

MCGILL SR LIVE SOUND PROCEDURE

Author: DF

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PROCEDURE

1. PREPARATION

Get technical information regarding the venue (Tanna, Pollack, MMR, etc...) and equipment needed from the Live Sound Coordinator.

Create an input list in some software program and print it. Double check with the Live Sound Coordinator on where to get major equipment such as snakes, consoles, wireless, and etc... (Keep in mind that some special equipment may come from Devyn that will need to be booked in advance.)

Microphone Selection: In the trying to preserve our expensive recording microphones, stick to using microphones that would actually be found on stage with a professional sound company. The live sound environment is much less controllable than a recording session and there is more potential for microphone abuse. Try to stay away from using ribbons and expensive condenser mics such as our beloved DPA's. Stay more within the dynamic microphone world if possible. For condensers, stick with just the KM184's and C-414's. By doing so, this will also prepare you for future work with live sound companies because live sound companies can't afford to put expensive microphones in such harsh environments.

Always plan on bringing extra equipment! Always have an extra DI, SM57, SM58, and a roll of tape with you at least. This prepares you for the last minute changes in equipment that always pop up on all live sound events. This happens on 9 out of the 10 events you will do.

Always have board tape and Sharpie! Label everything on stage and at front of house clearly. Never leave anything to chance in your head. In the heat of the moment you will not remember things guaranteed.

2. A) ONE PERSON EVENT WORKFLOW

Start from the source and work your way back: Start preparing the stage and work your way back to Front of House. Take care of the microphone set-up, monitors, and wiring before you do anything at front of house. This makes you look very prepared when the artist arrives and it allows you to be out of the way of the artist as they set-up on stage.

Always make sure your stage wiring is as clean as possible and taped down where there is foot traffic.

2. B) TWO PERSON EVENT WORKFLOW

One person can set-up the stage while the other person can work at front of house.

3. RING OUT SYSTEM (PREVENTING FEEDBACK)

Feedback is always preventable and because of this there is no excuse for it.

- A) First, make sure your master fader is set to unity (0 dB).
- B) For each channel on the console that has a microphone coming into it, bring that fader to unity and then slowly gain the microphone with the preamp until it begins to ring. With fine adjustment of the preamp you can get the ring to hold steady (just like an oscillator.)

Alternatively, set the preamp to a decent level and then slowly lift the fader until feedback occurs. Try to get the ringing to hold steady. By doing this with the fader instead of the preamp, it may be easier to hold the ringing steady with more fine adjustment and there is less risk of the feedback take off out of control. Please use this alternative method if you are uncomfortable with feedback or or have not done much live sound experience.

- C) Take note of the fundamental frequencies and harmonics heard within this microphone's feedback. Any common frequencies that feedback among all the channels can be dialed down with a graphic EQ that is placed just after the console's stereo outputs. Any frequencies that only feedback from just one microphone, I first suggest moving its the placement, but if this is not possible, use the channel's parametric EQ to dial down this frequency and or harmonics.

This allows you to set the headroom of the whole PA system, putting the feedback point above that headroom, assuming you have the preamps set just below the feedback threshold. The use of the graphic and parametric EQ will help to increase the systems headroom.

4. MIXING TIPS

SOUND REINFORCEMENT VS. SOUND CAPTURE

Every live sound event at McGill needs to be treated in the sound reinforcement frame of mind. You will not necessarily need to mic every instrument on stage, rather you want to reinforce any sound source that will get lost within the acoustics of the hall or odd dynamics of other instrumentation. You will find much more success if you reinforce the quieter instrumentation to the natural sound of the loudest instrumentation rather than micing everything and trying to mix everything together.

High pass filter can be your best friend: using a high pass filter on most everything can help clean out the mud in the stage bleed from one microphone to the other. With most music played at McGill live sound events, we do not need to be terribly concerned with

sub frequencies. In fact, Tanna has the only PA system with subwoofers and I have never felt a need for them in that room with live music.