

Why do your recordings sound like ass? 3

Started from 01-17-2011

Post #1710

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Quote:

Originally Posted by Fishtank

Hi everybody,

I found this tread few days ago and must say, absolutely fantastic!!! Couldn't stop reading since. The last time this happened to me was when a friend of mine hyped me to the new Battle Star Galactica (big time hesitation at first, but ended up watching the whole thing in one breath).

Yep, thank you very much for sharing your experience and knowledge, openly and consistently. This is really refreshing!

Now my question, if I dare, since it is my first post.

Yep, can you tell us about 3D mixing techniques, such as panning outside the stereo field (as an example) or psychoacoustic tricks that can be used to enhance the 3D feel in a song.

The link below will illustrate better than my words:

<http://gprime.net/flash.php/soundimmersion>

Thank you so much!""

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Thanks for the kind words!

I have no strong opinion on such stuff, and frankly feel that it's a bit outside the scope of this thread. It's not that hard to achieve that kind of "match being lit right next to your ear" effect, and almost any stereo mic technique will achieve it. You can google "dummy head recording" for details on a particularly effective approach.

Honestly, though, I'm kind of a fan of the eons-old proscenium. Hell, I'm a fan of mono, for that matter. A hard-panned tom-roll can be a nifty treat for listeners on headphones, but those kinds of psycho-acoustical "special effects" are probably a topic for a dedicated thread.

Quote:

Originally Posted by space42

Just wanted to take a minute and thank Yep for this wonderful thread!

I read it from beginning to end during a time where I was starting to record a new project. Perfect timing!

I recorded and mixed this project using reaper, free effects (besides superior drummer), inexpensive condensor mics, and some sound advice from this thread.

While far from perfect, it is done and it came out much better than some previous efforts!

I hope it is ok to post a link to music in this thread..

Check it out - feedback welcome

www.rinahsegal.com

Thanks again,

Jerry""
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Sounds pretty good!

If you want advice, I might suggest trying to tamp down on the "clacky" pick attack of the acoustic guitar which sounds a little "miked". I would also clean up the lows a little bit, maybe strip out some of the lows from the guitar to let the bass do its job. I also might hit the vocals with a bit more compression and a little more midrange-focus on the eq bring out the melody and "note" of the performance.

Overall, though, great job.

Quote:

Originally Posted by Dj Gaz Le Rock View Post

I just wanna say that because of this thread my homebrew garage rock stompers have become exactly that.....and I will forever be indebted to YEP for opening my mind up and clarifying more rudimentary mistakes I was making than I can list..

heres an example...<http://www.youtube.com/watch?v=p8nbMluTVUc>

It might not be "Radio" production but its almost exactly what I'm after

my next video will be dedicated to YEP and REAPER!""
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Love it!

Quote:

Originally Posted by shoyoninja

I've said some stuff about recording vocals a while ago, I'll try to add a little more to that...""

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Absolutely fantastic post.

And it applies to all instruments, not just vocals: singers and musicians alike can benefit by expanding their range and capabilities, but what you are mechanically capable of is often a much larger set than what you can perform fluidly,

effortlessly, and musically.

There is nothing wrong with being musically or technically ambitious, but that psycho-spiritual-emotional-physiological "connection" with the listener starts to fray when the performance becomes a forced and mechanical exercise. If you need dozens of takes or complex processing to get it to sound right, then chances are that you are starting to lose some piece of what makes it worth doing to begin with.

Quote:

Originally Posted by thalweg

Question for Yep.

Idle instruments in the listening room.

Sometimes I'm thinking I'm going crazy. I'm not high enough on myself to believe I have a super human sense of pitch. But one day the pitch of all my instrument tracks sound great then next..just a slight waver of a few beats off.

I have about 10 instruments hanging on walls and stands in my listening environment. I have a separate listening environment from my recording room divided by a clear double paned glass patio door so I can see and signal the performers while also checking mic balance on my monitors without bleed.

Before I go packing everything up to test...might you save me the hassle with your own experiences and let me know if having those instruments in the listening room is a no no.

Thanks""

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This is an excellent question.

EVERYTHING matters, but don't go over-thinking it, just do what sounds right.

This past week I had my first experience recording an acoustic bass guitar (in an acoustic-aggressive folk/rock combo), which sounded like absolute trash. It was not a cheap instrument, but it just had no depth or body, whether miked or DI, it just sounded like pure fret buzz and string squeak with a little bit of boxy mid-low wub-wub...

Note that the player was actually pretty good, and had a good sense of how to play bass. And at live volumes, the clackety bass actually gave an aggressive and lively sound to the music. But under the microscope of recording, the bass basically sounded like nothing except string and fret noise.

As it turned out, the sound MASSIVELY improved once the player tilted his bass upright and balanced it on a chair, playing it standing up, like a double-bass. Now the low-end tonality was deep, thunky, and "blooming", and well-suited to the clackety, stringy sound of the fretwork. The difference was not some magical change in playing technique, it was just that the body of the bass was no longer clamped within the meat and fat of the player's body, so the thin wooden body of the instrument was free to vibrate as intended.

With regards to your question, everything in the recording space matters. That might seem like a headache-inducing nightmare of acoustical problems, but it

shouldn't be. The simple and correct approach is simply to move around the spaces that are currently available to you and see where it sounds best. This might be in the closet, or in the bathroom, or the hallway. For that matter, you could just record everything outdoors and have no acoustics whatsoever, other than wind noise.

Everything matters. Which means: don't try to think through it, because the variables are infinite. Just make it sound good.

Quote:

Originally Posted by Tinderwet

Isn't it some serious overthinking? I mean, teaching people how to sing has its place, but it isn't directly related to mixing/recording. It sure is important, but then we could come up with so many micro topics related to music and get lost in the details.""

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It's not over-thinking at all. The material discussed has a huge amount to do with why a lot of recordings sound like ass. "Vocals as an afterthought" is maybe the single biggest problem with novice recordings.

Quote:

Originally Posted by Misaria

Thanks for all the information, Yep (and everybody contributing)!
With the information in this thread I've learned alot more than I have from many years of different (and paid for!) music-educations.

Getting towards the end of the thread I started fearing Yep would've left, but it seems you're still here (I hope!).

I love comparing music to cooking. I honestly use that alot too.
Anywho, I have a few questions that haven't surfaced (completely) yet.. that I've been waiting for since page 2, since I started reading..
I'd love to hear your input on this, yep!

1) You've mentioned noisereduction in the form of cleaning up the noise that resides between the (desirable) audio on a track, with expander/noisegate. But how about hiss removal or hum removal? Maybe more relevant for us with a homestudio/low budget gear?

For example, taking a bass/guitar DI recording and removing the hiss by using a passage, with the unwanted audio as, a template, even if the noise isn't that loud.

2) DC-offset is something I've just started learning about, maybe you could shed some light on it. I've read that a lowcut on an EQ can't remove DC-offset, at the same time I've heard that it can. Now I'm thinking I should use the dc-offset removal filter in Reaper, after each plugin (since I heard some vsts create dc-offset) just to make sure it doesn't occur. Some say they use it on everything, but some people claim that removing dc-offset degrades the audio.

3) When do you think one should stop? Should you let others deicide if it's "good enough".. I'm one of those that has worked for years on some songs, I've been

so-so satisfied.. even when people have said it sounds good, I feel I can do better.. This year I'm starting to get happy with my new sound, but who knows, in a few weeks I might hate it again. On the food subject, I listen to Gordon Ramsey: is it perfect? Can you do better? THEN DO IT
That's how I feel, I know a lot of people that are just happy with a crappy sound, and I do mean crappy and not different..

4) (sorry to ask you this) Do you have any tips or techniques to share based on what you've taught us? You've mentioned sidechaining the kick to the bass so the bass ducks on the hits. One thing that comes to mind that I've read somewhere is to send a copy of the main vocal track, but non-compressed, to a reverb. That way, when you sing louder the reverb reacts more like a real-life reverb, instead of sending an equal amount of signal all the time.

5) Will you post more audio examples? I'm willing to bet that many here would supply you with recordings so you can just focus on the educational part.

6) Considering how bad "Transformers 2" was, will you still see the third installment?

I guess my questions are a bit subjective, and also dependant on genre/situation. I'm not a native speaker, so I'm sorry for grammar and spelling errors (and if my questions are ridiculous).

Thanks for sharing your knowledge /Mikael""
=====

Sorry, been away from the forums for awhile. Life beckons!

1. noise Defining "noise" is a bit tricky, since stuff like crowd noise, for example, is an obvious part the aural experience of live music. Similarly, a bit of guitar hum at the intro can sometimes set an intimate "stage", and cue the experience of hearing something "real". Squeaks, creaks, crickets in the background, party noise, etc might be a part of the sonic environment we are capturing, or trying to create. But as a rule-that-is-meant-to-be-broken: any hum, hiss, rumble, background noise, mic handling noise, mechanical noise, squeaks, footsteps, pops, plosive, breath noise, creaky drum thrones, amp rattling, etc are generally the enemy of good sound. They are a veil and distraction between the musician's imagination and the listener's ear, and are the equivalent of grime, dust, and spots on an old painting. A ruthless attitude towards them generally produces much better recordings than a tolerant attitude.

