



THE SOUND TEAM

(as of September 2023)

It has become the practice to divide the responsibilities for 'Sound' into three roles that sometimes overlap:

- SOUND DESIGNER
- SOUND TECHNICIAN
- SOUND OPERATOR

It is the job of the Producer, in coordination with the Director, to find a Sound Designer who will be responsible for sourcing all the sounds for the show. An appropriate Designer should have a good understanding of all equipment and processes involved and be able to work closely with the Director on artistic aspects of the design before and during the initial rehearsal period.

Note: The Sound Team can request that we lease the full version of QLab if the free version does not have the required features.

SOUND TECHNICIAN

It is the job of the Producer, to find a Sound Technician who will be responsible for coordinating the provided sound files, sourcing new when needed, loading them into the computer software and preparing them for use during the play. This person may also perform the sound operations for some or all performances.

SOUND OPERATORS

The Sound Operator/s will operate the sound system during the run of the show and any designated rehearsals as per a schedule set by the Sound Technician.

Additional sound crew may also be needed, at the discretion of the designer, including:

- Live sound elements
- A pianist or other musicians

It's usually not possible for the Producer to know which of these roles will be needed before rehearsals are already underway, and so the Sound Team should communicate directly with the Producer to fill these roles as needed.



SOUND DESIGNER RESPONSIBILITIES

BEFORE REHEARSALS BEGIN:

- Read the script and create a draft Sound Plan of the show, paying particular attention to effects/music mentioned in the script.
- Meet with the Director to review the rough sound plan, and discuss:
 - Director's intent for overall tone, setting, etc.
 - possible music choices
- Ensure the Sound Technician receives the approved sound files in the appropriate format.
- Convert all recorded audio to a digital format that can be played directly.
- Use WAV format as MP3 files may have an inconsistent delay at the beginning.
- Record sounds at the highest volume possible before distortion so that, the levels can easily be adjusted.

SOUND TECHNICIAN RESPONSIBILITIES

- Meet with the Production Team to solidify scheduling, including:
 - paper tech date (after which all cues should be known)
 - earliest date appropriate to run partial sounds
 - dry tech date (date set by S.M.)
 - technical rehearsal(s) with cast / cue-to-cue dates (set by S.M.)
- Liaise with the Director and Stage Manager to review sound choices. Note how sound cues may interact with other cues (e.g. Lighting, Set changes)
- Create a draft Cue List (in Multi-play or Q-Lab) and if required, diagram additional equipment layout (e.g. extra speakers, instruments, hand-held mics, etc.)
- Present your Sound Plan, Cue List and additional equipment diagram to the Production Team.
- Assist Producer in recruiting sound operators and set up a schedule for them to attend rehearsals and the run of the show.

DURING REHEARSALS

- Start attending rehearsals when appropriate, as decided by the Director/Stage Manager/Producer.
- Ensure the microphone gain levels, the sound effects and music from the laptop are correct at the mixer and speakers.



- Run ALL show cues, perhaps excluding those for pre/post show & intermission.
- Work on timing with other crew (e.g. lights, set changes) and program levels.
- After rehearsal, confirm all cue changes with the Stage Manager.
- Do NOT try to complete the sound program during the rehearsals, focus on the points above and do the bulk of the programming before and after the rehearsal.

TECHNICAL REHEARSAL

Run ALL show cues, including those for pre/post show and intermission and make a note of any changes requested by the Director or Stage Manager.

CUE-TO-CUE

- Finalize timing of cues based on actor movement or dialog.
- Finalize levels.
- After the rehearsal, confirm all cue changes with the Stage Manager.

DRESS REHEARSAL(S)

- Allow the Operator(s) to run the full show unaided and encourage them! Let them know what parts are working well.
- Note last minute sound issues and review them with the Sound Operators and the Stage Manager at the end of the rehearsal.

DURING THE RUN

- Attend the first few performances to ensure that the sound operators are comfortable with their job.
- If you wish to provide notes at this stage, give them to the Stage Manager, not directly to the Operator.
- Be available throughout the run for troubleshooting.

AFTER THE RUN

- Before the set strike remove any on-stage equipment.
- During the set strike assist as required.
- Debrief the Operators and report at the post-production meeting.
If this was the last show of the season check all equipment and wiring for wear and tear, replace/fix as necessary and submit an inventory of sound equipment to the Executive.



