STAGE AND RECORDING CREW GUIDELINES AND PROCEDURES

for

Tennessee Technological University

Department of Music and Art

(Revision 5)
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Revision 5
This document is intended to provide guidelines for consistency in procedure among events in Wattenbarger Auditorium. While it is not intended to be all-inclusive and unforeseen situations sometimes arise that require special handling, do try to follow its direction.

Throughout you will find boxes like this one that have useful terms and historical notes within them. They have been placed there as an obvious ploy to get you to actually read this document. Please do so, if for no other reason than to help the author feel justified in his existence.

Those who are just starting their stage crew training need only concern themselves with the General Guidelines and Concert Procedures for Stage Workers. By the end of your first semester, you should have read the entire document and have a reasonable understanding of what it says.

Recording workers should know everything.

If something that you read here doesn’t make sense, please ask so that you understand BEFORE you are assigned to work a concert by yourself.
GENERAL GUIDELINES

FOR ALL
- Schedules are posted backstage, outside the elevator, in the recording booth, and on the internet at www.tnitech.edu/bfa. You should check this schedule frequently to find your work assignments.
- If you are unable to work when you have been scheduled, you should find a replacement worker. Notify Lee Bledsoe as soon as you can, and mark changes on the printed schedules. Please do not mark on the schedules for any other reason. Scheduling conflicts should be resolved as soon as the schedule is posted. **Except in the case of serious emergency, it is never acceptable to reschedule the day of an event.**
- At no time should clothing be worn with logos, advertisements, or writing of any kind. This includes logos, emblems, and letters for on-campus organizations and fraternities.
- Always be courteous and professional to performers, even when they don’t return the favor.
- If you are attending an event and find that the scheduled worker has not arrived, please fill in, or find another worker to fill in. Count the hours worked for yourself, not for the person who failed to show up. Lee Bledsoe should always be notified when workers fail to fulfill assigned tasks, regardless of their excuse, reasoning, or personal leverage.

FOR STAGE CREW
- Solid black should be worn for all major ensemble concerts and guest artist recitals. For other concerts, dress should be conservative and professional, but still comfortable enough to move pianos, chairs, stands, and other equipment. Remember that the audience can see you, and they are forming opinions about our department and school based on your appearance and actions. Never be the cause of a negative impression.
- If you typically do setup for an ensemble’s rehearsals, you are responsible for setting up for that ensemble’s concerts and dress rehearsals.
- Do not eat, drink, do homework, or use your computer while working backstage.

FOR RECORDING WORKERS
- Only recording workers should be in the recording booth during a concert.
- Food and drink are not allowed in the recording booth.
- For large ensemble concerts, or any concert during which you may be required to go onstage to help with equipment setup, dress requirements are the same as those for stage crew. Otherwise, casual clothing is acceptable.

**Pit cover:**
The strange synthetic material at the front of the stage. In a hall where musicals and opera were common, this cover would be removed to expose the “pit” beneath for the orchestra to be seated. For now, it is home to a lonely upright piano, a snake, and outputs from Amp#2 in the booth. The strange breeze that blows up out of the pit has nothing to do with the difference in temperature between the pit and the hall. It’s because a dragon lives down there. I swear.

**House:**
The part of the area where the audience sits. The lights above the audience’s head are called “house lights.” Very complicated.

Revision 5
**CONCERT PROCEDURES: STAGE WORKERS**

**BEFORE THE CONCERT**
1. Arrive at least 30 minutes early. For major concerts, you should be backstage 60 minutes early. Some concerts may have special setup times; check the schedule.
2. For evening concerts, turn the porch and foyer lights on using the switches located by the double doors in the lobby.
3. Get a program from the ushers.
4. Turn the organ lights off using the switch at the top of the stairs backstage.
5. Unlock the backstage key cabinet; get out the headphones for the intercom and connect them to the ClearCom box.
6. Check the onstage keypad to ensure that the source is set to Booth Mix. Turn the sound system on.
7. Set up the stage according to the setup sheet, if there is one. Always use the best equipment available; avoid unstable chairs and rusted stands. Ask the performer to approve the setup.
8. Ask the performer if there will be any set changes. Make note of them on your program.
9. Make sure the piano is unlocked and ready, if it is needed.
10. Clear the stage of all unneeded equipment. It is acceptable to put items behind the sound baffles, so long as they are completely out of sight.
11. Lock any doors that will not be needed during the concert to prevent random people from wandering onstage.
12. 5-10 minutes before the concert begins, call the elevator to the first floor. Use the elevator key in the backstage box to disable the elevator. Note that they key works with the lock on the *inside* of the elevator car, not the fire key lock on the outside.