2. DC offset A low-cut filter removes DC offset at the stage where it is applied. That means that you will still have similar headroom problems if you apply the low-cut after conversion to digital, or after anything else, for that matter. Frankly DC offset is basically inaudible-- the only issue is that it restricts headroom and therefore noise-floor and everything else that follows. The confusion/disagreement comes from the fact that "DC offset" is often referring to a completely separate issue with similar effects, particularly in reference to electric bass or guitar: When you pluck a guitar string, the string oscillates closer to and further from the pickup. The pickup sees the "near" oscillations as "louder" than the "far" oscillations. This is not "DC offset", since the signal still "zeroes to zero" so to speak, but it does produce unbalanced waveforms, most notably in DI recordings of bass guitar.

If you record a bass DI and then look at the waveform in REAPER, for example, it is normal to see either the "peaks" or "troughs" of the wave be closer to full-scale than the "other side", if that makes sense. This is because the string's oscillations

are moving toward the pickup in one direction, and away from in the other direction-- the "towards" motion will always transduce "louder" than the "away" motion, if that makes sense. In fact, you might even see one (or both) sides "flat-topping" or "clipping" even if the input gain is set well below 0dB-- that is the pickup itself clipping/overloading. EQ does not "correct" for this sort of "offset", since it's not actually "DC", even though it looks similar.

This "offset" can be reduced by setting up the guitar so that the pickup is further away from the strings, but that also changes the sound of the instrument. Sometimes a bit of "pickup clipping" adds a snarly, growly, nasty edge that is desirable. Moreover, moving the pickup further away increases the noise relative to string sound. The guitar should be set up subjectively for best sound, intonation, and playing action.

next post....

3. When do you "stop" recording/mixing/etc There are a million valid answers, but here's mine: You should draw a distinction between artistic experimentation and actual recording projects. You should never "stop" getting better at what you do, but your productions should follow a schedule and should stop when the schedule says it's time to move on. Your recordings should "record" what you were doing at the time.

You should do the bulk of your writing and practice away from the computer. Be able to make good music before you start trying to make good recordings.

Once you can play and sing a song in a way that is satisfying and inspiring to you, turn on the computer and set aside a day to set up your mics, test the placement, do all the technical work, etc. Get everything set up and ready to go. This might take two hours or three days or four weeks, depending on the scope and budget of your recording. Treat it as a technical process. Take notes, mark positions on the floor with painter's tape, set up all your mics and set the input levels way below clipping, re-string all your guitars and tune your drums, etc.

Now, knowing that you are able to play good music, since you have already figured it out away from the computer, set aside a reasonable amount of time to play and record the music that you can already play. Maybe that's a weekend, or a month, or a year. Frankly two hours is enough if you can actually play it. Everything else is polish-work. But plan it out, and decide how much time you're going to spend on each piece, and then stop when the time is up.

Projects of any sort tend to take up as much time as we allot, and then some. Nothing is ever done, the work just stops.

RE: questions 4,5,and 6-- I do not have good answers at this time.

Quote:
Originally Posted by audio2u

...I've been a working (and by 'working', I mean it's where I earn my bread and butter) engineer, mainly in commercial radio for 24 years, and I have learned some amazing stuff in this thread. Just goes to show that you never stop learning (at least, as long as you're prepared to listen!).

Anyway, back to my reading I go....."

=====

Thanks for the kind words, but it's an excellent point. I am positive that if audio2u and I shared a beer or two, (s)he could give me a lot of insights.

I suspect it's true of any human endeavor, but it's certainly true of audio engineering that the hard and messy and awesome part is the intersection of technical detail and human experience. This is true of landscaping, automotive design, cooking, medicine, whatever. There is always something to learn, and there is always value in the actual user experience.

I never thought this thread would still be alive for so long, but what prompted it, and what still holds true, was a frustration with simplistic and frankly idiotic "rules" that were commonly thrown around in audio forums, usually supported by half-informed technical-sounding woo-woo.

The quality of public discussion related to audio has frankly improved tremendously in that respect since I started this thread, both in forums, magazines, and so on. I'd love to say that I started it here, but I didn't-- in reality it was bubbling up everywhere, and this thread is just one of many taking a systematic approach to bridging the gap between technical understanding and artistic approach.

Audio quality is a never-ending pursuit, and never will have an end. "Fidelity" gets cheaper and easier by the month, much as people in the developed world get ever-increasing access to cheaper and fresher and more varied food ingredients. That only spurs new kinds of creativity and combinations and potential. Even if a "brain chip" were developed that could transmit pure imagination from one mind to another, the satisfaction would not be the same as actually hitting a skin or scraping a bow or plucking a string...

As long as we are mortal beings made of, and limited by, the sensory experiences of meat and bone, there will always and necessarily be a disconnect between what we can imagine and what we can experience. And the greatest beauties will always be stuff whose nuance and intricacy blurs the boundary between our Godlike awareness and our thoroughly earthbound bodies of clay.

Quote:
Originally Posted by Ashe37

Back on the topic of recording/mixing synths....

I've always been cautioned against running synths through a guitar amp unless the parts being played are in pitches normally seen in a guitar. Especially if the synthesizer is being used as the bass, it can generate tones that (best scenario) the guitar amp cannot reproduce effectively or (worst scenario) damage the amp. Same with running it through a bass amp, hence why keyboard amps with a much wider reproduction range exist.

Or am i being fed a line of bull? Or do i need a crossover and send the bass to a bass amp and the treble to a guitar amp?

I guess this is why so many synth-based musicians record directly into the computer and use PAs for live performance.""

=====

My advice is to stop thinking and start trying.

Guitar amps (or emulators) can be an awesome antidote to everything that is problematic about synths.

Your advisors are technically correct-- an 8x12 Marshall stack is not going to reproduce thunky subsonic synth bass accurately. But it will bring a whole new level of midrange beef, chunk, slurp, crush, and size to anything (including drums or vocals), and it will make midrange leads scream.

Distortion and compression are the sound of modern music, and guitar amps have been working on it for 60 years. Stop thinking about it and start trying it. Running a square-wave synth lead through a Marshall half-stack is so awesome it will give you a hangover.

Quote:

Originally Posted by rahul42

Super this has been an amazing thread so far thanks yep !!

I was wondering what your take was on plugins like the 112db red line monitor and the focusrite vrm box which are virtual mix environments that emulate monitors and room types . I've never used either but apparently they'r meant to be used with headphones so that you can mix anywhere on the fly .""

=====

They are half-measures, and always will be. Or at least, they will be until some completely new kind of transduction system is invented. (For starters, how do they know what headphones I am listening on?)

Since the start of this thread, a new wave of affordable, extremely accurate headphones has hit the market, which are certainly "mix-monitor quality" in terms of accuracy and flat response. This is a huge boon to home studios and budget audiophiles... in terms of listening experience, for example, a pair of ATH-M50s offers depth, realism and accuracy that used to cost hundreds of dollars in headphone money, or thousands in speaker money, for around \$100US. And even some \$30 earbuds from Costco now outperform expensive Sennheisers of 10 years ago in terms of low-end reproduction.

But even the world's best headphones don't let you walk around the room, they don't let you have a conversation while overhearing the music, they don't let you see how it sounds with the windows open or from the hallway, they don't tell you how the low-end "feels" in you chest at high volume, they don't tell you what it will sound like in a shopping mall at 70dB SPL from 2 meters overhead...

The fundamental problem with headphone-only monitoring is not that it is inaccurate, but that it's headphones.

The new wave of inexpensive high-quality headphones offers a huge boon to budget recordists. Headphones have always been a great way to check detail, and to second-guess room effects, and so on. And they still are. Really good headphones can even serve as primary mixing monitors in a pinch, with loudspeakers used simply to verify. But that last part is really important-- you still need to have a good set of speakers to verify on.

You can double-check "speaker mixes" on mediocre headphones, but trying to double-check headphone mixes on subpar speakers is a nightmare. Somewhere, somehow, you have to have a set of accurate open-air speakers that you trust if

you don't want every new system to be a surprise.

It doesn't matter what processing is applied, sound pumped right into your ears doesn't work the same way that sound transversing open air does. It's like trying to apply processing to those old 3D viewmasters (remember those?)... if you lined up your eyes just so, it sort of looked like real depth...

Quote:

Originally Posted by sstillwell

Quote:

Originally Posted by yep

Running a square-wave synth lead through a Marshall half-stack is so awesome it will give you a hangover.

Word.

