CREATING "A TECHNICIAN'S GUIDE TO EVANS AUDITORIUM AUDIO EQUIPMENT AND PROCEDURES" – MANAL AND REFLECTIONS

by

Nicté Sobrevilla Rosas

HONORS THESIS

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Thesis Supervisor:

Mark Erickson

Second Reader:

Gaila Raymer

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DEDICATION

To my father, Andrés Sobrevilla del Valle, whose example has taught me to question, speak kindly, and the greatest lesson of all - to find joy in all you do.

To my mother, Marta Patricia Rosas Rivera, who is the definition of perseverance, and whose very existence is a testament to bravery. She has taught me to be firm and decisive, to be bold and adventurous.

To my sister, Azul Sobrevilla Rosas, whom I owe my life too, for always being understanding and never doubting our strength as a family.

To my dog, Sherman, who accompanied me in all my deepest moments, and who without words, always listened.

To my grandfather, José de Jesus Sobrevilla Calvo, who taught me to laugh, and always placed the upmost importance in curiosity and exploration.

To my grandmother, María del Carmen del Valle Rivera, who has outwitted and outsmarted all that have come her way, and who continues to hold our family on her shoulders.

To my grandmother, Rosalinda Rivera Lizárraga, who lived a poetic life that twisted and turned, and will always be remembered.

To my partner, Colin Higginbotham, who has supported me with his kindness, compassion, strength, and vulnerability. Colin has shown me how vast and grand love can be.

To my animals, Matisse & Wonky, it is my privilege to experience this life with you.

To my best friend, Meg Burns, and her family, for teaching me compassion.

To the families Sobrevilla and Rosas, for always supporting me and going the distance.

To my country, México, whose colors, people and landscapes have shaped the morals and strength that have allowed me to strive for the most. I hope to make you proud.

To all immigrants, the world is yours for the taking.

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Dr. Ian Davidson, for his relentless love for teaching and supporting his students. For all the afternoons he taught me not only how to improve on my instrument, but also my relationships, my work, and my life. Through the oboe he has taught me the greatest lesson, how to believe in myself.

Mark Erickson, for creating a program that has allowed students to flourish and explore their passion. Particularly, for always holding me to a high standard and showing me what I can expect from myself. Mark was brave enough to take a chance on me and I hope to make him proud.

Gaila Raymer, who has taught me the value of one's work, has trusted me with the auditorium and given me the opportunity to complete this thesis. She has always set the standard of our work and excellence, and continues to be a role model of strength and the beauty of independence.

ABSTRACT

This thesis showcases the manual "A Technician's Guide to Evans Auditorium Equipment and Procedures" and reflects on the process of its creation. The main focus of the work, the manual itself, is written from a technician's point of view, with the intent of being a thorough reference that is up to date. Evans Auditorium is a key participant in the performances of the School of Music, holds ceremonies for Greek life organizations, and hosts touring acts from all around the world. It is imperative that in order to uphold its ability to showcase art and self-expression, the building be operated effectively.

This manual will support a technician's understanding of audio hardware and signal flow to encourage successful trouble shooting and smooth performances. Aside from equipment basics, this work provides a clear description of procedure during performances, detailed information on each ensemble, and several reference recordings that set a standard for the product Evans Auditorium strives to produce. The project also details accommodations that have been made for COVID-19 and reflects on how the changes were approached to create a new and successful environment. It is my hope that this manual will allow future students to further their understanding and be challenged in new ways, and that it can serve as a tool to cultivate the success of future acts.

Reflection

The process of writing the manual

The creation and writing of the Evans Auditorium manual proved to be a great challenge that has forced me to truly understand the signal flow of the audio system which runs through its walls. My interest in the building began in 2018, when after using the auditorium for a location recording, I was interviewed and hired to work as a technician. I began to shadow previous techs who taught me everything they could about the equipment and running a performance. However, I found that when information was passed down this way, key points would often be missed, and different people had different ways of approaching a problem. Trouble shooting would often be messy and lacked focus, a clear sign of lack of understanding signal flow. As the years passed and I took a more active role at the auditorium, I gained experience working with every ensemble in the school of music and collaborating with passing acts such as The Count Basie Orchestra and Conspirare. I felt that through the diverse groups who had performed with us, it was always important to give the performer a comfortable and positive experience, which I was not able to achieve until I had fully learned the tricks of the building. Soon enough, it was my turn to teach the next generation of technicians not only how to operate the equipment, but also how to be an accommodating and authentic host to performers. At this point, this place had really become a place where I felt safe was able to find joy, and I knew I wanted to create something that could continue to contribute after I graduated. This is why I chose to write this manual, as a guiding hand for those who need a quick reference and a place to start when beginning to train. Not

only does this project benefit a place I love, but it also challenged me to explore and understand routing to an extent I had never attempted. It pushed me to truly apply my educational training into a practical setting and to find passion in the meticulous.

I began to write this manual at the start of the Spring 2021 semester, spending hours in the auditorium researching equipment and looking at schematics from when the building was renovated in 2011. I decided to divide the work into sections so that when this manual is printed and put into use, the information can be organized and easily accessible. One of the greatest hurdles to overcome was finding a way to describe things that might be up to interpretation. I found that through this process the writing demanded that there be descriptive and solid dictation for something subjective, which in itself demanded a clear and thorough understanding of the audio systems. This work finally gave me the opportunity to research all equipment and its use, teaching me more about each device and how to better use it in the future. The most challenging thing of all was time management, staying on track and motivated through a semester still impacted by a pandemic. Making sure to be thorough and accurate, while being able to move forward at a solid pace, was a skill that really needed to be utilized in the creation of this thesis. This was a unique experience that I feel will benefit my ability to be persistent and determined during graduate school and future work, and I feel it has taught me just as much about myself as it has about the auditorium.

Although this building will be renovated in the following years, it is my hope that the concepts mentioned in this manual continue to hold true in the future and that technicians can continue to use this work as a tool to properly showcase acts that trust us with their work. Most importantly, I hope that this piece continues to encourage

exploration and curiosity both in the classroom and outside of it.

Reflection

Adapting to COVID-19

March 2020 was a challenging time for all of us, the COVID-19 virus demanded change in every single aspect of our lives. Personally, I was looking forward to ending my junior year strong, volunteering at SXSW, and getting to visit my family in Mexico over the summer. I was working live sound at a church, interning for a music studio (Blue Rock Artist Ranch and Studio), and recording a lot of performances at Texas State through Evans Auditorium while being a full-time student. As a team at Evans, we were excited to host the Jazz fests and concert week, and I looked forward to getting to work all these events with my friends and fellow techs. But as the number of cases rose, Texas State made the decision to go virtual for the rest of the 2020 Spring Semester. When the announcement was made, the feelings were overwhelming. It felt as though I had been robbed of one of my last semesters, and I had no idea if we were coming back. Not only did academics have to change, but I had lost all 3 of my jobs for the time being. In an effort to isolate, I moved in with my partner and our cat, where we shared one room and a communal kitchen for the next couple of months. Going from 18 hours of school and 3 jobs to staying in a single room each day waiting for whatever came next was one of the hardest moments of my life. And as days turned in to weeks and weeks turned in to months, the frustration became worse, and it seemed like nothing would ever be the same.

