

MUSICALS:

Mounting, Maintaining, Remounting, Downsizing

(some hints on what you need to write down!)

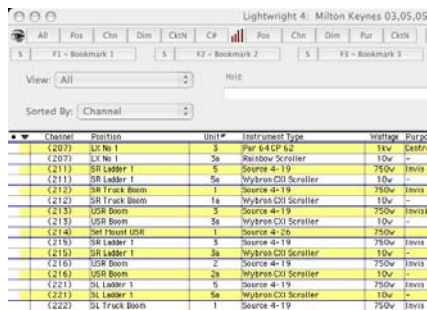
Rob Halliday

LDI Conference, November 2005

The documentation of a large-scale musical needs to serve its purpose during four main stages of the life of the show - as it is created, as it runs in its first venue, as it is remounted in new productions (or perhaps in new venues on a tour) then, as time goes on, as it is downsized into smaller and smaller tours! Thought lighting one of these shows was 'art'? Only about one part art to four parts information management...

Mounting

Even before the show is created on stage, there will be a mountain of paperwork generated as the rig is designed, put out to bid, re-designed to fit the budget, re-designed as the set is altered to fit its budget, then re-designed again after the venue is changed! Paperwork here includes the equipment list in a database system such as Lightwright and the lighting plan - lightplot in American parlance - showing where all of the lights are to be rigged. Standards



Channel	Position	Unit	Instrument Type	Voltage	Group
(207)	LR No 1	3	Plr 6.4 CP 62	10v	Light
(207)	LR No 1	3a	Rainbow Scroller	10v	-
(217)	SR Ladder 1	5	Source 4-19	750w	Light
(217)	SR Ladder 1	5a	Hydron CUI Scroller	10v	-
(212)	SR Trunk Boom	1	Source 4-19	750w	Light
(212)	SR Trunk Boom	1a	Hydron CUI Scroller	10v	-
(213)	USR Boom	5	Source 4-19	750w	Light
(213)	USR Boom	5a	Hydron CUI Scroller	10v	-
(214)	SR Trunk Boom	1	Source 4-19	750w	Light
(214)	SR Trunk Boom	1a	Hydron CUI Scroller	10v	-
(215)	SR Ladder 1	5	Source 4-19	750w	Light
(215)	SR Ladder 1	5a	Hydron CUI Scroller	10v	-
(216)	USR Boom	5	Source 4-19	750w	Light
(216)	USR Boom	5a	Hydron CUI Scroller	10v	-
(221)	SR Ladder 1	5	Source 4-19	750w	Light
(221)	SR Ladder 1	5a	Hydron CUI Scroller	10v	-
(222)	SR Trunk Boom	1	Source 4-19	750w	Light

across a production team are vital here since information will be moved regularly between lighting designer, associates, production electrician and other members of the design team. Ideally, software used will allow and support collaboration - allowing people to work on the same file or at least merge changes they've made into each others file - rather than having one 'active' file that has to be passed from person to person in a strictly managed way. And in a perfect world the drafting program and the rig database program would be seamlessly linked...

Email now at least offers a much faster way of moving files; storing files on the web allows everyone access to the 'current' version of a file (-it's not really 'paperwork' any more!)

In the theatre, the paperwork has to keep track of the rig - what's up there, what's been focused, what's still waiting to be focused, what those lights need in order to be focused (if they're specific to certain scenery). At this stage in many cases we still up in the crazy sit-

uation of having to 'double handle' data - for example, printing a patch out of Lightwright then typing it into the lighting console. That we are still doing this in this day-and-age is insane, but while there are alternatives they are generally less trustworthy or more difficult to set-up than just re-typing everything! This problem of data management continues throughout a production period - ensuring that if a patch is changed, it is changed in Lightwright and in the console and anywhere else it's written down. The job of lighting large scale musicals is four parts data and version management to one part 'art'!

At this point, the lightplot may be joined by magic sheets or other alternative representations of the rig; software such as Eric Cornwall's Virtual Magic Sheet now starts to merge the paper magic sheet into the list of numbers traditionally seen on screen (while software such as Strand's xConnect allows lighting designers to see those numbers in any way they choose rather than just how they're shown on the main console screen).

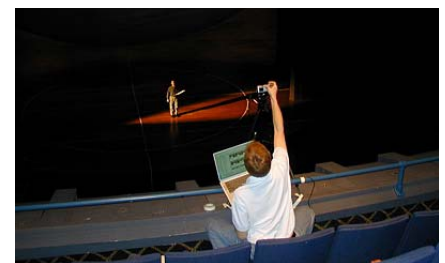


Traditionally, as a rig has been focused it has been 'focus-plotted' - a written record has been taken of where each light is pointing, usually using a grid-type notation such as '6L@8' for a beam centred on the head someone standing six feet stage-left of centre, eight feet upstage of the setting line; ideally this is done during focus so that when the lights get hit by scenery they can be re-focused to the right place! Of course, you also have to note the height of the person doing the focus plotting! And many details of the focus are hard to describe accu-

rately in this way - exactly where the shutter cut lands, exactly how hard or soft the edge focus of the beam is, exactly how the gobo is oriented.

