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Senior Capstone 2015

Carousel Programmer

UNIVERSITY OF Cincinnati
College-Conservatory of Music

CCM LIGHTING DESIGN & TECHNOLOGY

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THE BEGINNING:

My foray into the wild world of theatrical technology started its formal beginnings at a freshman Lighting Technology student at the Gainesville State College campus in 2011. I say formal, because even though I had done some work in the technical field in high school, my main focus was that of a performer. As a freshman, I quickly grew through the ranks of positions available in the lighting department, and was selected to be the programmer of the mainstage musical Hairspray with guest lighting designer Todd Wren. One of the biggest challenges at the time was simply learning the information as quickly and accurately as possible. We used the ETC Congo console, which is a cue only board that uses Reverse Polish Notation, and I was terrified. I thought that language was going to be what I would find more often in the wider world of theatre, and I immediately wanted to go back to my high school and run on their Ion. Little did I know that four years later, I would be the console programmer for Carousel on the ETC Eos!

During the run of Hairspray, I learned more than what I had been taught in classes, which was an eye opening experience. It was a new concept to me that knowledge in this profession could come on the job site, and not directly from a book read before you arrive. Mr. Wren taught me about moving lights (Elation Design Spot 575e series, to be exact), and about the theory of their control. "Tilt first, then pan," he would repeat. I was hooked! During the run of the show, when a mover lost its tilt belt, I was prepared enough to call the Master Electrician Amanda Pichler, and park out the intensity. Further through the run of the show, when the console crashed for 40 cues, I

was prepared with the stage manager to use the architectural control to black out the stage, wait for the curtain, and turn on house lights in case the console did not return to proper functionality.

When I entered my sophomore year at my previous institution, I was placed in charge of a show series at a theatre down the street from my residence. While working at that theatre, I was usually the sole representative for the college at that location, and was in charge of making the production's lighting, sound, and rigging up to the performers' expectations. I was essentially the Master Electrician, and general stage hand for every performance at the space related to the college. The learning within that environment was more than I had expected. With a new console available to me (Strand Palette VL 64), and a completely automated rigging system provided by J.R. Clancy, with a Seimen's branded control console, I took to the helm of the theatre and quickly met challenges greater than I had imagined. I learned what a Socapex (or Veam) connector was, with six circuits each, and the benefits/disadvantages of having distributed dimming permanently installed in raceways for each electric. Given the installation of fixed speed hoists for each electric, no genies available, and no large ladders, I also learned how to quickly "bounce focus" an electric. At the same time, I was the "Master of the Practicals" for the mainstage production of *The Producers*, which was an invented title given to me on behalf of the lighting professor to recognize my dedication to building each and every practical (mostly scenic installs) with no more than one or two helpers over the entire building process. Both of these achievements

allowed me to gain professional experience at the local theatre, and a summer job with *The Lost Colony*.

My switch to CCM began at my summer job. My mistakes from my past had begun to show, and I needed a way to gain more knowledge in a focused environment that teaches students though productions as well as in the classroom. I took a semester off to gather myself, and interviewed with four colleges. Having been accepted to all four, I chose CCM. At the time, I had also done research on consoles, and found that CCM had recently won the "Show Us Your ETC" contest to win the Eos Console we have today.

CCM- AT LAST:

With a fire in my stomach, and a pep to my step, I walked into CCM for the first time-ready to make a mark, ready to learn, and ready to better myself by dropping my bad habits. Admittedly, what I did not know at the time was the sheer number of bad habits I possessed. The halls that once seemed daunting became straighter paths, as I myself struggled with personal growth, professional development, and a change of character. CCM became my biggest challenge. I accepted.

My first show at CCM was my 12 hour, Metamorphoses. During that time, I was also hired for a few hours as the programmer. My first time on the Eos! I was working with Wes Richter. We had successfully programmed forty cues, to program the VL880s in a transition around the pool. I had begun my adventures in CCM's lighting program with a strong start. My next obligation was *Les Miserales*. I was the board operator,

with C.J. Mellides as the programmer. For the Final Dress, the Final Death scene was not quite the way it should have been, and designer David LaRose coached me through the quickest fixes in programming to date. All of these experiences, and being a Master Electrician in my second year at CCM prepared me for my Capstone as programmer on *Carousel.*

CAROUSEL:

