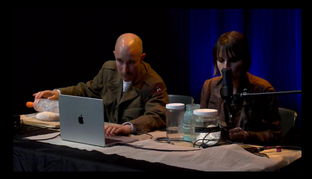
Electroacoustic Improvisation Summit (EIS) Audio System

Daniela Tomaino- Audio Crew Chief and FOH Mixer

Department of Entertainment Technology



Introduction:

The Electroacoustic Improvisation Summit (EIS) is a show that the Entertainment Technology department produces every Spring. Typically, the show delivers audio in-person and an archival recording for the artist to have. This year a live-streamed portion was added that furthered the complexity of system. My role in the project entailed overseeing the installation and operation of the system, mixing it from the front of house position, and ensuring that the system is thoroughly documented for the future. This was a complicated networked audio system, so a clearly documented system was important for trouble shooting now and in the future.

Deliverables:

- **Install System/Mix Show**
- **Audio System Diagram**
- **Clear Com System Diagram**
- **Potential Upgrades**
- **Signal Flow**
- **Power Run Diagram**

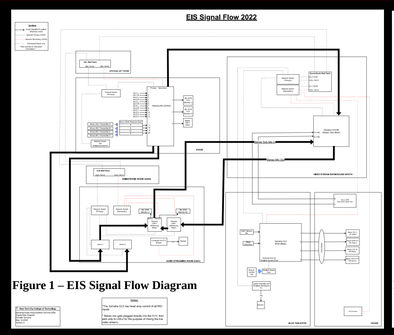


Figure 1 – EIS Signal Flow Diagram

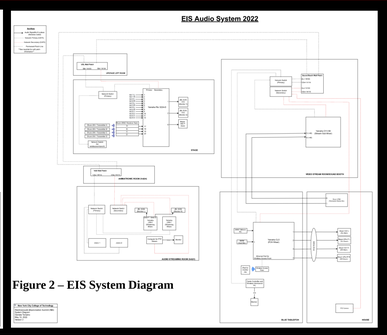


Figure 2 – EIS System Diagram

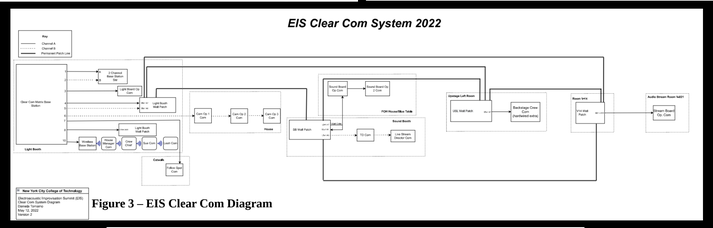


Figure 3 – EIS Clear Com Diagram

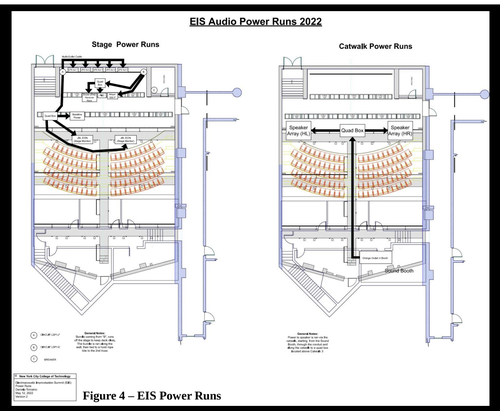


Figure 4 – EIS Power Runs

Methods:

Pre-Show

The EIS show process began immediately following the end of "A Cowboy From the Bronx". The first part of this show was the strike of the previous audio system (not including the PA). Following this, we took the preliminary paperwork create by Professor Huntington (Input/Patch List and the network diagram) and began to do a shop prep where we laid out and connected all the equipment in the system [see fig. 7] so that the following day we could work on the Dante patching and soft patching on individual boards [see fig 5]. After this was done, we did a test of the system so that we knew it worked before installing everything. After a successful shop prep, all we had to do was install the system into the Voorhees theatre (FOH, V-021, Sound Booth, and stage) [fig. 8-10]. After completing the installation, we did another full test of the audio system and com system to ensure the system worked after the installation process. A few patches had to be corrected, but over all the system worked seamlessly.

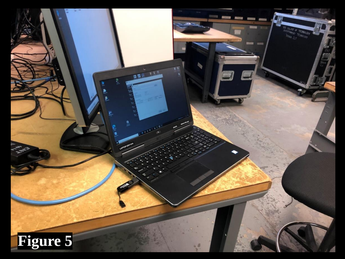


Figure 5

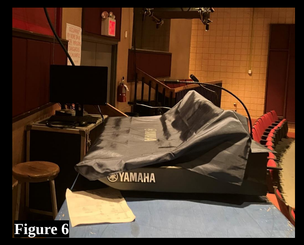


Figure 6

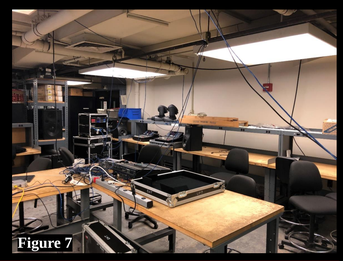


Figure 7

Show!