Jan Hammer would be proud of you.

Scott""

=====

And this from the man making some of the sickest plugins available, no less...

edit: analog synth-heads who are ignoring guitar stomp-boxes are missing out. Whether actual pedals or emulators, classic guitar FX like tube screamers, Univibe, Ross compressors, Dunlop wahs, etc are absolutely SICK on synths in the guitar-frequency range. If you can get your hands on a Marshall Shredmaster pedal from the 90s you will get scream and fatness like nobody's business. A similar sound can be got from the ~\$40 battery-powered Marshall pocket amps. Only downside is that they are surprisingly, ear-splittingly loud at full gain, which is what you want for screaming leads.

Quote:

Originally Posted by soundchaser59

No wonder their cables are so disgustingly expensive....to pay for those disgusting attorneys. Haven't bought any yet, never will.

Side track.....good thread....carry on.....""

=====

In fairness, Monster actually makes good cable, for the most part, although often over-priced and with shockingly-dishonest marketing (esp. different guitar cables for "rock", "jazz", etc)

But they are not that far out of line with "legit" premium audio cables, and their bread-and-butter is not the stupid-expensive audiophile stuff. \$30+ for mic or guitar cables is not actually outlandish. It's a specialized application and the proliferation of crackly, noisy, hum-collecting cheapo cables is pretty good evidence that *is* worth paying extra to have a cable that's going to last the next 10 or 20 years of gigging/recording, especially if you are spending good money on the rest of your signal chain.

My complaint with Monster is 100% their business practices, not the quality of

the cable. I'm not opposed to premium cables, in fact I avoid cheap cables like the plague. I just hate people who are evil.

Quote:

Originally Posted by johng View Post

I read this thread over and over almost every day. It has changed my life and, just when I thought I couldn't do it, got me started meaningfully on the path of completing a home-recording project.

So it is with great trepidation that I have to disagree with you here about fresh bass strings.....

I have spent a LOT of time studying bassists like Duck Dunn, Jamerson, Family Man, George Porter, Wilbur Ware, etc. I pay special attention to how they control the attack and decay of each note, and have worked hard at learning to emulate them with my right and left hand techniques.

The most meaningful content for bass function, as I see it, occupies the sonic terrain below about 800 hz or so. And as far as bass as an instrument, is concerned, I prefer to keep with the natural order of things and let the guitars be twangy, the drums tuned significantly higher than 80's rock, and the bass low and mean.

What I'm getting at is that my roundwound bass strings (strung on a USA G&L) are about a year old right now (I have used these live, on tour, in the studio...lots of sweat!), and I LOVE the way they sound. I will admit that they require a special sensitivity to play correctly. But so do fresh roundwounds.

Honestly, I hate the sound of new strings. They do nothing to my ear but add a horrible mess of fizz and pop that has nothing to do with how a BASS is supposed to sound.

BTW, yes, I have thought of using flats. I still prefer old rounds.

Could you elaborate a bit on why I'm wrong here? Clearly, I am nowhere near being the player the Jamerson was. And you are not the only one who I've heard say that only he could really work with old strings.

Actually, as a sidenote, I read in that Shadows of Motown book that towards the end of his career, he was getting more and more complaints about questionable intonation on his old strings.

Any feedback is more than greatly appreciated. Thanks for so much good information."

=====

No need for trepidation on any count. I am thrilled to hear that a discussion I started changed your life, and I would be just as thrilled if input from different perspectives were to change MY life, or that of someone else. If you take something away from gleaning insights from unexpected places, have it be that you never know where inspiration will come from, not that the most recent insight you heard is the definitive voice of God...

Onto the topic of bass strings:

Rules are meant to be broken, but as rules go, strings generally sound their best

when they are just broken in. Which is somewhat after "brand-new", and somewhat before "well-played". When I say "generally sound their best", I mean with the best clarity of tone, the best accuracy of pitch, and generally sounding the way the string is meant to sound.

Brand-new strings often require multiple re-tunings to "settle in". This can be accelerated by snapping the strings while tuning, or through good hardware (graphite or roller nuts and bridges, good tuners, etc). Brand-new strings are also often too clicky/clacky/stringy-sounding, and a few hours of play often "settles" them into clear and pingy but still "note-y" sound, like a piano string.

Old bass strings gradually become flabbier and more "note-y" still, with less "growl" and more "hoom", less "grind" and more "thump". This is a mostly tonal/subjective question, and there is a lot to be said for the thunky, unobtrusive sound of dead bass strings.

A more serious problem is with intonation. Contrary to the marketing of "coated" strings, the biggest problem with string age is not corrosion but metal fatigue: Anyone who has ever changed a set of strings knows that old strings have "flat spots" where the frets are. The metal stretches and bends with age and use-- instead of being a straight piece of metal with even windings, it becomes a wobbly and bent piece of metal with flat spots and separated windings.

The net result of this is partly a flabby and indistinct sound, which is not always a bad thing, per se, but it is also partly an inconsistent tonality and weird, uneven harmonics or overtones that can make the instrument sound constantly out-of-tune.

If you're playing a bass with old strings, and you love the bass sound, then don't change a thing. But if the bass sounds uneven, inconsistent, and pitchy, then it's time to begin at the beginning. As I said in the very first line of the very first post: if your recordings don't sound like ass, please ignore.

FWIW, I own three electric basses. One of them (my favorite) is an old Danelectro shorthorn that I pulled the frets out of and filled the slots with shims and wood putty, and treated the fretboard with tung oil (I have probably ruined the value of the vintage bass but I have no regrets). I have this bass strung with LaBella flatwounds that I have not changed for probably a decade. It sounds thunky and fat and vague, halfway between Motown and a string bass, and it blips and blurps like nobody's business for a 60's-type sound.

But my other two basses (a P-bass and a maple-neck frankenstein cobbled together from parts with EMGs) I keep strung with fresh DR strings at all times. The P-bass gets the fat, growly, big-bottom sound of typical pop/rock bass guitar, while the frankenstein/EMG bass is there for the piano-string "ping", cut, depth, and clarity for dense, heavy-rock/punk mixes.

To my dismay, the dead-string, flatwound, fretless, hollow-body Danelectro is the least-picked bass. Most clients love to play it, but prefer the recorded sound of the P-bass or the homemade "Frankenstien". And they are usually right. It depends a lot on the style of music and the other instruments, but the job of the bass is ultimately not to sound good on its own, but to complement the other instruments. And most modern music leaves little room for fat, flabby, thunky-sounding bass.

Getting back to the original point, with most recordings, the sonic qualities of the bass are usually less about how the bass sounds on its own, and more about how the bass locks together the more tonally prominent instruments, like drums and guitar. And a pitchy, flabby-sounding bassline is apt to make everything sound

problematic.

James Jamerson was a special case in a lot of ways. He routinely played notes that were way "out" but that sounded perfect. He controlled note duration to create harmonic movement within changes in ways that often completely altered the sense of harmonic progression, always for the better.

The most important thing for any bass player to be aware of is that the bass defines the tonal movement of the song. For good or for ill, if the bass makes a fast run up to the seventh, the whole band makes a fast run up to the seventh, whether they meant to or not. Playing good bass is not just about hitting notes that comprise a good melody, it's about making the whole band sound better. In a sense, it's the bass-player's job to make the band sound good, even if the bass sounds bad. IOW, the quality of the bass is always dependent on how it relates to the overall sound of the band. Unless it's a solo, how the bass sounds by itself is irrelevant.

Quote:
Originally Posted by warmingtone

There are some interesting points that flmason is getting some understanding of there, but still a ways to go..."

=====

This is a huge and rambling post, with an imperfect mix of good insights, dubious subjective opinion, and detailed technical analysis, which is to say, one after my own heart. I'm going to skip over a lot of it but there is some stuff that bears repeating/expanding...

Quote:

I think a huge part of a lot of things is not to do with the mix, but what parts are put down in the first place. As many of us are both the recordist and musician and the composer and often all these things merge, they are very important..."

=====

This is MASSIVE. It cannot be over-stated, especially when you are working on your own. At least half the value of working with a producer or pro mix engineer is that they can tell you what parts to mute, when to extend a part for two measures, when to get rid of your complicated and awkward transition, when the guitar part is obscuring the vocal, when the bass is too busy and distracting, etc.

Quote:

The amp sims and 'tone' is where the mojo lies really, this is such a small part..."

=====

I think there might be a typo in this sentence, since it appears to contradict itself, especially in light of the (excellent) comments and examples that follow.

The thing with guitar sounds (or any instrument sound) is: is it capable of expressing what the musician means to express? If you write a great monologue or poem, it will probably sound better if it's read by James Earl Jones or Gene Hackman or Jeff Bridges or Morgan Freeman or whoever. But there are also millions of people with great, rich, authoritative voices who could read it and have it sound big, bold, and dramatic (or whatever). A lot of them do car commercials

on AM radio and would probably record it for \$50 if the scheduling is convenient. And a lot of people with bad speaking voices could probably do it a disservice. But if you've written a monologue and feel that it could only sound right if read by Anthony Hopkins, then the problem is probably not with the other 5.99 billion voices in the world.

