

# Lighting design using an iPad

**John Black** looks at how different lighting design apps on the iPad have given him more freedom and flexibility



An iPad channel spreadsheet in use

## WHEN I WAS TAKING LIGHTING

design courses during my undergraduate coursework almost 15 years ago, I was taught the process of lighting design and paperwork creation as a hybrid process. My early coursework focused predominately on drafting by hand and involved using a fixture template to draw lighting plots on tracing paper which would then be fed through a blueprint machine. During hang and focus, any changes to the plot would require that I go back to the tracing paper, erase and redraw whatever information needed to be updated, and create a new print. Being neat and tidy was important not just for clearly communicating information, but because it affected the quality of the print.

In the later years, I was exposed to computer-aided design (CAD) software programs that digitised the drafting process. No longer did I need to worry about the neatness of my own writing and lighting plots could be drawn much more efficiently using libraries of symbols that could ‘snap’ to objects in the drawing. This also meant that changes could be made quickly, though it still required me to go to a design lab where the software was installed. PDF or image exports could be given to lighting electricians as well as paper printouts. I also remember the first time that I used

software for pre-visualisation – seeing a digital representation of my lighting rig and ‘controlling’ it with a software lighting controller to pre-program a show. This enabled me to program cues without having the console – or any of the actual lighting rig – in front of me. I was then able to load that file onto the console once in the venue, make any adjustments needed to my programmed palettes, and then I was ready for rehearsal.

Today, through the use of a number of software applications on my iPad (and even on my smartphone for that matter), I am able to go through

the lighting design process virtually anywhere that I want – including in the control booth, auditorium, catwalks or lifts as I am working with the fixtures themselves. The sharing of lighting information between the designer and electricians (students in my case) has become virtually instantaneous, which has allowed my workflow to become not only more efficient, but clearer and more flexible as well.

In this article, I am going to present some of the applications that I use on my iPad throughout the lighting design process and through performing maintenance and other tasks to the equipment during the implementation or maintenance

phases. I have separated the applications into three categories. While this certainly does not cover the wide spectrum of applications available, these are the tools that I have found useful in my workflow and I hope that you may find them useful as well.

## Plots/paperwork applications

There are actually very few lighting plot and paperwork applications available for the iPad. Typically, these applications are quite heavy and consume a lot of processing power, so it really is no surprise that they aren’t more common. For lighting paperwork such as instrument schedules, channel sheets and



An iPad instrument schedule report on the LXBeams2Go app



A light plot on the LXBeams2Go app

colour cut lists, for example, simply sharing Google Docs or Microsoft Office files is common. However, the information that can be communicated through a graphical light plot is indispensable. Until recently, I worked with digital PDFs of plots that I would share along with separate paperwork files. This allowed me to view the plots, but it was not possible to make changes or notes on the plot very easily. Over the years, I have used a number of different CAD software programs on my computer to create lighting plots. Most recently, I have been using the LXBeams application (and teaching student designers and electricians the LXFree application) by Claude



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Heintz Design, and most recently adopted the LXBeams2Go app.

### **LXBeams2Go by Claude Heintz Design**

The LXBeams2Go application allows you to view, edit and interact with LXSeries light plot files on your iPad. If you are not familiar with LXFree or LXBeams for drafting light plots, these are great, low-cost software solutions for drawing lighting plots and creating lighting paperwork (an all-in-one solution). I use these tools regularly in my workflow, and having the iPad app allows me to continue working when I am away from my computer in the light shop or even when working at the lighting positions with the fixtures. Having my plots and paperwork with me digitally during hang and focus sessions allows me to make changes immediately so that I always have an up-to-date representation of the actual rig and associated paperwork.

### **Lighting Designer by Clayton Combe**

Though I use LXBeams2Go in my workflow, I did find another drafting application for the iPhone and iPad called Lighting Designer. This application includes a large library of fixtures and other objects so that



**The iFRFR ETC console control app**

as well as the ability to control the playback of cues for remote show control.

### **iFRFR by Electronic Theatre Controls**

All of my theatres are equipped with ETC control consoles and I use the iFRFR application every week. There are many times when I have multiple events on the same stage throughout the day and need to make a quick focus change during the

allows me to control show files away from the host computer. This allows me to be in the house sitting next to a director or event planner and control all of the technical aspects of the show (and make changes) while being able to share a common experience (seeing and hearing) as the director.

## Reference applications

It's always handy to have reference information on hand without having to navigate through a manufacturer's website, pages of product listings and then search for the specific manual version or spec sheet you need. When needing to quickly build or repair a cable, decide on a gel colour to order or calculate a dip switch setting, I find it much faster to reference a dedicated application than to do an internet search. As a result, I have found and come to use the following apps regularly as I work with my lighting rig, whether in the early phases of a lighting design, while implementing a design or while maintaining the equipment.