After what seemed like an eternity, the 2020 Fall semester began. As the school of music began to have in-person classes again, they would need a space to host performances and double as a teaching theater. This was a big hurdle to overcome, as this

auditorium had no accommodations for streaming concerts or hosting a zoom class on a large scale.

After quite a bit of trial and error, Gaila Raymer and myself were able to come up with a system to allow online and in-person students to interact via zoom while both being able to hear the professor clearly. This meant that we took the inputs from the piano, the house mics, and the professors ear mic into a bus, and routed the output of that bus into an XLR that became the input for a PreSonus interface. This way the online students would have access to whatever was happening in the room. To connect the online students to those in the house, we took the zoom output from the PreSonus as an input that was routed to the front of house. This finally allowed for a more integrated learning experience, and facilitated music making through multiple mediums.

Performances were finally coming back, and we had finally begun to record ensembles again. Concert week came along, and Evans Auditorium was responsible for capturing ensemble performances that would later be edited to synch with the video captured by the band directors. Aside from taking a line out from the board to go into the director's backup recorder, this was not too different from what we did pre-pandemic. However, it felt as though it had taken a completely different meaning.

The first time I saw an ensemble after coming back to work was such an emotional and relieving moment. In a world that had become so strange, where there was no opportunity to feel at ease, I finally felt safe. Since I began to play the oboe at 10 years old, I had never gone so long without seeing a performance. I had felt so alone the past few months, every experience seemed like a risk, there was no moment without anxiety- except for this one.

I believe that this is why the arts are important, they give us a place to be ourselves, and music allows you to live in a moment authentically. Performing with others teaches you trust and accountability, and witnessing these acts gives you the privilege to experience a space in time in a way that will never be the same again.

This is also why Evans Auditorium is so important, so that memories like these can continue to happen for Texas State students and those who come to experience them.

Reflection

Suggestions for improving Evans Auditorium

After it's renovation in 2011, Evans Auditorium was given new life through its updated equipment, allowing the building to operate efficiently and reliably. However, due to the increase in technological demands of the last 10 years, I believe that there are changes that can be made to increase its the accessibility and performance.

Live streaming has become a necessity and an expectation for almost all performances. The ability to share experiences when one might not be able to be present physically is invaluable, and the ability to do this has only been heightened during the pandemic. Other buildings on campus have been renovated to include these accommodations, but Evans has been left behind. Without access to equipment dedicated to fulfilling live streaming roles, Evans auditorium and staff have had to come up with creative solutions that can meet the needs of each ensemble.

Live streaming accommodations would include a switcher, multiple video monitors, a designated stream mix from the console, and a computer with the ability to broadcast. With this equipment it would be possible for Evans to comfortably stream concerts and performances without having to edit for extra hours before and after each event. The inability to provide this service to clients highly discourages acts such as student recitals and full ensembles, therefore giving preference to other buildings on campus who can provide streaming. The integration of permanent live streaming equipment is critical to the longevity and accessibility of Evans Auditorium.

A Technician's Manual for Evans Auditorium Equipment and Procedures

Nicte Sobrevilla Rosas

Intro

Evans Auditorium plays a critical role in showcasing the School of Music's top ensembles, Greek life ceremonies, and touring acts from all around the world. When working under this building, it is important to keep a few things in mind so that one can be successful in this job.

1.- The most important idea is to remember that when people come to this building, they are here to showcase something that is important to them. It can be a symphony, a dance, or a ceremony, but it always is something that the client or group have worked really hard for. As you go through your regular routine, remember that this day is important to someone, and that we must respect it regardless of what the act is.

2.- Bring a positive attitude, as mentioned above, Evans Auditorium is used by all sorts of people who care about their craft, and this can sometimes make tensions high. Performers are trying their best to make a good end product and can sometimes get frustrated easily. Remaining calm and positive can not only help you, but it can also help those around you by giving them one less thing to worry about. Even if you are not sure what to do or need a break, try to handle it in your own time and in a timely manner, making sure to be discrete so that the performer does not notice and no extra friction is created. Always try to keep a positive mindset around the stage, it makes a difference and will keep clients coming back.

3.- Recording is a big part of this job and is one of the most important aspects. It might just be a day at work for you, but this might be someone's last dance or their most important concerto. Your job of recording these pieces is crucial, as these recordings mean a lot to the performer. The people on stage are trusting you with their work and believing that you have the ability to capture in an authentic and meaningful manner. You must honor this responsibility by making an artistic and representative recording that supports and showcases an artist's work.

This is a job where you are dealing with something very personal, a stage where people are able to express themselves in their own way, where they come to present themselves to the world. It is a privilege to work with these people, and an honor to be trusted with their art. It is a beautiful job that constantly reminds you of just how much people are capable of creating.

Getting to know your equipment

Shure SM58

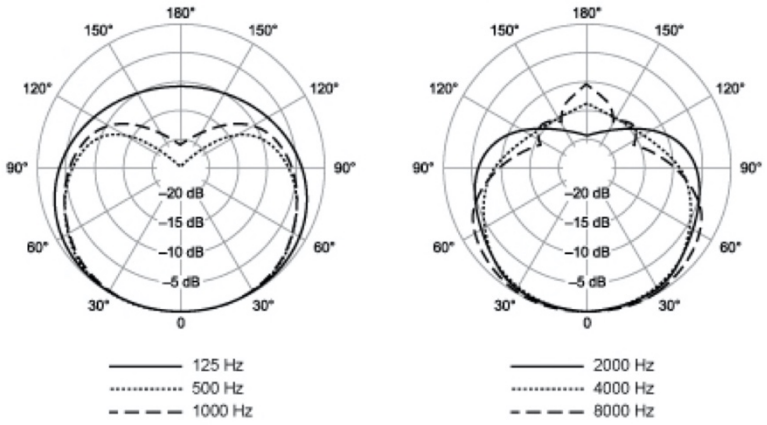
Type : Dynamic

The SM58 is a ‘go-to’ microphone for most live events.

This dynamic microphone cost $100, is shock resistant, and can be used on a variety of sound sources. Because it is a dynamic microphone, feel free to use this on loud sources - such as trumpets or saxophones. When micing vocals, pick this over a SM57 since this model features a pop filter.

COVID notes: You can take the pop screen off and wash it in the dishwasher. Help keep your artist safe!

Other tips: If the screen is dented, remove pop screen and help form it back into shape using the end of a broom stick. If this doesn’t do it, the replacements for the screen are pretty cheap.



“Vocal Microphone: SM58: User Guides: Shure Publications.” SM58 User Guide, pubs.shure.com/guide/SM58/en-US.

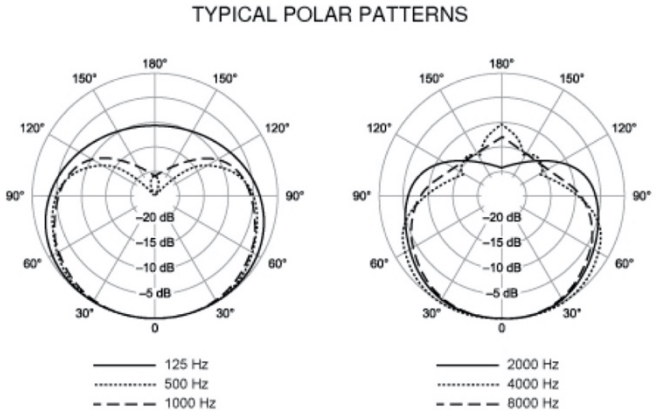
Shure SM57

Type : Dynamic Instrument
Mic

The SM57 is possibly the most popular mic available.

