



PLOTTING/VISUALIZATION/ARCHIVE STUDY GUIDE

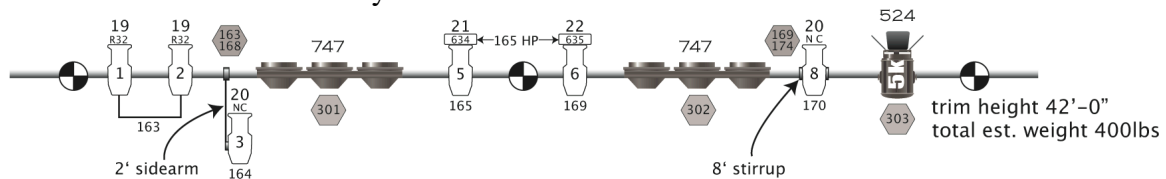
The theatrical style lighting plot has been around for many years and basically serves to hang and focus the show. In the motion picture/television world, the lighting plot has evolved into three types that are distinct in their purpose and presentation.

This plot is usually drawn to scale and will give the riggers an accurate layout of lighting instruments, channel layouts, cable runs, distribution equipment, dimmers, and

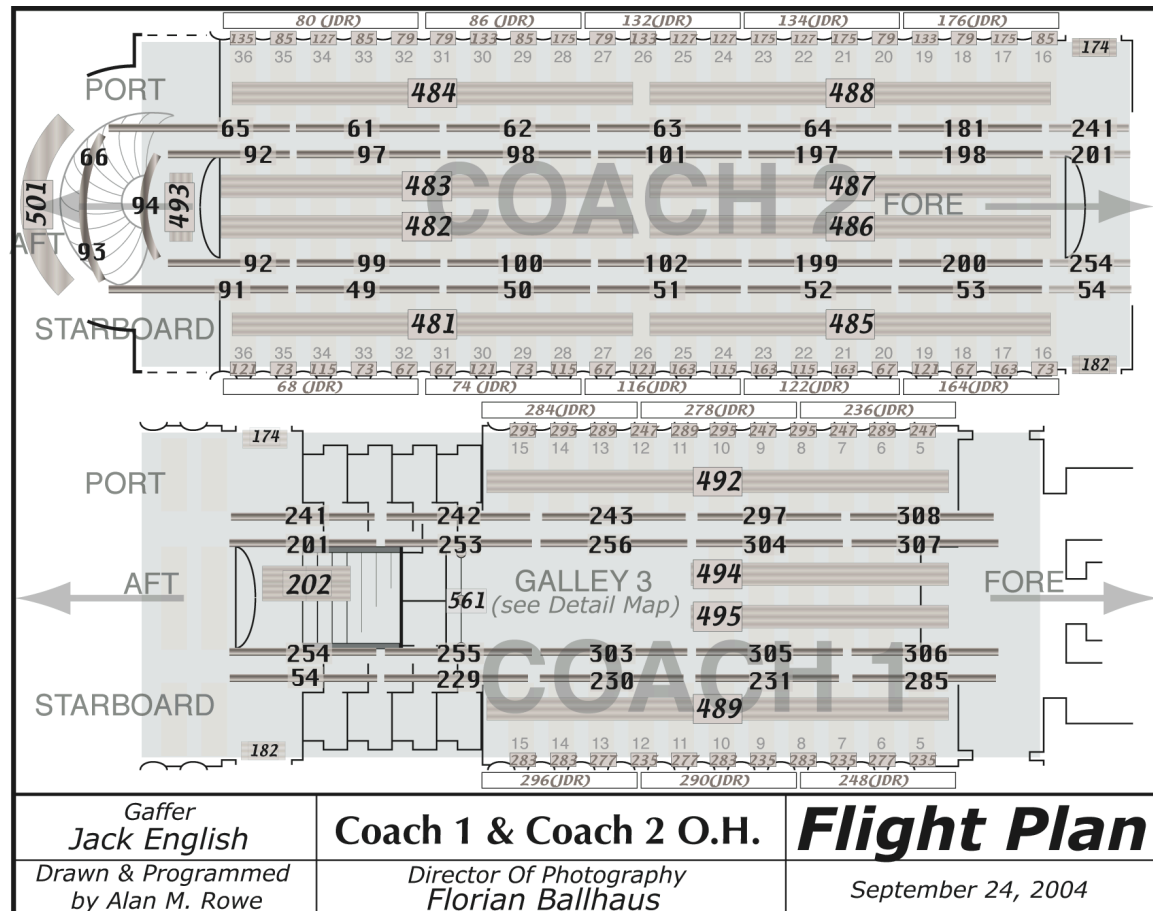
2520 W. Olive Ave Suite 330 • Burbank, CA 91505
818/843-0012 (Training Office) • 818/891-0728 (Local Office)

SAFETY & TRAINING PROGRAM

generator/transformer placements. Rigging Gaffers can make their equipment orders, estimate cable runs, and calculate both weight and electrical loads with the Rigging Plot. When drawn accurately, the Rigging Gaffer can give a copy of the plot directly to the crew who are hanging the pipes, trusses, and other lighting platforms. Equipment hanging information is typically featured on the Rigging Plot. This information is important to note so the riggers can order and use the right equipment to hang the lights. Sleds, stirrups, sidearms, etc can be visually represented on the lighting plot and it is important to note these icons in the Key.