I never record with a POD, if I can reasonably use a real amp. I almost always like the sound of real amps pushing real air better. In fact I usually prefer the sound and feel of a battery-powered practice amp with a 2" speaker to an amp sim. I admit freely that this preference extends beyond any pure test of A/B or isolated null test or anything else that can be clinically measured, and it's probably mostly irrational, but I just feel like I'm losing something anytime I'm recording a guitar through an amp sim.

That said, if you can't get a good guitar sound out of a POD or even good freeware plugins, then the problem is not with the amp sim. And I will and do freely use them where there is no amp available with the right sound, or in problem circumstances, or just for convenience.

It's not about the "fingers", it's about the totality of the player. Anyone anywhere can be trained to play any piece of music "correctly". Good players play [i]beautifully[/]. This becomes instantly obvious if you listen to serious piano music. Two players can sit down at the same piano and play the same written piece at the same tempo, at the same volume, both of them without "mistakes", and one sounds completely different from the other. Their fingers never touched the strings, it's all in the subtle art of musicianship, the phrasing, the control and note duration, the minute differences in dynamics.

The flaw is in thinking: "I followed the instructions exactly, and it's the job of this machine to make it sound good." It is the job of the musician to make it sound good. That's all that musicianship is, whether you are playing a cardboard box or a pipe organ.

To the point, a great many of the recorded sounds (guitar or otherwise) on those awesome classic albums kind of suck. The people who made them would have killed their sister to have the tools and processors that are available today, for free. Maybe they also would have recorded to tape and used analog eq or maybe they wouldn't have, but it's bordering on insanity to think that what made those records great was the chemistry of the capacitors or whatever.

Quote:
Originally Posted by ringing phone

Sorry to go off track a little....but on a whole, has this thread dealt with home recordists who are reasonably competent musicians/ singers...or does it include home recordists who can't really sing and who have poor to quite poor playing technique?

Because I feel that a lot of home recordings sound like ass because the guy or girl just can't sing. Weak singing is a like an Achilles leg, let alone heel.

...or are we talking about people who can pretty much perform?""
=====

I think your post is completely ON-track, and this thread seems to periodically get hijacked with wonky and endless debates over guitar tone that should really be moved to a separate thread.

To the point, if people spent half the time and effort practicing with the tools available to them that they spend arguing on forums, they would make a lot more and better-sounding music.

However, specifically with singers, esp amateur rock/pop/R&B-type singers, they tend to do less arguing and more plain worrying, mostly because they have no fucking clue what they are doing, and deep down they know it. Two weeks of actual PRACTICE would do most singers more good than a year of engineering and six grand worth of equipment and plugins (this is true for all instruments).

All those girl groups in the 60s who seemed to intuitively nail perfect harmonies and vocal blending on live, one-mic recordings came from backgrounds of church choirs or some such. They actually practiced stuff like singing intervals, scales, do-re-mis, etc. Hitting the note was a given, an ingrained, intuitive thing. They were free to focus on things like timbre and tone and expression, because the technical part of "singing" was second-nature.

Many (maybe most) modern singers are far too hip to be caught dead singing do-re-mis or "las" alternating root notes with octave intervals or any of that stuff that actual singers do. They're not out singing chants to jump-ropers in the schoolyard. A lot of them are not even singing at all except at rehearsals, shows, and recordings. Maybe a little bit in the shower or in the car along with the radio...

Instead there is this expectation that it's the job of magic mikes and machines and preamps and plugins and slick production to make them sound good. I'm pretty good at that, though not nearly as good as some. But I can do quite a bit to make a bad singer sound "professional", and I have offered some advice on the topic and am happy to offer more.

The problem is, nobody in the history of the world ever bought a record or even pirated one because the singer sounded "professional". ("Hey Trudy, have you heard the new Screaming Mimis? I just love how professional it sounds. I can't get enough of their consistent and mistake-free sound. It reminds me of what it's like to spend time with Johnny, he's so reliable and accurate. Sigh.")

We can do a lot, in a technical sense, to remove the "bad" from a performance these days. But it's still really hard to add "good" that isn't there. I started a separate spinoff thread on "production" as distinguished from the more technical aspects of engineering good recordings, but that's had a lot less interest.

To over-simplify, there are three primary aspects that make a great vocal track. In roughly descending order of importance, they are:

- The quality of the performance;
- The quality of the singer's voice or intrinsic talent;
- The engineering and production technicalities.

The first two are massively inter-related. The quality of your "voice" is partly dictated by genetics and upbringing and stuff we can't much control-- very few people are ever going to be competent opera singers no matter how effort and training they receive, much less a diva with a usable three-octave range.

But amplification and modern processing, not to mention the nature of modern popular music allows people with even limited vocal genes to still make compelling music. I'm not sure Bob Dylan's or Mick Jagger's range really even exceeds a half-octave, for example, but they work the notes they can sing for all they are worth. Moreover, they defy any categorical notion of a "good voice",

along with people like John Lee Hooker, Johnny Cash, Janis Joplin, etc. Never mind if we start to get into, say ODB, Kurt Cobain, etc. Even Frank Sinatra or Rosemary Clooney might not pass a Juilliard audition.

You don't need opera-quality pipes to make a hit record, or even a classic. But it's very hard to make a great record with a singer who can't hit the notes they intend to, with the delivery they mean to achieve.

This relates somewhat to all the wanky guitar-talk above: it's not that the physical instrument doesn't matter or has no effect on the quality of the sound, it's that the musician's job is fundamentally to work the instrument they have. Guitar players can buy new amps, Saxophonists can buy a new horn, Drummers can buy a new snare, but I don't know of any realistic way for a singer to buy new vocal chords.

In all cases, whatever the instrument, it is the job of the player to make it sound good. Good engineering can flatter the sound, and make it sit better in a mix, but it can't add very much in the way of talent or musical quality. I can do a lot to turn an ugly and amateurish vocal performance into a bland and inoffensive one, but again, nobody ever fell in love over a car-dealership jingle.

Singers need to PRACTICE, if they are ever going to sound better than bland and inoffensive. Your mom and your friends might be impressed with how "professional" it sounds after I get done with it, but if that's all you've got going for you, it's like trying to become a model by having someone photoshop out the fat.

I'm not a vocal coach, and I have no particular regimen to recommend. You can check Craigslist for singing lessons, or you can download or buy any of a million instructional things, or you can simply sit at a cheap keyboard and practice singing along with intervals.

See here for something you might not expect, and a great example of exactly what I am talking about:

<http://www.wimp.com/warmingup/>

Quote:

Originally Posted by Marah Mag

But love may have been consummated over a bank jingle.

http://en.wikipedia.org/wiki/We%27ve_Only_Just_Begun

(Tell the truth, Yep: Was that a test? Did I pass?)"

=====

Lol. I did not intend it as test, and had no knowledge of the source, but you certainly "passed" in the sense of disproving my thesis. Apparently commercial jingles *can* lead to wedding songs!

Quote:

Originally Posted by Marah Mag

...That assumes you have a song worth singing & a singer who feels it & brings it."

=====

If you don't have that, than the best I can do is make it sound like a car commercial. Which I can do with almost anything, I'm good at that.

But I'm a second-rate, maybe third-rate talent. (don't argue, I know me better than you do). There is a notion in baseball that the best hitters make the worst hitting coaches. The "naturals" have little to offer because they never had to think about it, they just did it right. According to this notion, the best hitting coaches are the smart and skilled mediocrities who barely made it to the big leagues, by analyzing everything. People who almost didn't really belong there, but who squeezed in by exploiting every little edge and advantage. People who made it without talent, in a sense. According to this notion, *those* are the people with advice to give.

If I have anything to contribute, it's along those lines. I'm a mediocrity who has put a lot of thought and effort into trying to figure out what makes the great ones great. I hope some people reading my posts might be natural talents who get a jump-start, who surpass and exceed any advice I can give.

To the degree that this thread is being read by other mediocrities, I hope that it will at least allow middling talents to make better-sounding records that they can be proud of.

Everyone has a song worth singing. Some have the skill to sing it in a way that is worth listening to. The very best sing songs that do a better job of singing everyone else's song than they could do themselves. They express our own feelings better than we can express them ourselves.

**Quote:
Originally Posted by Marah Mag**

I can't find the post, but I believe it was in this thread, where someone said something about a compressor's auto-make up.

I am finding it useful to have AMU turned on BEFORE moving from default, and keeping it on while adjusting the comp, and using the TRACK fader to actually adjust the track's level in the mix. I find that this lets me - in some sense forces me - to hear what the compressor is doing in context.