SOUND OPERATOR RESPONSIBILITIES

- Coordinate with Sound Technician on your availability to attend rehearsals and the run dates of the play.
- Ensure that your dates and times to operate the sound are correctly scheduled.
- Arrive at the hall around 6:00pm/12:30pm to ensure that sound equipment is set up and functioning properly.
- Play sound cues when prompted by the Stage Manager.
- Store/put away equipment at the end of each show, unless otherwise instructed by the Stage Manager.

SOUND OPERATOR INSTRUCTIONS FOR THE TOSHIBA LAPTOP USING MULTI-PLAY

- Turn on the mixer, located downstage right. This is a grey power bar on the front wall. The switch is red and will light-up when turned on. The mixer itself has a power switch at the back-right corner of the unit, but it should always be on, so you won't have to touch it.
- Ensure that the mixer is on. There should be some lights on the right side. Make sure that the "Main" control knob (at bottom right) is at 12 o'clock position. Also ensure that the small button on the right middle is depressed. This provides power to the onstage mics. When turned on, the green light bars will flash. You can check if the mics are working by tapping on them with a broom handle (Gently!).
- Go to back of hall & set-up the laptop & Tascam Mixer on a 6' table placed to the right of the Lighting console. Now connect the laptop and Tascam power supplies to a power bar that you will find in the lighting console. You will also find in there the long black cables that are labeled A, B, and C. You will also need the black USB cable from the Tascam box.
- Connect the Tascam to the laptop using the black USB cable via the "blue" USB port on the right side of the Toshiba laptop (there's a piece of white tape to easily identify it) and the only possible connection on the Tascam.
- Connect the black cables to the Sound Wall Outlet and the Tascam. These are labeled A, B and C. The ends with jacks, connects to the Tascam and the ends with round connectors goes to the wall.
- Turn on the laptop and Tascam (the small power button is located front left and an indicator light will come on (blue, I think).
IMPORTANT : Every time the Tascam is turned back on, the USB cable will have to be disconnected and reconnected. Otherwise, it can't find its brain ;-)



- The laptop's power button is top right. The Tascam window will open first. Click on the Mixer tab. Then open the pull-down menu under Scene Memory & select SLP 2 Load. You can then minimize the Tascam window.
- Launch Multi-Play by clicking the Icon at the bottom of the desktop. The latest production cue list should open. If not, open it from the "Recent Productions" in the File pull-down menu.
- YOU'RE READY TO GO! Cues highlighted in purple are on standby and will play when the spacebar is pressed. The standby bar (purple) will advance automatically to the next cue.

SOUND OPERATOR TIPS

IMPORTANT:

If there's no sound when a cue is played, try quitting, and restarting MultiPlay. This is assuming that everything is plugged in and turned on;-).

Also, check that the output is to the Tascam Mixer1608 Speakers and not the Realtek Speakers (the latter is the laptop's speaker). You will find this in the Production Properties/Audio tab.

If you press a cue by accident, click on the FADE button (light blue) on the left but be aware that you must move the standby bar (purple) to the next correct cue before you can play it. You can do this with the mouse, track pad or the cursor arrows.

The Stopwatch (located bottom left of the window) can be started by a left click or tap on pad or mouse (but the cursor must be located in the Stopwatch window. The same will stop it and/or restart it. A right click will reset it to zero. The Stopwatch is handy to time the acts and intermission. Remember to stop and/or reset at intermission

IMPORTANT: It is always better to fade rather than stop (too abrupt)

It'll probably be easier to use the mouse rather than the trackpad, but either works. Having said that if you find that the window has suddenly zoomed out or in, blame the pad. You can re-size it to suit by using 2 fingers on the pad (pinch method). The cursor must be in the window for this to work. You might want to try this to get comfortable with it before or after a show (not during ;-)).

There are Triggers on the keyboard that have functions as follows:

F will fade the current cue.

If none of these instructions help during a show, throw your hands up and run away, screaming : FIRE!



MISCELLANEOUS TIPS

- Ensure that all recorded audio has been converted into a digital format that can be played directly.
 - Use WAV format as MP3 files may have an inconsistent delay at the beginning.
 - Put as much of your sound plan into the Multi-play/Q-Lab program as possible. In particular:
 - Convert all recorded audio to a digital format that can be played directly in Multi-play.
 - Program all levels and fades in Multi-play/Q-Lab; do not adjust levels on the hardware mixer during a run.
- Use loops and auto-follows to reduce operator cues as appropriate.
- Make sure the output volume level on the laptop has not changed between rehearsals and shows.
- Use a PRE-SEND on the mixer to drive the upstage-facing stage speakers. This will allow you to set a comfortable sound level for the actors that does not change as other levels are modified.
- Always keep some extra headroom on the main mix fader during rehearsals; a live audience will tend to dampen sound levels substantially and require you to raise the main level.
- Audition sound effects and music tracks with the Director as soon as possible to avoid having to find new samples at the last minute.
- Avoid changing the layout of equipment during a run.