Initially, I was signed up to Master Electrician the Mainstage Drama production of David Edgar's *Pentecost*. Due to prior commitments, it was determined that I would not be an appropriate fit for the show, as the dates were conflicting. Half-way through the summer, I spoke with Professor Jim Gage, and it was determined that I should program *Carousel* with designer Joe Beumer. I quite enjoyed having my capstone change, as I intend on being a programmer when I graduate. Being a programmer on a CCM Musical Theatre production was a challenge, and the opportunity is highly sought after. In the beginning of October I met with Joe and Lauren Brunson (ALD 1) at the CCM Starbucks to discuss the expectations they set for the programmer, and the way the console should be set up. We changed default timings, gobo wheels, made specific submasters, macros, presets, groups, a Home Preset for the moving lights with pan and tilt limits, and spoke about Joe's syntax when giving a board operator instruction. I felt rather comfortable with the expectations, and the small differences Joe had versus other designers I have worked with in the past. He tries not to say "enter" and thinks about whether a cue should be updated to track, trace, or cue only before he says "update." He also relies on the console operator not storing intensity data into a preset, so that it can

be specific for each scene the preset is in, and tracks through the scenes with marking that is appropriate for the action on stage.

PRE-SPACE PREP AND LOAD-IN:

The console pre-show setup was straightforward, as I was provided with the patch and some basic groups, and preset/palette labels. Truth be told, the patching before we got into the space was a complete waste of time, as every conventional fixture was re-patched in the space to accurately reflect the channeling. This would have been avoided by simply assigning a fixture type to each appropriate channel to be used, and stopping there. The pre-patch also created issues in the space when troubleshooting, which wasted time and caused much frustration with the design team, and the Master Electrician team. In addition, some of the patch was incorrect on the data side, as I was tasked with using a Universe Layout page instead of an "Addressing Schedule" and I was translating without channel numbers, only the location, type, and unit numbers were listed. This paperwork was then mistranslated again by the M.E. team, and 12-way distros were placed in incorrect places, making troubleshooting a frustrating experience. This also led me to have plenty of time sitting behind the console with nothing to do, as the ALD used a remote-focus unit to troubleshoot without the need for a person at the console.

FOCUS:

I was not entirely useful during the focus of the show, as the ALD used the remote-focus unit to pull up the channels and be near the designer to anticipate his

needs. This allowed me some time to clean up groups, remake the custom gobo wheels, and familiarize myself with the console layout I wanted to set up for cueing. (I also volunteered in focus for a while, to keep contributing to the level I expected of myself for a CCM show.)