This dynamic microphone cost $100, is shock resistant, and can be used on a variety of sound sources. This is mostly an instrument mic and is commonly used on snare, jazz wind instruments, and for us it is used when micing the piano. Can be used on vocals.

This mic is super common, so if guest artists come they will know what they are looking for. Make sure that you are knowledgeable about this product and how each instrument is commonly miced so that you can make a good first impression.



"Instrument Microphone: SM57: User Guides: Shure Publications." SM57 User Guide, pubs.shure.com/guide/SM57/en-US.

Shure SLX2

Type : Dynamic Wireless

Evans Auditorium is equipped with three of these wireless mics. They have many purposes and are often used as handheld mics for directors or presentors for concerts and ceremonies. Another popular use for these is as a solo mic for Jazz soloist(s). These mics are tuned in to channels 1 - 3. The second number will be the ‘number’ of the mic. For example, if the mic is leveled ‘1’, the frequency it is tuned to would be 1-1.

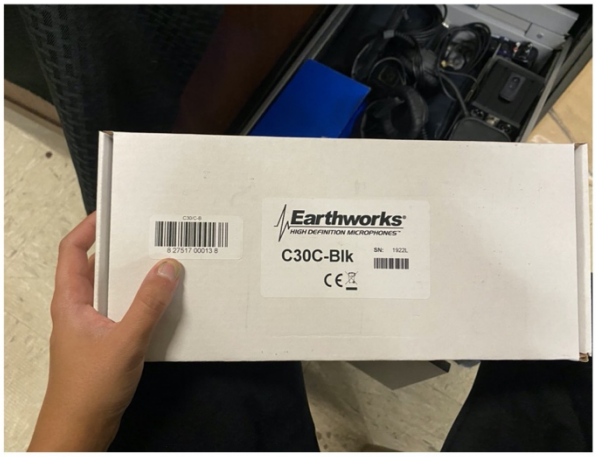
These mics use AA batteries that you should aim to change every 3 hours if the ceremony runs that long. They are also equipped with a mute button that you can flip on/off and coordinates with the light (green/orange) on its display screen.

Audio Technica
U853R

Type: Condenser

The AT U853R microphones are normally brought out for special events that require extra amplification. Previous uses have included choir performances, musicals, and ensemble recordings (in addiction to house mics). These mics are really small but come with an attachment to elongate the mic and give it the capacity to be put on a mic stand rather than hung (as is common). When capturing ensemble performances, they can be placed in an XY position, and pointed towards the group. In some occasions there will be additional players in the audience that the house mics might not pick up, this is when you would use these mics. These can also be used for musicals or acapella groups, where you might not have a mic for everyone. You can use these mics to amplify the sound of the group and make the most out of the situation.

Earthworks C30C-BLK



Type: Condenser
Pattern: Omni

These hanging mics were installed in the fall of 2020 and have been a great addition to the audio system. These are the most used mics in the auditorium and are responsible for capturing most of the performances that happen on the stage. This pair is also equipped with a special XLR cable that prevents rotation of the mics in order to preserve their position. These mic's patch point is the cat walk, with a panel corresponding to each side. These mics have a clean and precise sound, allowing the dynamics and textures of each ensemble to be captured accurately in the recordings.

Countryman
Isomax

Type: Condenser
'Britney' Mic

These are the preferred mics for leads in musicals and teachers who have to teach over zoom. They are discreet and sound great without the worry of the mic rubbing against fabric. The receivers for these mics are in the amp rack, and the frequency can be changed by holding the middle button until the number flashes. When using these in combination with monitors, make sure to find the trouble frequencies and ring them out prior to a rehearsal or performance.

Passive vs Active monitors

Passive and Active monitors are both found often in all live sound gigs. Evans is equipped with both types. Active monitors require you to pass power to them and have power amplifiers within themselves. Therefore, for this case you can plug them into floor panels to get power and pass audio via 1/4 inch. Passive monitors require an external amplifier. This means that the cable they use must be able to pass both power and audio. The cable we use to accomplish this is a Speakon cable. There are ports for both passive and active monitors on the wall panels.

Important: the unpowered label means the signal you send does not include power. This is how it is labeled on the board as well. It is important to understand the difference so that you can trouble shoot faster and better.

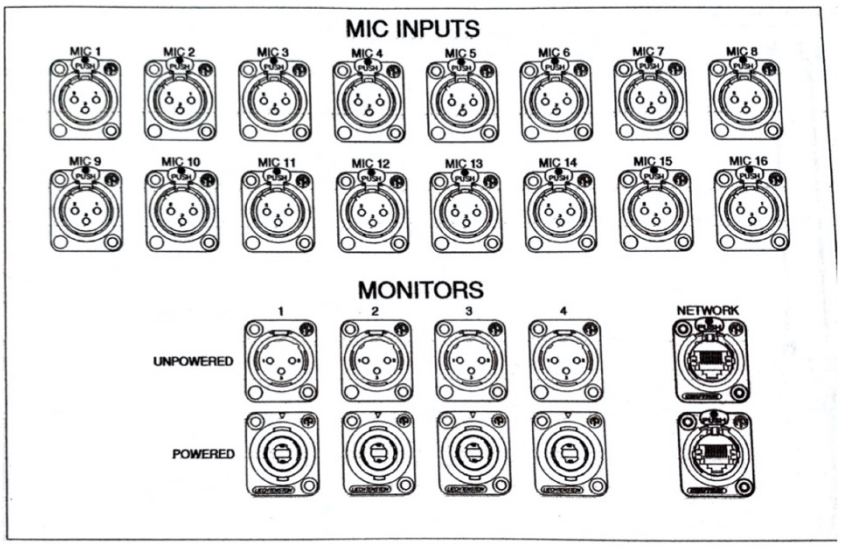


Diagram is property of FORD AV building schematics from 2011. Used with permission.

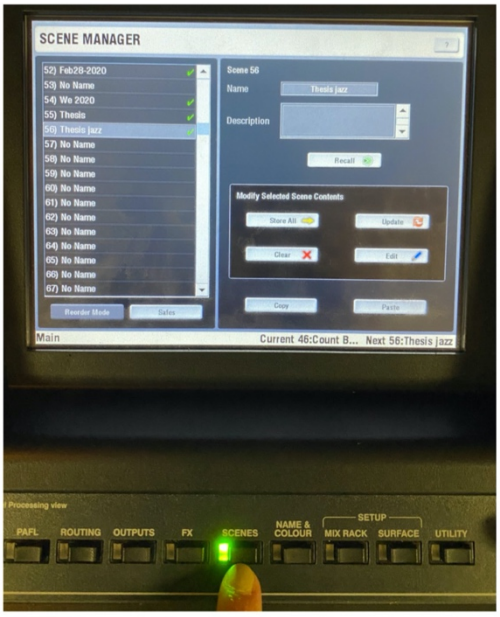
Tip: Active monitors means you actively have to switch them on (plug in to power). Passive do not require you to do so.

