Bass Amp EQ for Beginners

How to make sense of all of those dials and sliders and get a useful bass sound no matter what room you're in

By Mike Ippersiel www.bassguitarrocks.com mike@bassguitarrocks.com

When I set out to compile what I'd learned about the realities of getting a good bass sound no matter what room a bass player would find themselves in, I had no idea that it would take on a life of its own.

This post single-handedly became the most popular post I've ever written, and while it isn't without its flaws, I am happy to know that the tips provided in this article have potentially helped thousands of my fellow bassists.

I hope you find it helpful as well. I'd love to hear your thoughts and if you happen to have a few bass amp eq tips of your own that you'd like to pass along - just contact me at the email address listed at the bottom of the page.

Who knows - maybe your tips can help thousands of other bassists as well!

~Mike Ippersiel

Founder

BassGuitarRocks.com

How To Get The Best Sound Out of your Bass Amp

Bassists once had to wrestle with their sound, physically as well as sonically! Back in the 70's bass gear was heavier than heck and getting a sound other than a dull thud was almost impossible.

Luckily bass amps have evolved and getting more presence and attack along with the low end is now easier to achieve. A little knowledge can determine whether your sound is abysmal or awesome.

By Mike Ippersiel www.bassguitarrocks.com mike@bassguitarrocks.com

What is Bass Amp EQ?

EQ is short for ‘equalization’. This is the section on an amp (we’ll ignore the on-board preamp EQ you may have on your bass for now) that shapes the tone or sound of the instrument. Depending on the bass amp you use, the EQ section may have three knobs labelled LOW, MID and HIGH or a 12 band graphic equalizer or some combination of the two.

In my personal experience, the best place to start to shape your sound is ‘ground zero’ – that means remove all the EQ from your signal chain.

What’s a signal chain you ask?

(Here’s an example of my own signal chain rendered as a bass guitar diagram)

By Mike Ippersiel www.bassguitarrocks.com mike@bassguitarrocks.com

A signal chain includes all the devices used to make your bass heard and/or colour its tone.

If you plug your bass directly into an amp then you have a small signal chain. If you plug your bass through 30 different effects boxes and two different amps then you have a big and complicated signal chain.

I'm not going to tell you that one is better than the other, but if you're just starting out I would heavily suggest keeping it simple.

Once you are comfortable with getting a good sound out of your electric bass and amp, you can build from there.

How To Equalize A Bass Amp

Start simple; disable any bass amp eq settings that are currently active on the amplifier. To do that, de-select things like 'bass boost' or 'presence enhance' that alters the sound of your bass. Set your EQ dials to "0" or at 12 o'clock, or your graphic EQ sliders to their middle position – in most cases this will give you only the sound from your bass and cable being amplified by the bass rig.

How does it sound?

If you like what you hear – feel free to leave it as is. Eqing bass guitar is best when you add or remove only what needs to be addressed, rather than twiddling knobs at random and hoping for the best.

If you're just getting acquainted with your amp, this is a good way to learn the function of each knob one at a time (returning each back to the off or neutral setting before testing the next) and see what happens to your bass sound.

If you compare your 'before' and 'after' sound you'll have a better idea how each feature works and what works best for you.

Feel free to take notes if you like. You may find a sound that works great for a bass solo section, or the perfect sound for supporting the rest of the band. Being a great bassist means you know how to get those tasty sounds and can unleash them at just the right time.

Bass Amp Setup

For those that think all you do is plug the amp into the wall and your bass into the amp and play, here's a newsflash – where you put your amp has a huge impact on what you hear.

Also, where you stand in relation to the amp, what your amp is on or leaning against along with the size, shape and surface materials that make up the room also affect the sound you hear coming from your amp.

Whoa – that's quite the list to wrap your head around isn't it?

To be able to get a consistently good sound out of your electric bass amp, you need to have a decent grasp on how each of the above elements affect what you hear.

Ever wonder what happened to that perfect bass sound you achieved in your bedroom, basement or garage that suddenly 'sucks' when you get on the gig? Read on and you'll understand why.