**TO START THE CONCERT**
1. When the performer is ready to start the concert, contact the recording worker over the intercom. He or she will dim the house lights and play the cell phone announcement.
2. Once this is complete, make a final check with the performer and open the door for them to go out on stage.

**DURING THE CONCERT**
1. Open the door when the performer comes back off stage between pieces. Never assume that no one will come off stage. Conductors, accompanists, page-turners, etc. may come off without the main performers or ensemble.
2. If the sound system will not be needed for the remainder of the concert, you can turn it off using the switch on the rack. (Hold the switch for three seconds to activate it. You will hear an audible click when the amps begin to shut down.)
3. Pay attention to the intercom in case the recording worker needs to contact you.
4. Be quiet during the performance; the auditorium is not completely soundproof. If you hear others being loud in the lobby or stairwell, advise them that there is a concert going on, and politely ask them to lower their voices.

5. Make set changes quickly and professionally. If members of the audience choose to applaud or otherwise acknowledge your presence, ignore them and quickly complete the set change.

AFTER THE CONCERT
1. Clear the stage of all equipment, unless instructed otherwise.
   a. Pianos should be locked, covered, and left onstage unless otherwise instructed.
   b. Chairs and stands should be placed neatly on their racks backstage. No racks of equipment should be left onstage.
2. Unplug the intercom headset and put it in the backstage key cabinet, along with any other equipment or keys you may have removed for the concert. Lock the cabinet.
3. Turn the organ lights back on.
4. Set the lights to Preset 4 and lock all auditorium doors before leaving.

SPECIAL CONVOCATION INSTRUCTIONS
- If you are playing on the convocation, you should find a replacement worker as soon as the schedule is posted. The morning of convocation is not an acceptable time to find a replacement worker.
- You should arrive at the auditorium early; if you do not have a class, get there thirty minutes early. If you do have a class the hour before, you should get there as soon as you can.
- If you have not received a setup sheet for convocation, the default setup is the shell, piano, page turner chair, and a stand for the soloist. Clear the stage of all other equipment.

**Upstage and downstage:**

In earlier days of theater, stages were often “raked”, meaning that the stage sloped down toward the audience. The idea was to provide better visibility for the audience by placing items at the back of the stage higher than those at the front. Most modern theaters are not built this way, and our concert hall certainly is not, but the terminology has stuck around. Downstage refers to moving toward the audience (down the slope!) and upstage refers to moving away from the audience. Why does this matter to you? We have two snakes for the main sound system, one upstage and one downstage. If you ever have to work a jazz band concert, you might need to know the difference. Also, sometimes guest artists will use these terms, and you need to know what they mean.
CONCERT PROCEDURES: RECORDING WORKERS

BEFORE THE CONCERT
1. Arrive at least 30 minutes early. If it is a major concert or a concert involving the PA equipment, arrive at least 60 minutes early. Get a program from the usher. For guest artists, you should check with the performer to see if they want a recording; some major solo artists have recording contracts and prefer not to have their concerts recorded.
2. Leave the bottom door closed and locked during the concert; take your keys with you.
3. **Intercom**: Turn on the ClearCom. The power switch is located on the back of the ClearCom. The talk buttons on the front should turn blue. Press the Tone Alert button; it should turn blue. Turn the speaker on.
4. **Lights**: On the white keypad in the recording booth:
   a. Press the “Manual” button to lock out the house keypads.
   b. Press the “Preset 5” button to go to the pre-concert setting.
5. Uncover and turn on the sound board. You will need to turn on BOTH Phantom and Mains.
6. Prepare the hanging mic channels by raising the channel faders to 10db—about 3/4 of the way up.
7. Bring up the Main L/R faders about 3/4 of the way up.
8. Turn on Amp 1. This amp allows you to hear the concert over the monitors on either side of the sound board.
9. Adjust the volume of the monitors by moving the headphone fader.
10. Turn on CD-R’s Two and Three.
11. Load CD’s into both CD-R’s. Place them both in record mode.
   a. For CD-R 2: Press the Record button to enter record mode
   b. For CD-R 3: Press REC MODE until you see “Record Manual”
12. Check that the level indicators on the CD-R’s are displaying some sort of input. If they are not, then there is either no noise at all in the auditorium or there is a problem with the equipment. See the Troubleshooting section for help.
13. Turn on the Sony DVD player labeled “CD Playback” and bring up the CD playback channels on the mixer. Check that the auditorium announcement CD is in the drive.
14. Label the CD case inserts.
   a. Performer’s name
   b. Date
   c. A list of the pieces to be performed with composer’s names
15. Wait for the stage worker to contact you. Pay attention to the intercom!