Important: Although there are 4 outputs for each type of monitor in each panel, there are only 4 mixes. This means that if you plug in a monitor to the #1 slot on stage right and on the #1 on stage left, these will share the same mix. When you control mix #1 you are controlling what feeds both of those speakers. However, the mix for unpowered #1 and powered monitors #1 are different.

To ring monitors out: Begin by asking either the performer or your team mate to stand in front of the monitor in the relative position where the user will be standing. In other scenarios (like if working on an X32 board) iPads will be available where you can use an RTA meter that will help you visually pin point the frequencies you need to take out to prevent feedback, so you could do this step on your own. In Evans we do not have access to an IPad, so we must use our ears! Bring up the fader that corresponds to the mic you are ringing out, and as soon as you start to hear it feedback try your best to pin point that frequency. With a sharp Q value set for the EQ band you are choosing, bring the trouble frequency down until it stops. Continue to find different problem frequencies until you are comfortable that it will not feedback during the performance. Make sure that close to finishing, you take the time to walk around the stage and the monitor in order to prevent problems during a performance.

About the board

Evans Auditorium was equipped with the Live A&H console after its latest renovation in 2011. This board lives in the booth for most events but has a movable version that can be placed in the house for FOH mixing during an event. Both versions of the board have access to every scene, however, they cannot be used at the same time. To switch who has control you must flip the switch in the equipment closet.



Once you have turned on the board you can pull up a scene by pressing the scene button under the screen and pressing ‘recall all’ once you have selected the scene you want.

Description on basic scenes and routing can be found under the scene section of the thesis.

The Equipment Rack

1 Inputs
These are the channel inputs that come from the pannels. These connect to the iLive console

2 Microphone recievers
Make sure frequencies corralate, if a certain channel is too noisy change here.

3 QS Control Processor
Controls the amplifiers

4 Board selector
Switch between mixing in house or in booth

5 Power amplifiers
for speakers

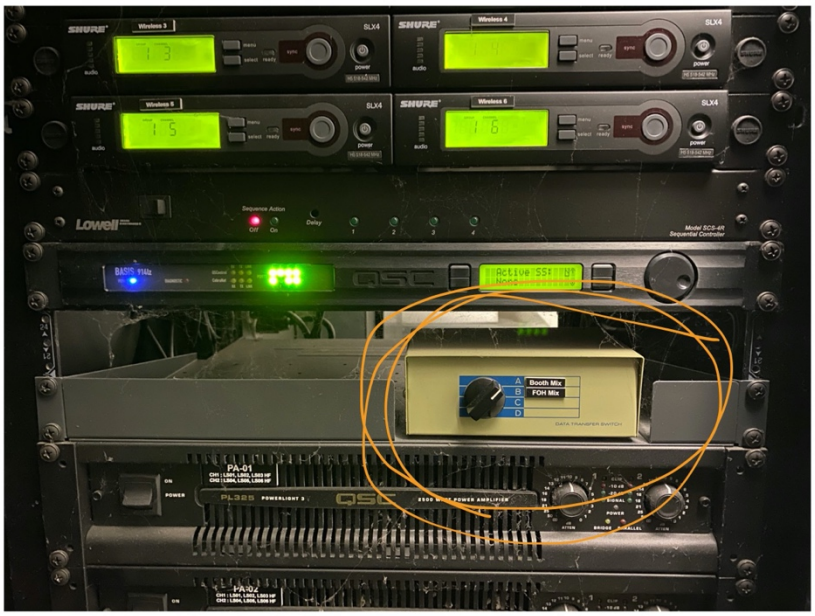
A. Power Surge Protector - Prevents against voltage spikes

B. Power Supply for communication systems

C. These mics are on the panel, and include cat mics, wireless mics, and the mic in the booth.

D. This is the ACE network panel that connects the iLive console to the digital snakes via Ethernet. This acts as a bridge and provides the ability to switch between FOH and booth mixing.

This is the receiver system for the wireless mics (hand helds, lavs, etc.) The label on each receiver indicates the title of that microphone on the board. If there is a noise problem, you might want to change what frequency a mic uses. You would change that both here and on the wireless mic itself, making sure that both the receiver and transmitter match.

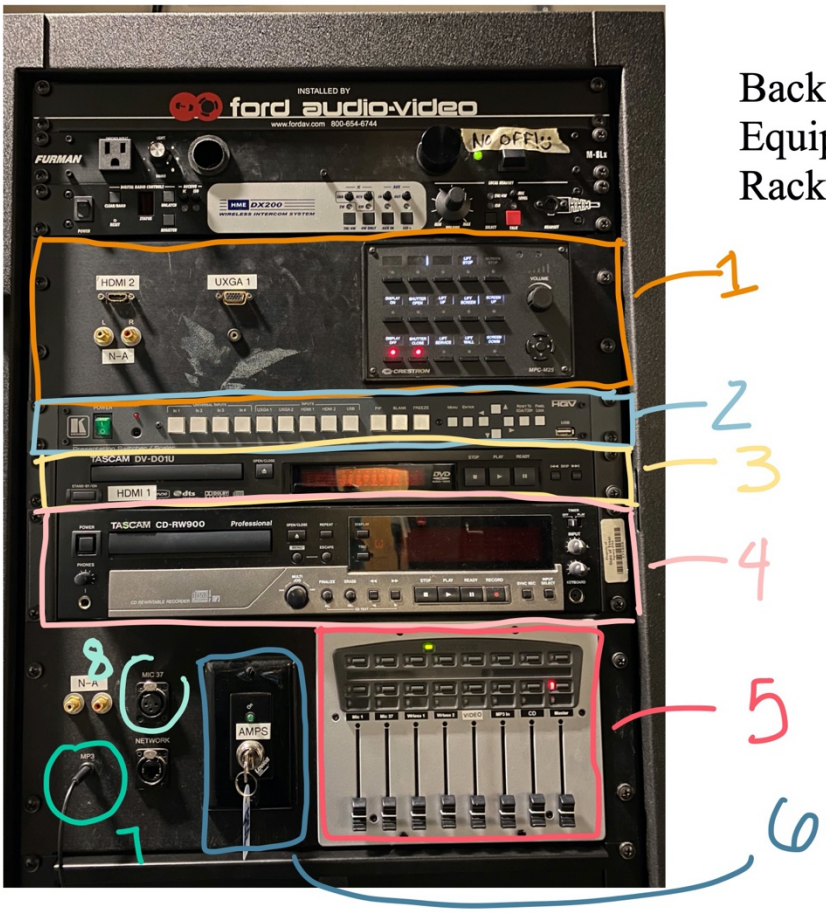


This box is super important, it acts a switcher for which board is accessing the AES network and currently using mixing capabilities of the iLive console. If you have brought out the house iLive and it is not connecting to the AES network, it is likely that you forgot to switch the knob to the right position.