Here are some screenshots of the layouts I used during programming sessions:
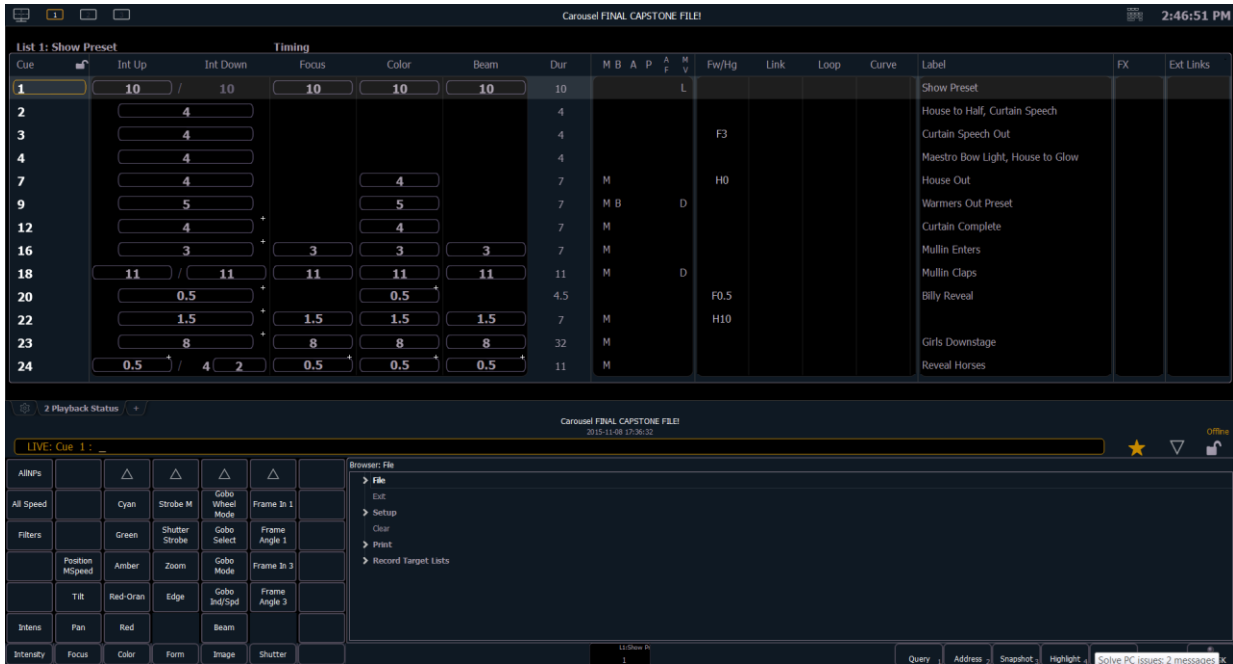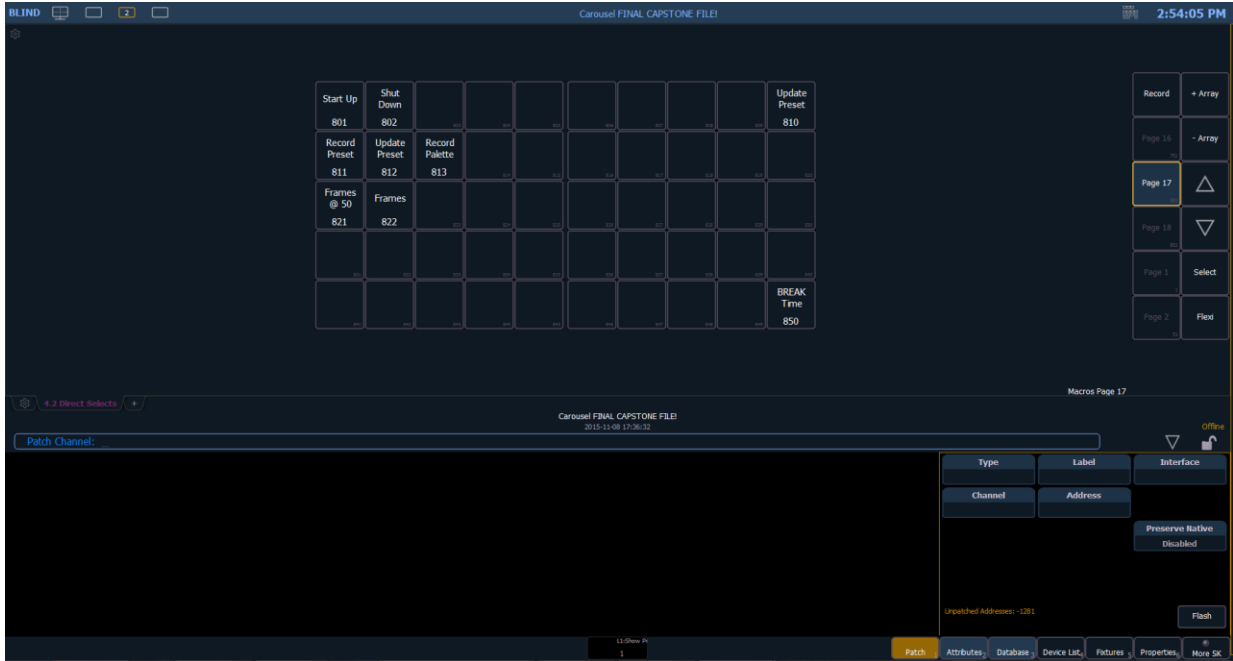
Screenshot 1: The right hand monitor (RHM) on the Eos itself, with a cue list and direct selects.

