How Reverb Makes Everything Fall into Place

BY BJÖRGVIN BENEDIKTSSON

WWW.AUDIO-ISSUES.COM
How Reverb Makes Everything Fall into Place

This first article is excerpted from the blog and found its way into the second version of Mixing Strategies. It’s such a good introduction to approaching reverb that I had to include it.

I was mixing a song the other day that had a bunch of different tracks screaming in my face.

Once you’ve gotten past a certain amount tracks it gets harder and harder to separate everything.

This is when you inevitably start cluttering up your mix, drowning out the vocal with rock guitar or losing the punch of the drum because of all the synths.

I had mixed all the individual tracks so that they sounded good. The rhythm section was grooving and the beat was tight, but when I put it all together it just fell apart.

Everything was trying to occupy the same space and all the instruments were screaming for my attention.

That’s when it hit me:

“I hadn’t started using any reverb…”

I was so caught up in making all the levels right and having each individual instrument sounding great that I’d forgotten about creating an actual space for them.

No wonder my instruments were clashing. They were all vying for the same two-dimensional space. I hadn’t given them any room to breathe.
Reverb Creates the Stage

Reverb creates the stage in which you set your mix. Think of it this way: If you want your song to take place in a big cathedral, then use the big cathedral reverb.

If you want a tight studio space, then use the space that sounds like a small studio space. Find a good space for your song.

But by all means, don’t use nothing.

Skipping the reverb will result in a cluttered and difficult mix unless you’ve carefully recorded everything with a specific room sound.

But not many bedroom recordists do that.

Group Your Elements

You can make it easy on your DAW by using groups of similar instruments.

If you’ve already mixed your guitars then you can group them together and send them to the same reverb.

The same thing can be done with any number of similar sounding elements, such as drums, vocals or synths.

I grouped together my vocals, my drum and percussion tracks as well as my guitars into three separate groups.

By using three short, but different reverbs on each of these groups they all fell into place in their own space.

Just like that had my mix been transformed from a cluttered two-dimensional shouting match to a nicely separated 3D image.

Reverb Holds Everything Together

It sounds silly to have forgotten to use something as necessary as reverb. I just hadn’t gotten to it yet, but in this particular case it shocked how big of a difference it made to the overall mix.

It wasn’t just that the tracks sounded better with reverb on them, it was that all the tracks somehow held together better with a little space between them.

Reverb is the glue that holds a mix together. Don’t forget to use it.
How Reverb Makes Everything Fall Into Place

AN EASY WAY TO CHOOSE THE RIGHT REVERB

With all the options of reverb modes, plug-ins and outboard processors it’s hard to know what you should choose for your next track.

What should you think about when choosing the right space for you song? Even though you have a favorite sounding reverb it might not work for that alternative FolkTronica act that you just recorded.

Think about the tempo of the song

If you are working with a fast tempo song that needs to come across clearly and well defined, mucking it up with long reverbs will just make the mix sound cluttered.

Think about the tempo of the song and select your reverbs accordingly. A slower song can use longer reverbs, and faster songs might need really short reverbs.

Or you could even just use delays instead.

Think about the wetness of the song

Do you want your overall mix to be dry, or do you want lush reverbs filling up the space?

Are some of the pre-recorded tracks already rich with heavy reverbs and space, or was it all recorded extremely dry?

Think about how wet you want your mix to be and choose your reverb according to that.

Think about the lushness of the arrangement

Is the arrangement going to be really dry and in-your-face or is everything going to be drowned in space?

You might need to keep some elements dry even though you are going for an extremely wet mix, but the more reverb you are putting on your instruments the more you need to anchor it down with at least a few dry instruments.

Also, be wary of adding too much reverb since it can be a sign of a very amateurish production.
Think about the rhythm of the vocal track

Is the singer singing long sustained notes, scat singing or rapping? These are some of the factors you might want to consider when you are choosing your vocal reverb.

The rhythm of the vocal can dictate if the reverb you’ve chosen actually works.

If you’re going for “My Heart Will Go On” Celine Dion long sustained singing then a large and long reverb might work exceptionally.