We teched out the first act of the show the day before the show, so that our could get an idea of how the process worked. This also saved us some time on the day of the show, because we had four other acts to tech out. On the day of the show, we had a tech for each act starting with the last act first. Once we finished tech, we set up for the top of show. I had kept notes at the board of levels for each act. After the individual acts, there was a conference at where each performer discussed their act, we used the Duggan to mix this.

Figure 8

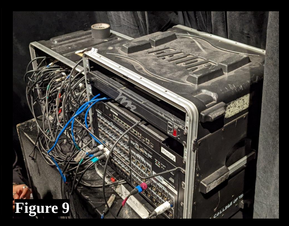


Figure 9

Figure 10

Post Show and Strike!

After the performance we immediately cleared the stage so that, audio equipment was out of the way. The next time we met, we struck the entire audio system (including the PA), so that the theatre was ready for the fall semester of 2022.

Figure 11

Purchasing Request

Date:	May 10, 2022
Name of Requester	Daniela Tomaino
Request Title	Luminex Network Switch Upgrade

Part #	Product	Quantity	Unit	Cost	Extended Cost	Vendor
LU0100055-POE	Luminex GigaCore 10 Pre-Configured 8-Port Ethernet Switch with PoE	8	per.	$2,273	$18,180	https://www.bhphotovideo.com/c/product/1477869-REG/luminex_lu0100058_poe_gigacore_10_8x_nestrirl.html
LU0100058	Luminex GigaCore 10 Pre-Configured 8-Port Ethernet Switch	8	per.	$1,615.50	$12,924.00	https://www.bhphotovideo.com/c/product/1477855-REG/luminex_lu0100058_gigacore_10_8x_nestrirl.html
LU0100052-POE	Luminex GigaCore 26i Gigabit Ethernet Switch with 370W PoE Supply (24 RJ45 Ports, 6 SFP	6	per.	$4,005	$24,030	https://www.bhphotovideo.com/c/product/1477829-REG/luminex_lu0100052_poe_gigacore_26i_gigabit_ethernet.html
LU0100052	Luminex GigaCore 26i Gigabit Ethernet Switch (24 RJ45 Ports, 6 SFP Ports)	6	per.	$3,025.50	$18,153.00	https://www.bhphotovideo.com/c/product/1477828-REG/luminex_lu0100052_gigacore_26i_gigabit_ethernet.html

Obstacles:

-I am not a mixer and had little board experience.
-I had never led a crew before this.
-I had no previous networked audio experience.
-Before the show, how many people we had to work the show was up in the air (scheduling conflicts). We didn't know if we would have had enough people work the show.
-There was a major time crunch in-between shows for both lighting and audio (we both needed the space for the overturn).
-Some issues during the show (violin had feedback loop, turned on gate instead of compression)

Outcomes:

-I feel like I am more comfortable on CL5 with basic mixing and internal patching on the Yamaha CL5, and boards in general seeing how we patched on the LS9 and OV1 too. The concept are the same throughout all digital boards.
- I am a lot more confident in my abilities to understand and work with a networked audio system. Having to document it all help to instill the concepts.
- I understand Dante patching (how it works/how to do it).
- Got more practice working with systems and doing the documentation for it [figs. 1-4]
-Learnt how to lead a crew. When people rely on you, you need to be organized and know and understand what is going on.
-Ran monitors on iPad, no need for monitor world and saved us time.
-Presented a possible upgrade to the network system [fig. 11]

Conclusions:

I feel like in the end we were able to have a successful show with little issues and I was able to learn so much valuable information that I will carry with me through my career. I am very proud of how it all turned out and how great the crew was in all this. I think this was a great opportunity for me to have lots of hands-on time with many different aspects of audio. I was able to work on skills that I already feel comfortable in, like systems, and I was also able to work on skills that I am not the best at like mixing and leading a group.

Acknowledgments:

Professor Huntington – **Advisor**
Tech Production Audio Crew – Joel Barbecho, Nick Mallios, Sibel Yalin, Adam Valle, Hesler Garcia, Michael Torres, Wilson Huang, David Binns, Nesreen Hosameldin, Sepidah Saleh
Cindy Vazquez – Monitor Mixer/ Head A2
Friends and Family!