Modern Bass Tone - How To Mix A Bass Guitar

Paschalis

Hello my fellow readers, in this tutorial I'll teach you how to mix a bass guitar and shape it to the needs of your mix.

Since bass is an instrument that can handle lots of processing, we are able to use heavy compression, multiple layers, different ampsims for some grit, *even Melodyne* for fine tuning plus *lots of other cool stuff* to create a fantastic bass tone and make others wonder how you get that kind of bass sound.

I use this kind of technique mostly on Modern mixes rather than old-school songs. Since I don't know your style let me give you an example of how the bass guitar will sound.



This isn't the only way to mix bass. It's 1 way to mix modern bass and my preferred one.

Let's get started, shall we?

Source... Source...

Since this is a mixing tutorial I am assuming that you've recorded a decent bass sound, but if not, let me share a couple of quick tips before diving into the really heavy processing tips.

The Bass DI (Direct Input signal) is the signal that you get right away from the bass guitar itself, **Bass Guitar -> Audio Interface**. No amps, No pedals, No cabinets.

Try to get a nice clean and balanced sound out of your **Bass Di**. Avoid a muddy sound by buying **new fresh strings** or, if money is an issue, use a *MIDI* program that can play bass.

It is not a shame to use software, especially for your bass tone, which is one of the hardest things to get a **great source sound** from, if money is an issue.



If you are trying to get something mediocre to really good then your bass guitar with **some new strings and being intonated** will work just fine.

But if you really want to surpass your average bass tone and get superb bass tones similar to famous record labels you 'll need to improve your Source/DI tone, no matter if it's a real bass guitar or a MIDI one.

You'll need to invest \$300 minimum to get a bass guitar that will give you a professional DI sound.

That's why a **bass VSTi** (Virtual Studio Technology instrument) can really save you tons of money plus give you fantastic DI sounds with lots of bass guitars to choose from.

Here's a couple of some of my favourite bass programs that I've used in many of my productions:

I have to repeat: You do NOT have to get an expensive bass guitar, the one you've got now will work just fine. I just want to keep you informed that there are also some more options to get an even better DI signal, that's all.

Recording: DI Signal, Amp or Pedal?

Truth is that you will use all of the 3 channels but if I highly suggest to record DIRECTLY to your Audio Interface. Why is that so crucial?

The DI signal (Direct Input) is the "mother" of the signals, the cleanest, most balanced signal and the best to play with: You can easily re-amp the signal, using software and get all the harmonic distortion you need in no time.

But, what happens if you want to record the bass amp using a mic and ditch the DI signal completely?

The Importance of the DI Signal

Let's say that you want to record your amp using a mic. You've set up your mics, recorded everything and now it's time to mix!

The low end of the amp/pedal will make your life hard. Period.

The bass frequencies that your amp/pedal produced are not mix friendly. While the sound rocks in your room, it would be hell to mix your bass guitar and co-operate with the rest of the mix.

The DI signal has the cleanest, most powerful and mix-friendly low end. The low end that your amp produces creates more drawbacks than benefits.

That's why we will use the low end of the DI signal along with the grit of an amp using multiple tracks/layers and EQ.

I Don't Want To Use A Digital Amp But A Real Amp... What To Do

It's really simple. You can record your amp/pedal signal AND your DI signal simultaneously.

You just need one of these: Radial JDI.

It's a pedal that can help you record the signal of your favorite amp along with the DI signal.

The process is really simple:

- 1. It splits the signal into 2 signals.
- 2. You create 2 tracks in your DAW. For example: DI bass, Amp Bass.
- 3. Send each signal to its corresponding track.
- 4. Ready to record 2 birds with 1 stone!

Layering: Using Multiple Tracks

The bass guitar is a tricky instrument to play with and it takes lots of process to make it sit in the mix.

That's why I love to separate it to at least 2 tracks. The DI track and the amp/grit/distortion track.



- **DI Track**: This tracks plays the role of the low end of the mix. I remove all the mid-high frequencies and keep just the low ones using a low pass filter. (More details below.)
- **Grit Track**: This is the track that keeps the mid-highs of your bass tone. I use an bass amp or a pedal (digital or analog doesn't matter as long as it sounds good) to get all the harmonic distortion I want. I remove everything under 250Hz, but we'll talk about mixing later in this guide.