TO START THE CONCERT
1. When the stage worker calls you and says the performer is ready, bring the house lights down by pressing the appropriate preset for the concert. (For most solo and small ensemble concerts, this will be Preset 6. Large ensembles will use Preset 7.)
2. Press play on the Sony DVD player to play the recorded cell phone announcement over the sound system. When the announcement is done, turn off the CD player and lower the channels.
3. When the performer has come out on stage and is about to begin the first piece, start the recording:
   a. On CDR-2: Press Play
b. On CDR-3: Press Record

**Important Note:** The CD-R's begin recording immediately, so wait until the performer is actually ready to begin. However, it is better to have a few seconds of silence or a tuning note at the start of a track than to miss the start of a piece. When in doubt, press play!

4. You can check the levels (volume) on both CD-R's by plugging headphones into the ¼ port on the front of each. Make any necessary adjustments slowly. (Note that the headphone port on the CD-R has its own volume control; the loudness of the sound you hear is not necessarily the loudness of the recording. You should check the display to see the actual recording levels.)
   a. In general, you want the levels to be as high as possible without clipping.
   b. If the level display on either CD-R is red-lining, the levels need to come down.
   c. If there is distortion in the sound, the levels need to come down.
   d. The levels should be adjusted by raising or lowering the Main L/R faders. If you need to boost or lower more than they allow (unlikely), you can also adjust the Auditorium Mic faders.

**DURING THE CONCERT**

1. For multi-movement works, use track increment to advance to the next track between movements. This ensures that no part of the piece is missed.
   a. On CD-R-2, press Record.
   b. On CD-R-3, press TRACK INCR.
2. At the end of the piece, fade out the applause using the Main L/R faders. Then press Pause on both CD-R's to end the track.
3. Bring the faders back up to the original level.
4. When the performer is ready to begin playing again, start the next track:
   b. On CDR-3, press Record.
5. Write track numbers on the CD case inserts.

**AFTER THE CONCERT**

1. Wait until the audience has stopped clapping and you are sure the performer will not play an encore. Encores are not listed in the program and may not be planned in advance.
2. Press the Preset 5 button to bring up the house lights.
3. Press “Stop” on both CD-R's.
4. Finalize the CD's.
   a. For CD-R-2, press “Finalize” and then “Enter” (The knob on the right).
   b. For CD-R 3, press “Finalize” and then “Record.”
5. Turn off Amp 1.
6. Turn off both Phantom and Main power on the board. Lower all the faders and cover the board.
7. Turn off the intercom.
8. After the audience leaves, press the “Manual” button on the light panel to unlock the house keypads.
9. When the CD's are finished finalizing, put one, with a program, in the concert recording box. The other goes to the performer, or the performer's studio professor.
10. Lock both doors—light and sound booths—before leaving. Turn off the lights by pressing the switch; do not merely lower the dimmer.

**SPECIAL CONVOCATION INSTRUCTIONS**
Unless otherwise instructed use only CDR-2 to make one copy of the concert.

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**A Nice Touch**
The lovely knitted mixer cover was provided by Vanessa Ansberry in 2008. We tried to purchase a “real” cover, but the only one that we could find (and afford) was made of spandex and nylon. It didn’t stay on the mixer very well, and it was ugly. This one works much better, and it’s cute.

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**Monitors**
A speaker placed on the stage to provide sound to the performer. Mostly, it’s the jazz band that uses these, but you may see them come out for other events too. Sometimes they are called *wedges* because of their shape.