**SOUND OPERATOR INSTRUCTIONS
FOR THE MAC LAPTOP USING Q-Lab**

Note: if the sound equipment is already set-up, you can skip step # 1

- Go to back of hall & set-up the laptop & Tascam Mixer on a 6' table placed to the right of the Lighting console. Now connect the laptop and Tascam power supplies to a power bar that you will find in the lighting console. You will also find in there the long black cables that are labeled A, B. Connect these cables to the sound manifold on the back wall and to the back of the Tascam's inputs 1 and 2. You will also need the black USB cable from the Tascam box.
- Turn on the Tascam mixer via the power switch front left. A green light will indicate that it's on. Connect the Tascam to the Mac, using the Black USB cable and the 3 port Mac USB adapter.
- Turn on the Mac by simply opening it and pressing return at the password prompt.
Turn on the wireless mouse by sliding the switch at on its back so that a green dot is visible. It will take a few seconds for the laptop to connect. If it doesn't connect you can use the hardwired mouse or the trackpad.
- Several icons will appear at the bottom of the desktop. Select the Q-Lab icon by tapping on it with the cursor. This will launch Q-Lab. The Tascam should now display an orange light beneath the green one. This indicates that it is connected to the laptop.
- Now, go turn on the mixer, located downstage right. This is a grey power bar on the front wall. The switch is red & will light-up when turned on. The mixer itself has a power switch at the back-right corner of the unit, but it should always be on, so you won't have to touch it.
- Ensure that the mixer is on. There should be some lights on the right side. Make sure that the "Main" control knob (at bottom right) is at 12 o'clock position. Also ensure that the small button on the right middle is depressed. This provides power to the onstage mics.
When turned on, the green light bars will flash. You can check if the mics are working by tapping on them with a broom handle (Gently!).
- Go back to the Tech table. From the Q-Lab window select the appropriate file for your show & click Open Workspace at the bottom of the window. This will display all the cues for your show. At the bottom left of the window select Show. In the View pull-down menu select Lists-Carts & Active Cues. This will provide you with controls such as Pause, Play, Stop & Rewind. These functions will affect all cues currently running.



Note that the rewind button will put you right back to the start of the show!!!

- The cue highlighted by the blue bar is on standby & will play when the spacebar is pressed. The standby bar will advance automatically to the next cue. Do not press more than once as this will cause the next cue to play on top of the current one. WAIT FOR THE SM TO CALL THE CUES!
- After the show, you should quit Q-Lab & then shut down the Mac by selecting that function from the pull-down menu under the Apple symbol, top left corner of the desktop. Then turn off the Tascam. Turn off the wireless mouse and plug it in to charge, using the appropriate cable & connector. Cover the table with the green fabric. Turn off the mixer on stage. GO HOME! (or to the pub!)

TIPS:

