# Show Control Upgrade

ALLEN&HEATH

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# Revamping the Auditorium Equipment

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## Purpose

Recently, SHS Theatre Tech attended the Illinois High School Theatrefest and were inspired by a performance put on by other teenagers. A technical director at another school ran a workshop that had examples of more professional theatre setups. The technical director explained that he wanted his students to be able to transition into a more professional setting after high school, and helped them accomplish this by working to provide equipment used in the industry. The new equipment would help the Schaumburg High School Theatre train technicians to use industry standard equipment.

## New Equipment

- 1 Windows Desktop
- 2 Mac Minis
- Dell Touch Screen Monitor
- USB to Two Universe DMX (Comes with ETC EOS Software Key)
- ETC EOS Software Key
- QLab License
- Dante Via License

| Name | Cost | Status | Purchased | Actual Cost |
|---|---|---|---|---|
| ETC Physical Software Key + USB DMX | $250 | Contacted Vendor 1/27 - Getting Quote | | |
| Dell Touch Screen Monitor | $250 | Amazon Prime Purchase | | $263.90 |
| QLab 4 License - Pro Audio License | $350 | Contacted Vendor 1/27 (Ed Pricing) - Account updated to reflect Ed pricing 1/29 | Purchased - 2/1/2018 | $349 |
| MIDI to USB | $30 | Amazon Prime Purchase | | $30.68 |
| Dante Via License - Mac | $50 | Contacted Vendor 1/27 (Ed Priding?) | Purchased - 2/1/2018 | $49 |
| Mac Mini (2x) | $1000 | Quote coming 1/27 | | |
| Programmable Keyboard | $30 | Amazon Prime Purchase | | |
| **Total** | **$1960** | | | |

*Pro Audio Version only. Full version $799.

## Lighting System

An ETC EOS software key and computer with touch screen will allow us to essentially run the Ion light board virtually, without the need to purchase the main console. The software was designed with touchscreen interfacing in mind, and will not be cumbersome to run without physical faders. In order to achieve this, SHS would need to purchase a physical licence key and an ETC USB to DMX adaptor ($250). The adaptor would support both our wired DMX universe and our wireless DMX universe. With this, we would be able to learn how to operate a modern Ion board, with minimal cost to the school. Over time, this system can be expanded with generic MIDI faders and macro button keyboards.

Significantly, this would not be an irreversible installation. If, for any reason, someone wanted to return to using the Palette VL, it would require physically moving one cable. So, for simple light shows such as band concerts or rentals, we could return to using the Palette VL. We could also leave the Palette VL plugged in if another staff member wants to do basic light control, and when we want to design a light plot for a large show, it would be a simple switch to the Ion.

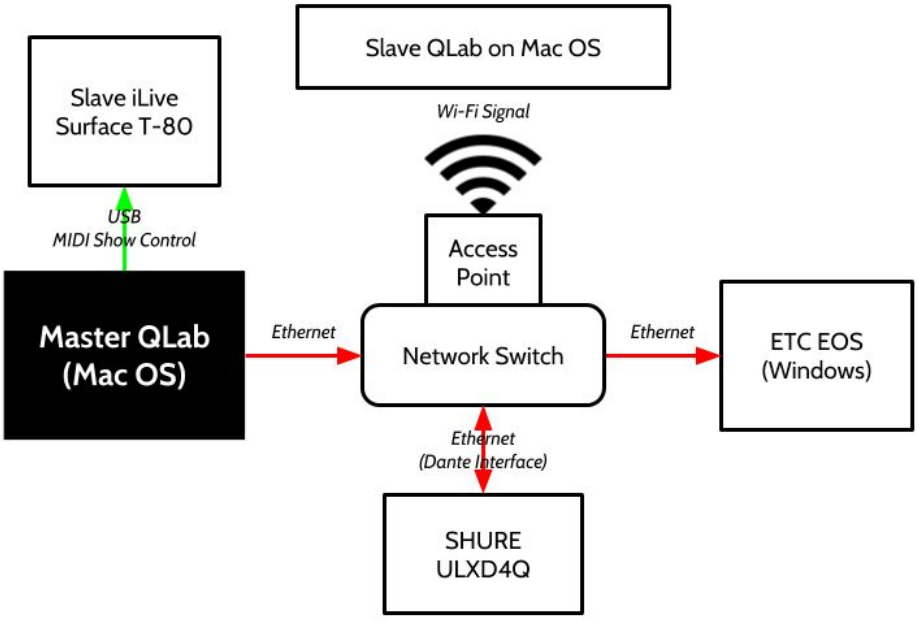
## Show Control

QLab is the software that will control the auditorium systems used to run audio, video, and lights and runs exclusively on MacOS. We will be able to integrate all cues into one workflow and increase efficiency and accuracy of our productions.

The iLive T-80 is the sound system used in the auditorium. Using a MIDI to USB converter, the QLab software will communicate with the T-80 and execute commands. For productions, one or two sound designers would live mix the audio, but QLab would run sound cues and effects with fading capabilities. The ETC EOS software will utilize QLab to control what light cues will be executed. The programming of the light cues will be done by the designer on the Ion, and the cues will be executed by the QLab for show control.

