



Sound Reinforcement

Equipment needed:

- The board (mixer/head)
- Mics, cables & stands
- Extension cord & multi plug
- 2 speakers
- Speaker stands
- Duct tape for taping down cables
- Small flashlight
- Note pad & pen/pencil
- Small table for the head and a work space

Setting up the sound system:

- Board (powered)
 - Plug extension cord into wall outlet and multi-plug into extension cord
 - Plug power cable of the board into the multi-plug BUT DO NOT TURN ON until all mics and the speakers are plugged in.
 - Run mic cables from the board to the stage - label which channel is which instrument or voice or person.
 - Run speaker cables from the "speaker output" jack on the board to the input on the speaker itself
- Board (mixer only - not powered)
 - Plug extension cord into wall outlet and multi-plug into extension cord
 - Plug power cable of the board into the multi-plug BUT DO NOT TURN ON until all mics and the speakers are plugged in.
 - Run mic cables from the board to the stage - label which channel is which instrument or voice or person.
 - Attach appropriate cables from the output of the board (usually in the back) to the input of the amplifier. (Sometimes it will call for mic cables, speaker cables or even guitar cables.)
 - Run speaker cables from the "speaker output" jack on the amplifier to the input on the speaker itself

- Our theatre mixer board (the old one) has a "balanced" output. If any other board is used with the theatre system check to see if the output is balanced or unbalanced; if unbalanced, get the "Mixer unbalanced output" adaptor from the drawer of the sound rack. The adaptor goes between the unbalanced board output and the snake output line (quarter inch phono plug) running to the side wall.
- Mics
 - Set up mic stands for each mic
 - Screw the tops on and adjust the boom
 - Put the mic in the mic clip
 - XLR mic cable goes from the mic to the channel input (only one input per channel - you can't use both an XLR and a 1/4" phono plug in the same channel at the same time)
- Sound Check
 - Turn down all volume knobs to zero -- each channel and the main.
 - Power up (turn on) the board -OR-
 - If there is a separate amplifier, power up the mixer, then power up the amplifier. (If you have the amp on and turn on the board, there will be a pop as the electricity comes into the mixer & gets amplified. Bad...)
 - Turn the main to about 12 o'clock
 - Turn up the channel volume to about 9 o'clock for the mic you are testing first
 - Test each mic by speaking into it - do not blow in it or tap (blowing into it gets moisture in the mic and tapping it jars the innards of the mic).
 - Adjust volume as needed
 - Adjust EQ as needed
- Thoughts/Cautions
 - If recording, try not to turn volume up and down a lot - it makes for a pulsing sound on the recording. In live sound reinforcement, try to leave it at a steady volume so that the performer can control his/her volume, but if feedback occurs, turn it down until the feedback goes away.
 - Be constantly aware of feedback - even if you think you have everything set up to avoid it, it can occur as a performer changes position or as someone moves a speaker or moves something in front of a speaker.
 - Always turn down the volume before removing or plugging in any cables - the "pops" that happen when the sound is up is very bad for the speakers and for the electronics in the board.
 - Do not drop cables -- the solder holding the wires to the plug breaks

easily and then the cable is ruined

- Choose the size you want the wrapped cable to be and then wrap it the way the cable wants to be wrapped; do not wrap it around your arm.
- If you start getting some interference (sometimes radio stations will suddenly appear and come through the speakers!), try switching the on/off toggle switch to the other side (it changes the grounding)

Bose EQ Unit

- Our Bose speakers need an EQ unit between the board and the speaker for best quality sound

Clean up with portable system:

- Turn down the volume on each channel and the main
- Turn off the power (allow the head to cool before moving it)
- Turn off the amp first, then the board if the mixer is separate
- Unplug all cables and wrap them as THEY want to be wrapped. Store.
- Put mics in boxes/pouches and in storage box
- When the head is cool, wrap its power cable around the heat release
- Remove mic clips and put them in the box
- Fold up the mic stands and store
- Take speakers to the storage room
- Head goes on top of the speakers - cover with blanket
- Put the table back where we found it