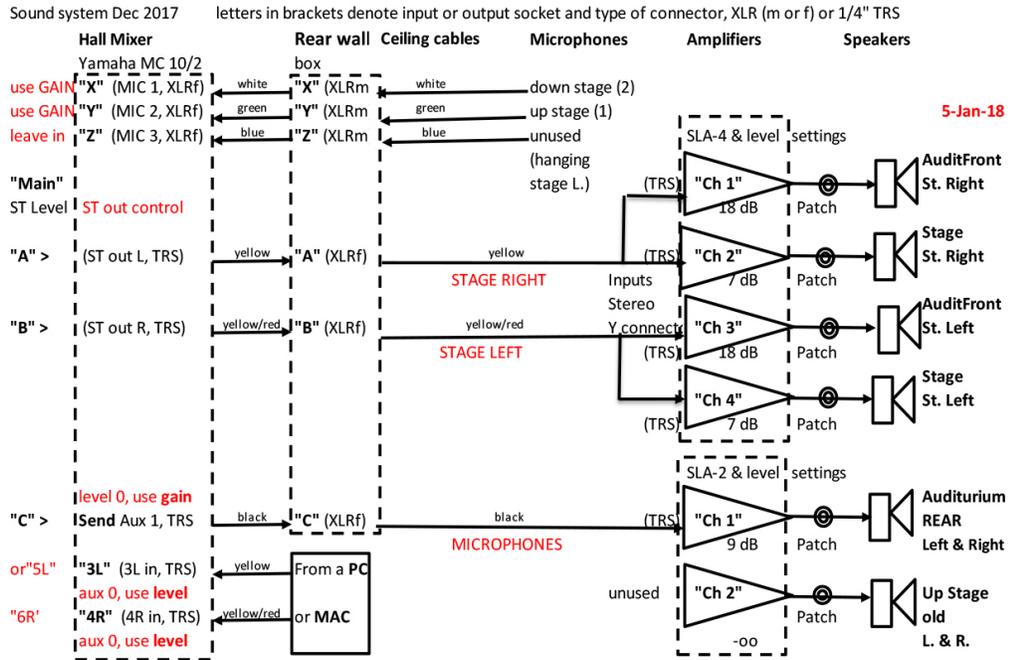
IMPORTANT

- If the cues are only coming out of the laptop's speaker and not the hall speakers, check the following: Each cue must be assigned to the appropriate output. This is found in the edit mode. Select edit at the bottom left of the window. Then select the Audio Levels tab at the bottom. On the left you will see the Audio Output Patch pull-down menu. From that menu, select Mixer 1608 rather than Built-in Output.
- If you press a cue by accident, click on the Stop button on the right side of the window. You can do this with the mouse, track pad.
- Please note that the stand-by bar (blue) always advances, so that if you played a cue too early and had to stop it, you will have to move the stand-by bar to the appropriate cue before pressing the spacebar again. This can be done via the mouse, trackpad or cursor arrows.
- • It'll probably be easier to use the mouse rather than the trackpad, but either works.;-)

If none of these instructions help during a show, throw your hands up and run away, screaming : FIRE!



SOUND EQUIPMENT SCHEMATICS



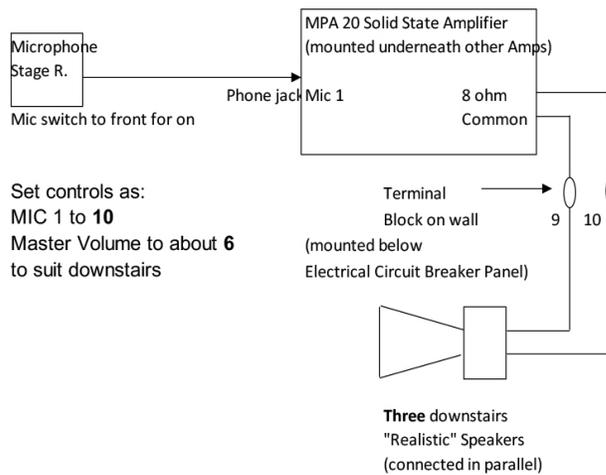
5-Jan-18

Stage Mixer, on St. R.

① Patch panel, April 2017



Downstairs monitor, for Dressings rooms





This audio patch panel built in Feb 2017

It enables the various Amplifiers to be patched to the different Speakers

It consists of a wall plate, with fixed cables for Amplifiers and patch cables for Speakers

Connections below allow sounds from speakers for Stage Left and Right to be independent

Also Auditorium rear speakers to be used for stage mics

SPEAKER Wall plate

Wall Plate Markings	Amplifier Connection	Speaker Connection	Wall Plate Markings	Amplifier Connection	Speaker Connection
Front Left	Ch 1 of SLA-4	Auditorium, Front, St R	Rear Left	Ch 2 of SLA-4	Stage, St R
Front Centre	Ch 3 of SLA-4	Auditorium, Front, St L	Auxillary	Ch 4 of SLA-4	Stage, St L
Front Right	Ch 1 of SLA-2	Auditorium, Rear, St L & R	Rear Right	Ch 2 of SLA-2	

AMPLIFIER Inputs

Ch 1 of SLA-4	A of Mixer, Input bridged to Ch 2	Y connector used
Ch 2 of SLA-4	Input bridged to Ch 1	
Ch 3 of SLA-4	B of Mixer, Input bridged to Ch 4	Y connector used
Ch 4 of SLA-4	Input bridged to Ch 3	
Ch 1 of SLA-2	C of Mixer,	
Ch 2 of SLA-2	no connection	

DO NOT use the Bridge switch of the SLA amplifiers. Bridges 1 with 2, etc

That bridge switch makes the amplifiers in parallel and disables the outputs

April 2017. Connected the amplifiers to Speaker Wall Plate

Existing Speakers have compatible banana plugs with 3/4 inch dual plugs