



Vocal Mixing Cheatsheet

Many bloggers will *tell* you what the "perfect" vocal plugin settings are.

I wish I could do that too. Heck, it'd certainly save me a few keystrokes.

But the truth is, it's not that easy. And I don't want to mislead you.

There is no one-size-fits-all formula to mixing vocals. There are no magic settings that work 100% of the time.

With that being said, it *is* possible to quickly dial in the right settings, if you know where to start.

The following tips will help you approach vocal mixing with more clarity and confidence. Apply these tips, and you'll be on your way to crafting a vocal sound that competes with the pros.

Vocal Compression Tips

Attack Time

Your compressor's attack time will affect the consonants of a vocal performance.

Faster attack times will pull consonants down. This can make a vocal smoother and less aggressive. Often times, it can also push a vocal further back in the mix.

On the other hand, slower attack times will emphasize consonants. This can add articulation and clarity to a performance. It can also make a vocalist sound like they're spitting out the words. For this reason, slow-attack compression tends to work well on hip-hop vocals, where clear diction is crucial.

Release Time

Your compressor's release time will control how it shapes the tail ends of words and phrases. There are really only two options:

- Set it as fast as possible
- Time it to follow the natural dynamics of the performance

Option #1 will bring up low-level details, like breaths and tail ends of phrases. This can make a performance sound more aggressive and passionate. This setting works well on harder styles of music, like mainstream pop and rock.

Option #2 will reign in dynamics in a more subtle, transparent way. This can often sound more natural and less processed than Option #1. This approach works well with softer, mellower genres (think folk, jazz, and acoustic). To learn how to pull off this technique, [watch the video here](#).

Threshold and Ratio

Threshold and ratio determine how much compression is applied, and how aggressive it is. They work best when tweaked together.

How To Nail The Perfect Threshold And Ratio:

1. Set the ratio to a moderate setting (~3:1).
 2. While listening to your entire mix ([do not solo the vocal](#)), pull down the threshold until the compressor starts compressing. Add makeup gain as needed so the vocal doesn't drop in volume.
 3. Adjust the threshold, ratio, and makeup gain until you can hear every word of the performance clearly. If the threshold is down very low but certain words are still getting lost, turn up the ratio. If the compression sounds too aggressive, turn down the ratio.
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3 Steps To EQing Any Vocal

Step 1: High-Pass Filter

- Get rid of any low end that doesn't contribute musically to the performance
- Apply before compression
- Not always necessary—some vocals won't need any filtering

Step 2: Sweep and Destroy

- [Apply subtractive EQ](#) to remove any frequencies that don't sound good (boomy, muddy, harsh, etc.)
- Two areas to focus on: lower midrange (150 - 300 Hz) and upper midrange (2 - 4 kHz)
- Do this on headphones

Step 3: Enhance

- Accentuate pleasing qualities of vocal with smooth, broad, and gentle EQ boosts
 - Often involves a top-end boost
 - Always do this in context with the rest of the mix playing
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General Vocal Mixing Tips

1. Be Bold

Need to add 20 dB of top end to a vocal?

So be it.



Sometimes you need a gentle touch, but other times, you've got to rip out the chainsaw and hack away. As long as you're making deliberate decisions, let your ears be the guide.

Ignore what the screen looks like. Do whatever it takes to bring your vocals to life.

2. Don't Abuse The Solo Button

Mixing is all about context. You're trying to make a group of sounds blend together as a cohesive unit.

It's impossible to do this when you overuse the solo button. This is because [the solo button removes the context you need to understand how tracks contribute to the mix as a whole](#).

You'll get much better results if you make the majority of your vocal mixing decisions with the rest of the mix playing. Remember – it doesn't matter what the vocal sounds like in solo. The end listener is only going to hear the full mix.

3. Know When To Leave It Alone

Not every vocal track needs to be processed. In fact, many don't.

The best mixers know when to leave the vocals alone.



To this point, a lot of people will tell you to high-pass every vocal track. This is ridiculous. As a general rule, [the less processing you can get away with, the better your mixes will sound](#). If it ain't broke, don't fix it.

4. Always A/B

Mixing isn't just about making the right decisions. It's also about avoiding the wrong ones.

Take the time to ensure that every move you make is actually making your vocals sound better. Get in the habit of A/B'ing everything with the original, unprocessed track. Always level-match the before and after versions, so you can compare at a consistent volume. If you apply a hefty boost to a vocal, this means that you'll need to turn down the output gain on your EQ to compensate. This is the only way to determine whether or not a decision is actually making things better.

Every move you make should be a clear improvement. If you have any doubts, you're probably better off without it.

5. Know Your Tools

Your plugin library should be like a box of crayons. There should be no question what to reach for when.

Learn how each of your plugins differ in tone and functionality. Study their unique saturation curves. Develop your own opinions about when to reach for one over the other.

Once you develop this understanding, you'll know exactly which plugins will help you achieve the sound you're looking for. This will help you craft a great vocal sound much faster.

Diving Deeper — My Top 5 Vocal Mixing Tutorials

1. How To Mix Vocals With Yoad Nevo

Mixer Yoad Nevo takes you through his vocal mixing process in detail. If you like this video, Yoad also has several other (excellent) vocal mixing tutorials on YouTube.



2. How To Use Multiband Compression On Vocals

Top mixer Tony Maserati shares the benefits and process of using multiband compression on vocals. Whenever I get questions from readers about multiband compression, this is where I send them.



3. Mixing A Rap Vocal For Consistency

I'm a big fan of Matthew Weiss, as well as his mixing tutorials. This one is no exception. Very cool approach for achieving a Drake-inspired sound.



4. 5 Powerful, Little-Known Vocal Mixing Tricks

Couldn't miss the opportunity to include one of my own =) These 5 tricks will add impact, clarity, and energy to your vocals...



5. Cleaning Up Vocals With Subtractive EQ

A fantastic tutorial on cleaning up vocals with subtractive EQ. This technique is a core part of my mixing process.



For more mixing tips, visit BehindTheSpeakers.com.