It's as though, by setting up the AMU, you set up a constant, and that helps you focus the track under compression. A pivot of some kind.

The AMU switch always seemed like it was supposed to be an A/B of some kind and, when it's flipped on AFTER you make a bunch of adjustments, will show a huge diff. But it was never clear to me what that diff actually meant.

By having the AMU on from flat, and playing the track fader AS you adjust the comp (in effect making the track fader the the comp's last stage), you are "riding out" the changes that cumulatively show up as drastic when the AMU is switched on post.

Does that make sense?

That's what it sounds like I'm hearing with ReaComp.

I love compression.""
=====

Auto-makeup gain is useful precisely to the degree that the compressor itself is well-designed.

In terms of the above, it should be turned off for A/B comparisons, along with any other makeup gain. If the compressor does not sound better without makeup gain (whether auto or manual), then the compression is not actually improving the sound.

Setting aside saturation/distortion artifacts, what makes one compressor sound different from another with the same settings is usually the detection circuit and response curve. That is to say, how the compressor defines/detects "loudness", and also how quickly it responds to the same.

There is no clear rule of thumb for this. A compressor that makes fast, palm-muted metal power-chords chug and thump might make mellow, clean-tone jazz guitars pump and hiss unnaturally. Compression settings that make a rock drum kit pound and pulse and breathe with huge, stomping sounds, might make a cocktail kit sound pumpy and fake and kind of dumb.

The faders should be used to turn up one instrument relative to another. Compression should not be used to make a thing "louder", it should be used to alter/contain/control the dynamic profile of a given instrument. You can always make something sound louder with compression, until the listener turns down the playback volume. At that point, you have only made it flatter and smaller.

Compression should be used to control the way an instrument breathes and pulses. In a sense, GOOD use of compression is dangerously close to BAD compression.

Quote:

Originally Posted by Marah Mag

Right. In practice IGWOS those 2 are destined to overlap and morph. The extent perhaps depending on genre. And one's patience w technical shit. And what you are actually trying to accomplish. Or not accomplish.

This thread has been going on for so long, I'd like to ask: What exactly does ass sound like these days?""

=====

I'm not sure what IGWOS means....

To the latter question:

IMO, the topic, and "like ass" still applies to anything where the recorded work still falls significantly short of the vision. IOW the totality of who you are is who you are, but if the only impression anyone has of you is the bottled smells that come out of your ass, then they are probably not getting a fair picture.

More specifically, what I meant five years ago and still mean today, is that if your records sound significantly inferior than your musical vision, well, that's what this thread was intended to address. As I said in the very first line of the very first post, if your recordings do not "sound like ass", please ignore. Frankly, being something of a mediocrity myself, I don't have a lot of input when it comes to making brilliant records sound more brilliant.

I'm a pebble-polisher, not a diamond-cutter. If you have genuine diamonds then you probably don't need my advice: a billion-dollar industry is picking through the muck day and night for you already, and they'll be happy to shine you up good.

Quote:

Originally Posted by *flmason*

Couple of questions jumped to mind in the discussion about vocals.

1) Is my impression that vocals and elec. guitar are the two most problematic tracks to get sounding "commercial"? Seems like Bass and Drums (just in my experience) respond to "standard" EQ'ing etc. more predictably?"

=====

This is not my experience at all. Vocals are the instrument that is hardest to cover up if the singer is not up to par, but to me that's a completely different thing than making the singer sound "commercial". It would be hard to make Bob Dylan or ODB sound "commercial", but why would you even try? OTOH, trying to make a BAD singer sound GOOD is a whole nother thing, but making a bad singer sound "commercial" is actually not that hard these days, although it can be time-consuming: just have them whisper a bunch of tracks, getting as many of the notes in tune and in time as possible, then edit and auto-tune the hell out of them until they are well-aligned and layered enough, and practically anyone will sound like a car commercial.

IMO, genuinely "commercial" bass and drums are actually the hardest, mostly because there is NOT that huge difference between "adequate" and "awesome".

Drums are by far the most technically difficult instrument to record in a typical rock/pop combo. I can't imagine how anyone could think otherwise.

Quote:

2) There's constant banter about, "Artist X can't really sing...Autotune...blah, blah". Been my brief experience when I had a chance to sit down to Melodyne and Autotune... that niether could fix my voice to even the level of a poor radio DJ. So really how good is that stuff.""

=====

Ahem. Melodyne/Autotune is excellent at correcting pitch. It does little or nothing for bad singing. Have you ever been to an orchestral concert? Every musician should hear a live orchestra AT LEAST once per year. I guarantee there is a free or cheap one near you. If not, it's worth a weekend trip.

Classical and opera singers just sing. No mics, no preamps, no compressors, no eq, no nothing. They just stand in front of an orchestra and sing, LOUD, like, deafening-- that's their job. What makes the good ones good at it is not just that they spend hours every day practicing scales, notes, intervals, etc-- It is taken for granted that their intonation is perfect. That's the baseline, like a licensed electrician who knows the principles of safe grounding and what wire gauge and insulation rating to use for the circuit-breaker rating, and so on.

In the classical world, the singer/musician is EXPECTED to perform perfectly and flawlessly in terms of timing and pitch. With a live orchestra, being technically correct is the bare minimum of acceptable skill.

Operatic singers are people who can sing with perfect intonation and clarity, over AT LEAST a full-octave range, at area-filling volume (literally at levels that cause hearing damage at close range). That's the baseline requirement to get an audition. And by "perfect intonation" we're talking about being able to sing a half-step above the melody, on demand, based on the written score (ever tried singing a perfect half-step above the melody you're listening to? Talk about a grueling exercise in ear-training...)

IF you have that skill, then you can earn an audition. That's just the baseline. If you also happen to have a good voice and good reading skills, then you can probably get a background part. To get a lead, you usually need something closer to a two-octave range (at concert volume) PLUS that rare and magnificent combination of genetics, talent, and training that produces a GLORIOUS voice, something simultaneously rich, clear, full, airy, and articulate-- "the sun in the voice," as Pavarotti put it, even at volume levels where most people are going hoarse, screaming their lungs out. Plus you have to have the stamina to do that for several hours per day.

THAT is good singing.

Fortunately pop music is not nearly so demanding. The modern technology of amplification, signal processing, and recording allows much weaker singers to still offer their creative vision and raw talent to a worldwide audience, and to fill concert halls, even if they lack the grueling and rigorous training, and even if they maybe lack the genes and talents of the great voices.

But there still has to be some "there" there. You say that you've tried melodyne and autotune and your singing still doesn't sound good... forgive me for asking, but has your singing EVER sounded good? Have you ever been to, like, church, or a school concert, or a choral performance, or something like that?

You know how there is this thing where some people are good singers and some people are not?

Autotune is for people who know what note they are trying to hit but occasionally miss it. It can't make a tuneless singer with a bad voice sound like Celine Dion.

Autotune is something like 12 years old. Any record made before, say, 1997 was done without Autotune. So all those singers from the prior 60 years of popular music recordings were actually singing those notes and harmonies and so on. And a lot of them were doing it live, with one-take, one-mike, in-and-out recordings. All those girl groups and doo-wop acts and barbershop quartets and so on just got up and sang it, and what you hear is what they sang. They grew up in church choirs and singing jump-rope chants and harmonizing on street-corners and so on, and then they got "discovered" and sang it into a mic. Point is, they were good singers who sounded good long before any engineer or processor ever came into play.

It is noteworthy that other people wrote their songs, for the most part. Just because you have talent and vision and something worth saying doesn't necessarily mean that you're the right person to sing it.

Quote:

3) Regarding Vocal Harmonizers... same as (2). The demos for some of them sound amazing... the one or two I've been able to try... just don't seem to be as amazing as the demos, LOL! (As an aside, anyone know the names for the kind of harmonies you hear in 60's pop alot... Beatles, et. al. Same question for country? I.e. if you were trying to dial in those sounds... what intervals are they, etc.?)""
=====

I'm detecting a recurring theme in these questions, which seems to be asking for studio tricks that will achieve the stuff that was accomplished by musical genius. The Beatles harmonies were the notes that sounded good together, based on the strengths and limitations of the voices at hand. Those girl groups and doo-wop acts of the 60s were mostly not technically trained in the theory of harmony, they were people who grew up singing in church choirs and the like who sang stuff that sounded good off-the-cuff and on-the-fly. The Beach Boys were not writing out scored arrangements, they were intonating the stuff that sounded good based on intuitive practice from spending a lot of time singing together.

You can orchestrate/compose whatever you like, but you cannot get the offhand vibe of intuited harmonies with a plugin. It just doesn't work.

Quote:

4) Is it me or do the classic recordings of days gone by seem to be heavily affected by the reverb in use? Seems like the reverbs they used then have some sort of resonance or overall sound that somehow seems to smooth the vocals out and homogenize them..."