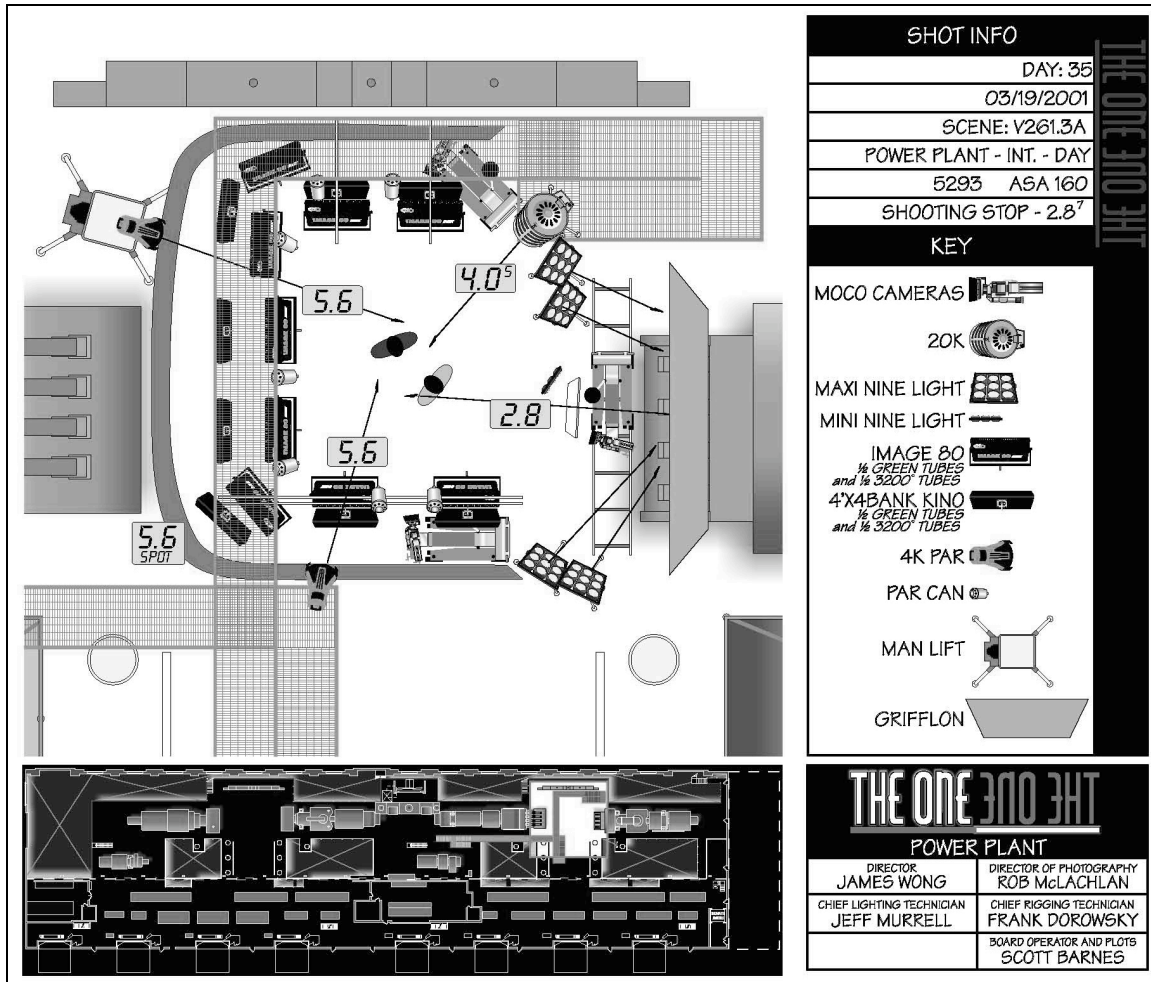
Perhaps the style of plot that we are currently the most familiar with is the *Shooting Map*.



The *Shooting Map* does not rely on scale and does not need to be as accurate with locations and distances as the *Rigging Plot*. The main purpose of the Shooting Plot is to give the CLT and crew a visual reference to the lighting system. Above all, it should be easy to read and make visual sense to the crew.