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**Piano 1 and Piano 2:**
The number one piano is the newer one. It sits on a black truck. The number two piano is the older one. It sits on a gray truck. Sometimes, people just call these the “old piano” and “new piano.” You could do that too, if it’s easier for you.

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**What happened to CDR-1?**
It broke. If you are very lucky, you might sight it on the shelf to the right of the door as you enter the recording booth. It served TTU well for over 20 years and then just gave out.
**AUDIO EQUIPMENT DESCRIPTIONS**

**MIXER**
The following table lists the inputs for each channel on the board.

<table>
<thead>
<tr>
<th>Channel</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Downstage Snake Channel 1</td>
</tr>
<tr>
<td>2</td>
<td>Downstage Snake Channel 2</td>
</tr>
<tr>
<td>3</td>
<td>Auditorium Mic (L)</td>
</tr>
<tr>
<td>4</td>
<td>Auditorium Mic (R)</td>
</tr>
<tr>
<td>5</td>
<td>Recital Hall (L)</td>
</tr>
<tr>
<td>6</td>
<td>Recital Hall (R)</td>
</tr>
<tr>
<td>7</td>
<td>CD In (L)</td>
</tr>
<tr>
<td>8</td>
<td>CD In (R)</td>
</tr>
<tr>
<td>9</td>
<td>Patchbay In (1)—Connected by default to DAT-L</td>
</tr>
<tr>
<td>10</td>
<td>Patchbay In (2)—Connected by default to DAT-R</td>
</tr>
<tr>
<td>11</td>
<td>Wireless Mic 2</td>
</tr>
</tbody>
</table>

**AUX 2 SEND – HOUSE PA**
The Aux 2 Send is used as the House PA Mix during events that require CD playback or wireless mics. Note that Jazz Band and other major live audio events will use the main house board. The booth system is sufficient for minor tasks only.

For each channel that needs to be a part of the house PA mix:
1. Turn up the Aux 2 knob.
2. Bring up the channel fader.

You will have to find a combination of the two levels that works well. Ideally, you can find a level for the knob that will allow you to make adjustments during the concert using only the channel fader.

Note: Before the event, you must turn on the sound system and select “Booth Mix” from the Sound Configuration menu on the onstage keypad.

**MON SEND (AUX 1) – ONSTAGE MONITORS**
The Aux 1 Send is used as the Monitor Mix for events that require CD playback and are not using the house mixer. Plug a wedge into the Left Channel output in the pit. Turn on Amp #2.

For each channel that needs to be a part of the monitor mix:
1. Depress the MON button.
2. Adjust the level for the channel using the Aux 1 knob.

The Aux 1 knob will adjust the level for the monitor mix independent of the level for the House Mix. Adjusting the channel fader will have no effect on the level for the Monitor Send.
Note: If the performer wants more than one monitor, chain the speakers together by connecting one speaker to the output of the other rather than to the Right Channel output in the pit. Due to equipment limitations in the booth, we cannot create multiple monitor mixes.

1/4” Snake
There is a 1/4” phono snake that connects the mixer to the patchbay. Following is a list of each channel in the snake and the signal that it carries:

<table>
<thead>
<tr>
<th>Channel</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Left Main Out (Auditorium Recording Mix)</td>
</tr>
<tr>
<td>2</td>
<td>Right Main Out (Auditorium Recording Mix)</td>
</tr>
<tr>
<td>3</td>
<td>Alt 3 Out (Recital Hall Recording Mix)</td>
</tr>
<tr>
<td>4</td>
<td>Alt 4 Out (Recital Hall Recording Mix)</td>
</tr>
<tr>
<td>5</td>
<td>Patchbay in 1</td>
</tr>
<tr>
<td>6</td>
<td>Patchbay in 2</td>
</tr>
<tr>
<td>7</td>
<td>Monitor Send</td>
</tr>
<tr>
<td>8</td>
<td>Open</td>
</tr>
</tbody>
</table>

Under normal circumstances, you should not need this information.

Patch Bay
The patchbay is a switchboard that allows you to easily connect one device to another. Our patchbay is “half-normalized.” Signals that come in to the patchbay on the top row are automatically sent out to the device immediately below. This connection can be broken by plugging in a patch cable to the lower device.