To sum up: The DI signal will get all the lows and anything with an amp or pedal on it will keep just the mid-highs of the frequency spectrum.



It's... Mixing Time!

I know I know, that's the part with the most fun and it took too long to talk about, but trust me without the above information it wouldn't be fun... at all.

Let's get started!

- 1. Split your bass signal into 2 tracks. Name one track "Bass Low" and the other "Bass Grit", you get the idea.
- 2. Send these tracks to a group track. Name it "Bass Group" or just "Bass".
- 3. Use a filter and remove the mid-highs on your "Bass Low" track. Keep only the lows up to **250Hz** or so, use your ears.
- 4. Use an amp, amp sim, pedal or pedal simulator to your grit track and generate harmonics with grit/distortion.
- 5. Use high and low filters to remove all the frequencies to your grit track, except the **250Hz to 5Khz** (or less) region.

For now, ignore everything else and **just play with the faders**. No need to play with compression and other stuff here.

Just play with the volume of these 2 tracks and stop wherever it sounds right to you.

It really helps to play with these faders along with the drums and try to **gel the kick with the bass guitar**.

Mixing Time... Part 2! – Processing The Bass Group

Now that we've created the basic tone of our bass, it's time to really go to town with our bass group.

We will not use any other plugins on the separate channels, cause these 2 channels actually form one instrument so we'll have to treat it as one instrument too.

So use your plugins to your **Bass Group**.

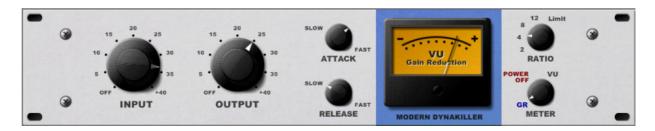
Use a high pass filter and remove some low end around **50Hz** – **60Hz**. I know what you're thinking, removing bass from bass?? Trust me these frequencies are so low that do not serve anything useful, it's just low end mud. Plus, with all the processing that we'll do now the lows will creep back up to us.

Use a **limiter** gently to remove some really aggressive peaks. The compressors that we'll use next will work easier and in a more effective way by doing so.

Use a Waves 1176 compressor or if you don't own one, just use a FET compressor of your liking.



If you can't afford the 1176 model from Waves just download for Free the 1176 model from Antress. It really rocks and it's free.



Settings: Aim for heavy reduction from -5GR to -10GR, 4:1 or 8:1 Ratio, quick Attack around 3 to 10ms and Fast Release.

Now use an another compressor. Still have some sudden peaks? Use a hard compressor. Need some gentle compression to even out the dynamics? Use something more gentle like the Waves CLA2a.



If you can't afford it, here's a free LA2A clone for you by the Antress team.

Time For Some EQ

Remove some mud by cutting some db in the 250 to 500Hz area with a wide Q.

Cut around 50Hz to 80Hz so your kick drum can cut through.

Remove some low end mud by cutting around 150Hz to 250Hz.

Now aim to reduce the "cardbox" sound. Cut some db with a wide Q to the 500Hz - 1.000Hz region.

Feel free to **add a new band** and search the frequency spectrum for more abnormalities and cut them or even boost frequencies that sound good.

Give Me More... Tightness!

You really think that after all this heavy compression your bass frequencies are tight enough, right?

No they are not and frequencies under **250Hz** need to "sit in the pocket" **giving us the freedom** to add all the instruments we need in a busy metal/rock/hip-hop or even an epic-metal production.

For this exact reason, our last step (I promise IT IS the last step) we'll use a **couple more** plugins.

Multiband Compression

The best way to make sure that our low end acts like a "good boy" and doesn't interfere too much with our dynamics is to add a **Multi-band Compressor**.

I love using the C4 Multiband Compression by Waves but you can use this Free multiband compressor too.



We'll use 2 bands:

Now compress the 2 bands and make them tighter.

With all this **Gain Reduction** you'll feel (and hear) that your bands are noticeably tighter but also **lower in volume**.

Make up for it by using the **Make-Up Gain** of your multiband compressor, **bypass** the plugin, listen to the before/after effect and **match the volume**.

Our Final Limiter

Now that you are finished with your multiband compressor, add a final **L1 Limiter** or just Download the fantastic and free Gclip Limiter.