If for some reason the wireless mics and cat mics input and outputs are moved around this is how they are set-up:

When selecting the input for a channel you can select the device, the slot and the socket. The following paragraph describes inputs in that manner.

The wireless mics come into the board on inputs iDR Mix 16, Slot B, Socket 1-6. The cat mics are socket 7 and 8. There are 4 sets of iDR mix racks or devices, each slot containing 8 channels, this is how the 32 inputs are created. The next device is booth mixer, which includes the CD player on Booth mixer device, slots A and C, sockets 1 & 2.



Back Equipment Rack

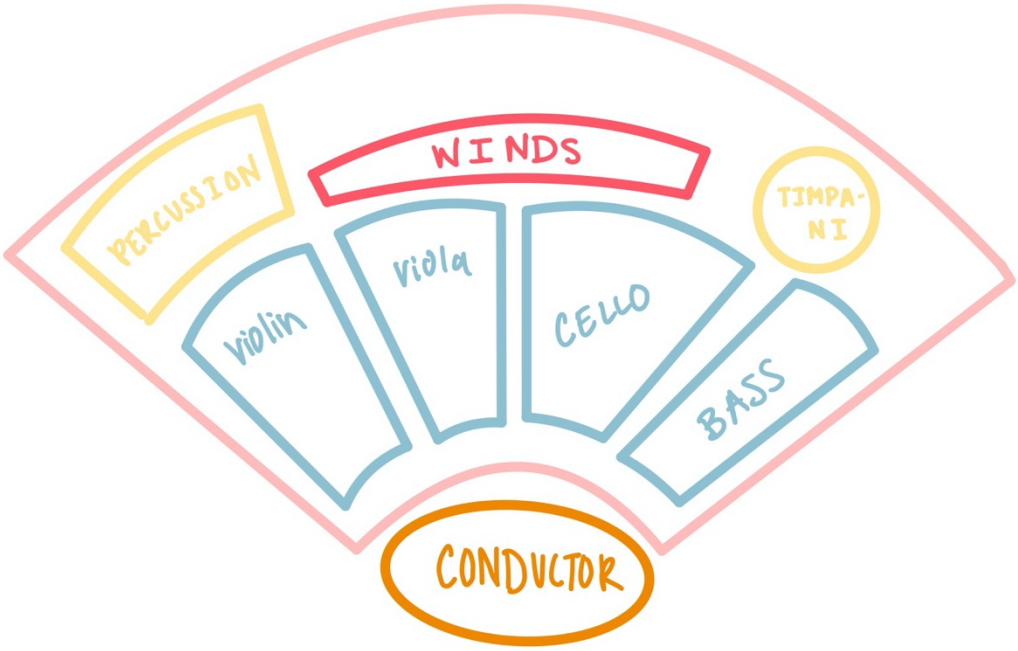
This back equipment rack should always remain on!

1. Projector panel. This is where you will plug in laptops that clients want displayed via the HDMI 2 port or the UXCA 1 port. The buttons to the right are the command for the projector screen.
2. This panel is the switcher, allowing you to select the source for the projector. If you are not getting a picture, this is a place to check.
3. This is the DVD player, can be selected from the switcher not really used anymore)
4. Announcement player- This is great if you are doing a small event by yourself where you don't necessarily have to be in the booth. You can play the announcement from the stage and control it using the faders here.
5. Mic Panel- Allows you to control a limited amount of mics from the stage, really handy if you have to be helping clients on the ground while keeping control of sound sources.
6. A place to turn on the amps without having to go up to the booth
7. MP3 port
8. Extra mic that can be controlled from the panel to its right.

Common Setups

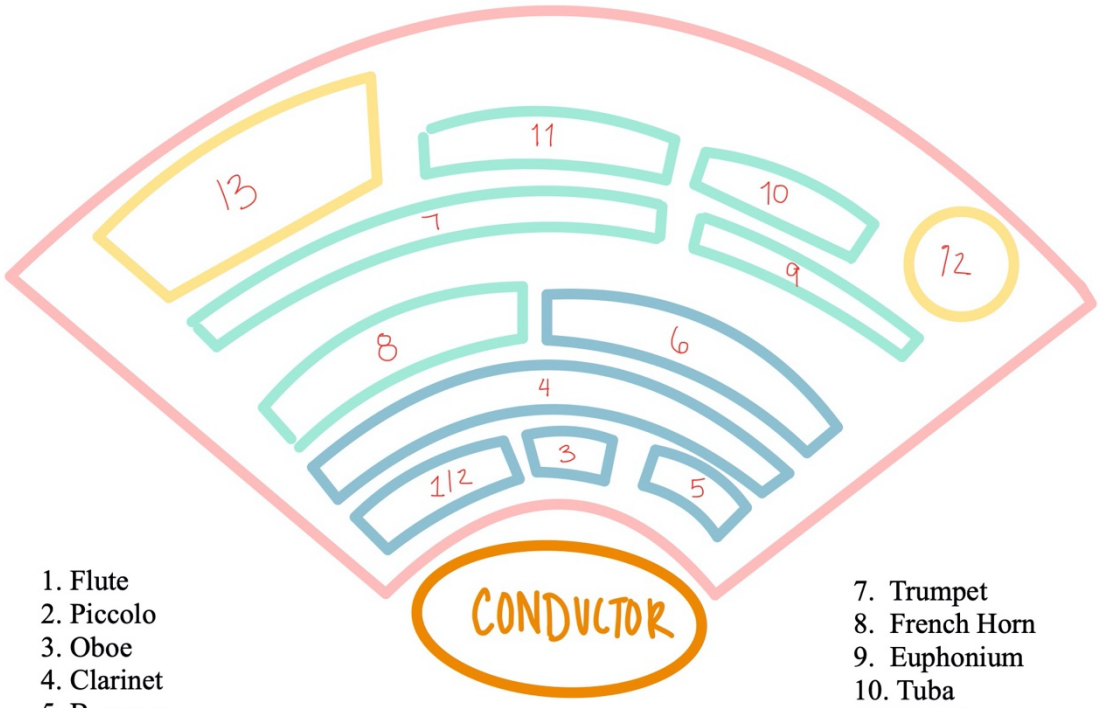
The Orchestra

The Orchestra is one of our biggest ensembles at TXST. The Orchestras' main families include the strings, winds, and percussion. The typical orchestra setup is pictured below. These concerts are typically recorded with the house mics. It is important to pay attention to meters while the orchestra warms up due to its really large dynamic range.



The Bands

Texas State features three different ensembles as far as bands. Wind Symphony, Symphonic Winds, and Concert Band. The size of each group varies depending on both ensemble and piece. This is a typical setup, but instruments are often arranged to achieve a particular sound, and players may even move between pieces. Placement and orchestration vary a lot, but this is a basic idea.