SAFETY & TRAINING PROGRAM

The *Archive Plot* documents a shot that has been completed, so it can be recreated later in the production schedule or during re-shoots.

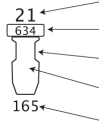


This plot depends heavily on notes and needs to be in a format that can easily be stored in a notebook or a binder. Scale is often not possible on this plot so distances and elevations should be noted on the plot. Exposures (both individual lamps and shooting stop) are frequently noted as well as a description of the action of the shot.

SAFETY & TRAINING PROGRAM

All lighting plots have many common characteristics.

KEY











Channel

Color Scoller w/ Channel

Fixture Type

Instrument

Dimmer

Maxibrite MFL

Tungsten Spacelight

Daylight Spacelight

40° Source 4 ERS

5k Fresnel

Socapex Drop

100A Circuit

Motor Point

The *Key* is where all of the definitions of the icons used in the plot are found. The *Key* will also define the attributes of an icon. It is very important to always refer to the *Key* before reading a plot to ensure that you are accurately interpreting the attributes. There is no standard for assigning attributes to an icon. For instance, the Channel number can be in front of an icon in one plot and behind it in another.

It is important that all plots relating to a single show, share the same standards for assigning attributes on the plot and in the *key*. This is necessary so the crew can reference between plots without having to translate the attributes.

The *Title Block* contains all of the pertinent information relating to the stage, set, date, scale, personnel and production. It is extremely important to double-check the spelling of everyone's name.



CONSTANTINE

BZR CONFERENCE ROOM, STAGE 15, WBPS

Director Of Photography
PHILIPPE ROUSSELOT, ASC, AFC

Chief Lighting Technician
JACK ENGLISH

Rigging CLT 11/17/03
DJ LOOTENS

Programming & Drawn by
ALAN M. ROWE

Frequently there are items or situations needed for the installation or management of the lighting system that do not translate well in to a visual format. It is important to convey these details to the crew on the plot even though they may not translate visually. These comments are usually found in a section indicated by the title "Notes."

NOTES

Color Pack 2 (CP2) is L202, R32, & Light Opal

The *Notes* section is where you will find information about specific lamps, cues, colors, etc. that are not found elsewhere on the plot and are not easily represented visually.



Orientation is important so that people reading the plots can quickly find the information that they are looking for. It is helpful to include landmarks from the stage (i.e. the elephant door) or location. It is important that all text reference the same direction.

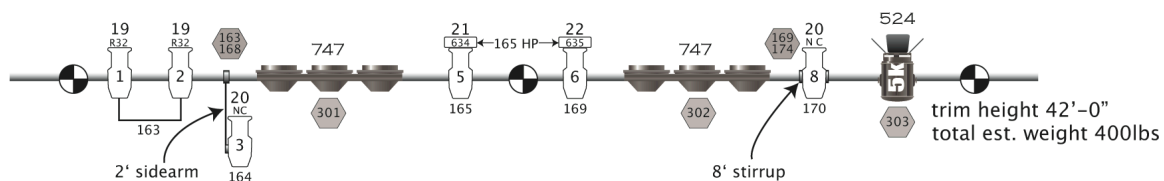
It is generally a good idea to have a geographical reference to the cardinal directions on the plot.

Many sets make geographical references awkward and other references (such as nautical) may be more appropriate.

PAPERWORK

Plots and paperwork have often in the past been considered to be somewhat of a luxury with the crew relying on good labeling for troubleshooting problems. With the advent of the newer consoles, more advanced dimming systems and ever expanding rigs, theatrical style paperwork has become an essential part of planning the system. Troubleshooting some of our larger rigs without proper paperwork becomes nearly impossible. There are three basic types of theatrical-style paperwork that are useful for the motion picture lighting technician. The first we are familiar with and use constantly; this is the *Shop Order*. The second is the *Hook-Up* and the third is the *Schedule*. The types of Hook-Ups and Schedules are entirely reliant upon the needs of the productions but the two that are most commonly used are the *Dimmer Hook-Up* and the *Instrument Schedule*.

The *Instrument Schedule* is organized by position, pipe, or location of the lighting instruments. The Instrument Schedule is extremely useful for creating inventories of equipment, color, and cabling for each position. The Instrument Schedule is also useful for calculating weight loads, lift points and cable picks/drops.