Screenshot 2: The left hand monitor on the Eos itself, with a channel view in table mode with Patched channels Flexi.
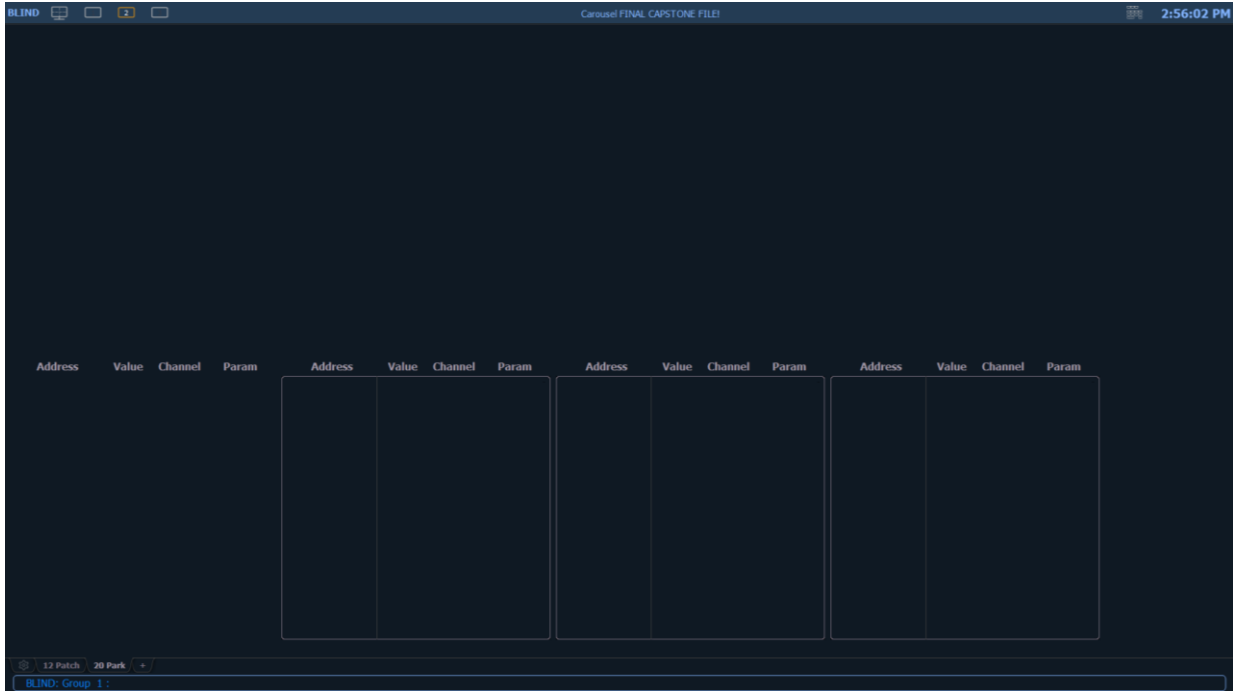
Screenshot 3: RHM Space 2, with Macro Direct Selects. Served as a backup in case the ELO monitor went away.
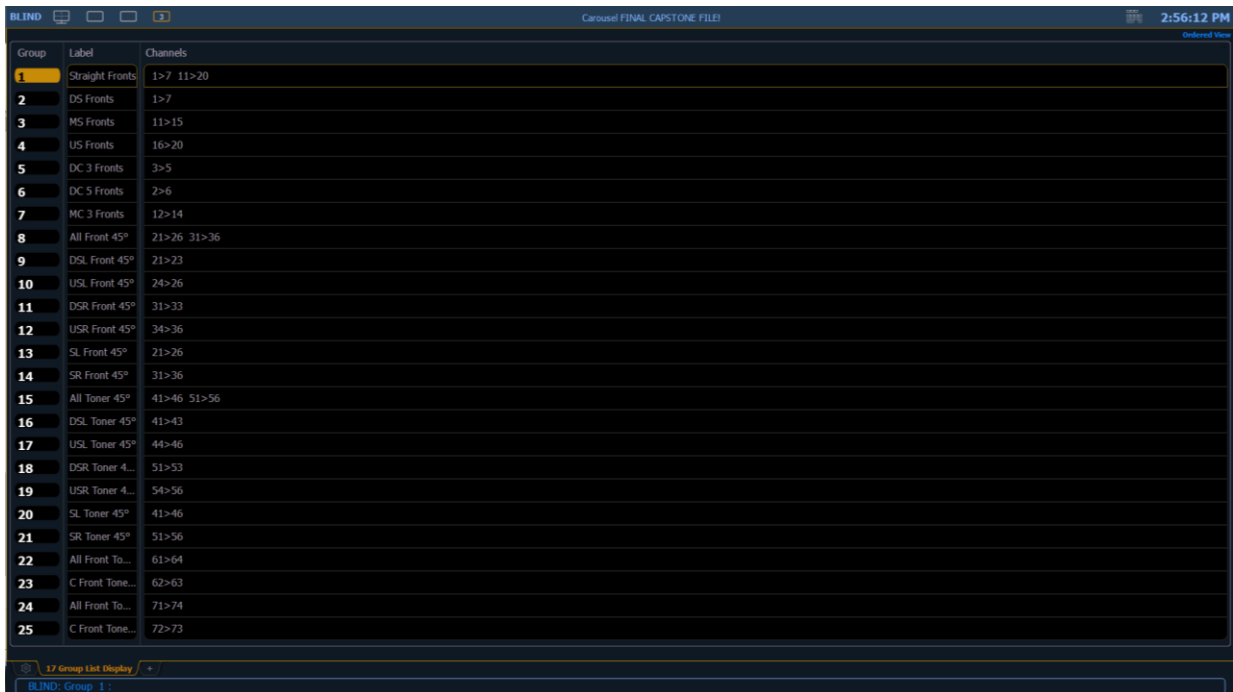