=====

You are correctly apprehending a bunch of different stuff. For starters, modern records are far more "dry" and close-miked than older records usually are. This is partly just from technology: it's only recently become possible to have 100 tracks or whatever, which means you can have a close mic on every drum, etc. It also allows the engineer, without bouncing or generation-loss, to double- or triple- or quadruple-track all the vocals, guitars, etc, as a substitute for reverb.

Piling on more "dry" tracks gives a lot of the "fullness" of reverb while maintaining a more "in your face" sound. Everything sounds more thick and full-bodied than a plain-jane trio, but it still sounds up-front and not "washed out" with reverb. At its worst, this can start to sound profoundly artificial and tiring and fake (see "Limp Bizkit").

Older records had significant technical limitations on track counts. If you wanted that "big" sound, you either had to authentically put a ton of musicians into the same room, or do something like run the parts through an echo chamber or tape delay. Compared to modern, infinite-track digital recordings, these approaches necessarily yielded a somewhat mushier, roomier, midrangier, "washier" sound (that is arguably a lot closer to the natural sound of music than having 100 close-miked tracks, but whatever-- personally I suspect that a lot of the modern fetish for "vintage" and "analog" is really just a misdirected desire to hear the sound of actual musicians).

Quote:

5) Just how where those 80's Hair Metal vocals done? Clearly it's harmonies and multiple vocals. But what else. And... did all those guys have voices that were in a basically female range?"

=====

Jesus, dude, you are on a long and rambling post that should really be five separate threads...

Most of those hair-band singers were actually fairly limited-range baritones or tenors singing in a sort of pseudo-falsetto "fire" palette. It's not actual "range", it's just vocal technique. See attached audio example. Apologies for the fact I had

to sing it myself, with a cold.

Quote:

Fader Automation - I find this can remove a lot of the "retarded" sound for some problems...

what does that even mean?

Quote:

Originally Posted by doojum

...About monitoring then. A quick experiment with my reasonable monitors revealed the horror of a small untreated room. Playing various sine waves and walking about basically results in nausea. There is a limited amount I can do here in terms of treatment. Do you think there is any refuge from a bad room by monitoring at low levels as you suggest? I suppose I'm hoping that somehow the nastiness of the room is reduced by putting less energy into it? Dreaming?..."
=====

It's nice to stumble upon pointed interesting questions in the latter part of this thread, which has mostly devolved into exactly the kind of pointless philosophical wankery that I meant to side-step, so thank you for elevating the quality of discussion.

On the monitoring side, "nearfield" monitoring intrinsically negates some of the artifacts of bad room acoustics, especially if you can pull the speakers away from the walls somewhat. The sound from the speakers has to hit the walls, and then bounce back to your ears, which means the room-sound will always be quieter and more subdued than the direct sound. In theory, everything good about nearfields is even better with good headphones, except that then you're monitoring on headphones, which just never seems to work right. Which is a whole nother topic.

Nearfield monitoring at lower levels does not in any theoretical sense "negate" room effects. The direct sound hitting your ears is louder, but so is the reflected sound. The primary advantage to low-volume monitoring is that you're not kidding yourself by making a mix that has to be played loud to sound good (everything sounds good loud).

However, in practice, there is or at least can be a slight acoustical advantage to monitoring at low volume... stuff like floorboards, sheetrock, tabletops, etc all resonates at certain frequencies. This is pretty obvious to anyone who has ever had "the floors shake" from loud music, etc. All these substances and surfaces have a certain degree of non-linear mechanical resistance. By that I mean, if you have ever lived in an old house, you have probably experienced the creaky floorboard that creaks much louder if you step on it quickly than if you step on it gingerly. It's still your whole body-weight, but the material does a better job of absorbing it.

On the recording/tracking end, there is no need to worry about room acoustics unless you are working on time and budget constraints. Here, you need only find an instrument and mic-placement that sounds good. That might be in a grossly-imperfect acoustical space such as a stairwell, bathtub, or closet-- it doesn't matter.

"Accuracy" is not and never has been a virtue in sound-capture. It's important in monitoring so that you know what you are capturing, but the sound itself can be

whatever you like. The point is, you want the stuff that you like to be a factor of the captured sound, not an artifact of the playback system.

There is a sticky at the top of this forum regarding acoustics where I and others have posted low-budget advice for acoustical treatment. The ideal scenario is to have a neutral but not entirely dead room for monitoring, and then you can do whatever you want on the capture side.

Having a neutral space to record in (as distinct from a neutral monitoring or control room) can be a great help when time and budgets are pressing, but it's by no means necessary, and it isn't necessarily better than a "colored" live room.

Whenever possible, the two most important things to me are the monitors and the listening room. Modern tech offers cheap solutions to almost any problem as long as you can trust what you hear from the speakers. But the quality of your darts hardly matters if you are throwing them at a blurry target in a dark room.

That said, actually recording with what you have is infinitely more valuable than second-guessing what you have. The point is not perfect the art of perfecting the art, but to perfect the art of DOING the art.

Not sure how much that helps, but that's what I got.

Quote:
Originally Posted by LungButter

...

1) I was playing around with an effect-free bass track, DI'd into Reaper via StealthPedal. I pulled up a graphic EQ, cut all frequencies below 50Hz, and above 500Hz and the track got louder. I essentially left the 'meaty' part of the waveform alone. Is this as simple as "cutting all other frequencies effectively boosts the remaining ones", or is it something else? To my noob-ness it seems that cutting that many frequencies would decrease the overall volume level, even though the track was actually using relatively little of them.

2) When you guys talk about 'layering' guitar tracks, are you taking one track, duplicating it and panning each to one side, or do you record two different takes? Or both? Is one better than the other, or is it situation dependent? If you record two different takes do the subtle differences of each take add to the thickness of the sound?""

=====

Wow, awesome questions.

1) What you almost certainly experienced is the fact that a conventional EQ tends to "boost" the frequencies right around the cutoff point. The sharper the cutoff, the bigger the boost. This is an inescapable fact of how equalizers generally work. The technical wherefores are a big topic, but you can think of an equalizer as a sort of flat steel spring that doesn't break: if you bend it down, then the part around the bend curves upwards, and the steeper the bend (higher "Q"), the bigger the "boost" that happens right at the cutoff point. Imagine a line that cannot have angles, only "S"-shaped curves.

This also works in reverse: when you "boost" an eq frequency, it forces a "dip" just before and after the "boosted" band. This is why it's so important to eq by ear and not by looking at spectrographs.

What is almost certainly happening here is that the "S"-curve of your EQ has boosted surrounding frequencies in the core bass guitar range while cutting out weak extraneous noise. There is nothing wrong with this if it sounds right, in fact you may have found the perfect cutoff frequencies to isolate and maximize the usable bass range while getting rid of the extraneous stuff. Or you might have found a horrible quagmire of mud that accents low G and the C# an octave above. Or you might have found the best practical compromise that seats the bass between your kick drum and guitar sounds. (I hate rules and recipes for this stuff).

2) Could be any of the above. By far the most common (and usually most effective) approach is to simply re-record the same guitar track multiple times. This has become almost universal standard practice in anything remotely resembling heavy guitar rock: you have your rhythm guitar part, and you record it 2, 4, 8, or however many times so that your record has not one but multiple identical tracks of the same guitar part. You can do this all in one speaker, or hard-panned across two speakers. It is almost never done mono.

I frankly kind of hate this sound, but it is EXTREMELY popular, and it would be wrong of me not to give fair attention to this approach. It's the sound of "modern" heavy guitar... it's that thick, big, "note-less" sound you hear in the background of sports-radio bumpers and rap-metal songs. It's the sound that says, "I'm sick of music: let's hear some DISTORTED GUITAR!". It's the modern "rock" version of the bland, generic, tuneless string sections in old bubblegum pop. It's the "guitar as synth pad" sound. You just layer up power-chords until they sound like nothing but "more louder", the way you get movie popcorn with "extra yellow". It doesn't taste like anything, it just makes it oilier and "more".

All of that might sound like criticism, but it's frankly exactly what that "layered" sound is all about: cheap ingredients piled high until they taste like nothing but overload. The whole point is to get it to sound like nothing but a thick crush or "wall" of noteless sound-- if the listener can tune a piano to it, you're doing it wrong.

It might sound like I'm being facetious here but I'm dead serious: as much as I dislike these sounds, I'm actually pretty good at achieving them. It's kind a specialty of mine, and what I shoot for is the blandest, most note-less "crush" I can get. I call it the "space marine" sound-- music for action sci-fi movies, just a huge bland crush of adrenaline and psycho-acoustical overload.

An alternate (usually inferior) approach to "thickening" the sound is to use short delays and/or alternate processing in the opposite speaker. This almost always sounds weaker than actually double-tracking the part, but it can certainly work if you get to mixdown and decide that you need "that sound" with only one track.

