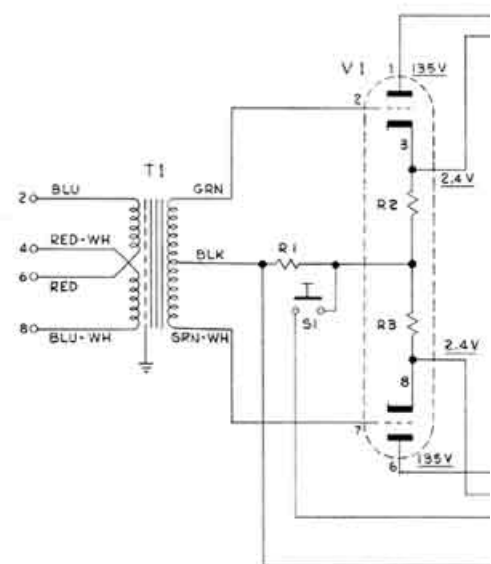




Here is a little ditty about a pet peeve of mine. After playing around with a few other names like "confessions of an ex-ebay junkie" or "audio blasphemy", I settled on titling this article "The Vintage Audio Myth" because that is what best describes the false religion I once subscribed to.

Back in the 1980's when I first became interested in the recording process, it was a good time for buying vintage gear. Digital was just coming into usefulness and many older major pieces of pro audio gear like recording consoles and 2" tape machines were being upgraded and sold off. **Confession #1;** Back then I was actually naive enough to think that if I acquired some of the older gear that had already been proven to viably record hit songs, people would then flock to my studio because that's what people want, to record hit songs, right? As it turns out, people want music that sounds good, not necessarily music with good vintage sound. As you can imagine, the notion that vintage gear might not be as sacred as one may have been led believe is exactly the notion that hundreds of audio equipment manufacturers absolutely don't want you to entertain. The fact is there are thousands and thousands of recorded tunes that have been released with relatively horrible sound, songs people like anyway. For me, at that time in the 80's, I wanted what I thought in my mind was "good sound" and I embarked on a quest to find out exactly what that was.

Many things I already understood about "good sound" were acquired during years as a builder and repairman of string instruments. That was when I really started listening to the complex nature of multiple sounds acting in a coordinated and almost predictable way. When building guitars you can build two identical instruments, from the same wood stock and using the same hardware, however, after completion, the two might sound very different from each other. On top of that "good sound" probably couldn't be more subjective than it is. ***When I speak of "good sound" I'm talking about an instrument that returns positive feedback in a way that inspires the person interacting with it to create at an elevated level, synergy if you will.*** I include vocal microphones in the instruments category. This idea



Altec Preamp Input



of inspiration can be extrapolated into the realm of studio equipment as well. In other words, if it makes good music, it "sounds good".