Bass Amp Positioning

Where you place your amp is very important, the reason for this is that bass frequencies are omni-directional. This means they react much like water does when you drop a pebble in a pond – the sound waves form an outwardly expanding circle from the source (your bass rig) and crashes into the nearest surface where it is either absorbed or reflected back at you.

The sound waves that are reflected cause a problem known as frequency cancellation. When frequencies (such as mids and highs) can become eliminated when reflected sound waves crash into the next wave of sound emanating from the bass speakers; as a result your prized bass tone may be changed into a big heaping pile of sonic mud.

You may not be able to totally eliminate frequency cancellation, but it can be managed if you know what to do.

For starters:

- Never put your amp in the center of a room.

Picture a square room as seen from above with your amp in the center, when you start playing, sound waves bounce off all four walls and head right back at you.

Since sound travels pretty fast, all those sound waves come back at you almost instantly and at approximately the same time. Messing with your bass amp EQ by twiddling buttons will do little to help – the alternative is:

- Always put your amp close to wall.

Move it close, but don't let it touch the wall – otherwise the wall will vibrate and enhance the bass frequencies like a pseudo amplifier.

Placing the bass amp about a foot away helps to minimize the reflection from the walls behind you – and extends the distance to the wall directly in front of you, which is a good thing. You can further reduce sound reflections by collecting carpet, blankets or even the mythological eggshell cartons and hang them on the wall.

You may notice that professional studios and live concert halls have dampened reflective surfaces like metal, glass or stone to improve the overall acoustics of the room.

Now that you've dealt with the frequency cancellation, it's a good time to figure out where you're going to stand.

If this is just a practice room it's no big deal, but if you're performing live or in a rehearsal studio you should be a certain distance away from you bass amp to hear it effectively.

- A good rule of thumb is that the size of the speakers in your bass cabinet dictate how far away you should be.
- If you have a single 15″ speaker than 15 feet in front of that speaker should be the 'sweet spot' where you can hear it best. This works for any size speaker – a 10″ speaker will throw sound about ten feet ahead, and having multiples doesn't change this (i.e. a 2 x 10″ cabinet will still sound better about 10 feet away, not five or 20 feet away).

If you're performing live, you won't always have the luxury of standing in the perfect spot in front your bass rig. The stage may be too small, or you may have to set up your gear in front of two other bands equipment.

If you sing or use bass effect pedals, you're going to need to be plugged into your amp and reach the mic or have another outlet close by to plug your effects into. Having a reliable bass wireless unit doesn't hurt in this instance!

Directing Your Bass Amp Speakers

If you're standing in the 'sweet spot' in front of your bass rig and are still having troubles hearing yourself - don't be hasty!

Before you reach for the volume knob (prompting the next installment of volume wars in your band) check and see where your speakers are aimed at.

If your bass amp is sitting on the floor, your sound is probably slapping you somewhere in the neighbourhood of the back of your calves up to maybe your lower back – not your ears.

Wedging a piece of wood under your amp so that it points up at about a 45 degree angle should be adequate if you're 10 or 15 feet away from the amp. If you're much closer you may need to tilt the amplifier back at a more extreme angle or put it on a chair or both.

Bass Frequencies vs. Room Acoustics

Okay, now that the amp is in the best spot possible in the room, and you're far enough in front of it and/or have it angled in such a way that the sound is actually reaching your ears – you can now listen to your bass amp and determine what needs to happen to the sound.

Do you need more low end or less? Are you lost when the distorted guitars or drums kick in (or if you're starting out, when the music on your MP3 player or radio comes on)?

Now is when you get to play with your bass amp equalizer.

- Try boosting the **LOW** frequencies if your sound is too thin or trebly.
- Boosting **MID** frequencies help to bring out finger-style playing nuances.

- **LOW MIDS** help bring out the ‘snarl’ of your bass.
- Boosting the **HIGH** frequencies will increase your presence, or the sound of a pick (or fingernails) on the strings.