The auditorium projectors can also be controlled by this software. Using Wi-Fi for the catwalk projection system, we can control what we show using this software. Due to the wiring required to the catwalk, the 9 projector system will use a seperate computer running QLab which will be commanded by the master QLab for show control in the booth. These two systems will communicate through a Wi-Fi connection using a local access point, which is already set up in the auditorium.

## Networking



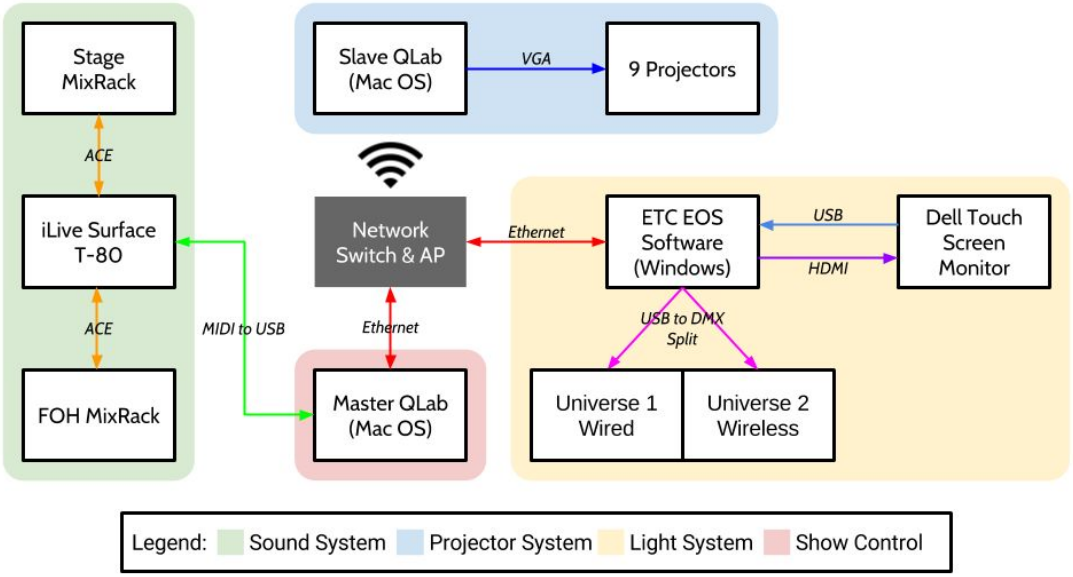

**MIDI Show Control (MSC):** The Musical Instrument Digital Interface (MIDI) is known for its use to connect piano keyboards to computers. In our system, the Show Control Standard will allow us to communicate with the soundboard. QLab will send MIDI messages to the board to fire the specified cue.

**Ethernet Transmission Control Protocol (TCP):** We will use to send messages to the ETC EOS software using network cues from the master QLab. Furthermore, we will use the same network to control the projection system as well. The master QLab will send network cues over Wi-Fi to trigger the cues on the slave QLab in the catwalk.

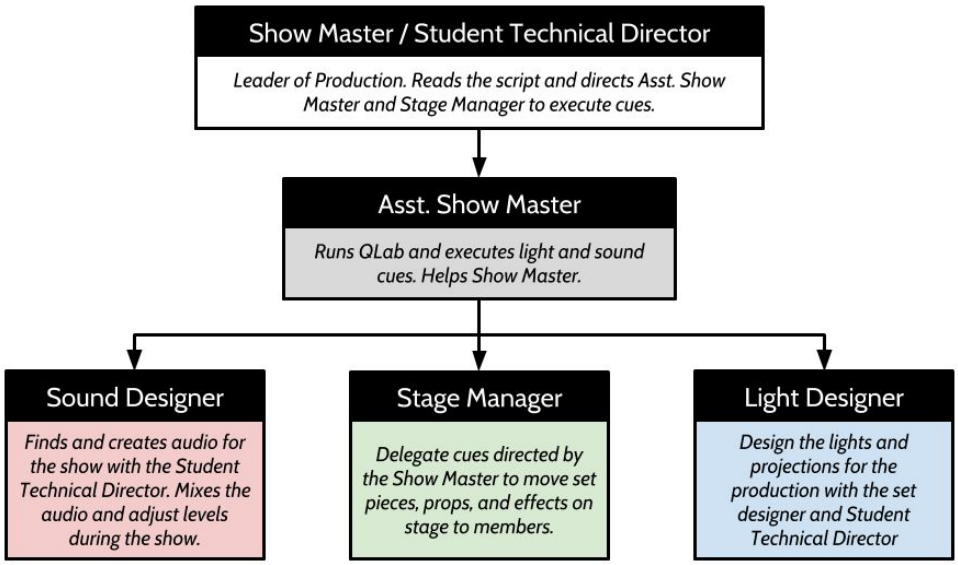
Using MIDI show control for sound, while using TCP for lights with prevent cross talk between the iLive T-80 and the ETC EOS software.

# Revamped Setup

## Systems




## Productions




This new streamlined software will allow for more artistic input for the technicians. The sound designers will work entirely on mixing, producing, deciding artistically the best sound to use for the production. The light designers will work entirely on deciding the best artistic choice for lights based on the set.