

Technical Terms Dictionary

To help with completing the Performance Site Questionnaire

Stage Dimensions

Proscenium: (n. singular) \Pro*sce"ni*um\

1. The area of a stage between the curtain and the orchestra.
2. The arch which surrounds a modern stage area.

(<http://www.cs.unc.edu/~bennett/Proscenium/>)

STAGE RIGGING

Fly System:



Weights for fly system



Flyrail

Cyclorama: On larger stages, a grouping of curtains and drapes (cyclorama) used to divide the platform into various sections.

At BYU, “the Cyc” often refers to the upstage back curtain (is white or a light color), which can be us for lighting or special effects purposes.

Info on Cyclorama (nice ref.):

<http://www.commercialdrapes.com/html/cyclorama.html>



Sound System

Mixing Console:

The sound engineer will patch the different speakers, amps and monitors into the sound board according to his/her preferences. The number of channels needed varies by group. The house speakers will be playing music for the audience while the monitors are for the performers benefit.



Sound Mixer



Monitor



House speaker

Lighting System

Control Board:

Similar to the sound board, the light board has different lights patched into it. Each show is patched differently and according to the light engineers' preferences. Recently, DMX has been the craze and the way everybody is going. It offers better control of the lights and allows for more technically difficult lighting plots. With DMX, the engineer can program the intensity and the number of lights to a single button. Thus all they have to do is push the button to change the lighting, and not worry about sliding as much. The biggest difference is that **DMX is digital whereas AMX is analog**. The difference is seen on the back of the board. The DMX has a five pin cable and the AMX has a four pin cable.



DMX cable (5 prongs)



AMX Cable(4 prongs) <http://stagelight.com/toolbox/pinout.htm>

There are a few different sizes of boards (depending on the number of channels). Each light grouping is patched into the board and assigned a channel (including the dimmers which are most often found back of house).



24 channel light board



16 channel light board



DMX board



Crossfading light board



Push cue DMX board



Audio twist lock

Another important element for the tech crew is the Fly loft for the battens. This is where they install the lights for overhead and backlighting. The battens need to have circuits on them to enable the plugging in of the lights.



Power strip on batten

Electrical Supply:

It is helpful for there to be a Power supply panel that can be directly tied into. It should have a 3 phase cam connectors with 200 amps per leg at 120 v.



Cam lock



Correct power boxes



Bottom of box (cables will not be there)



Power supply with cam lock-there should always be five



Different cam lock connectors

If there is only an electrical box, they will have to get an electrician to open the box and then tie into the power. Most High Schools do not have 3 phase cam connectors. They are found in nice theatres most often.



Box without cam locks (notice only 4 main wires)

NB: There should always be a main on/off switch on the box to turn off the power while the tech crew is patching into the power supply. Otherwise they must do it with live wires!

Electrical Connectors:



Stage pins



Twist lock



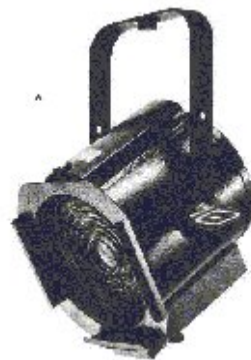
Edison Connectors

Lighting Instruments:

There are many different types of lights used in stage productions. The most common is the ellipsoidal light. This is the one that is similar to a spot light and has shutters on it. It is often used for specials. The next most common one would be the fresnel lights. These are often used for overhead washes. If fresnels are unavailable, par cans are used. They are the most basic of lights and basically consist of a can with a light bulb in it. They are used for backlighting.



Ellipsoidal



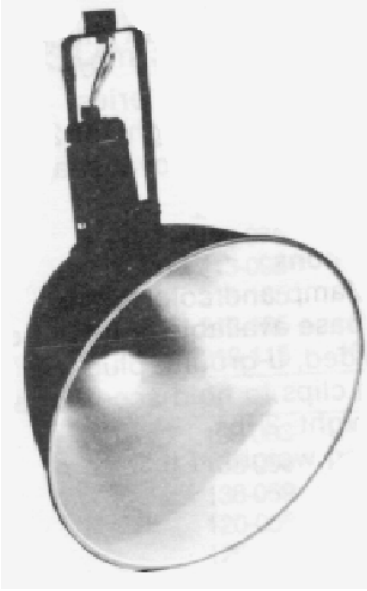
Fresnel



Par Can



Strip lights



Scoop



Light control box

Follow spots:



Follow spot

Technical Lighting Definitions

Adaptor (or Splitter): Connector which allows two or more electrical devices to be connected to a single outlet. The connection is normally parallel, that is, each device is fed the same voltage, but the current is divided between them. Sometimes known as a “Twofer”. A three-way splitter is known as a “Threefer”. A series splitter is also available where a voltage is shared equally between two loads. See Series Splitter. Jumper and Grelco.

Barn doors: A rotatable attachment consisting of two or four metal flaps which is fixed to the front of a Fresnel or PC type lantern to reduce the beam spread in one or more directions.

Boarder: A narrow horizontal masking piece (flattage or cloth), normally of neutral color to mask the lighting effective backing can be obtained by hanging a sharktooth gauze just in the front of the plain white eye which gives a hazy effect of distance.

Dimmer: Electrical or electronic device which controls the amount of electricity passed to a lantern, and therefore the intensity of the lamp.

Dimmer Rack: A number of individual dimmer circuits mounted in a cabinet.

Ellipsoidal: Used for general wash lighting, a profile lantern with an elliptical reflector. Usually this fixture is referred as a LEKO.

Fiber Optic: A method of directing light down a very thin glass fiber. Fiber optics are used mostly in communication, but find theatre applications in star cloths which are black backcloths with the ends of optical fibers poked through, to create a mass of pin pricks of light. A large bundle or harness of fibers may be fed from one light source, sometimes with a motorized color or flicker wheel.

Focus: The session when all the lanterns in the rig are angled in the correct direction, with the correct beam size.

Focusing: The process of adjusting the direction and beam size of lanterns.

Fresnel: Used to produce a soft, diffused, luminescent light. Can either be used to produce a narrow beam or a wide beam or flood which produces a smooth wash of light.

Gobo: Also known as a pattern, template, or cookie, is a lightweight metal cutout that turns the lighting instrument into a pattern projector.

House Lights: The auditorium lighting which is commonly faded out when the performance starts.

Iris: Adjustable aperture which, when placed in the gate of a profile lantern, varies the size of a beam of light. The original name was iris diaphragm.

Lamp: Light bulb

Light Plot: A drafted blueprint drawing that notes the placement and layout of all the lighting instruments and gel colors that are to be used in the design of lights for a show.

Par-can: A parabolic aluminized reflector, or PAR, is sealed-beam lamp similar to the headlight of an automobile. Pars are used extensively in concert lighting and are finding increased usage in dance lighting because of their characteristic punch of light, relatively low cost, portability, durability, and light weight.

Shutter: A lever-actuated device used to control the height of the top and bottom edges of a follow-spot beam and many other lights; also called a chopper.

Source Four: A lighting instrument used much like a Par-can (general wash). However this fixture uses a parabolic reflector and by using different lenses the beam spread can be controlled. There is also a slot for a Gobo for texture. The fixture is usually the light of choice for a "Special".