Screenshot 4: External right hand screen (ELO) for patching. Same as RHM when ELO went away (Space 2)
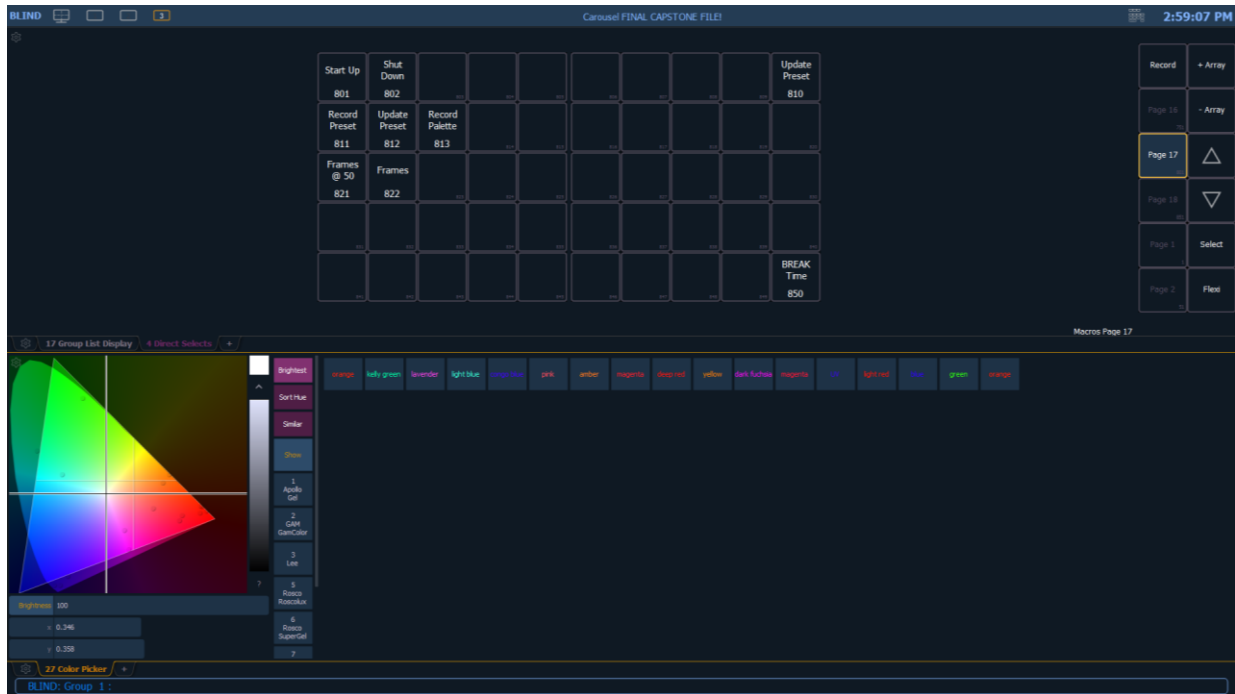
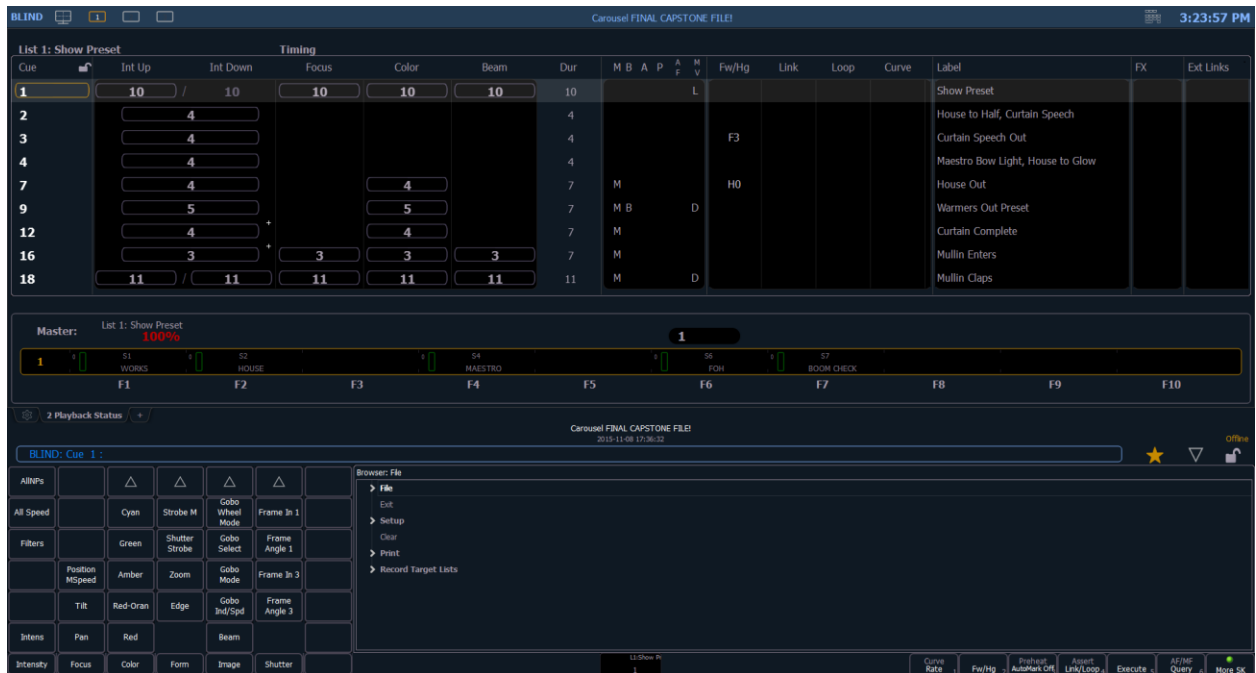Screenshot 5: ELO for parking. Same as RHM when ELO went away (Space 2).