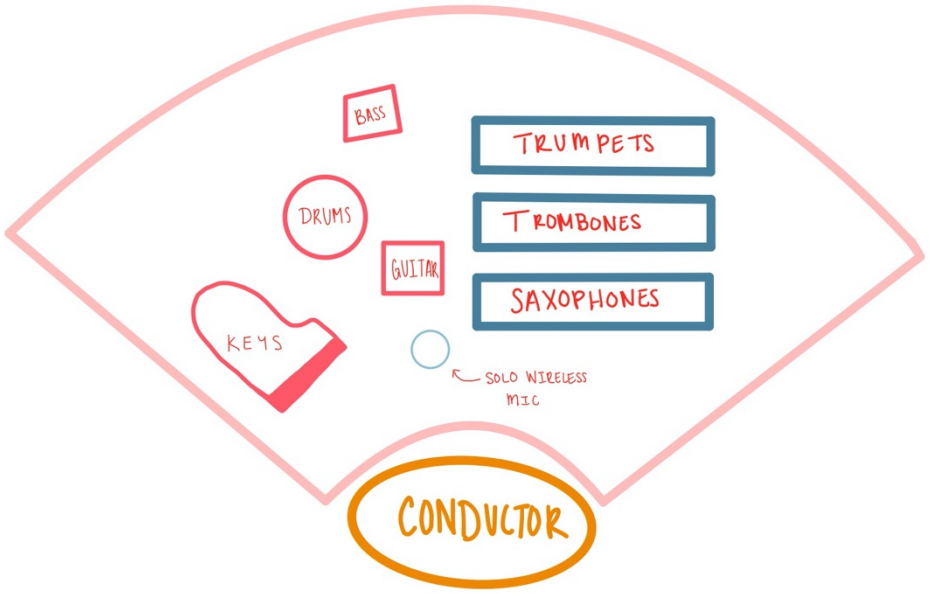


1. Flute
2. Piccolo
3. Oboe
4. Clarinet
5. Bassoon
6. Saxophone

7. Trumpet
8. French Horn
9. Euphonium
10. Tuba
11. Trombone
12. Timpani
13. Percussion

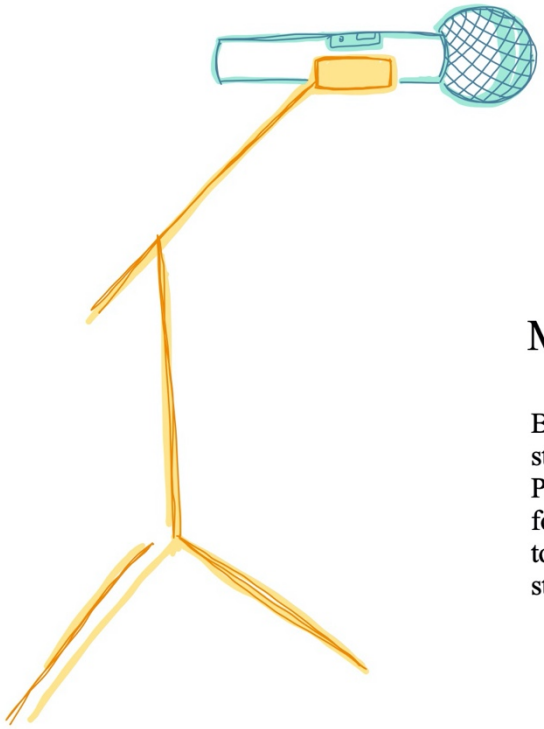
The Jazz bands

Texas State houses a number of Jazz bands that all use similar setups, most of the time house mics do just fine for recording the performance. We normally mic the piano & provide a solo mic. Mic techniques in next page.



Micing Jazz bands

You will need one of the wireless mics in a boom pole that can have its height/angle adjusted. This will be the solo mic as well as the speaking mic for whenever the director is on stage. You will probably need to mic the piano and bring both the piano and speaker mics up in FOH.



Solo Mic

Micing the piano

Bring out a pair of 57s and two mic stands with the ability to angle. Place mics as a stereo pair following the 3-1 rule, making sure to cover both the high & low strings.

Pre Saved Scenes
and their uses

Jazz Recording / Concert Scene

Use this scene when recording a jazz band or just mixing the live performance. The scene has extra inputs just in case you need them. Most likely you will only need the solo mic and the piano L & R channels.

Scene title: Thesis Jazz

Notes about mixing Jazz:
It is important to recognize that most of the time the band will not be fully miced, and therefore you will not have control of the volume of some of the instruments. Your job in this case is to match the stage volume of the instruments that are not a part of your mix and incorporate the miced instruments carefully and musically. It is also key that if there is a soloist on stage, their sound has clarity and dynamics that represent the instrument correctly while standing out from the group. This is where it is really important to tap into your musicianship skills, as you now become part of the ensemble yourself, and these students and directors are now trusting you to convey their work in a way that does it justice.

Basic Recording Scene

Use this scene when recording big ensembles that only require the cat mics. In this scene you should be able to manipulate the recording levels using the blue ‘Rec’ fader. Suggested fader levels for the announcement are: -10 db mains, -15db CD2

Scene title: Thesis

It is critical that while using this scene and recording bands that you keep the headphones on and constantly listen to the mix. It can be easy to get distracted when you are not needed for 10-15 minutes, but it is so important that you keep using your ears the whole time.

Tip: Even if bands tell you in rehearsal that they have played ‘the loudest they are going to play’, sometimes when the adrenaline kicks in, they go above this. This is why it is so so important you keep an eye. The directors and students are trusting you to preserve their work, and we must do it to the best of our ability!

Zoom Class Scene

This scene is super important while classes are remote.
Because the auditorium was not designed with the need in mind, the routing can get a little tricky. However, we will go over how it works in this explanation. Please refer to the picture after the explanation to help visualize the signal path.

First, you will need the following equipment:
-Computer (with zoom)
- Presonus Interface
- Wireless mic
- 2 Shure SM57 microphones

Begin by bringing out the piano to the center stage, and then micing it with a stereo pair of 57s. You can plug these microphones into inputs 1 & 2 on the channel input panel. Because the wireless mics are already tuned to the correct frequency, there is no on-stage setup required. Once you have done this, you have correctly set up the inputs for a basic class.

In this scenario you are basically using the board as a summing bus, of which the output will be the input into the zoom stream.

At the board you will see the unpowered and powered mixes for monitors 1-4. For this example we will be using unpowered monitor mix 1 that will exit as an XLR output on the stage. To set up your levels of what the zoom students will receive, press the ‘mix’ button under the ‘Unpowered 1’ bus. You are now controlling the mix for the class. To monitor, press the PFL under the same channel strip and plug in your headphones into the board. Set the proper levels that you feel best benefit the class. You will want to do this for the front of house mix as well so that the in-person students can have amplified direction as well.

Now, you can head back to the stage so that we can set up the zoom meeting property. Begin by bringing out the laptop, and connect the Presonus interface (or any interface) to the computer. Make sure that it is turned on, and open zoom. Once you are in zoom, open up the preferences on the upper right hand side. For both input and audio interface make sure that the interface is selected.

Head over to the mic panel and run an XLR cable from the output that you have chosen (in this example it would be output 1 since it correlates with our mix) into the input for the interface. Mess around with the gain knob next to the input until it gets to a comfortable signal level. Assuming that the board is turned on and levels set properly, students should now be able to hear the piano and the wireless mic.

Zoom Class Scene

If the professors would like to hear the zoom students as well we must follow a few extra steps.