### *Good Sound - Guitars & Tube Mics*

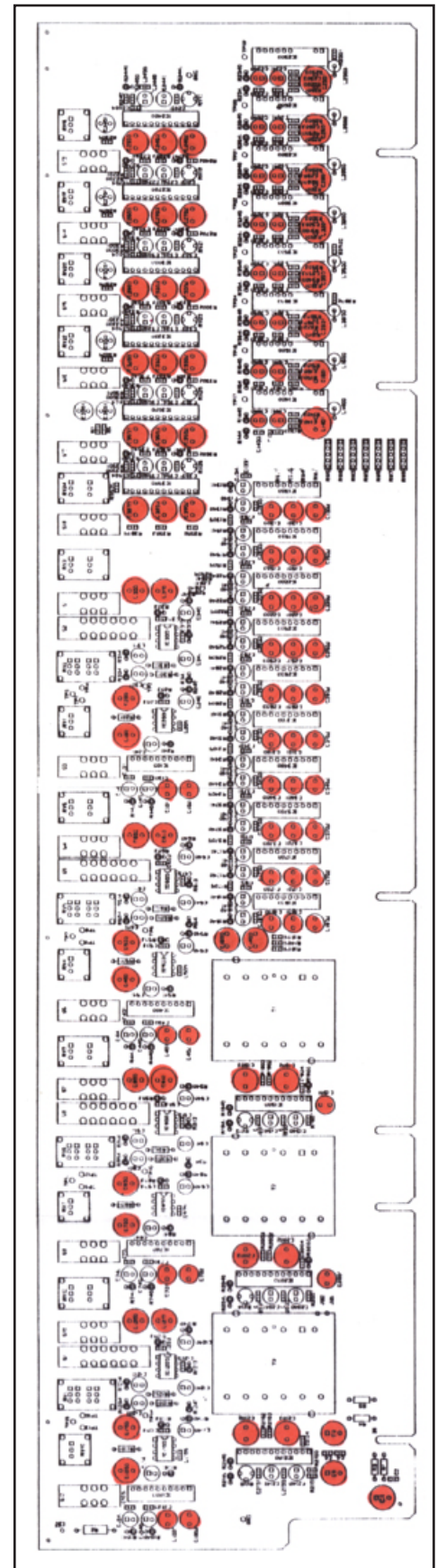
When I owned a guitar shop in the 80's we were a Gibson warrantee center. We also did repairs for several other Gibson dealers. There were a lot of Les Pauls going through the shop at that time which provided me the opportunity to play hundreds if not thousands of Les Pauls and the same for Fender Strats. I found that about 25% of almost any model didn't sound special at all, about 60% sound average and about 15% are special. Special meaning they seem to beg to be played and they give back in great tone and rich harmonics. That might seem like low percentage of great sounding instruments to be sure but when you consider all of the different mechanical factors associated with how a guitar sounds, it's not hard to see that the chances of all of it working together perfectly isn't so good. Hence, the 15% rule. You really don't hear much regarding this rather ugly reality on the web and in print because when someone shells out couple thousand bucks for a guitar, it has to sound good, right? It's hard to imagine buying an instrument without thoroughly trying it out first, yet people do it with guitars and microphones all of the time. Buying instruments and microphones sight unseen through auction sites is tantamount to playing the lotto. Old tube mics are just like guitars. They all sound different, even from model to model. Many times the old tube mics (and guitars) that are sold on auction sites are left over parts from several examples that were used to make a couple of really good ones. Newly refurbished identical tube mics have passed through the studio here that sounded like completely different mics.

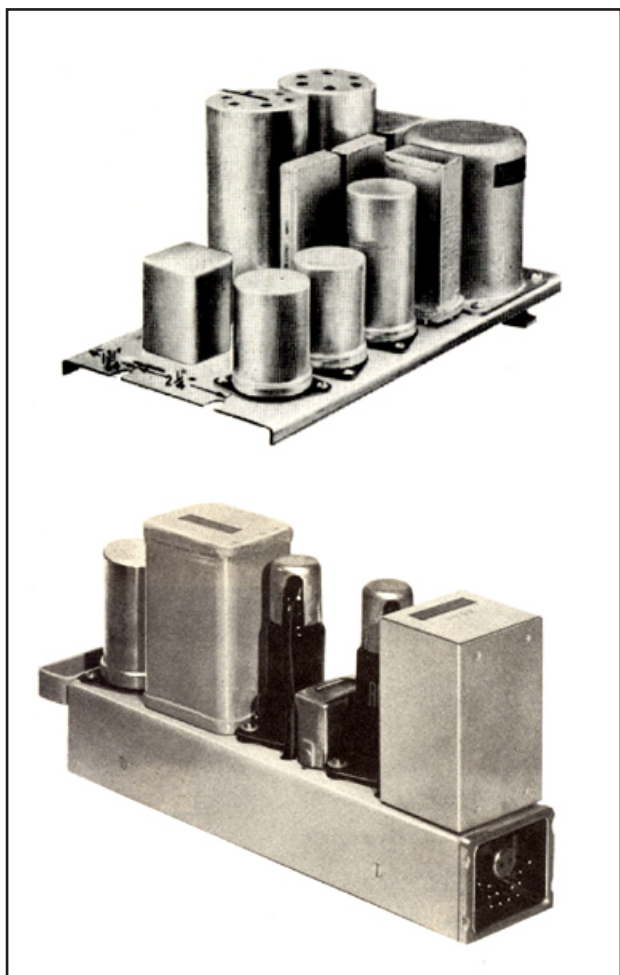
Where is all of this going? Well, while buying up tons of tube and early vintage ss audio gear during those years, it afforded me opportunities to audition hundreds of pieces of gear, many of them in a comparison scenario. I found that the sound of many of the different examples of the same models sounded different from each other. For instance, some of the channels on my Sony 3036 console sound different from each other, even after a recap. More importantly, in a larger context, the more equipment auditioned, the more it couldn't be denied that even some of the most reputed gear wasn't really "special" at all. In fact most vintage pieces that I have personally auditioned during those years and since have modern (read cheaper) vastly superior replacements. *The elephant in the room here is the song. Even if you have the best sounding gear in the world, one question just begs for an answer, what are you going to do with it? If you have a great song you can record it using a Mackie, 57's, and a good engineer. Not one person who likes the song is going to give a rat's ass if the mic preamps didn't have 1620 tubes.*