For example, the Aux 3/4 Sends from the mixer are plugged into the patchbay on 5 and 6, above the L/R inputs to CDR-2. This means that the Aux 3/4 signal will be automatically sent to CD-R 2 L/R with no patch cable required. If you plug a patch cable into the ports for CDR-2, this connection is broken, and CD-R 2 will receive whatever signal is present on the patch cable.

Amps
There are two amps in the current audio setup.

Amp #1 drives the studio monitors that are on either side of the mixer.

Amp #2 drives the speaker outputs in the pit. Typically, these outputs are used for onstage monitors.

Wireless Mics
The wireless mic transmitter (labeled #2) is stored in the backstage key closet. The output from the wireless mic receiver is plugged directly into the board (See the mixer channel listing above).

1. Turn the receiver on.
2. Turn up the Aux Send 2 knob for the Wireless Mic channel to add that signal to the House PA Mix.
3. Bring up the channel fader after the performer has turned the mic on to avoid a “pop” when the transmitter is switched on or off.

**CD Playback**

CD Playback uses the Sony DVD player in the rack that is labeled CD Playback. The outputs from this player are plugged directly into the mixer.

Read “Aux 2 Send” (p.9). Turn up the Aux 2 Send knobs for the CD playback channels and raise the channel faders. Make sure the sound system is turned on and set to booth mix.

Due to hardware limitations, it is difficult to independently control the level of CD signal going to the House PA and to the CD Recorder. For concerts that involve CD accompaniments, you may find it easier to use the “Solo to Main” switch to select only the hanging mics for the Auditorium Recording Mix. **Warning:** The following procedure sends the recording mix through the Solo/Phones fader before it enters the main mix. (Input Channel → Solo/Phones Fader → Main L/R) You should check to make sure that this level is raised and make sure that you do not adjust the level during the concert. You WILL NOT be able to adjust the levels of your booth monitors without affecting the recording mix. If you’d rather not worry about the monitors being too loud, just turn off Amp #1.

1. Press the “Solo to Main” button.
2. Press the “Solo” button for each channel that you want to be a part of the recording mix (usually only the auditorium mics).
3. Turn up the Solo/Phones fader.

Now the CD playback signal will not be sent to the main recording mix. It will still be picked up by the hanging mics.

**Snake:**

A nasty reptile involved in the fall of the human race. Also, a multi-core cable that allows you to transmit several audio signals from the stage to the mixer. In our auditorium, there are three: the upstage snake, which transmits only to the house board, the downstage snake, which transmits to the house board and the recording booth, and the pit snake, which transmits only to the recording booth. Most of the time, you will use the downstage snake.

**What happened to wireless microphone #1?**

Oddly enough, it died. Actually, the microphone works perfectly, as far as we can tell, but the receiver unit is somewhat disabled. You won’t find it lurking around the booth, though. It lives in a closet, far, faraway.
LIGHTING

Stage lighting is controlled by the small white board in the recording booth. The following is a description of each button and its function. For the channel settings that have been programmed into each preset, see Appendix B.

<table>
<thead>
<tr>
<th>Manual</th>
<th>Locks out the 5 button keypads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record</td>
<td>Used in recording new presets</td>
</tr>
<tr>
<td>Preset 1</td>
<td>Rehearsal – General hall</td>
</tr>
<tr>
<td>Preset 2</td>
<td>Rehearsal – Full Stage</td>
</tr>
<tr>
<td>Preset 3</td>
<td>Rehearsal – Stage Only</td>
</tr>
<tr>
<td>Preset 4</td>
<td>All off, with ghost lighting for safety. Use this to turn the lights &quot;off.&quot;</td>
</tr>
<tr>
<td>Preset 5</td>
<td>Preconcert/Intermission, House lights up</td>
</tr>
<tr>
<td>Preset 6</td>
<td>Small Ensemble/Solo Recital, House Lights down</td>
</tr>
<tr>
<td>Preset 7</td>
<td>Large Ensemble/Choral, House lights down</td>
</tr>
<tr>
<td>Preset 8</td>
<td>Open-assign as needed</td>
</tr>
<tr>
<td>Off</td>
<td>All off. Do not use—use preset 4 to turn lights &quot;off.&quot;</td>
</tr>
</tbody>
</table>

The sliders on the board have been set to control various lighting elements that you may need for concerts.