As you might have guessed, my favorite way to do electric guitar is to get ONE track that sounds powerful and awesome on its own. Most rock guitar players seem to have long since given up on this goal, though, and seem to increasingly regard it as the job of the studio to make them sound good.

Quote:

Originally Posted by *flmason*

...Regarding the "Space Marine" sound, could you point out some examples, so I'm sure I'm on target with your description?..."

=====

Seriously, almost any hard-rock station or sci-fi action flick has this. Off the top of my head, the soundtrack for "300" is a candidate. There's also a bit in the film "Idiocracy" where there are like 100 guitar players all playing a metal riff during a sort of "modern gladiators" thing that illustrates exactly what I have about this, but it's very effective.

Quote:

ONE AWESOME TRACK... (oh yeah!) any good advise on getting this "ITB" (in the box)? I'm guessing the pre-eminent popular example of this is EVH?"

=====

Seriously, this is just about playing something awesome and working the sound to get the awesome out of it. Funny that you brought up EVH, since there is a very old story (I am paraphrasing from memory) of some producer monitoring levels prior to a Van Halen session, or something. He's sitting in the control room and hears this awesome guitar sound pouring out of the speakers, and rushes out into the live room to see what Eddie VH is playing, to mark everything down for "awesome guitar sound", and it turns out Eddie is playing some Steinbrenner (I think) with rusted old strings through a little practice amp, just whatever was laying around.

Quote:

2, 4, 8, etc. tracks, for me knowing that I have to double it, turns me into a "wooden indian" as they used to say in baseball... stiff (waiting for a walk, in baseball).

You know, "ok, 4 of these 1 2 3 4, two of those 1 2 ..." Not that music isn't about counting and timing, but when you say, "I gotta be able to do it 8 times, near exactly the same", you start dumbing down your ideas, unless you're really awesomely practiced. (I'm just not.)"

=====

Yeah, that's the whole idea, and exactly the problem. It only works if you play it exactly the same every time, and you can only play it exactly the same every time if you stop trying to do it "good", and just start trying to do it "correctly".

To be cynical about it, it's what you do when playing music sounds bad. It's a technique for achieving sonics, not a musical performance.

Quote:

Originally Posted by TedR View Post

Hi Yep

I was hoping you could give a listen to this brief acoustic guitar and vocal recording I made at home, and critique it from a sound quality perspective.

I realize there is a hiss present but try and ignore that for now if you can, hehe

Your input would be greatly appreciated !

Thanks, Ted

<http://www.box.net/shared/f2c1snh8ts...16/824305658/1>""

=====

You're right that the hiss is a serious problem, but otherwise it sounds fucking awesome. Seriously one of the best-recorded solo acoustic/vocal records I've heard in a long time. It's very well-sung and well-played, but the technicals are outstanding: The guitar is clear, full-bodied, and articulate, without brittleness or muddy boominess. The vocal is rich and intimate without essiness or boxiness. The level and dynamic balance is perfect.

What is the deal with that godawful hiss, though? It sounds like a hardware mixer where someone left all the empty inputs and faders cranked up.

Quote:

Originally Posted by Kenneth R.

I don't want to be presumptuous, but I hope my queries weren't buried beneath the divergent gear discussions that keep blooming up in here...

What are the advantages and disadvantages of different methods of fader automation?

I find myself automating faders for some tracks after I record. I might set them to a drawn curve, or ride them manually and have Reaper save and follow that. Read, Trim, Write. Not sure I know the difference between Read and Trim.

It also seems to me to be possible that if I need to adjust the faders in such a way, it might have been tracked wrong. Should I have mixer faders set to a specific gain and sit there, or is automation the norm? In what cases should I use automation and in what cases is it better to have a fixed gain setting? If I've got a lot of crazy automation going on, is that a sign that I've got to do something about my mic placement/dynamics control?""

=====

Sorry, yes. In a sense this is the whole art of mixing, and it has been given short-thrift.

It's a fantastic question, and one I hope will get more opinions than my own.

Other than in super-pristine, "authentic" recordings such as classical and maybe acoustic music, fader-manipulation is really what the mixer ultimately does.

The more "modern" the recorded sound gets, the more automated it tends to be. For example, where it used to be standard practice to pull back the guitar faders while the singer is singing, it's now common to use a multi-band compressor with a side-chain to duck the "presence range" of the guitars keyed to the vocal to maintain more consistent levels. For good or for ill, just ducking a single range maintains a more constant impression of "loudness" .

More obvious examples are in breakdowns or solos. Pre-automation, we used to tape guitar picks to the console to set the "high" and "low" limits of where various instruments should be. For example, we might set the bass "low" limit at a drum breakdown (where the drums were fully-cranked to the top guitar pick and where all the other instruments were muted). So the bass might be 6dB down but still in the mix while the toms are going nuts. The bass "high" limit might be at a

bass solo or slick bass transition where it punched up above the other backing tracks, and for the rest of the song, the bass would have some "target" average level, in between the high and low picks. (Note there might be two or three people each in charge of particular faders during mixdown).

Automation offers a lot more control, but there is still something to be said for that three-tiered approach. For one thing, it's a hell of a lot easier to keep track of than having all faders be open-ended: for each song section, you can just set every track to either quiet, average, or loud.

Obviously, the source track and musician will have something to say about the performance dynamics. Ideally, they will have a LOT to say, maybe even EVERYTHING to say, if the band is brilliant about controlling their own performance. More commonly though, there will be places where everyone either gets loud or gets quiet all at once. That's really where the art of fader-riding comes into play.

More on this later. Good topic.

Quote:

Originally Posted by lucifer1306217

I fear that I might start to sound like a broken record as we get more into specific instruments and practices, but the reality is that the same principles apply over and over again.

When it comes to recording electric guitar, the most important thing is to make sure that we are actually starting with the player's "sound." One man's trash is another's treasure, and it's not the engineer's job to decide whether the guitar should sound like My Sharona or Cannibal Corpse or Charlie Christian.

For the home recordist, one of the problems with most "how to record guitar" guides is that they presume that the player's sound has already been worked out and well-established. This is usually the case with major-label artists who have already established a following, played hundreds of concerts, and who have had the opportunity to use advance money to shop through dozens of amplifiers.

But what of the Joe Blow who started this whole thread, he of the Squier Strat and the Peavy amp? How is he to know whether he would hear a bigger improvement from Lace Sensor pickups, or from a vintage tube amp, or from a modern modeling half-stack, or from buying a \$3,000 Les Paul, or an original Ross compressor pedal, or from a POD vs a V-AMP vs a Johnson J-Station vs actually buying a real tube amp? For that matter, does he even really know for sure what "his sound" would be, even if he could have it for free if he simply named it right now?"

=====

Bingo. Whole point of the thread.

Neither I nor anyone else can answer all of those questions, but I have tried to answer the easy and budget-independent ones. Moreover, I believe that correctly addressing the budget-neutral questions can sometimes negate or at least make obvious the budget-dependent ones.

I can't guarantee that Joe Blow with his Squire Strat, Peavy Amp, Mbox and SM57 will achieve cinematic A+ recordings with freeware plugins and cheap ad-hoc room treatment. But he can probably achieve at least a \$10,000 improvement

(gear-wise) by using good basic recording and mixing practice (maybe even a \$100,000 improvement). Moreover, that improvement will carry over regardless of what gear he uses. If he can also spend another \$10k or \$100k or \$1mm on gear and room, and if he spends it wisely, he will probably improve his sound even more. But it will be incremental, if he was following best practices to begin with.

Incremental does not mean irrelevant. There is, or at least can be, a sonic value to using expensive gear. But using good practices and techniques gets the most out of WHATEVER you are working with. A nincompoop with a million-dollar budget can make a bad record much faster than an expert with a thousand-dollar budget. A bigger budget does not automatically translate into bigger sound, but better skill does.

This was intended specifically to NOT be a gear thread. Some people might have read that as indicating a "gear is irreverent" thread. It's not for me to say-- I was the guy who threw out a topic for discussion, and I've been involved in it, but the discussion itself is what has value, if anything does.

For my part, I generally find gear threads pointless and boring. That doesn't mean that I find gear pointless and boring, just that threads about gear seem to be dominated by people defending the money they have spent, or else bitching about the stuff they are unable to operate properly.

There used to be a music/audio store in Boston called E.U. Wurlitzer (I have no idea whether they were related to the organ company) that would let you set up a revolving credit account and then you could take anything home for 4 weeks to try it for free. So you could A/B anything they carried in your own studio, on your own time, with your own instruments, on your own voice, etc. They were around forever but they went out of business around 10 years ago, when internet shopping gutted the independent retailers. I was devastated.

Call me stupid, but it took me about 5 years to figure out that their "try it for free" policy was no different from a 30-day return policy, which is commonplace with online retailers. (doh).