Screenshot 6: Basic groups list on the external left hand monitor (Space 3)

Screenshot 7: The ELO main screen (Space 1) for Macro D.S. and a color space.

Screenshot 8: Cue list in blind

	1	2	3	4	5	6	7	11	12	13	14	15	16	17	18	19	20	21
Cue	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens	Intens
1																		
2																		
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	8	8	8	8	8	8	8	8	8	8	8	8	-	-	-	-	-	20
16	8	8	8	8	8	8	8	0	20	20	20	0	-	15	15	15	-	20
18	8	8	8	8	8	8	8	-	20	20	20	-	-	15	15	15	-	20
20	8	8	8	8	8	8	8	-	0	0	0	-	-	0	0	0	-	20
22	8	8	8	8	8	8	8	-	-	-	-	-	-	-	-	-	-	20
23	15	27	27	15	27	27	27	15	15	15	15	27	-	-	-	-	-	20
24	0	0	0	65	0	0	0	0	0	0	0	0	-	-	-	-	-	0
26	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	15	15	15	30	30	-	-	15	15	15	-	-	-	-	-	-	-
28	15	15	15	30	50	40	15	15	15	15	15	15	-	-	-	-	-	-
30	30	60	60	60	60	60	0	15	15	15	15	15	-	-	-	-	-	-
32	30	30	60	60	60	60	20	25	25	25	25	25	20	20	20	20	20	-
34	30	30	40	40	40	40	20	25	25	25	25	25	20	20	20	20	20	-
36	25	45	45	45	45	45	25	25	25	25	25	25	25	25	25	25	25	-
38	25	45	45	45	45	45	25	25	25	25	25	25	25	25	25	25	25	-
40	25	45	45	45	45	45	25	25	25	25	25	25	25	25	25	25	25	MK
42	60	70	35	45	45	45	25	25	25	25	25	25	25	25	25	25	25	FL
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.5	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	35