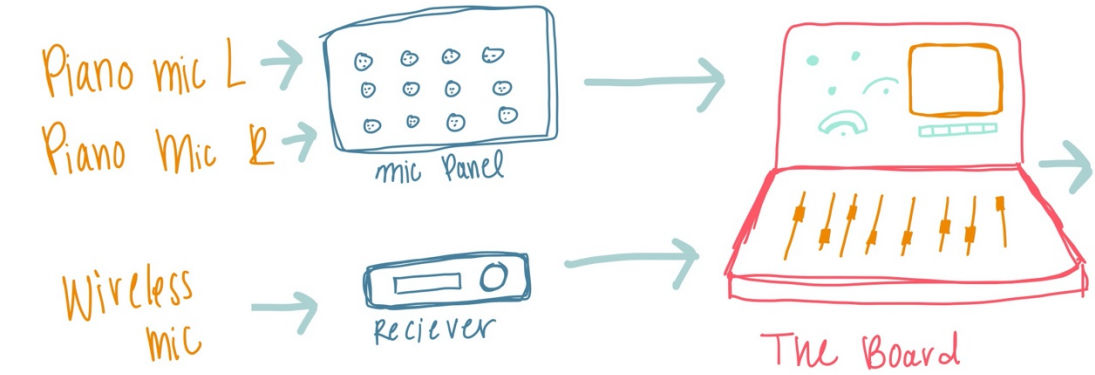
In this case you will need to grab a DI box and an extra XLR cable.

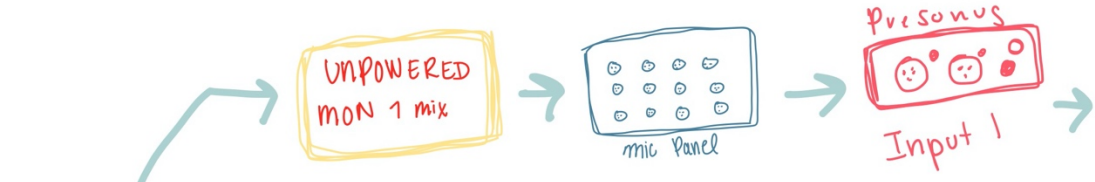
You will need to take an output from the interface that you are using. This can either be the monitor output or the headphone output. If this happens to be a 1/4 output you will need to run it through a DI box so that it can become mic level and be a proper input into the board.

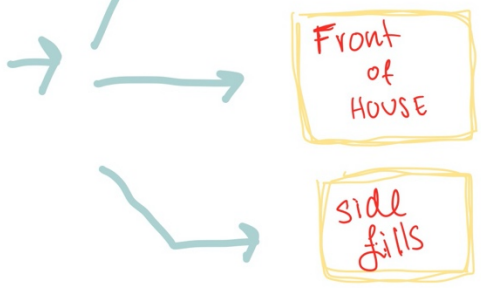
Run this into the channel 3 input for the mic panel.
You will need to bring this up both in the front of house mix and the side fills. This allows in person students to hear the zoom students while they ask a question through the front of house, and the professor on stage to be able to receive information from those learning from home.

This following process is able to work only because zoom does not amplify your own ‘voice’ or input. If zoom did not do this, it would create a feed back loop. This is why it is important that the channel 3 input, or out from the zoom meeting, is NOT brought up in your monitor mix. This will create a feed back loop as well.

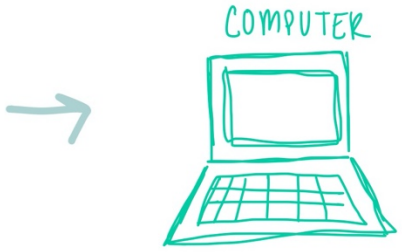
This set up has really allowed classes, particularly choir classes, to still feel personal. The professors can hear the piano and on-line students in the house, and both learning environments encourage questions from students in a manner that does not interrupt the flow of class.

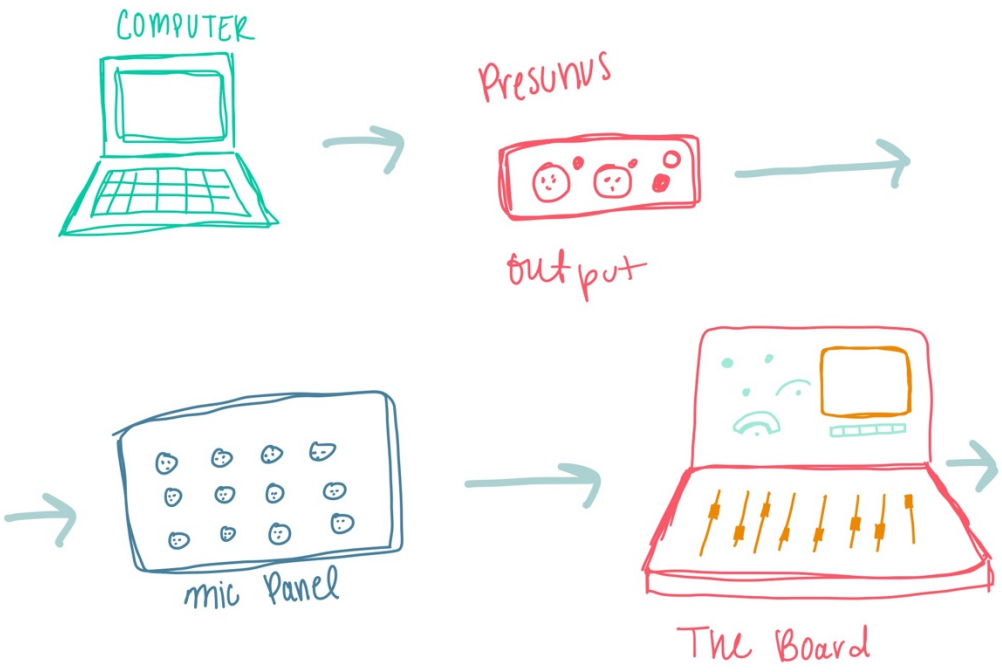


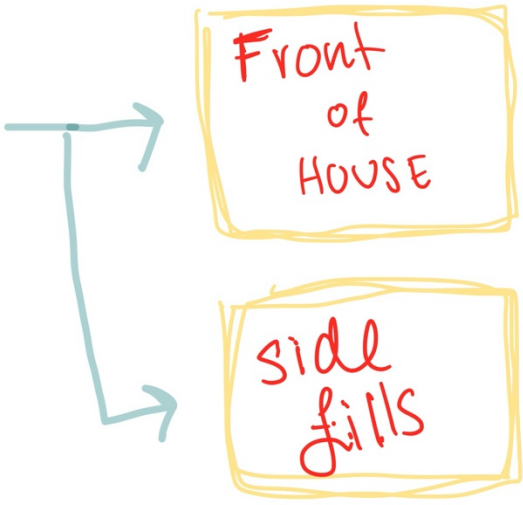




Basic Zoom Setup







Extra step so proffesors can monitor zoom students

Concert Procedure

Standard Concert Prep

This page applies mostly to Concert Band, Symphonic Winds and Wind Symphony.

Operations Manager will set a time appropriate for you to come in, you may come in early but might not get paid beyond what is asked by manager.

