worked for both the player, the song and the listener. It makes me wonder sometimes where we'd be right now – or how we would interpret "good sound" - if digital had actually come first? Have you ever tried to explain to someone what "good sound" is and why it sounds "good"? Have ever even considered it? I listened intently to Dave Hill at the Avid booth attempting to explain it to the audience seated before him and I could see that it was challenging even for him and this was a fairly heady crowd. Try explaining it to a novice sometime and you'll quickly discover where the expression on the RCA dog's face came from.

Consider also, that we live and work in a very romanticized business; music production, and it has some very unique technology desires. I mean, name me one other relatively hi-tech industry where a technology that is 50,60,70 years old is more revered and oft times considered better at it's "job" than the contemporary version of the same technology? Examples? Tube EQs, tube compressors, tube microphones, tube "what-evers" … and then their are recording and playback mediums, Analog 2" tape, Analog 1/2" tape, vinyl and of course discrete console, pre-amp and mixing circuits from the 60s and 70s and on and on. Why is that? I submit that at least part of the reason is that we are "used" to the sound that they provided because we are regularly reminded of it via recordings, and then strive to re-experience it in our own work. It's the audio equivalent of why film vs. video, or black and white vs. color reproductions of the exact same image evoke such differing emotional responses when viewed.

Now as you can clearly see, I could go on ad-nauseam about the impact that the conversion from analog to digital has had on technology, manufacturing, workflows, music production techniques, sound quality, the now need for less "talent" to complete a production and on and on. But for the sake of time and focus, I'm going to narrow it down to some of it's impact on live sound which is where I do most of my eating and breathing these days anyway.

The migration to digital technology in live sound, with the new workflows and sound qualities that come with it is, compared to our counterparts in the recording disciplines, in it's infancy. But that doesn't mean it's any less important or vital to the success and growth of the live sound discipline and the well being of the industry for that matter. In fact in many way's it might be more vital to the future and quality of live sound simply because it offers more practicality and value by at least an order of magnitude to it's analog equivalent in analog technology.

What we've historically and consistently seemed to strive for in live sound is more "bang for the buck" whether we are talking speakers, microphones, consoles or even the number of acts on the bill for that matter. Digital technology ratchets that "bftb" ratio up. Consider the most recent example; the digital live sound console. Because of digital, you can now travel with a console that is a fraction of the weight of it's analog equivalent, especially if you consider that you can now have three to four times the input/output capability associated with a physically smaller control surface. And then there's the processing power that is available via, in the case of VENUE, a rich and robust palette of TDM Plug-in processors that would be unmatched by an actual equipment offering by any sound company. With hi-quality plug in processing, you no longer have a fractional representation of the normal hybrid of analog and digital processing racks, cabling and associated footprint, but an elimination of it. And I don't solely mean the physical footprint, although it's considerable. I also mean the carbon footprint as well. Reduce the weight that goes in and out of a semi-truck every night by a thousand pounds, multiply it by the number of total number of shows that happen on a nightly basis around the world throughout the year, and you don't have to be a rocket scientist or even Al Gore for that matter to calculate the net positive impact on fuel as well as night to night power consumption. Don't believe me? I recently read about a famed fighter pilot who was hired by a major airline to analyze their fuel consumption. His first move? Take all the magazine's off of the planes. Wha? How much impact could that possibly have? It reportedly saved the airline millions of dollars over the course of a year in fuel consumption. It's pretty simple math folks – somehow it took the airlines until 2010 to figure it out.

The wonderful part about the paradigm shift to digital for live sound is that the physical girth of the technology has, and will continue to decrease dramatically but the processing power and associated sound qualities choices has, is likely to continue to grow and improve exponentially. The challenge for today's, as well as tomorrow's engineers, be they recording, live sound engineers or both, is the need to fully understand what is right and good about analog sound quality and in turn how to acquire it and execute it in digital form without simply bailing out and using the analog gear option. The challenge as a manufacturer is for us to respect the need and desire for analog sound quality in our equipment offerings and then effectively produce them for the end user. Why? See PAC Amendment .775; subsection db; paragraph fs

So my fellow inhabitants of the "audiogeekosphere", just like our friends in the political arena we must continue to strive to achieve a clear and accurate picture in our minds – and our ears – of what good audio quality is, what causes it to be interpreted as such, why good sounds impact us in the way the they do, and who we are as engineers as a result of it all. If we don't, audio won't be able to move forward very quickly lest we, like our political counterparts continue to be mired in identity gridlock. It requires a healthy debate by both parties – but with a little concession from time to time. A true bi-partisan effort.

Gosh … I feel so … George Will-ish!

Leave a Comment

login or create an account to post a comment.

About Robert Scovill

I am a 30 year veteran of live sound and 6 time TEC Award winner for Sound Reinforcement Engineer. I serve as Senior Market Specialist for live sound for Avid and am currently mixing front of house sound for the 2010 Tom Petty and The Heartbreakers North American Tour.

Latest Posts

Discover Mixing and Recording Tips with Ken "Pooch" Van Druten

Are You Experienced? First show!

Got VENUE? Solve Church Mixing Challenges with VENUE Tech Notes