INSTRUMENT SCHEDULE for the above position

Instrument	Type	Channel	Dim/Cir	Color	Notes
1	40° Source 4	19	163	R32	2•fer w/#2
2	40° Source 4	19	163	R32	2•fer w/#1
3	40° Source 4	19	164	nc	2' sidearm
4	Maxibrute-MFL	747	301	nc	
5	40° Source 4	21	165	scr	Scroller Ch 634; Hot D165
6	40° Source 4	22	169	scr	Scroller Ch 635; Hot D165
7	Maxibrute-MFL	747	302	nc	
8	40° Source 4	20	170	nc	8' stirrup
9	5k Fresnel	524	303	nc	

SAFETY & TRAINING PROGRAM

The *Dimmer Hook-Up* is an organized list of the dimmers and their function. The Dimmer Hook-Up is sorted by dimmer number and is necessary for both soft and hard patch.

DIM	CHAN	UNIV	SLOT	MULT	CIR	TYPE	SET
25	25	A	25	A	1	2.4kW Dimmer	Tail
26	26	A	26	A	2	2.4kW Dimmer	Tail
27	27	A	27	A	3	2.4kW Dimmer	Tail
28	28	A	28	A	4	2.4kW Dimmer	Tail
29	29	A	29	A	5	2.4kW Dimmer	Tail
30	30	A	30	A	6	2.4kW Dimmer	Tail

The Dimmer Hook-Up can be organized by power source, dimmer room, rack or any configuration useful to the Rigging Gaffer & crew. The Dimmer Hook-Up can also be setup to calculate electrical loads and phase assignments.

DIMMER HOOKUP TRANSFORMER A (250kVA)

DIMMER	CHANNEL	MULTI	CIRCUIT	POSITION	#	TYPE	SET/FOCUS	COLOR	WATTS	VOLTAGE	AMPS	PHASE	Aø	Bø	Cø
193	193	N/A	193	Cyc-Top	1	5kW Skypan (x2)	Translight	NC	10000	120	83.33	A	83.33		
194	194	N/A	194	Cyc-Top	2	5kW Skypan (x2)	Translight	NC	10000	120	83.33	B		83.33	
195	195	N/A	195	Cyc-Top	3	5kW Skypan (x2)	Translight	NC	10000	120	83.33	C			83.33
196	196	N/A	196	Cyc-Bottom	1	5kW Skypan (x2)	Translight	NC	10000	120	83.33	A	83.33		
197	197	N/A	197	Cyc-Bottom	2	5kW Skypan (x2)	Translight	NC	10000	120	83.33	B		83.33	
198	198	N/A	198	Cyc-Bottom	3	5kW Skypan (x2)	Translight	NC	10000	120	83.33	C			83.33
501	1	N/A	501	North Truss	1	20k Fresnel	Sunlight	L-202	20000	208	96.15	AB	96.15	96.15	
502	2	N/A	502	North Truss	2	20k Fresnel	Sunlight	L-202	20000	208	96.15	BC		96.15	96.15
503	3	N/A	503	North Truss	3	20k Fresnel	Sunlight	L-202	20000	208	96.15	AC	96.15		96.15
504	4	N/A	504	North Truss	4	20k Fresnel	Sunlight	L-202	20000	208	96.15	AB	96.15	96.15	
Total Amps per phase													Aø	Bø	Cø
													455.12	455.12	358.97

The *Channel Schedule* is a list of channel assignments, sorted by channel number, which details all of the information related to the channel.

CHANNEL SCHEDULE

CHANNEL	POSITION	#	TYPE	COLOR	MULTI	CIRCUIT	DIMMER	SET/FOCUS
1	North Truss	1	20k Fresnel	L-202	N/A	501	501	Sunlight
2	North Truss	2	20k Fresnel	L-202	N/A	502	502	Sunlight
3	North Truss	3	20k Fresnel	L-202	N/A	503	503	Sunlight
4	North Truss	4	20k Fresnel	L-202	N/A	504	504	Sunlight
5	Cyc-Top	1	5kW Skypan (x2)	NC	N/A	193	193	Translight
6	Cyc-Top	2	5kW Skypan (x2)	NC	N/A	194	194	Translight
7	Cyc-Top	3	5kW Skypan (x2)	NC	N/A	195	195	Translight
8	Cyc-Bottom	1	5kW Skypan (x2)	NC	N/A	196	196	Translight
9	Cyc-Bottom	2	5kW Skypan (x2)	NC	N/A	197	197	Translight
10	Cyc-Bottom	3	5kW Skypan (x2)	NC	N/A	198	198	Translight

Paperwork can be tailored to every situation to provide accurate documentation to help the crew reference information quickly and efficiently. This will save time when troubleshooting and when lighting the set.

All of these different paperwork configurations can be daunting and if each one is assembled manually, the time required to update the paperwork will make it unfeasible. There many spreadsheet programs available to organize this information and changes are updated to each piece of paperwork immediately. Some of these programs will interface with the drafting programs to streamline the entire process. Using one of these advanced drawing programs will create your plots, paperwork, and shop orders, saving the Rigging Gaffer, programmer, and crew countless hours of time and frustration.