But if your singer is Scatman John then a long reverb might just get in the way.

Think about the room

Think about the instrumentation and see if you can’t place them all together in the same room.

Some instruments sound great together when they’re “placed” in the same room or reverb device.

Say you have a great sounding impulse response from an old recording studio. Use the reverb of that room to glue the instruments together

Conclusion

Take a while to think about the characteristics of the mix at hand and then choose the reverb you think is right.
IS RECORDING WITH REVERB REALLY HARMFUL TO YOUR AUDIO?

I got a question a while back about reverb:

“I always seem to add a slight reverb or echo effect when recording guitar or voice....It seems to smooth it out...It’s not overdone I feel, but I’ve read this is a mistake? Why would it be.”

Now, there is a part in Recording Strategies (www.recordingstrategies.com) that goes over some of the reasons why you shouldn’t record with reverb, but I’ll elaborate.

Recording Without Reverb

The reason you shouldn’t record with reverb is because once that sound is on your guitar track, it’s never coming off.

It’s even worse than tattoos. Not even with lasers are taking the echo off your vocals.

Consider the production.

If you haven’t thought through all the parts of the arrangement and the production, then maybe that reverb won’t fit in the long run.

Say you record a song in a specific style with a slap-back echo, but later down the line you decide to change the feel of the song to something different.

What then?

You want a dry sound that you can manipulate, if you aren’t 100% sure how you want the final mix to sound.

If you’re recording in a really great room then you can always throw up an extra room mic to capture that reverb.

This doesn’t pertain to live recordings with everyone in the same room though.

Then you just get what you get, room sound and all.

If you’re overdubbing or recording every instrument after one another, you should be careful to keep it as dry as possible.
Recording With Reverb

However, if that’s an integral part of your sound, then maybe it needs to be on.

Consider guitarists such as Tom Morello or Mike Einziger. Most of their guitar parts are drenched in modulation effects that are invaluable to their final sound.

Imagine listening to the guitar part to “Know Your Enemy” by RATM without the tremolo effect turned on?

That effect is the essence of the whole part, and without it that song would just sound weird.

So that’s the gist of it. If you wrote the song with a specific effect or echo in mind, then don’t go out of your way to record it dry. It’ll just sound weird.

But if you’re not sure how the song is gonna sound, keep it dry. Simple as that.
5 REVERB MISTAKES THAT MAKE YOU LOOK LIKE AN IDIOT

Reverb is one of those things that even the most experienced of engineers are still trying to figure out.

It’s like the Higgs Boson of the audio industry. Engineers have used and analyzed it for years, but they haven’t quite cracked it yet.

Even if you’re not a seasoned engineer (or a quantum physicist) you can certainly learn to avoid a few stupid mistakes when it comes to using reverb in your mixes.

1. Not EQ’ing your Reverbs

EQ doesn’t only belong on your recorded tracks. EQ is also extremely useful for making your reverb fit better in your mix.

Use EQ to avoid unnecessary low-end clutter or reduce the highs to make the reverb blend in better.

2. Not Tweaking the Presets

The funny thing about all those presets is that they have nothing to do with what you’re using them on.

They’re a generic, best-fit sound that might work on something similar to what you have in mind. How’s that for ambiguous and vague?

However, presets create a good starting point. Reverbs have enough parameters so that you can easily tweak them to fit your session.

3. A need for the MOST EXPENSIVE REVERB!

The more expensive the reverb, the better it is right? Wrong.

Sure, high quality reverbs usually sound great, but are they that much better than either your stock plug-ins or cheaper alternatives?

A somewhat recent Home Recording Show episode touted the amazing sounds coming from the Valhalla reverb, and they recommended it as a cheaper alternative to the over-priced Waves reverbs.

Make do with what you have, and find the cheapest alternative possible if your stock reverbs absolutely suck.
4. You Use Too Much

I probably still do this sometimes. This is the classic beginner’s mistake.

Too much reverb drowns out your mix and makes everything sound “floaty” (for a lack of a better term).