Zone Sliders

1. House Lights
2. Balcony Lights*
3. Stage Right Conductor Special
4. Center Stage Right Conductor Special
5. Center Stage Left Conductor Special
6. Stage Left Conductor Special
7-9 Open-assign as needed

*Some house lights will come up as well. There is nothing you can do to fix this due to the way the lights were wired during the installation.

Note: These instructions do not cover the use of the large lighting panel in the lighting booth. Do not touch this panel unless you have been instructed in its use.

FLASHING THE LIGHTS

The house and lobby lights should be flashed to signal the end of an intermission.

1. Return to Preset 5 at the start of the intermission.
2. Press the Preset 9 button to lower the house and lobby lights to 50%.
3. Press the Preset 9 button again to raise the house and lobby lights to the previous level.
4. When the performer is ready to begin the second half of the concert, return to the concert preset.
THE PROJECTOR AND TEACHING CART

Video input to the projector is by means of the teaching cart. You may place the cart backstage or onstage depending on the desire of the performer/lecturer, but the cart’s outputs are always plugged into the panel onstage. If the cart is locked, there is a key in the backstage key cabinet on ring A.

GENERAL INSTRUCTIONS

1. If the cart is to be placed backstage, run the cables for video and audio out through the downstage pass door (a.k.a. “doggy door”).
2. Plug the video cables from the teaching cart into the onstage panel labeled “Lectern Video.” The cables and their jacks are color coded. Plug in the two audio inputs on the same panel.
3. Plug in the cart’s power cord and turn on the mixer.
4. Using the onstage keypad, set the sound system input to Lectern Audio (under the Configuration menu) and turn the sound system on.
5. Using the onstage keypad, use “Projection → Lectern” to set the cart as the input source and auto-lower the screen and projector.
6. Using the video switcher in the cart, select the input you want. The audio inputs will automatically adjust with the video. Note that you can use only ONE of these at a time.
   a. DVD Player
   b. Desktop VGA—displays the image that is on the cart computer.
   c. Laptop VGA—for connecting a visiting laptop. The cables to connect the laptop should be sitting on the top of the cart.
7. Set the audio settings on the mixer for “DVD/Laptop/Desktop Audio.”
   a. Pan all the way left
   b. Set volume to 3 (can be adjusted up or down as needed)
   c. Set the Left Master at 4.5
8. Make sure the Aux In knob is turned all the way down.
9. When finished, turn the sound system and projector off with the keypad (the projector will auto-raise). Turn the volume on all microphone channels fully down. Make sure that all wireless microphones are turned off, placed in a pouch, and locked in the cart.

WIRELESS MICROPHONE

1. Follow above instructions to set up the cart, sound system, and video projector, if needed.
2. On the mixer, set up the channel for the wireless microphone.
   a. Pan all the way right
   b. Set volume to 6
   c. Set the Right Master to 7
3. Turn on the Shure receiver in the cart.
4. Turn on the microphone and check. (You can use either the lavaliere or handheld microphone.)
5. If there is no sound, check that both the microphone and receiver are using the same channel. You can change the channel using the select button on the receiver.
6. Check the battery indicator on the microphone and replace the batteries if they are low.

**Desktop Microphone**

1. On the mixer, set up the desktop microphone channel
   a. Set volume to 6
   b. Pan all the way right
   c. Set the Right Master to 7

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**Gels:**

Color filters which are placed over light fixtures to color the light they emit. While we mostly use white downlights to light our stage, all the fixtures on the catwalk are “gelled” to give a little extra warmth or coolness to their light.

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**Catwalk:**

The really creepy—and dirty—part of the auditorium up above the recording booth, where lighting fixtures are hung and strange noises are produced. Justin, the auditorium ghost, is rumored to live up there somewhere.

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**Stage left and stage right:**

Left and right from the perspective of the performers. Please don’t mess this one up in front of guests. It’s embarrassing.

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**Jazz Closet**

The stage left closet where most of our audio equipment is stored. Many cool things that can be broken live here, so don’t touch unless you know what you are doing and have been approved to do so.
OTHER PROCEDURES

MOVING THE HANGING MICS
The cables that suspend the mics all run to a board in the sound booth behind the racks of recording equipment. You should not adjust these cables unless you have a specific reason to do so.