I'm not saying that there wasn't some really nice sounding vintage recording gear and some pieces have become iconic. When I had a pile of the stuff it became apparent that most of it wasn't worth the time investment. *Every minute spent troubleshooting or restoring gear is a minute not spent recording.* Take a look at the scan to the right. This scan shows a recap guide of a Sony 3036 master module. Each red dot represents a signal coupling capacitor that had to be changed. Add to that work and money, 36 input channel strips, each of those modules sporting dozens of spent caps also in need of replacement. Then there is the monitor module, comm module, busses, and more. Are you getting the picture? The 3036 radiates enough heat to keep the entire studio warm in the coldest months of a Buffalo winter. There is a reason why studios in the 70's and 80's had in house techs, it's because they needed them! Nothing is more frustrating during a session when a piece goes down, and, since most studios can't afford a full time tech, the teching gets passed to you, especially if the unit was used on a recording previously and is needed to complete the recording. Thinking back to how many hours I've spent tracking down issues with gear as a ratio to how much actual recording got done over time, the cost of owning racks of vintage gear is far higher than just the purchase price. *There just seems to be a prevailing misconception that there are secrets to the way gear was made and that the sound was somehow magically better back when.* Even in the 60's, 70's, and 80's gear was already being made to a price point so there were prudent economic engineering compromises being made. More importantly, the design engineers of the time didn't use old proven technology when designing new products. They used the latest and most improved components. Often the first applications of new technology had to be fine tuned so the earliest examples off the line may have some issues that were ironed out after the shortcomings became apparent.

Recalling an AES interview with Rien Narma (Fairchild 670, Ampex MR-70, more), he was asked about the Fairchild 660/670 compressors, which were actually designed in Narma's home shop before his days at Fairchild, it was noted by the interviewer that one of the key components of the 670 compressor was no longer available in the marketplace. Mr. Narma looked at the interviewer with complete puzzlement and said "why would anyone build it the same way today"? It was the same situation with the Bell Labs guys. When new materials became available that were more efficient than earlier materials, those materials were eagerly incorporated into new designs. That is why Western Electric,





Top: Western Electric 120A Preamp,  
Middle: Langevin 116A Preamp,  
Bottom, John Hardy Sony 3036  
Replacement Preamp

and later, Westrex, didn't just continue making 120A Preamps even though many people today think they are the epitome of preamplification. It's the tiny nuances in sound that people all too often get consumed in and lose track of the big picture. In a good song those tiny nuances become almost meaningless. If you record a good vocal performance through a Western Electric 120A and the same performance through a Langevin 116A or even a Hardy mic preamp there will not be \$4K worth of sound difference. After owning all of those I use the Hardy preamps in my Sony console. Why? Because, they sound great everyday and there are no issues with huge loud power supplies, or tubes making noise, or expensive caps going bad, or interfacing problems or, or, or.....

So where does "good sound" come from? The song is the first step. The quality of musicianship is probably next followed closely by the quality of the sound of the instruments. I chose the song first for the simple reason that you can record a great song with horrible equipment and still get a hit, conversely you can't really make a good song out of a lemon by using great equipment. ***People don't want music with good sound, they want music that sounds good.*** Once the song is determined the musicianship becomes the next critical element.

***Confession #2;*** When I first began recording, like many I was recording much of my own group. I would futz with every component of the sound trying to get things to fall together. We were great players but vocally we were a nightmare. It wasn't until a real singer booked into the studio that it dawned on me that the key to a good recording is by having great sound ***without*** the gear.