Do not exceed more than -3 to -4db here. But if you do, chances are that you haven't compressed enough to your compressors that you've added **earlier in your chain**.

So please go back, compress more and then come back to your Limiter.

Some Really Cool Tricks For A Professional Sound

In this chapter I'll give you 3 more tips that will make your bass tone shine.

These are the tips I use daily and I really can't live without them from the day that I've given them a try.

They saved me lots of hours editing, made my life easier and **they'll make yours too**.



Melodyne

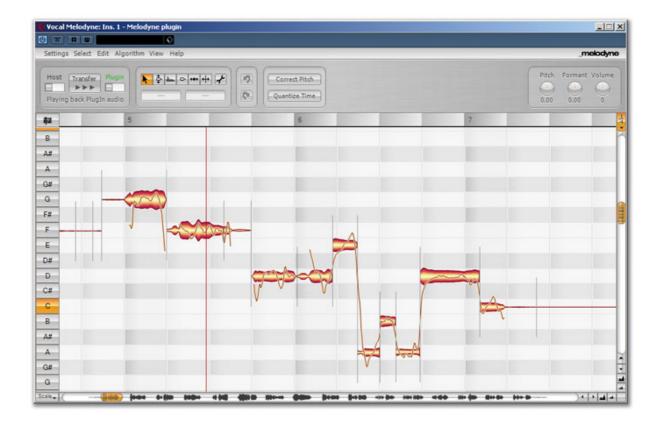
Yes, you got that right. Melodyne!

Melodyne is mainly used for vocals but you won't believe what it can do to your bass.

Let's say that a client sent you to mix his song, but he recorded his bass without even tuning it properly. You won't be able to get a decent low end with that kind of bass tone.

And since bass is mostly a monophonic instrument Melodyne can **do wonders** on it.

You just open Melodyne, **lock the notes** by double clicking them and you have a **perfectly in-tune bass**, how's that sound?



Waves Bass Rider

Since bass needs lots of compression, we sacrifice some of its life and punch due to it.

Wouldn't be perfect if we could **automate the volume of each note** just by using our volume fader? This way, the signal that we would feed to the compressors would be already **"manually compressed"** since the volume would be evened out by our own hands.

This would result in **less errant peaks**, thus making the compressors give us what we want with less moves.

Well, we could automate the volume by hand, but this would take days or even weeks to complete... But there's a solution and it's called Waves Bass Rider.

This thing draws automation curves all by itself.

It saves you an enormous amount of time plus helping you focus on other stuff (like composing music heh!) instead of drawing Automation curves by hand.

I highly suggest you to give it a go, you'll love it!

Chorus or Reverb

Chorus on the bass alone will destroy it. No chorus-reverb is good on the low frequencies.

For this reason you can can create an Aux Track and add a chorus there. Then send your bass via your fx return.

Then add an EQ and remove all the low frequencies. You'll end up with a wider bass, but don't overdo it though.

To sum up: Just use chorus on the mids and highs of your bass.





Monitoring The Signal Chain

As you can see, the bass guitar is really the No1 instrument that you can really go to town and still accept all of your crazy tweaks.

Since you'll use lots of compression don't be afraid to go back to your signal chain and be more drastic.

Let me explain...

For example, if you'd started with a cut of -7db at 70Hz and then have added a compressor, you might need to go back and **cut 4db more** resulting in a -11db cut.

It wasn't your fault, your judgement for a -7db cut was great, it's just that the compressor that you've added after the EQ **emphasized your previous cuts** and worked against you, so go back and be more drastic on your EQ.

Same things applies to the compressors. If your 2nd compressor works too hard you might need to go back to your 1st one, make it compress harder and then adjust your 2nd one.

It's everything about balance.

Conclusion

Yeap that's over 2.000 words, but I really wanted to cover anything – *okay almost anything* - about bass and help you improve your bass tones.

Thank you for following me on this post, I know it seems "too much" at first, but it's really nothing if you mix through it step by step.

I guess it's time for me to take a break and listen to some Deftones!

If you'd like to "thank" me for this post, I would really appreciate it if you could give it a like, follow, google plus it, you know all the good social media stuff!

You can also share your thoughts with me in the comment section below.

Take care guys.

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