Problem Bass Frequencies

Sometimes despite all the thought you've put into your sound and your bass amp and cabinet placement, you'll still end up with some frequencies that are too weak or too overbearing. Bass amp tone setting is part art and science; here are some tips.

Too Much Low End

(Bass frequencies)

- As a bassist you can never really have too much bass frequencies right? WRONG! Sure, dealing out the cellar-dwelling low end is part of the job description, but not when you have so much thud that you can't even distinguish the notes you're playing.

By Mike Ippersiel www.bassguitarrocks.com mike@bassguitarrocks.com

Rather than boost HIGHS or MIDS to compensate you can also try reducing the amount of bass – even if it feels like the wrong thing to do as a bassist.

Another good tip is to get your amp off the floor, use either a chair or a milk crate or something else that breaks the contact with the floor and isn't hollow itself.

When your bass cabinet rests on the floor (especially on a hollow stage), the floor resonates with the cabinet causing a massive bass boost that can't be 'EQ'ed out of your sound. If nothing else works for you and you don't mind investing some money to improve your sound you can check out Auralex Acoustics.

Auralex Gramma Isolation Riser

They make Amp Isolation Risers isolation risers in two different sizes that should accommodate just about any bass rig.

Too Much High End

(Treble frequencies)

- Too many HIGHS will give you a harsh and noisy sound, turn them down and see if your sound is improved. If you need some clarity you can position your picking/plucking hand closer to the bridge or try boosting some of the high mids frequencies.

  Playing at loud volumes especially if you have sketchy wiring in your electric bass guitar may not be addressed with bass amp equalization tweaks alone;. you may require a noise gate or filter that will suppress those high frequencies from exiting your speakers.

  Does your bass speaker cabinet have a built in tweeter? Tweeters deal out the highest frequencies of the bass signal coming out of the speakers and often have a dial on the back or side of the cabinet that allows you to reduce the volume or disable it completely.

  If you still have too much treble in your sound, consider placing the bass cabinet directly on the floor.

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Too Many Mid Frequencies

(Middle-range frequencies)

- To most bass players the mid frequencies are our friends. They help add clarity, depth and snarl to the notes and allow us to maintain some sonic real estate that even loud and distorted guitars rarely occupy. But as you can probably guess, too much of even a good thing can be bad.

  Excessively boosted mid frequencies can give a ‘honk’ to your sound that is possibly more annoying than the other two problems combined. I don’t think I’ve ever encountered this problem as a direct result of room acoustics – more often it is from bass amplifier equalizer tweaking gone wrong without correctly placing and positioning your amp.

  To fix the MID problem, you’ll need to revisit your amplifier EQ settings after you position the bass amp in the best possible place (see positioning your bass amp above).

Your Bass Amp EQ will Change in Every Room

Here's the good news, even after you've found the perfect sound and set-up for your bass amp, it'll all fly out the window as soon as you walk out of that room and play a gig at a bar, in a backyard or in a gymnasium.

Every single room (or lack thereof) has its own acoustic properties that will help or hinder your bass guitar sound.

As much as we'd all like a perfect bass amp tone system that we could just 'set and forget', there is no such thing currently available.The best solution that you have is to keep the above recommendations in mind each time you set your bass amp up anywhere.

These tips will help you rise out of the sonic mud and impress others with your consistently great bass sounds (yeah…maybe someone will notice, it could happen!).

By Mike Ippersiel www.bassguitarrocks.com mike@bassguitarrocks.com

Thank you for reading

Bass Amp EQ for Beginners

As you can see bass amp equalizer settings can be pretty complex, so don't feel bad if it takes you awhile to achieve a great sound when playing solo and with a band.

Learning how to eq a bass amp takes time and these bass amp eq tips will help you get much closer to finding your ultimate sound. Aside from getting more bass lessons, mastering your eq will be an ongoing experience changing from room to room you perform in, the bands you perform with and the style of music you choose to play.

Good luck!

Mike Ippersiel
Founder
BassGuitarRocks.com