So when it comes to gear, by all means read the reviews. But when you can buy almost anything with a 30-day return policy, it's pointless to me to spend much time arguing over who likes what better for what esoteric spec. Try it and see.

It's not that gear is pointless, it's that gear-threads are pointless.

Quote:

Originally Posted by reapercurious

...what do you do when nothing that you do works?""

====

In all seriousness, this is not a technical problem but a musical one. Step away from the computer, shut off the internet, and get back to what made you start doing music in the first place.

You know what the word "play" means, right? It's what little kids do with sticks in sandboxes. Do that. That's where art comes from. The rest is just lighting and frame-building.

Quote:

Originally Posted by Marah Mag

Fear of sounding like ass is a creativity & productivity killer...""

=====

This whole post was fantastic but the starting line is worth repeating.

My very first sentence in this thread was: "Nothing personal, if the title does not apply, please ignore." To reiterate:

...if the title does not apply, please ignore.

...PLEASE IGNORE...

Fix the stuff that sounds bad, not the stuff that sounds good. If it's not broken, don't break it.

With so many hundreds of posts, this thread is almost becoming self-defeating. It is increasingly nit-picking around the edges and second-guessing perfectionism. If I were an admin I would have locked and buried it ages ago. Occasionally there are still some good questions, but this has largely devolved into an aimless sub-forum. Gearslutz and ProSoundWeb have lots of broad-ranging discussions with better experts than I.

I started this thread with the explicit intent to help novice recordists get the most out of what they had to work with. In some cases, some people have been able to offer expert-level advice (sometimes maybe even me), but my point was a primer on the basics, not an end-all-be-all text on good sound. I certainly would have no objection to it becoming the online Alpha and Omega of studio-recording, but I don't personally believe such an authoritative text is possible-- art will be debated until the extinction of sentience.

Start new threads. Bring the discussion elsewhere. Help other people.

If this thread has helped anyone to make better-sounding musical recordings, then it has made the world a better place, and I got what I wanted from it. If your recordings "sound like ass" then please feel free to ask for help, that's the whole point.

But this is not the place to flog dead horses or argue about the nuances of world-class perfectionism. I'm not a proven hit-maker, and I don't think any of the current thread "regulars" are. I'm a low-level engineer who can tell you what it takes to achieve escape velocity, but getting to Mars or even the Moon is something else. I wish I were a musical genius, but I'm really just a mediocrity with a skill for translating well-established technical concepts into plain English. Whatever value I have contributed is not in knowing extraordinary things, it's in explaining well-established things clearly.

The broader art of making good sound and music is outside the scope of this thread. If your recordings do not sound like ass, please ignore.

Quote:

Originally Posted by lucifer1306217

...But what of the Joe Blow who started this whole thread, he of the Squier Strat and the Peavy amp? How is he to know whether he would hear a bigger

improvement from Lace Sensor pickups, or from a vintage tube amp, or from a modern modeling half-stack, or from buying a \$3,000 Les Paul, or an original Ross compressor pedal, or from a POD vs a V-AMP vs a Johnson J-Station vs actually buying a real tube amp? For that matter, does he even really know for sure what "his sound" would be, even if he could have it for free if he simply named it right now?"

=====

Replying with more thoughts later, on this last topic in particular. Apologies if it just confuses things....

Really, that is exactly what this thread was never meant to be about, and I'm sorry that it ever got into that stuff.

Frankly, there are vast oceans of places on the web to debate that kind of stuff. There is no need for another gear thread, especially not for a place for guitar players to argue over pickups.

If the guitar player cannot achieve "his sound", I recommend guitar lessons or guitar forums, not audio engineering. If he would prefer to buy pickups and amps, there are plenty of places where people argue over such things.

Quote:

Originally Posted by reapercurious

...but if i put on any commercial song, it sounds perfect..."

=====

I seriously doubt that your whole post is accurate. Frankly, if you have read this whole thread all the way through (or any other good recording primer), and if random commercial recordings still sound "perfect", then you're not getting it.

There are very, very few "perfect" recordings in the history of the world. Maybe fewer than 20, surely not more than 100. Dave Brubeck's "Take Five" is one that comes to mind. Nothing on the current top 40 that I know of is.

This is not just personal opinion. If you ask the engineers, producers, artists about virtually any record made long enough ago to have some perspective (say more than two years ago), they can tell you at least five things that they wish they could do differently.

I hate to tell anyone to go back to the beginning of the thread, but if you cannot hear at least some of those flaws and imperfections, then you are flying blind, trying to do things yourself. If a good sauce means you can't tell when a steak is over-cooked, then you're not going to cut it as a chef.

Quote:

Originally Posted by Marah Mag

Fear of sounding like ass is a creativity & productivity killer.

And there are worse things people can say about your recordings. And better things people can say about a record than that it "sounds good." Believe it or not.

I believe one of the keys is to not try so hard."

=====

Amen to all of the above.

When you are 70 years old, and have made 900 records, you might finally crack the code and make one for the ages, a perfect recording that is perfectly perfect and will never be topped.

But if you skip the 899 records in-between, you'll never get there, and you'll also have skipped a bunch of pretty damn good records that might have made a lot of people happy.

Quote:

Originally Posted by Rocksteady

I haven't made it all the way through the thread but I'm getting ready to purchase some studio monitors. Did we ever get to that monitor buying guide promised to us at the very beginning of this thread? I just like to seek the advice of my peers so I know what I'm hearing when I hear what I've never heard before.""

=====

Not sure I ever specifically promised a "monitor buying guide". If so, I probably over-promised.

I have not used anything close to a majority of the monitors out there. I'm still on the old NS10s, and I am POSITIVE that those are not the best monitors out there for the money these days. I supplement them with a Tivoli Audio PAL for checking mono/small-speaker sound, and a big old expensive set of Technics 3-way loudspeakers with 15" woofers to check the lows and "loud" sound. I also have a surround system with EMU PM5 monitors and a subwoofer that I mostly use for watching movies, plus my car, earbuds, headphones, etc.

You want monitors with a very clear and accurate midrange at high volume. You will not usually be using them at high volume, if you take my advice, but it is important to be able to get them to sound ear-smackingly loud, painful even, at the peaks, like a drum kit, and still be clean and un-clipped. Otherwise you will start squashing your sound just to get it loud enough to sound like the source material.

I hate recommending gear, since there is almost certainly something better and cheaper than whatever impressed me four years ago or whatever, but in the low/mid-priced active monitors I have heard, I like the folded-tweeter ADAMs, the JBL LSR series, and the 8"-woofer Mackies.

I have heard other, cheaper, smaller monitors that sounded great and that I could work on in a pinch (for example the PM5's or even the little Tivoli Audio PAL), but they are not loud enough and do not have enough low-end extension to actually sound like a drum kit or a bass rig... you end up compressing the raw tracks just get a satisfying volume out of them.

I usually try to mix and monitor at low levels for a bunch of reasons referenced earlier in the thread, but I still do want a speaker system that is capable of sounding like the actual drum kit or Ampeg 8x10 or whatever.

Almost any purpose-made studio monitor is likely to be better than almost any

non-audiophile hifi or computer speaker, and vastly better than a rehearsal-space PA system.

I hate talking about gear and what to buy, because frankly it's getting better and cheaper way faster than I can keep track of, and also because I never want to give the impression that you need "X" to make good recordings-- you don't.

I would rather have good monitors than anything else, if I had to pick, but good monitors really only means something that you can trust. Listening on lots of different speakers can make up for mediocre monitors, but it's time-consuming and imprecise.

Quote:

Originally Posted by *flmason*

Well... when we are constantly told that the reason the band doesn't sound live like it did on the recording... and we like the recorded sound better... Ya know, because of all the things you can do in the studio you can't do live...""

=====

This is a dead thread that should be locked, un-stickied, and allowed to die the natural and dignified death of old internet posts. It's latter pages are increasingly not worth reading, and demean the forum by being stickied at the top.

I am impressed and happy that it lasted as long as it did. Most forum-discussions on the topic of recording technique last only 5 or 10 posts before they get hijacked by gear-discussions or guitar-players.

Discussions of gear are not without value. Some gear is certainly better than others. But the point of this thread, from the very first post, was expressly to discuss gear-independent techniques.

That discussion of good practice has increasingly become a sideline to rambling feuds about whatever. The downside for the forum is that people might click on the last post in the stickies, thinking that's that most relevant and up-to-date info, and just find pages and pages of garbage.

It had a good run. Now it's the same junk that people argue about everywhere. I'm not a mod, and I can't un-sticky it. I wish people would let this thread die, and find somewhere else to argue about guitars.

Stopped 9-11-2011 Thread #1982 FINAL

THE END

As yeps post above says, it has had a good run. I have leaned a ton from the thread but it has disintegrated too much.

I hope that theses 3 PDF's will help you out, and Happy Recording! Smurf