List 1: Show Preset — **Timing**

Cue	Int Up	Int Down	Focus	Color	Beam	Dur	M B A P ^F M V	Fw/Hg	Link	Loop	Curve	Rate	Label	FX	Ext Links
1	10 /	10	10	10	10	10		L					Show Preset		

BLIND: Cue 1 :

Screenshot 9: Channel and Cue table in blind. My preferred way to view and edit blind cues, when paired with screenshot 8 on the RHM, 9 on the left hand external, and 2 on the LHM (both 9 and 2 in Active Flexi)

CUEING:

When cueing, Joe uses the "Rem Dim" function more than I was initially comfortable with, which was a great learning opportunity. Previously I had used it to create simple cueing, as it would speed up my progress. This led to the creation of "partial auto-blocks" in the Eos, which was not the desired effect. What I learned about the function is that it can be used as a toggle when left on the command line, and is powerful for updating presets and palettes while working in time with action on stage. When I would mistakenly remove "Rem Dim" from the command line, we worked together to use the "Capture" function to save the work we had made, then the "Go To Cue" would restore the scene around the captured work. This and Joe's preset/palette creation made cueing relatively simple.

Minor issues in the console arose when the "Nettie's Spa" sign moved after cueing one time. We had fixed the position of the movers focused on it, but had only updated those cues with absolute data, instead of updating the focus palette or the preset. It was determined that the preset should reference the focus palette and beam palette, so that we could use different color mixes per cue, with the same focus/shutters on the sign and not store any absolute data in the cue. When we updated the cue list, we went initially updated the focus palette, then the preset was automatically corrected. All we had left to do was track the appropriate preset through the cues in "Blind" and our problem was solved! The macro for updating presets and palettes that Joe had specified was perfect for occasions like this, as we did not want to store the intensity in anything but the cues. The macro prevented storing that data by using the syntax for selective recording, which

also saved time when we needed to mark cues for a specific move in a place other than where Auto-mark had posted it.

Joe and I established a creative and consistent vocabulary when programming that contributed to the overall effectiveness of the cueing process, and was one of the reasons why I enjoyed the process so thoroughly. When in the zone, we communicated through ideas and concepts, which I then executed on the board, using the intent of what Joe said without getting caught in the specifics of the "how it happens in the console." Noted examples include the choice of color when mixing. I knew the syntax the console expected, and Joe could simply tell me if he wanted a specific manufacturer or a color used in a previous scene or fixture. This became even more efficient when we created several custom effects for the flickering of LEDs in a custom street light fixture that was not seen working on stage until only a couple of days before opening. The vocabulary also helped when channels or groups were incorrectly verbalized, for instance a mover group, which was frequently confused with the channel number's starting digit (Group 210 for all movers, versus Group 710-which did not exist, but sometimes verbalized due to human nature, and the movers themselves starting in the 700s channels). Slight mistakes like these are not a problem, and completely human-but having that vocabulary and trust with me as a programmer helped make the correct actions happen on stage. It was also helpful when Joe lost his voice, as I could interpret shorthand of what was desired and confirm with him using the mirrored CIA on his monitors.

SELF EVALUATION:

The first couple of days on the job were honestly a bit rough. Joe expected some of the palettes and macros to be working fully at the time of load in, and I was not sure they would. Pair that with the patch issues, and it was a tense start. After the first day of programming however, we seemed to make great progress. By the end of that day, we had cue 140 written, by the end of the second day- 277. The end of the first day of tech was similarly successful, with few gaps the last number cue we had recorded was 666. To me, it meant that I was doing a good job keeping up, without making significant enough mistakes to slow progress. As noted above, the cueing process became a test of conversing in the most efficient way possible, and as such I feel we succeeded. Patch issues aside, I believe I was successful for the production in both speed and accuracy to help content be created and edited. My attention to detail on the smaller points of programming became helpful, especially when updating cues, palettes, and presets.