

Switching Between Rehearsal & Production at Summit

by Wendy Roome 11/14/2022

For rehearsals, we normally run lighting & sound from the back of the auditorium, and for production, we run from the balcony. For sound, we use QLab on a MacBook pro, and move the MacBook from the back of the auditorium to the table in the balcony.

For lighting, during rehearsals, we use an ETC Element2, with two monitors. But because the Element2 doesn't fit in the balcony, during tech week we transfer the show file to an ETC/Nomad -- the computer-based version of the Element2 software -- running on a Mac Mini that's permanently mounted in the balcony, and we run the show with that.

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Setup For Rehearsals

General Preparation

Put a sturdy table in the back of the auditorium, towards the balcony ladder. You'll need a power cord and an outlet strip (or splitter) with at least 4 outlets. There are outlets under the lip of the top riser in the auditorium.

Drop a long ethernet cable and a USB extension cable from the balcony to the rehearsal table. The cables should be stored in the canvas bag under the balcony table. Plug the ethernet cable into the router. Find male end of the USB cable from the Tascam audio interface (it's probably plugged into a small USB hub connected to the MacBook). Plug the male end into the female end of the USB extension cable.

Tie the cables to the balcony table, of course, so you don't pull anything down off the balcony!

MacBook & QLab

Find the beige MacBook case in the balcony. The front compartment should have a small USB hub and an Edison adaptor for the MacBook power supply. Unplug the MacBook power supply from the power cable that snakes around the back of the power amps, and attach the Edison adaptor to it. Disconnect & pack up the MacBook, and lower it, and the power supply & the

cordless mouse – the one labelled “MacBook” on the bottom – down to the rehearsal table. You can leave the USB hub – the one with the ethernet cable – in the balcony.

On the rehearsal table, setup the MacBook, connect the power supply, and plug the male end of the USB extension cord into the MacBook, using the small hub that’s in the laptop bag.

Powerup the MacBook, turn on WiFi, and connect to the “sph-artnet” network. Connect the cordless mouse to charge it up.

Element2

Setup & plugin the Element2 and the two monitors, and connect the video cables, and the mouse & keyboard, to the Element2. Plug the ethernet cable into “Port 1” on the Element2.

NOTE: You do NOT need a DMX cable! We’ve configured the Element2 to send dimmer levels over the ethernet to an interface box in the balcony. That box then sends DMX signals to our dimmers & smart lights. The ETC/Nomad in the balcony does the same thing when it’s running. As a result, to switch control from Element2 to Nomad, just turn off Element2 and start Nomad.

Switching To Production Using ETC/Nomad

Once the lighting designer is satisfied with the cues in Element2, and you’ve created network “go” cues in QLab for the lighting cues (see the [eos2qlab](#) instructions), you need to copy the Element2 show file to the Mac Mini, and reconfigure QLab to send “go” cues to the mac mini.

Copy Latest Show File From Element2 to Mac Mini

Here's how to copy the lighting show file from the Element2 to the Mac Mini over the network instead of flash drive. It's similar, except that instead of clicking on the flash drive icon, you select "Connect To Server" from the Finder's GO menu.

In detail:

- On the Element2: **SAVE THE SHOW FILE!!!** Element2 does NOT automatically save it.
- On the mac, switch to the Finder (click on a blank part of the desktop)
- Open a window to the Nomad show archive: Documents/ETC/Eos/ShowArchive. This is where you'll paste the show file.
- From the GO menu at the top of the screen, select "Connect To Server" from the bottom of the menu.
- In the popup, select **smb://element2-summit** from "Favorite servers." Most likely it's already selected.
- Click “Connect,” and then select “Show Archive” when it asks where to connect.
- The mac will popup a new window with the Element2's files. Right-click on the latest version of the show file, and select “Copy.”
- Then switch to the Mini's show archive window, right click, and select Paste.
- When done, disconnect from the Element2: in any finder window, click on the |> icon to the right of the Element2-summit entry in the sidebar.

Warning

Do NOT start the Nomad app on the mac mini while the Element2 is on!! If you do, they will both send light levels to the dimmers. The dimmers will respond to the most recent command. Since the Element2 and Nomad send out up to 40 commands per second, the instruments will probably flicker like crazy.

Configure QLab To Send GO Commands to Nomad

Click on the “gear” icon on the lower right to open the “Settings” window, and click “Network” from the left hand list. Find the first patch. Generally it’s called “Active Controller.” The “Destination” field in this patch tells QLab where to send the “GO” commands – it’s the lighting controller’s IP address.

Change the Active Controller’s Destination from **192.168.42.101** – the Element2’s address – to **192.168.42.104** – the Mac Mini’s address.

If the second network patch is named “EOS Active Controller”, and its “Destination” is also **192.168.42.101**, change that to **192.168.42.104** as well.

Don’t change the other patches (we don’t use them; they’re just there to remind us of the controller addresses).

Test It!

Finally, make sure Nomad is controlling the lights, and QLab can control Nomad:

- At the stage manager’s desk, push the House & Works transfer switches down, so they’re not controlled by the lighting board. If you don’t, the lights may go out when you change over to Nomad.
- Turn the Element2 off.
- Start the Nomad app on the Mac Mini:
 - Click on the “EOS Family Welcome Screen” application.
 - Click “Primary.”
 - When the Element2 screen comes up, open the show file you just copied over. This is hard to describe; it’s best of you get the lighting designer to do it for you. If they can’t, see page 115 of the [EOS Manual](#).¹ Once you’ve done that, Nomad will remember the file.
- Verify that Nomad is working by running some cues:
 - Click on the “Popup Virtual Keyboard” icon in the upper-right corner of the window. It’s between the “Camera” icon and the time-of-day.
 - In the popup window, the green triangle in the left side is the **GO** button.
 - Click **GO** a few times and verify that the lights change.

¹ Here’s a short description. Find the “triangle” and “lock” icons at the bottom right of the Nomad window. If the triangle is pointing up, click it so it points down. This opens the “browser” window at the bottom of the screen. In the middle of the browser window, click “> File.” Then click “> Open” and then “> Show File Archive.” Scroll down to the file for your show, and double-click it. If it asks you to “Save the show,” click YES. Then when it asks, “Do You Really Want to Open The File?” click OK. When it’s done loading, click the triangle to close the browser window.

- To run (say) cue 14, in the virtual keyboard, click these buttons:
CUE 1 4 LOAD GO
- In QLab, run a few lighting cues to make sure the stage lights change. If they don't, verify that you set the "Active Controller" destination correctly in the previous step.