LIVE AUDIO TROUBLESHOOTING GUIDE

I'll start by saying, it's important that you have enough time for basic set up, in advance of artists arriving. Before they arrive, you should have the basic structure of your PA set up and confirmed to be working. If you don't have any audio sources on your phone, get one. All the app stores have signal generators, and these work well to test your audio, both directly from mixer to speakers and through routing such as DI's, snake etc. A microphone will also be a good tester if you are using mics on stage. If you are finding that you don't have enough time for set up, we need to discuss with Mary Beth, about getting you more time. Troubleshooting should normally not take more than 15 minutes, so you want to aim to have your set up done at least 15 minutes before artists call time. I would prefer to be way ahead of this so you're not dealing with artists who arrive early and want to warm up, which can hinder your attempts to troubleshoot.

Secondly, you should not be troubleshooting for an hour before calling for help. If you haven't figured it out in half an hour, then it's time to call. I never mind you calling to talk through something. Sometimes things can be fixed over the phone, sometimes it requires a trip for me. That's okay.

Some of the following checks will seem obvious, but never overlook them. Most problems can be solved in an "a-ha" moment. Something simple that wasn't selected or connected. Or was connected to the wrong place. Try and disconnect yourself from the initial set up when you're troubleshooting – do it as if you were troubleshooting someone else's set up.

When you're checking things, always have volume at a low to moderate level. If something suddenly starts to work, you can cause damage to equipment, or to people's hearing if you have your mixer set at a high volume level.

When you're changing things out, mute the channel that you're changing… if it's somewhere between the mixer and the speaker, you need to turn off the speaker before you make the change.

No Audio At All

1. Check power: Are the speakers turned on? Can you hear at least some hiss coming from the speakers? Is the mixer turned on? If you're using microphones or DI's, is phantom power turned on for the channel you're using? Are you running everything through EQ's? If so, are they turned on?
2. Check hard connections. Check that your cables are routed correctly going both ways. Are you using the right snake (really this is for Cook, where you'd use one snake if you're set up at the back of the hall, and a different one if you're set up in the booth). Are your cables routed to the correct ports on the mixer? For devices that have more than one connector (eg, DI's, mixer, speakers) are you connected to the correct input/output? Check that all your devices are connected at all – speakers, mixer, EQ's, microphone or other sound generating device.
3. Check soft connections. Check that master faders are up on the mixer, that channels are routed to the master outputs, check that DI buttons are correctly set (pads off). Check phantom power again.
4. Check the sound source. Do you get anything if you plug it straight into a mixer channel and avoid the snake? Can you plug headphones directly into the device and ensure that it is sending sound? Change out the microphone. Change out the DI.
5. Change out the cables: Running temporary cable lines that don't meet safety standards is okay while you're checking cables. Obviously you want to avoid a trip hazard, but don't thread cables through holes as you normally would: make your cable changes quick.
6. Change the sound source. Connect a CD player or something directly to the mixer.
7. Re-route your device to another channel on the snake, and then to another channel on the mixer.
8. Re-route the audio to another output channel on the snake, and connect the speaker to that output.
9. Change out the mixer.
10. Change out speaker (you can use a stage monitor for the purpose of checking this).
11. Simplify your set up: phone (sound source) > mixer > speaker.
12. Call for help.

No Audio to one speaker – everything else works okay

The problem is with one input when you're using panning, or the connection from the mixer to the speaker.

1. Check power – is the non-functioning speaker turned on? Can you hear a hiss close up to it?
2. Check mixer settings – Confirm a sound source is working on the functioning speaker, then pan that same input to the side of the non-functioning speaker.
3. Check the master fader.
4. If everything is still working on one speaker, check the entire signal chain on the non-working speaker, starting at the mixer. Change cables one at a time. Change the channel being used on the snake.
5. Simplify your set up.
6. Call for help.

One sound source doesn't work – everything else is okay

The problem is the connection between the sound source and the mixer.

1. Check the mixer settings – channel routed to master outputs? Unmuted?
2. Check cables and DI's – replace one at a time.
3. If your source is a microphone, change it out.
4. Simplify your set up – plug the source directly into the mixer, bypassing the snake.
5. Call for help.