Greet the director and ask if they have any special requests. Ask the director if they can take a moment during rehearsal to play the loudest moment in the piece. Also ask if they have movements, and if they do if they want them broken up into different tracks or one continuous recording.

Head up to the booth & bring headphones.

Take a look to see if cat mics are still in correct position.

Plug in headphones into the primary recording device (DENON DN-700R) so that you are hearing an accurate representation of what is being captured.
Listen to the sound of the band to make sure there is no distortion. Try to pay attention to the loudest and quietest spots. If you are lucky enough to get the directors to play the loudest section, watch the meter on the SD recording device. At its peak, the better should be close to -2 db on the DENON meter, or 'tapping' close to it. If levels are not where you want them to be, manipulate the recording fader (blue) on the board. Continue to listen for distortion through the whole performance.

Make sure that you have the Tascam (recording player device) on with the reshow recording (:32 seconds long), that both devices are record enabled, and that your headphones are up and working.

Standard Concert

As instructed by the conductor (via text, communication system, or predetermined time) bring down the house lights to 25% and begin pre-show announcement. This is standard, so make sure you ask the director if this is okay & how they want to queue you before the concert starts.

To set up the ALESIS recording device, begin by pressing power.
Click, ‘playlist select’.
Look through all the playlist to find the one with the oldest date. Using the arrows to the left, change the date to today’s date.
Next, press the ‘playlist edit’ button, then the ‘new track’ button.
Once you are here you will want to press the record button once to record enable the device.

To prepare the DENON device you only have to turn it on, double check there is an SD card in the primary slot and press the record button once.

After the announcement, but before the ensemble starts playing, press record on the ‘backup’ system (ALESIS). You will not need to stop this recording and it will roll until the performance is over.

Once the conductor is on stage, start recording on primary device (DENON). You should already have prepped your systems to be enabled. Once you press record, it will start a track. After the conductor is done conducting the piece and their hands are down, press ‘stop’. It is important to press ‘stop’, not ‘pause’- a stop will pause a track that can then be continued, while stop will finalize it.

As agreed to by yourself and the conductor, ‘record’ and ‘stop’ for each piece. Pay attention to how you were asked to record movements. Ex: each movement as a separate ‘track’ or all the movements in a piece as a continue 'track’.

Standard Concert Shut Down

At the end of the concert, bring up house lights to full and bring stage lights to 75%

Press stop on the backup recording device (ALESIS)

Remove SD card from primary recording device (DENON) and insert into Evans computer. Grab files from the SD card and label them correctly. (Instructions detailed in 'Sending off files' section)

Once files have been sent to both the librarian and the director, shut down board by first muting the mains, pressing the 'utilities' button and clicking 'power down surface'. Now it is safe to manually flip the switch on the back of the console. Turn off all the lights for the booth and lock the booth.

Lock up the booth and head downstairs.

Once the directors and performers have left, double check all the doors (lobby doors and balcony doors) to be locked. Using the on stage panel (reference basic lighting section) lower the house lights and turn off work lights. Place the ghost light in the middle of the stage and leave turned on.

Lock the back door on your way out.

Locking Up

Follow the following steps starting in console room:

- Turn off console and all equipment upstairs
- Lock the door for control room & hit the lights
- Make sure people are out of the balcony, check for trash or forgotten items, check all four balcony doors to see if they are open, double check that they are all locked when you leave
- Take elevator down
- In the lobby turn off the show lights over lobby doors (switch next to entrance doors if you were coming in from the quad)
- Check every single entrance door and double check that you locked all of them
- As you walk to the office, try to see if there is trash or forgotten items
- Grab your stuff and lock the office
- Turn off house lights and work lights
- As you go through to the exit check dressing rooms for missing stuff and make sure lights are out
- Triple check you locked auditorium door

Sending off files

This is the official and safe way that we send recordings to both the librarians and the directors.

1.- Visit the following link :
https://doit.txstate.edu/services/file-transfer.html

Or simply google 'TXST file transfer'

2.- Sign in with your net ID

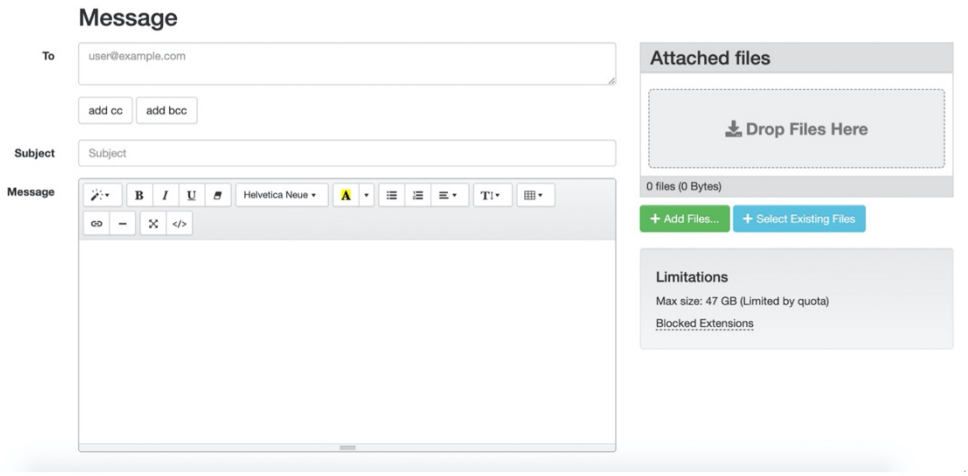
3.- Send files to the librarian and the director by adding their email to the recipient section

The email for the current librarian, Mark Blair, is mb53@txstate.edu

4.- CC Gaila at gr22@txstate.edu

5.- Write a message that includes the date, the concert title (if there is one), the director and the ensemble. If possible, include the title for each piece and the composer.

6.- Drag and drop the files from the SD card that you retrieved from the DANON once they are properly labeled.



Label tracks with the name of the piece and the take number
ex: PeterAndTheWolf_Take2

Basic Lighting Techniques

This panel is found at the booth, mirroring the one by stage left behind the grand drape. This is where saved scenes can be found and how we manage lights during a performance. You should be able to do all the procedures required for the concert from the booth thanks to this! The House light fader controls the brightness for the audience lights and the bulbs in the room between the entrance doors and the audience seating. The concert lights include the spot light for the director and the back/front lighting for the performers. Conductor, Jazz and Recital are special scenes that are not used often but have been designed for that specific ensemble. The work lights are not to be used for a performance, and are mainly to light up the stage while performers are getting set up or stuff is being worked on at the stage.

The lights next to the HOUSE and WORKS tabs indicate which panel has control of the light system (either on stage panel or booth panel). To regain control of the lights, bring the corresponding light fader up until the light next to the button turns green. This will signal that you can now change light levels.

Reference Recordings

Full Recording of Jazz Fest 2020

Showcases what a live sound performance should sound like. This was recorded at Evans Auditorium with full amplification. Extremely talented group with high end players such as Doug Lawrence.

Conspirare Choir

Grammy winning choir ensemble recorded at Texas State Evans Auditorium.

Symphony Orchestra

Spring 2021 recording of Peter and the Wolf featuring a narrator.

Wind Ensemble

Texas State's top wind ensemble preforming a contemporary piece as part of their spring 2020 program.