

Introduction

Great sound starts on the stage! The on stage bass amp can be one of the most critical pieces of the overall sound equation. It's size, placement, and adjustments can make a significant difference in the sonic worship experience for the bass player, the band and congregation. A tight, energetic low end is crucial in live sound. In this edition of On Stage Sound let's talk about the bass amp and how to make it sound it's best in our worship environments.

The Bass Guitar

Before we tweak the bass amp **make sure all the knobs are turned up on the bass**. At only rare occasion should the volume pot on a bass guitar be anywhere other than 100%. When a bass guitars volume knob is turned down, you will lose tone and attack. Any additional switches and toggles should be set to the middle of the road positions. Keep in mind that **where your fingers or pick meet the strings will change the tone greatly**. In general, try to play the string closer to the neck for a more low end sound.

The Amp

I would encourage every church to have a bass amp ON THE STAGE. Because bass amps send low frequencies, the normal problems associated with guitar amps do not apply. Low frequencies are not as irritating to the listener and their bleed into other mics is easily mitigated. In-ear monitors and floor wedges usually do a poor job of imitating the sensation of air moving in the low end. **I have found bass players play more consistently when they feel this sensation close to them.** With new technology bass amps have become very affordable. In general, the the bigger the stage, the bigger the amp although you can always go bigger and turn down.

Bass Amp EQ

Bass amp EQ (equalization) comes in 2 different flavors: Knobs and Graphic. For knobs, I start all the EQ knobs on a bass amp at unity (or 12 o'clock /in the middle). From there I generally lower the Treble a bit and raise the low end a bit. Most of the time I lower the midrange a bit to clean up some muddiness. If you want more punch you could try boosting some mid-range. If your room does not have subs I might suggest raising the low end knob significantly. **Great bass players will continually be adjusting the tone on their amp to find the right fit for the particular bass they have and the room they are playing.** Keep in mind the way the bass frequencies translate to the people will be different than the way it translates to the stage. Adjust for both stage and congregation, but as you compromise **favor the congregation.**

For graphic EQ's I do all the same adjustments, but there are more options. Bring the high end down a bit (towards the right), raise the low end (towards the left) and lower some of the low mid frequency for more clarity.

Bass Amp Volume

Work with the sound personnel find a good volume for the bass amp. I**t should be loud enough that it makes a difference to the player, but it should be tempered so it does not mess up the sound engineers mix and he or she can still have ultimate control over the low end.** If the room does not have adequate subs installed the bass amp can really help add punch and low end emotion to the mix. On many bass amps there are two knobs that control volume (gain, master, input etc⋯). Usually this means one of them controls overall volume and one the gain (or distortion). Some grit or distortion might sound good on bass. Season to taste and **don't be afraid to obsess over the the stage volume of the bass amp. Work until it fits the mix.**

EXTRAS:

Direct Out: Many bass amps have a male XLR slot for you to connect the bass amp to the sound system. These can be convenient, but I have found that they can be noisy and troublesome. **I would suggest using an active DI Box (or direct input box) to communicate with the sound board.** There are more options to help eliminate ground hums and other signal noise issues. A great industry standard is the Countryman Type 85.

The Sound System: In churches, often times the subwoofers are in disrepair or not calibrated correctly. It's easy and common for sub speakers to blow. It should be very obvious if the subs are working. If you are not sure they are engaged, then they probably are in need of service. There could be a problem with the actually speaker, power, crossover (a rackmounted device that splits the high and low frequencies).

Give You an Inch and You Take a Mile: **In most live sound situations there are more inches of speaker dedicated to the low end (kick drum, bass guitar, floor tom, pads) than for any other instrument.** If you look on the floor (sometimes hanging from the ceiling) there are large speakers dedicated to that low end punch. Keep in mind all those speakers play a role in the sub frequencies alongside the bass amp.

If you have questions or would like to discuss training for your worship team that covers issues like this and much more contact Mike O'Brien at vineband@hotmail.com