### **Lighting Handbook by Andrew Derrington**

This is an application that I have both on my iPad and my phone. It has a large bank of useful information for lighting designers and technicians including fixture



**The Lighting Handbook**

manuals, connector wirings, a lamp guide and dip switch calculators.

### **Barbizon Electrician's Handbook by Barbizon Electric Company**

This is another all-in-one reference application that I find myself using frequently. Not only is it a worthwhile reference for new lighting technicians and learning about the tools of the trade, but it provides cable pinouts,



**The Barbizon Electrician's Handbook**

dip switch calculators, power calculations and gel colour matches between manufacturers.

There are dozens of brand-specific applications available as well, but these two applications are my first go-to because of the breadth of information that they provide.

## Conclusion

These are just a few of my most frequently used applications that I use as I work through the various stages of the lighting design process. I have found over the years that having these applications on my iPad has provided me the freedom to be more hands-on with the rig, be more efficient in maintaining lighting paperwork, improve communication with directors, event planners and crews, and have easily accessible references when needing to look up information or perform maintenance tasks.

There are many applications available – both free and paid for – with many more coming onto the market all the time. It is important to remember that these applications are just tools. As a lighting designer or technician, your goal is for the realised design to effectively support and communicate the message being presented on the stage. Find the right combination of tools for your workflow and hopefully those tools will enable and empower you to create and achieve even greater designs.



**The QLab window for Show Control software**

the user can draw lighting plots and floor plans within the application. Files are able to be synced across devices using iCloud sync, enabling information to be communicated easily and efficiently with crew members.

## Console control applications

Having the ability to control the lighting rig while working on it (such as while focusing fixtures) is also an indispensable tool. The majority of console manufacturers have companion applications for iPads and/or smartphone devices to be able to control individual circuits or fixtures,

in-between time. Instead of bringing in an additional volunteer or staff member for the quick change, I can go to the fixture and control it from my smartphone remotely.

### **QLab Remote by Figure53**

Though not strictly limited to lighting, I use Figure53's QLab show control software religiously. I use it for playback of media files, generating timecode for synchronisation, triggering lighting cues and projection mapping. It's a great piece of software I use every single day on all of the events that I support. The QLab Remote application for iPad



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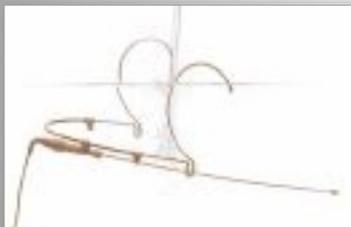


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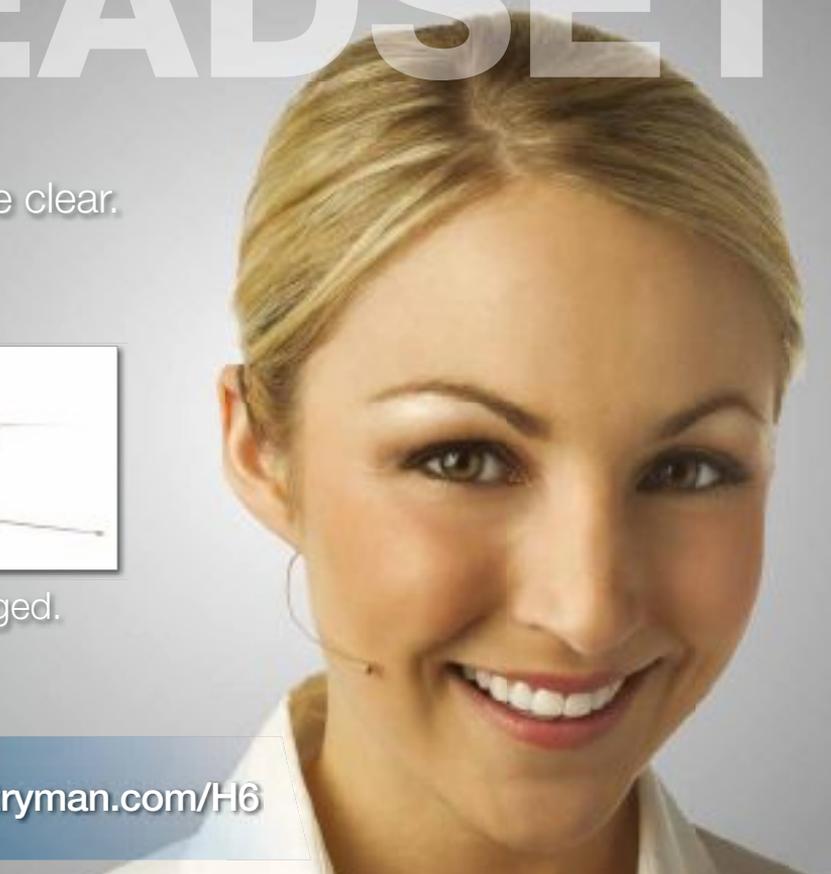
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