Thank you for signing up for the RecordingExcellence.com newsletter. As you begin your home recording journey, or strive to take your mixes to the next level, it's my hope that this list of tips will instantly help you improve them.

There's a lot of information out there when it comes to mixing, and it can be overwhelming to sift through all of it. I know when I first started, I just wanted **quick and easy** information to help my mixes sound better and more professional.



I learned that you don't need to pay for expensive classes and top-of-the-line equipment/software plugins to improve your mixes (of course, those things can certainly help incrementally).

In truth, the biggest gains in mixing quality can come from looking at your process from the beginning and knowing some winning tips. **That's why I put together this list, and am now giving it to you.** It includes the simple rules and techniques that I follow whenever I'm working on a project. This stuff works -- and I sincerely hope it aids you on your musical journey.

Sincerely,

Scott Hawksworth

 $Founder,\,Recording Excellence.com$

The Ultimate Mixing Cheat Sheet

A 26-point Checklist to Instantly Improve Your Mix

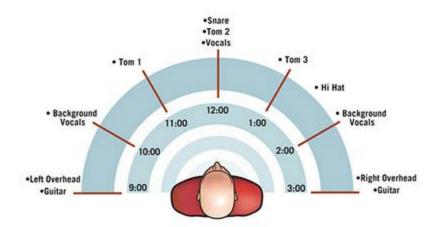
- 1. Have a clear plan of where you're trying to go before you start mixing.
 - Set specific goals to achieve before you sit down. Do everything with *intention*.
 - Give yourself a limited amount of time for experimenting
 - Don't address every problem as it comes up, but mark it for later
- 2. **Set a moderate volume level for your mix and stick to it**. There's a temptation to mix with the volume turned up so you can, in theory, hear everything better. In reality, this can create more problems for you. You should set a volume that is low enough where you could chat with someone right in front of your monitors with the music playing and not have to raise your voice significantly. At the same time *don't be afraid to listen to your mix at different volume levels* either. Mix at the same level, but turning your monitors up and down can be a great way to confirm that everything's sounding good.



Mixing Desk - Source: flirckr.com/aidanwojtas/

- 3. **Gain and volume are different things.** This may seem obvious to mixing vets, but too many people get it confused. Here's a great article explaining the differences between gain, volume, and loudness.
- 4. **Loud doesn't equal exciting.** There's a temptation to make volume a substitute for effects or other dynamics of a mix. Don't make this mistake!

5. Be smart with panning. Don't make your instruments fight for the center, left or right. A good stereo sound is crucial, so make sure you try different things and are always conscious of potential crowding issues.



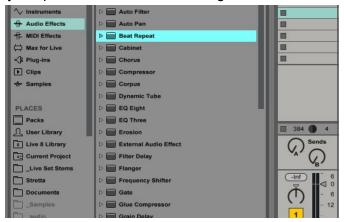
Example panning chart. Source: media.uaudio.com

- 6. Try panning in mono if you're struggling to create separation for your instruments. This might seem a little strange if you're trying to make a good stereo mix, but it works!
- 7. It's generally a bad idea to pan bass sounds like drums and bass guitars to one side. These are high-energy sounds that need to be shared equally between speakers for the best results and sound.
- 8. **Don't overlook the importance of dryness in a mix**. Reverb (and other effects) adds wetness to a mix, which can make it sound "farther away". Too much wetness and you will lose any sort of "punch" in the song which is a bad thing. Also keep an idea of everything will "fit" once you start adding effects like reverb.



Source: audio.thedelimagazine.com/secrets-of-mixing-space-as-third-dimension/

9. **Don't add too many effects (especially reverb).** Effects are great, and can really add to a song, but too much of a good thing is always bad. Over using effects can make your mix cluttered and take away the punch that's essential to a good mix.



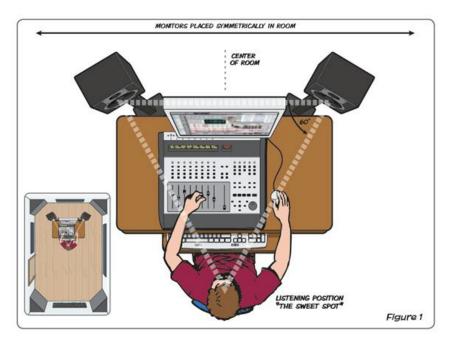
Audio Effects in Ableton Live

- 10. **Take breaks from the track when mixing.** This is a general tip for really doing any kind of work (even if it's something fun like mixing). Walking away from the mix will not only recharge you mentally, but it's a great way to "reset" your ears and keep your perspective fresh.
- 11. Try listening to your mix OUTSIDE the door of the room/studio where you're mixing to check balance. This might seem strange, but it can really help show imbalances more clearly than sitting directly in front of your monitors can.
- 12. Check your mix using headphones too. Monitors are by far the best thing to listen through when mixing, but a nice pair of studio headphones can fill in the blanks nicely by picking up audio issues you may have missed.
- 13. **Utilize gain staging to ensure adequate headroom before you ever start mixing**. Gain staging is so important because you don't want to overload your mix and get clipping on your master track. You can keep your track levels low (with plenty of room for your master fader to work) by utilizing plugins. If you're unsure what gain staging is you can <u>read about it here</u>.