1. Find the correct cable. The left cable on the board is the left support cable from your perspective in the booth, the center cable is the center support cable, and the right cable is the right support cable.
2. Grasp the cable firmly so that the mic will not drop when you release the cable.
3. Unscrew the clamp holding the mic in place, while still holding the cable.
4. Lower or raise the cable to the desired height.
5. Secure the cable by tightening the clamp. Do not release the cable until you are sure it is secure.

Note: The cable for the audio signal is run along the same path as the center support cable. Make sure that the weight of the mics is supported by the braided steel support cable and not the mic cable.

Another note: the center support cable has a bad habit of jamming and refusing to lower. If this happens to you, someone else will need to go up on the catwalk, where the support and mic cables run vertically along the center of the catwalk, and pull on the cable to lower the microphones.

MOVING THE AUDITORIUM CURTAINS
The curtains are controlled by the row of five switches backstage next to the stage right door. Each switch controls a specific curtain. Note that there is no curtain currently attached to the track controlled by switch three.
1. Find the switch that controls the curtain you want to move.
2. If the curtain is moving the wrong way, you must allow it to continue until it reaches the end of its travel. At this point, the curtain will reverse direction, and you can move it to the desired position.
3. If the curtain is moving, flipping the switch again will stop it.

**Recording Two Concerts At Once – Recital Hall Instructions**

Occasionally, there will be concerts scheduled in both the auditorium and the recital hall. In those cases, there will just be one CD recorded for each concert.

1. Bring up the levels for the Recital Hall Mics.
2. Press the Mute (Alt 3/4) button for those channels.
3. Unplug the patch cable that connects Main L/R to CD-R 2 L/R.

The auditorium mics will now be recorded on CDR-1 and the recital hall mics will be recorded on CDR-2. Adjust the volume for the recital hall recording with the faders for the Recital Hall Mics.

If there is only a concert in the recital hall, you may follow the standard recording procedure, except use the recital hall mic channels on the board instead of the auditorium mics.

**Using The Intercom**

From The Booth

1. Turn the intercom on with the power switch on the back. The talk buttons should light up in blue.
2. Press and hold the talk button to communicate with the stage worker.
3. You can latch the button in the talk position by pressing and releasing the talk button.
4. If you need to get the stage worker’s attention, you can press the call button to flash the red light on the belt pack backstage.

If you don’t want to wear the headset for the entire concert, you can use the speaker switch on the right side of the Clearcom Box to turn on the built-in speakers. Don’t do this if you have the windows to the house open for some reason!

From Backstage

- Press the talk button to communicate with the booth.
- You can latch the talk button in the on position by pressing and releasing. Press again to release.
- Pressing the call button flashes a light in the booth.
- If you need a longer cable than the one in the backstage cabinet (for a concert where the downstage door will be used), any XLR/mic cable can connect the Clearcom wall box to the beltpack. You may use cables from the jazz closet, but be careful with them and return them, neatly coiled, to the closet after the concert.
HELP!

LOCKED DOORS
If a door is locked and you need access:

1. Get the keys from the backstage key cabinet.
2. Find another student worker with keys.
3. Find a faculty member with keys.
4. Call campus security at 3234.

TROUBLESHOOTING EQUIPMENT
Don’t Panic! If there are no levels on the CD-R’s when you put them into standby mode then something is wrong with the equipment. Check these things:

1. Did you push all the correct buttons on the sound board? Especially check that none of the Mute/Alt buttons are pressed on channels that are not the recital hall mics.
2. Is everything patched correctly? In most cases, there should only be two patch cables.
3. Are all the cords plugged firmly into their respective devices? Check the mixer, CD-R’s, and anything else that you are using.

If these steps fail, contact another worker who knows more about the system than you do.

