

## On Recording

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by **Darron Burke**

I was thinking the other day about digital audio and how we've come to think of it as such as cold-sounding medium. I have a couple of theories.

When keyboard and electronics companies started issuing products with preset sounds, they knew people would be auditioning these sounds on their own, not in a mix where they would eventually end up. The engineers of the equipment didn't want to be accused of making bad sounds. So they nipped and tuckered, until the presets sounded crisp and clear when listened to alone. In most cases, if you could listen to any one instrument that is sunken into the mix of your favorite song, you would find it to be unrefined, fuzzy and rough. All of these sounds with their rough edges fit together to make the song and aren't clear-cut and perfect. When you mix preset sounds together in an attempt to make music: you get the cold naked sound of a TV commercial. That's why your friends say, unconvincingly, "uh, yeah...it sounds pretty good..."

Following in the same footsteps as keyboards, drum machines and samplers, mixing boards are coming on the market with super clean, noiseless specs, and couple that with a digital 8-track (a very pure, noiseless format) and you have the crisp clean, no caffeine sound. And though it's true that ADATs, DA88s and the like don't hide your mistakes like the quiet whisper of analog tape, I think a lot of people who didn't have much recording experience bought digital 8-tracks, recorded some music (badly) and blamed the machines.

So how can we mess-up our sound so it sounds good again?

Using outboard mic preamps, is something that might just save us in these times of digital takeover. Mic preamps are becoming very popular with musicians and home-based studios, and there are lots of new and old designs to choose from. My favorite are the input modules from the mixing boards of the 70s. I look for mic preamps with input and output transformers with solid state Class A electronics, or old tube stuff. They help to keep a little of that "old-world sound" in my recordings. Some even fuzz-up the sound ever so slightly, making, say, a vocal sit just-right in your mix without sounding too clear—like an obvious overdub. (Not too loud, not to quiet).

Like my other example, new products, even mic-preamps, have to live up to digital-age expectations—having nice clean specs and linear frequency characteristics, even though everyone is touting the virtues of old-style tube preamps and compressors. Because of this contradiction, many engineers prefer the older equipment—the unique "personality" hasn't been designed out.

There are a lot of "fake" tube processing devices on the market these days. In these units, the signal goes to a chip first for amplification, then can be diverted into a tube for effect as an aside. But the main circuit is not tube. Some of these sound good, but it's kind-of like cheating.

In the equipment of yesteryear, there was a transformer on the input, coupled to the tube or amplifier, and usually an output transformer as well. Newer production methods dispensed with "bulky" and costly transformers, but sacrificed their unique sonic character with them. Luckily, there are a few manufacturers who still make high quality transformers and the old ones are in high demand by gearheads who make and repair their own equipment. There are also preamps and other processing equipment that feature transformers as a main point of interest: Geoff Daking and John Hardy both make exceptional mic preamps based on early Class A designs. Some companies offer transformers as an option (such as Behringer and dbx).

One of my favorite mic preamps is an Ampex 601. It was the input section to an old reel-to-reel from 1945. It has tubes and a big mic input transformer. It also has a balanced XLR mic input—not many do from that era. I use it to get a sicko-fuzz distorted bass sound.

Here's how. I plug the bass into a DI box. From the DI into the mic input. This particular mic pre has a *ton* of gain, so when I turn up the input knob a little the meter is already in the red and the input tube is overdriven. Then I push it more until the needle pins totally to the right—it doesn't move(!) unless you stop playing bass. Then a guitar cable from the output of the Ampex into a bass amp—my favorite for this is an Ampeg flip top from the 60s. The resulting sound is gigantic. Unlike using a rat or other stomp box, the low notes of the bass are still there. Ever notice that when you step a rat the bass disappears? (This just might be the magic of tubes.) The bass amp isn't distorting, just the preamp. So it's grindy and full and tons of sustain. When I add this to my mix it really fills out the low end.

I sometimes I use this method in addition to a clean bass sound I've already laid down. Come to think of it, I use this method (without DI) for vocals, keyboard and just about anything. I've split vocals—one clean, one distorted—to 2 different tracks and mixed them together later, even used them left to right for stereo. I used this technique on the Gigolo Aunts "Wishing You the Worst" chorus—I love it. It's cool and spacious.

You can add distortion into any instrument of your mix using a pedal patched into your aux send or channel insert. It's a great thing to try, even if your song is not supposed to *sound* distorted. It can change and alter things in ways you wouldn't expect. It can open up the stereo field: vocals

get “warmer”, bass thickens and becomes more smooth; drum-sound broadens. Guitars...hell, they’re already distorted, aren’t they?!

I discussed the Ampex 601 Bass sound because everything thing I used was stuff I was able to buy cheaply. DI box: \$10 from a studio going-out-of-business (it has a \$90 Jensen transformer in it.) Ampex 601: I got it out of the trash and have bought others at yard sales for \$20 each. Ampeg amp: \$70. You might not be able to find these exact items, but if you look around you’ll find something cool and useable.

On recording drums:

I have a trick I use for recording bass drum that works almost every time. Instead of adding or boosting EQ, I cut out somewhere around 300hz, and remove the knocky-thumpy sound. I usually use a parametric EQ. Once I’ve cut the level all the way down, I sweep the frequency around until I’m left with a nice round low kick, and a nice attack on top. You can then add a little snap to the top by boosting some hi-end. This trick gets rid of the floppy bass drum sound. You can EQ before you hit the tape if you trust yourself, or after, if you want to play it safe. I’ve tried this technique on acoustic guitar also, and got that early Sebadoh sound.

On microphones:

Peavey makes an omnidirectional condenser microphone that really is great. It’s called the PVR-1. You can get them at Daddy’s Junky Music for around \$120 each. I use them for drum overheads or room mics. Then when I’m through recording basic tracks, I use them for acoustic guitars. I’ve turned many people on to these mics (all my friends have them) and everybody has had great results.

These are some of my recording tricks, that I’ve found through experimentation or by trying other people’s suggestions. Even, if these techniques don’t work the way you expected, they may lead to a new and surprising effect, and you will have discovered your own secret trick.

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**Darron Burke**’s current project (circa 1998) is producing and recording a full-length album for local band Slept at Supersonic Studio in Cambridge. Other activities include: recording Gigolo Aunts “Learn to Play Guitar”; The Ghost of Tony Gold “For Lovers Only”; Deluxe Folk Implosion and Sleepyhead. He is currently a member of the band UltraBreakfast. He still accepts audio gear as payment for recording. Contact: [tubeguy@usa.net](mailto:tubeguy@usa.net)