Set proper levels to leave plenty of headroom and avoid clipping: gain staging

- 14. Varying the drum and bass levels throughout a mix is generally a bad idea. In a majority of songs, the drums and bass are the most consistent things, forming the foundation of the song and keeping things moving along. Playing with these levels isn't advisable because it's counterintuitive to the consistency they provide.
- 15. **Be smart when using EQ and Compression**. EQ and Compression are incredibly powerful tools for mixing. But like any tool, they can be misused and end up hurting a mix rather than helping it. Too much compression can make your track sound unnatural. Too much or too little usage of EQ can make your mix sound awful. More isn't always better.
- 16. **Print off an EQ cheat sheet and reference it every time you're mixing**. Here's a <u>cheat sheet</u> I'd recommend using. There are many others out there. Some audio engineers might have differing opinions on what levels will give what type of sound and what's best, but it's good to at least have a starting reference point.
- 17. **Make sure your studio monitors are placed in a good position.** You don't want your monitors to be too close to each other, you also don't want them to be too far apart. Considering the acoustics of your room and how monitor placement within that room will affect the sounds you hear is also key.



Source: crossfadr.com

18. When mixing, don't be afraid to close your eyes and really listen. These days there are so many great tools out there that can show you if a track is running too hot, or if you're working with a primarily MIDI-based track show you visuals on a sequencer and so on. In short, our

technology can almost be distracting at times. Sometimes it's a good idea to sit down, close your eyes and just HEAR what you're doing.

19. Excessive low-end is one of the most common problems in mixing, be wary of it. This is especially a problem in home studios that lack significant acoustic treatment. Too much low end can make a mix sound awful, so focus on that potential issue.



Low end- a common problem area of a mix. Source: cdn.tutsplus.com

- 20. **Do all of your EQ work in mono**. This is a fantastic tip for anyone, especially those struggling with utilizing EQ. Working in mono forces you to build the mix piece by piece and really hone in on each individual track. Keep working on it until you can clearly pick out each part and they all have great balance.
- 21. Try automating your master fader up 1.5db on the chorus to make it really stand out. It's a very specific tip/trick, but one that can work wonders for giving a chorus just a little bit extra power.
- 22. **Learn when to tweak a mix and when to leave it alone.** There's a temptation to keep tweaking a mix, and you could theoretically do it indefinitely. The best audio engineers know when to stop messing with a mix. Again, too much of a good thing is almost always bad. Trust your work!
- 23. It's generally better to use EQ to cut rather than using it to boost when trying to fix problems. The human ear is less sensitive to cuts than it is to boosts, and therefore it's much easier to go off the rails and get bad results if you're boosting a track rather than cutting it.

24. Avoid having too many instruments compete for the same part of the audio spectrum at all costs. This is particularly an issue with mid-range frequencies. Too much competition for one part of the spectrum can lead to disastrous results.

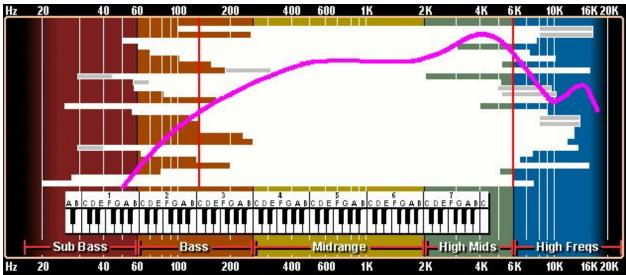


Fig 1 - The great frequency overlap. When shown together it becomes evident that most instruments share most of the same frequency space (white), especially between ~130Hz and ~6kHz (red lines.) Instruments do not naturally fall into their own frequency "slots" without care in the song's arrangement. Factor in the average sensitivity of the human ear to the upper midranges (pink line), and it's easy to see how buildup in the 1kHz-6kHz range can become problematic.

Source: independentrecording.net

- 25. **Don't blindly trust your ears.** Sometimes after listening to something for a while you won't be hearing it the same way as someone listening to it for the first time. Don't consider your mix "done" until you give it one last check after some time away from it (usually a day).
- 26. **Never stop learning.** There are many great sites out there to learn more about mixing. Some of my favorites:
 - Home Recording Forums Great community with a sub-forum on mixing techniques
 - The Pro Audio Files
 - Recording Excellence shameless self promotion

So there you have it, 26 tips to instantly help you improve your mixing. I hope you had as much fun reading this cheat sheet, as I had creating it!

If you have a minute, please <u>connect with me on Facebook</u> - I've love to hear from you, check out your music, or answer any questions you have!

Thanks again,

Scott Hawksworth

Founder, RecordingExcellence.com