Scale back on the reverb. Use it to make your tracks stand out, but don’t make the reverb be the thing that stands out.

Makes sense?

You want the listen to the great sounding vocal. You want the reverb to be an inherent part of the vocal sound. You want the reverb to draw attention to the vocal, not itself.

5. Too Many Different Types

Too many different spaces in a mix sounds unnatural. If that’s what you’re going for, disregard what I’m saying.

Otherwise try to stick to a few spaces. Combining different instruments and tracks into the same reverb works well to glue your elements together.

Using only one universal reverb is not a good idea either. Everything will sound too similar and nothing will stick out. It’s a delicate balance of a few different reverbs used in moderation that is the key.
WHEN DELAY IS BETTER – 5 REASONS TO SKIP THE REVERB

Don’t you dare touch that reverb!

Let go of the reverb for one day, and use a delay instead. Delays are easier to handle, and some are much less confusing than the average reverb.

Sometimes you just need a little depth, without adding reverb, and delay can easily do the job.

So when would you substitute your reverb for a little bit of delay?

For Guitar Solos

Sure, guitar solos can sound awesome with a hefty amount of reverb. But they can sound equally cool with a nice delay.

Use a short to medium stereo delay with one repeat. It’ll add width and depth to your signal immediately.

The stereo delay will make the solo sound wider, and the delay will add the depth.

And if you have the original signal in the middle, summing to mono won’t ruin the sound.

For Rhythm Guitar

Both reverb and delay can quickly ruin a tight rhythm guitar take. If you use too much of either one, you’ll end up with a cluttered guitar track.

However, using a short slap echo or 8th note delay can also add interest.

Send your guitar track to a delay via a send, and mix the delayed track underneath just to add a little space.

It doesn’t have to clutter the track if you use it sparsely.

For Lead Vocals

For an in-your-face lead vocal, scrap the reverb entirely and use delay to add depth.

Delay adds space without pushing the vocal back, something that happens all too often when you use too much reverb.
Depending on the BPM of the song, style and genre, use either short, medium or long delays.

If it’s a ballad with long, drawn out words then a long delay creates a big sound without overpowering the actual vocal.

A fast rock song benefits from a short, subtle delay and groovy pop songs use medium delays to a great effect.

**For Percussion?**

Similar problems arise from using too much delay on percussion as it does on rhythm guitar.

A short delay timed to the BPM of the song gives percussion punchiness without giving it too much room in the mix.

**For Organs**

Medium to long delays with a fair amount of feedback can beef up an organ or pad sound.

If you have an organ playing long, sustained chords then a long delay can give that foundation a thicker sound.

**Conclusion**

Basically, use delay to create depth, for whatever instrument, without taking up space.

Use it for sweet sounding guitar solos, funky rhythm guitar, punchy vocals or foundational elements like organs or percussion.

How do you use delays in your productions?
WHERE TO PUT THE GATE IN GATED REVERB

A reader writes in with a question about the gated reverb trick in Mixing Strategies:

“About the Gated reverb, I miss the point where the “gate comes after the reverb.” That means that in the reverb return track you insert a gate? Also can you use a stereo reverb as a send FX in a mono instrument track?”

Short answer?

Yes.

Longer answer: On the reverb return bus, where you would send the snare to, insert a reverb of your choosing.

Then, after the reverb you insert a gate on the same send return(auxiliary bus, effects return etc) and side-chain the gate to the original snare track.

That way, whenever the drummer hits the snare the gate opens up to let the reverb out.

But by fiddling with the knobs on the gate you can manipulate the envelope of the reverb. This allows you to create interesting reverb effects that tie to the snare sound.

Big in the 80’s, not as big now. Still used, but with more subtlety.

Stereo Reverb on Mono Sources?

Gated reverb works just fine with a stereo reverb. It follows the same principles, but I tend to use mono reverbs on snares.

It’s simply a preference thing. If the stereo reverb sounds big and groovy and you love it, go for it.

A good starting point is to have a nice stereo reverb for the whole drum-kit.

If you need a little extra separation, an extra mono reverb just on the snare can add an extra layer of depth to your drum sound.