

# How to use a lighting desk - part four

In the final part of his ‘How to use a lighting desk’ series, **John Black** takes a look at multiple cue lists and interactive user interfaces

**IN THE PREVIOUS ARTICLE** IN this series, we looked at some of the built-in organisational tools that are available in most lighting desks to help organise and recall various types of information. We looked at fixture groups and the ability to select specific groupings of fixtures using just a few simple steps. We also looked at several types of palettes and the ability to store and recall programmed settings quickly, as well as the advantages of utilising palettes when programming a show and having to make changes.

In this final part of the series, we will look at two more features built in to most lighting desks that I think will help you maximise organisation and efficiency in performing tasks on the desk. These are features that I personally use in my programming that help me to organise an event’s show file and enable others working with me to take control.

## Multiple Cue Lists

It wasn’t that long ago when programmers were limited to writing lighting cues in a single cue list. In fact, I still have some desks in my inventory that operate that way. I hold on to these desks because they are excellent for training beginner lighting technicians, and there are still many situations in which a single cue list is used. For example, I will use a single cue list when programming the lighting for a drama production. The event is linear, running through the same cues sequentially each

time through the show without any deviation. In this situation, using a single cue list makes the most sense.

There are other times when using multiple cue lists is very helpful. One way that I use multiple cue lists is when programming for a concert-style event. The artist(s) or event organisers usually know what they will be performing or presenting, but the exact programme order may be fluid, or decided just prior to the start of the show. It is easy to see how a single cue list would not be very useful in this situation. The programmer would have to either insert links into cues just prior to each performance according to the decided programme order, or manually jump around the cue list during the event. Neither of these two options are very efficient and can contribute to an operator’s stress.

To avoid this, I program individual items of the performance as a

## MEET THE AUTHOR

John Black serves as the theatre manager for Seoul Foreign School in Seoul, South Korea. Holding a degree in Theatre Design, he provides technical production support and design in three state-of-the-art performance venues on campus for over 40 major concerts and productions a year in the areas of sound, lighting, video and staging. John especially enjoys sharing his passion for entertainment technology with high school students each year through his student production team, *Crusader Live!*, giving students the opportunity to learn and work with professional-level technologies in a demanding production environment.



**John Black, theatre manager for Seoul Foreign School**

service elements available all of the time. For instance, if over a given month, a worship band prepares and plays 20 songs but selects only six or eight each week, you as the lighting technician are ready without having to spend hours programming every week that a new song list is put out.

this use of multiple cue lists is shown in Image 1.

## Interactive User Interfaces

In an age when more and more technologies feature interactive controls, lighting manufacturers have

Cue List	Playback	Label	Fixture	Independent	HTP	Assist	Signal	End Lines
1	1 P1 F1	Alt Service	Hitcase		LTP			
2	2 P1 F2	Band 1 - Song 1	Proportional		LTP			
3	3 P1 F3	Band 1 - Song 2	Proportional		LTP			
4	4 P1 F4	Band 1 - Song 3	Proportional		LTP			
5	5 P1 F5	Alt Service	Proportional		LTP			
6	6 P1 F6	Band 2 - Song 1	Proportional		LTP			
7	7 P1 F7	Band 2 - Song 2	Proportional		LTP			
8	8 P1 F8	Band 2 - Song 3	Proportional		LTP			

**Image 1 - multiple cue lists**

separate cue list. For example, if a band is playing 15 songs, I will program individual cue lists for each song. Each cue list will begin with a mark cue to preset all of my fixtures for the start of that cue list and away I go. The advantage of programming in this way is that if a programme order change is made between the final rehearsal and the performance, or even during the run of the show, I don’t have to reprogram or make any changes to the show’s cues.

In a house of worship setting, the advantage of utilising multiple cue lists would be in having a library of already programmed cue lists for

Instead, the cue list for a particular song can be recalled and you are ready to go.

Another use for multiple cue lists in a house of worship is for those organisations that hold multiple services in a given day (or week) with different programme orders and elements. Instead of having to build multiple show files on the lighting desk and change between files in between services, each service can be programmed into a unique cue list and take advantage of referencing all of the same fixture group and palette memories without the need to reopen a different show file. An example of

found ways to incorporate interactive displays to either complement, or replace, traditional command-line control syntax in their desks.