Justin the auditorium ghost

The auditorium is not, and has never been considered to be, haunted. Justin was invented by the TTU Stage Crew in 2007 to explain the strange noises and mysterious equipment malfunctions in the hall. He doesn’t really exist; there’s no need to contact an exorcist. Just understand that if someone says that Justin is at work again, it means something has broken and we haven’t found someone to blame yet.
APPENDIX A: IDIOT’S GUIDE TO WHERE THE SIGNAL WENT

Cardinal Rules of Stage Crew

1. Show up.
2. Do as you are told.
3. Don’t be dumb.
APPENDIX B: CONCERT LIGHTING PRESET VALUES

Preset One (General Hall—House lights up)
  Channels 28-30 @ 85% (EL 1-3 White Downlights)
  Channel 31 @ 65%
  Channel 96 @ 75% (House)

Preset Two (Large Ensemble Rehearsal)
  Channels 28-30 @ 85% (EL 1-3 White Downlights)
  Channel 31 @ 85%
  Channels 32-33 @ 65%
  Channel 96 @ 35% (House)

Preset Three (Solo/Chamber Rehearsal)
  Channels 28-30 @ 85% (EL 1-3 White Downlights)
  Channel 96 @ 65% (House)

Preset Four (Ghost Lighting)
  Channel 93 @ 25% (Partial House)
  Note: The system will automatically go to preset four at 11 PM and 1 AM.

Preset Five (Preconcert)
  Channels 28-29 @ 33% (White Downlights)
  Channels 30-31 @ 40%
  Channels 32-33 @ 33%
  Channels 93-94 @ 50% (House and Balcony)
  Channel 96 @ 75% (House)

Preset Six (Solo/Chamber Concert)
  Channels 28-30 @ 85% (EL 1-3 White Downlights)
  Channel 31 @ 65% (4th EL Downlight)
  Channels 13-18 @ 50% (Warm Wash)
  Channels 19, 20, 22 @ 33% (Cool Wash)
  Channel 21 @ 20% (Really Bright Cool Wash)
  Channels 62-64 @ 33% (Organ Blue)
  Channels 65-67 @ 15% (Organ Amber)

Preset Seven (Large Ensemble Concert – without baffles)
  Channels 28-33 @ 85% (EL 1-3 White Downlights)
  Channels 14-17 @ 75% (Warm Wash)
  Channels 19-22 @ 33% (Cool Wash)
  Channels 62-64 @ 33% (Organ Blue)
  Channels 65-67 @ 15% (Organ Amber)

Preset Eight
  Open – assign as needed

See the section on lighting for information about the zone sliders.
APPENDIX C: SUGGESTIONS FOR FURTHER READING

Just can’t get enough of this whole stage crew thing, can you? For those of you who have been tossed into doing recording, audio, and lighting and feel a bit lost, here are some free resources that I’ve found to be useful.

- **User guides** for any of the equipment. I’m not kidding. If you don’t know how something works, don’t figure it out by pushing buttons. Go download the user guide from the manufacturer’s website and read it. Geeky, yes, but remarkably effective.

- **Shure Audio.** [http://www.shure.com/ProAudio/TechLibrary/index.htm#techlibrary](http://www.shure.com/ProAudio/TechLibrary/index.htm#techlibrary) The Shure site has invaluable information about the use of microphones, wireless systems, and audio engineering in general. All their documents, of course, focus on Shure products, but they are highly educational nonetheless.

- **ETC.** [http://www.etcconnect.com](http://www.etcconnect.com) Electronic Theatre Controls makes the fixtures and control board that we use to light our hall. Go check out their documents for general information about theater lighting, in addition to information about specific fixtures and the control board, an Express 24/48. Most of our fixtures come from the Source Four, Source Four PARNel, and Source Four PAR lines of instruments, so start with documentation for those if you are looking for specifics.

- **Rosco.** [http://www.rosco.com/us/technotes/index.asp](http://www.rosco.com/us/technotes/index.asp) Rosco is a major manufacturer of color filters (gels) for theatrical lighting, and they made most of the gels that are used in our hall. While most of their documents are on color selection for theater and cinematography, they do have some practical suggestions that are useful. There’s also a rather boring article about the long term effects of exposure to theatrical fog and smoke.

- **Mackie.** [http://www.mackie.com](http://www.mackie.com) Pull the user guides for any Mackie equipment that you may be using—like the booth mixer, a CR1604. If you are a completely clueless about audio equipment, this is a good place to start. These documents are written for you!

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The fastest way to get on your boss’s good side

Buy doughnuts. Lee Bledsoe likes Ralph’s butter twists. They’re very tasty.

He also likes it if you show up and work when you’re supposed to.