Moving lights have also added to the confusion - instead of having one focus, they can have many, many focuses. Do you need to focus plot these? Wouldn't the lights always go back to the same place? Experience suggests that you do: lights vary from unit to unit, a unit rigged slightly off horizontal will miss its targets, edge focus can be inconsistent from day to day, rotating gobos often don't have anything to indicate their orientation when loaded into the lights. And, of course, you need something to prove to the director that the light is in the same place it has always been in, but the actor has moved!

Years ago, I used to document the moving lights as people did the conventional lights - by drawing each focus by hand. On *Oklahoma!* in New York a few years ago, we turned to digital photography to document both the conventional focus and the moving light focus, taking a picture of each light in each focus in turn on



the stage (the pictures don't need to be hugely high resolution; the keys to success are a tripod, some worklight so you don't just see a blob of light, a person standing in each light so you can see the effect of the light, and a camera with a big enough memory card and a good battery!). The trouble was, you still had to figure out what to photograph - which lights were actually used in which focuses in which cue during the show.

FocusTrack was also designed to solve this problem, allowing you to list what scroller frames, gobos and the like are used quickly.

Chan Type
(283) Pollux 5K Fresnel w/ Rainbow Scroller

Rigging:

Position	Unit No
LX No 2	2a
Base	Rotation
Rotation	Lens Type

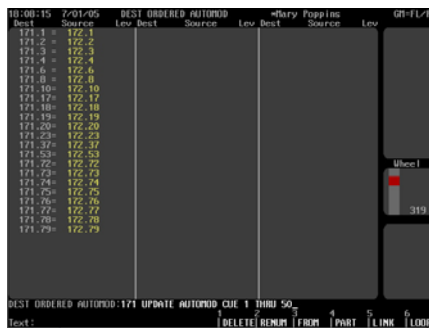
On in these groups in cues:

46	85 Deep Blue
97	385 Royal Blue
106	723 Virgin Blue

Downsizing

The first transfer of a musical will probably be the same as the original - maybe better rationalised, possibly a little bigger. From then on it's all downhill as the producers set out to do the show smaller, faster, cheaper. You now have to figure out how to do the show with fewer lights working harder. Making those decisions comes down to data again: can I cut that back-light scroller cover and replace it with the moving lights? How many specials can one moving light replace? Those are artistic decisions, but ones best made on the basis of hard data.

And having made those decisions, you need to make those changes in the show. A good console will help you with this - Strand's AutoMod function is invaluable here, allowing, for example, a six-part wash cover to be merged down to



four lights, or the levels of multiple specials to be combined into one moving light. And here, preset palettes are invaluable again. To set your moving light up to replace those specials you don't need a day of WYSIWYG; in the offline editor set the lights to be in palettes called 'position 1', 'position 2'. It doesn't matter that you don't know what the pan/tilt values for those positions are yet - you can fill them in later, in the theatre.

Then load the show in, focus it, light it, make it look beautiful (the computers can't do this part!). Then start the process of documenting the show all over again so that this production can also be immaculately maintained.....

Group or Palette number

Channel number

First cue in which channel is on in this focus

other cues with chan in this focus

check boxes for focused

focus description

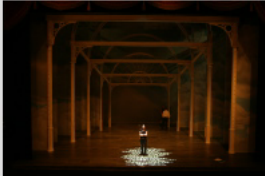
focus of lamp picture


focus of lamp as part of wash

other attributes stored in this palette


cue picture

notepad

light? <input type="checkbox"/>	43	VL2000 Spot	LX1	
acc? <input type="checkbox"/>	404	DS Cobbles 2	DS Cobbles band topl, index -, off set, don't spill over front of stage	
	6.7			Thu, Nov 3, 2010 10:39 PM

light? <input type="checkbox"/>	74	VL3500Q Spot	Boom 2L	
acc? <input type="checkbox"/>	694	DS Street	Shuttered rectangle as 'street' for buskers and people US of them	
	6.7			Thu, Nov 3, 2010 10:39 PM

FocusTrack list view showing each lamp in a focus with a description and picture

Q	Pr 1	--- Wouldn't it be...					
29	LB 10	Del	Dr 10	Wr	XP	LPR	FX
	Sc	Covent Garden					
	Set	Brazier, St Paul's					
Eliza DC, men by brazier UR; silhouette to St Paul's US							

FocusTrack Cue view showing the cue information from the console with a picture

examples are from the UK tour of *My Fair Lady*

Lightwright: www.mckernon.com; Virtual Magic Sheet: www.westsidesystems.com/vms
 Further information about FocusTrack: www.focustrack.co.uk, or visit the Strand Lighting stand

Rob Halliday

Rob began his lighting career with the National Youth Theatre of Great Britain. Since then he has worked on shows across the UK and in America, Australia, Belgium, Denmark, France, Germany, Japan, Korea, Lebanon, Russia and Singapore as Lighting Designer (recently: *My Fair Lady*, *The Merry Wives of Windsor*, *Kiss Me Kate*), Lighting Programmer (*Guys and Dolls*, *Mary Poppins*, *Miss Saigon*, *Oklahoma!*, *Oliver!*, *Ragtime*, *Les Misérables*) and writer (for *Lighting+Sound International*, *Lighting+Sound America* and *Lighting Dimensions*). He has lectured at colleges including LAMDA in London and the Hong Kong Academy for Performing Arts, and has spoken about projects he has worked on at LDI on several occasions. He is a member of the ETS-LDI 2005 Advisory Board.