In many houses of worship, lighting technicians are volunteers who have a wide variety of experience and knowledge of lighting desks and systems. Some may feel very comfortable with the equipment and have the ability to use many of these programming tools that have been touched on in this series. On the other hand, and this is the case for my workplace, many volunteers have the desire to get involved or have an interest in lighting, but lack



**A programmed cue list**





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background experience or knowledge. Walking up to a lighting console may be stressful enough without being asked to perform programming tasks. Volunteers may also come and go without being able to spend the time really getting to know the equipment and how to take advantage of the various tools available.

In my own workplace, this is where the use of interactive user interfaces is an indispensable tool. I've intentionally left this feature for the end of the series, as these user interfaces must first be programmed to include and represent the fixtures, groups, palettes and so on that have been programmed on the desk. Once set up by an experienced user, however, virtually anyone capable of using a tablet device will be able to walk up to the console and take control of the rig and show file.

There are many manufacturers of lighting desks that include interactive

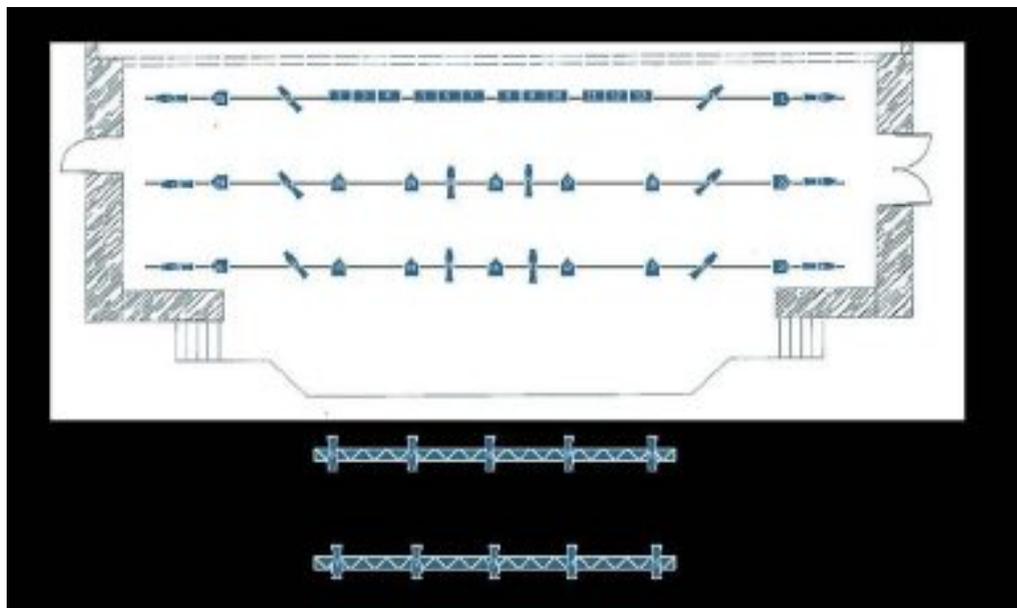


Image 2 - An ETC Magic Sheet interactive display



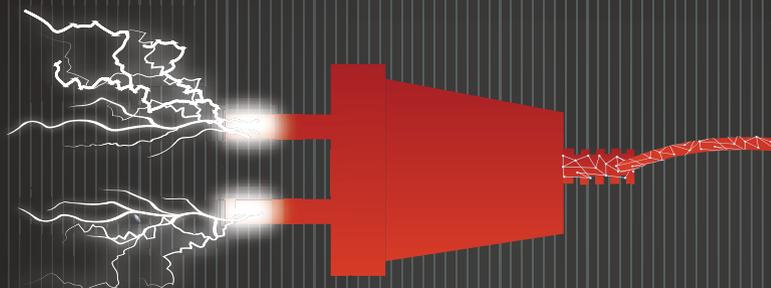
Fixture groups can be created based on hanging location

user interfaces for controlling a lighting rig, though they may use different terminology from brand to brand. For example, Electronic Theatre Controls utilises interactive displays called Magic Sheets, which I am most familiar with as ETC consoles are installed in each of my venues.