One day I set up an experiment. I was finishing up a demo for a band that was just getting their feet wet. We were at the end of the session listening to playback and the band members were lamenting that their cheaper equipment made the recording sound cheap. The members would assert that they would sound much better if they had the same type of equipment that we used professionally with our gigging group. The members of my band were arriving to do some rehearsing for a show and they began to listen to the playback of the previous group's session. The song was easy so I suggested recording part of the song with the first group's low end gear but with the players from my band. After listening to playback the newbies couldn't believe the difference in the actual "sound", it was hard for me to get around because it was so drastic. The superior

playing, a by-product of much more experience that our guys had, made all the difference. The rule here is the better the musicians, the better the final sound regardless of the gear. Sure, we did a little intonating of the instruments and retuned the drums but those are things that good (experienced) musicians can hear. ***Even the simplest passage will sound better with a real player.*** You'll notice that better players often don't spend hours trying to get a sound. Our band always had a great guitar player and they sounded great through any amp/instrument combo. Another invaluable lesson learned over the years is that a great vocal will make even the worst sounding recording sound infinitely better. As a matter of fact, if you listen carefully to certain recordings out of the 50's and 60's and listen past the vocal, the music elements are often faded and distorted due to track bouncing or signals passing through a tube console too many times. The song might still be fantastic because the key element, the vocal, has it's own track and stands out from the rest of the recording.

In the hopes of saving the reader a few more bucks here's another huge lesson I've learned while doing live sound and in the studio. I used to try twenty mics and preamps on the drums. Now the priority is simply to take some time up front to tune the drums and choose the appropriate heads etc. ***If the kit doesn't sound good acoustically, it won't, no matter how much fidgeting one does short of replacing organic sounds with samples.*** Having a well tuned drum kit with new heads and a strong drummer will make more difference on the actual sound of the drums in a recording than any preamp/mic combination, at least in my experience. If the drummer doesn't have much experience he/she might not even realize what their kit actually sounds like from anywhere but the throne. I can't count the occasions when I had to explain to drummers that the recorded sound of their kit is a reflection of what their kit actually sounds like acoustically. When they hear their kit played by someone else they immediately hear why it sounds as it does on record. This problem is quite common with guitar and bass players as well. Many players stand right next to their amplifiers when they play and some wavelengths of the lower frequencies don't have a chance to develop, as a result the player doesn't hear the all of the low end mush that is fogging up the recorded sound.

There was a time in the 70's when studios didn't have dozens of different preamps to spice up the sound. They simply used the channels of the console. The material was recorded, mixed and sold. Thousands of hits got made that way and no one in the general public cared if the songs were recorded on a Neve, Spectra Sonics, MCI, or whatever the console. The more successful studios were simply good at using the gear and people that they had at their disposal. Sure they still wanted good sounding equipment and most studios invested in a good board, decent recorders and an assortment of mixing tools. There are engineers from the same period who swear by the sonics of the old MCI consoles which were considerably more "budget" than the Neves. Thousands of hits were recorded with both makes which proves that you don't need a Neve to make good music.

The final point to be made here addresses the prevailing web attitude that great music, the kind that transcends the ages, ended at the 70's. That seems a little hard to swallow as there is still some great music being recorded. Perhaps the perceived lack of transcending music has more to do with the current state of the recording process. Recording budgets have been all but eliminated since the devaluation of music media starting with Napster. Record companies can't recoup their investment any longer so they don't make the investment any longer. All of that industry capital used to cover a good room, engineer, producer, techs and more. In some instances it made for too many cooks in the kitchen, but in many, many instances synergy happened, and music that would not have come to light with only the band's input alone became something that will be enjoyed for as long as we've been listening to Mozart.

In the recording world most of the internet chatter and trade mag interest is on the equipment. That's where the money is. Good sound resides mostly in the rest of the equation and any gear, new or

old, isn't going to turn a bad song into a winner. So my advice to budding record producers and engineers is to spend more time on *what and who* you record rather than *what to record with*. Another thing to keep in mind is that no matter which vintage piece of gear you may think you need for your studio, it can be said without question that great hit songs have been recorded without it. It's not the gear that is the magic bullet, it's the application and implementation of every element involved in making the final product. People have been chasing mythical sound since the days of Stadivari seemingly never asking themselves, "how do you chase a myth"?

Enjoy the Music!

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