

Lighting 1

Goals

- Be able to identify the types and models of lighting instruments used in Mem Aud and understand the basics of how they work
- Know the location of the console, lighting support areas and dimmer racks
- Know and understand the differences between dimmers, circuits and channels
- Know how to correctly hang and circuit a fixture
- Know how to focus a light
- Know how to change lenses
- Know how to bench focus a light
- Be able to turn on and off the console, change sub pages, turn on channels and dimmers, ,
- Be able to use the Premier System
- Have a better understanding of the terminology and equipment used in lighting
- Be able to use the console to patch dimmers into channels
- Acquire basic troubleshooting skills
- Correctly cable the PRT

Types of instruments used at Mem Aud

Ellipsoidal Reflector Spotlights (ERS)

- ETC Source-4
- Altman Shakespeare
- Altman Shakespeare Zoom

Wash Fixtures

- ETC Source-4 PAR
- PAR 64
- Fresnel

Cyclorama and Border Lights

- Single Cell Cycs
- Three Cell Cycs

Miscellaneous

- Follow spots
- Moles (blindings)

Some things to remember when hanging and circuiting a lighting fixture

- Is the clamp tightened onto the pipe ¼ turn beyond hand tight?
- Is the fixture pointing in roughly the same direction it will be in when it is focused?
- Is the fixture right side up?
- Is the safety chain installed correctly?
- Are the yoke and Jesus bolts tight?
- Is the pigtail completely free to allow the light to be focused or removed easily?
- Are all the cables labeled as to what circuit they are connecting to?
- Are all connectors completely connected?
- Do all connections have a gaff tape backer to keep them from becoming unplugged?
- Are all the cables hung so that there is no stress or strain on the connectors?
- Is all the excess slack coiled neatly next to the fixture or circuit? (it shouldn't be wrapped around the pipe)
- Is there sufficient room between the fixture and any potentially flammable objects?

Trouble Shooting

- Identifying the problem
 - Instrument – How to test and change lamps
 - Cable – How to test and re-wire
 - Dimmer / Circuit
 - Breakers trip – why?
 - Overload
- Basic Electrical Safety
 - Fire extinguishers
 - What to do if something is sparking

Other Items to Discuss

- Gels, Gobos and such
- Side arms, sliding tees, booms, ladders, barn doors, top hats, donuts, blackwrap
- Two-fers & adapters
- Troubleshooting tools
- Changing a lamp
- Where items are stored

Hand Outs

- Backstage Handbook (Third Edition) – Pages 178-180
- ETC source 4 Leko user manual – Pages 5, 8-12 (pages refer to pdf, not manual)
- ETC source 4 Par user manual – Pages 3, 5-7 (pages refer to pdf, not manual)