These interactive user interfaces are fully customisable in terms of layout

and information included in the display. If the lighting rig is relatively small, the display can be laid out to look like a standard light plot that graphically represents each fixture's location in the rig relative to all the other fixtures and the stage. In this situation, one of my technicians can look at the rig, choose a fixture to control, and visually find that unit on the lighting desk quickly

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as the layout on the desk mirrors the physical rig, as shown in Image 2.

With larger installations or shows, creating the full light plot on the lighting desk may not be the most efficient way to organise information. Instead, memories of programmed information in the form of buttons that are logically laid out may work better. For example, I may organise all of my fixture groups in one area of the display, all of the colour palettes in another, and all of my focus palettes in another. By collecting groups of similar functions, it's easy to make selections and recall settings.

In most of my work, I will actually utilise a combination of these two layout methods, and will try and give as much visual information to the user as I can. For example, say that I have 30 LED fixtures that provide the colour wash for my stage, and several colour palettes preprogrammed for those fixtures. My goal is for any operator to be able to bring the intensity of those fixtures up (perhaps even in different groupings) and apply a colour without having to write any commands or keystrokes into the desk.

Additionally, let's say that I have six tight spotlights focused around the stage. As they most likely will be used individually, I may place graphical representations of those fixtures in a layout similar to a plot, or

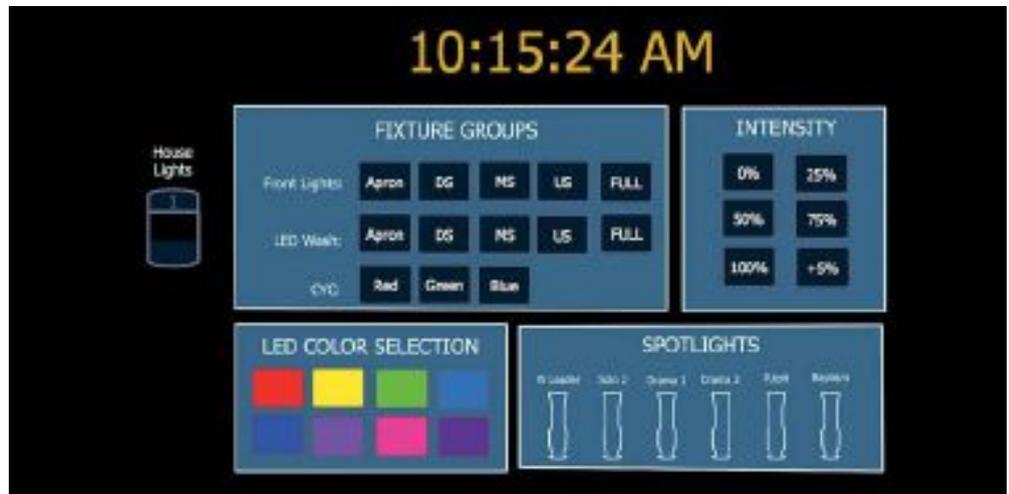


Image 3 - Magic Sheets can be used to quickly identify fixtures

in an organised table found in many cheat sheets, such that the operator can quickly identify those fixtures as spotlights and adjust their intensity, as shown in Image 3.

Utilising these interactive user interfaces really enables volunteers with any amount of experience to interact with and control the rig in the venue. Accessibility can shift attitudes away from fear of doing something wrong towards inspiring creativity and discovery of the lighting technology and its power and influence in creating event experiences.

My hope is that through the four articles in this series, you will have been empowered to explore the many features of your lighting desk and utilise the many functions that are built in to make your life as designer, programmer, and/or operator effective. These articles have in no way tried to uncover all of the features of any one lighting desk. Each desk is unique and the terminology used differs somewhat from brand to brand. However, most desks incorporate the tools that I have selected for this series, and these are some of the

features I use most often every day.

I also hope that some of the examples I've given have opened the doors of inspiration so that you are able to find creative solutions for using these tools in a manner that best suits your particular workflow. The lighting desk is a powerful tool, and just as is the case when a new computer operating system comes on to the market, the more you understand the features of the tool, the more effective and efficient you will be in bringing your lighting plans and designs into reality. Happy programming!

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