



Performing Arts Virtual Learning

**7 & 8 Stagecraft
Lighting Design**

May 19, 2020



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Lesson: May 19, 2020

Objective/Learning Target:

Understanding basic terminology and equipment used
in lighting design



What do you know about electricity?

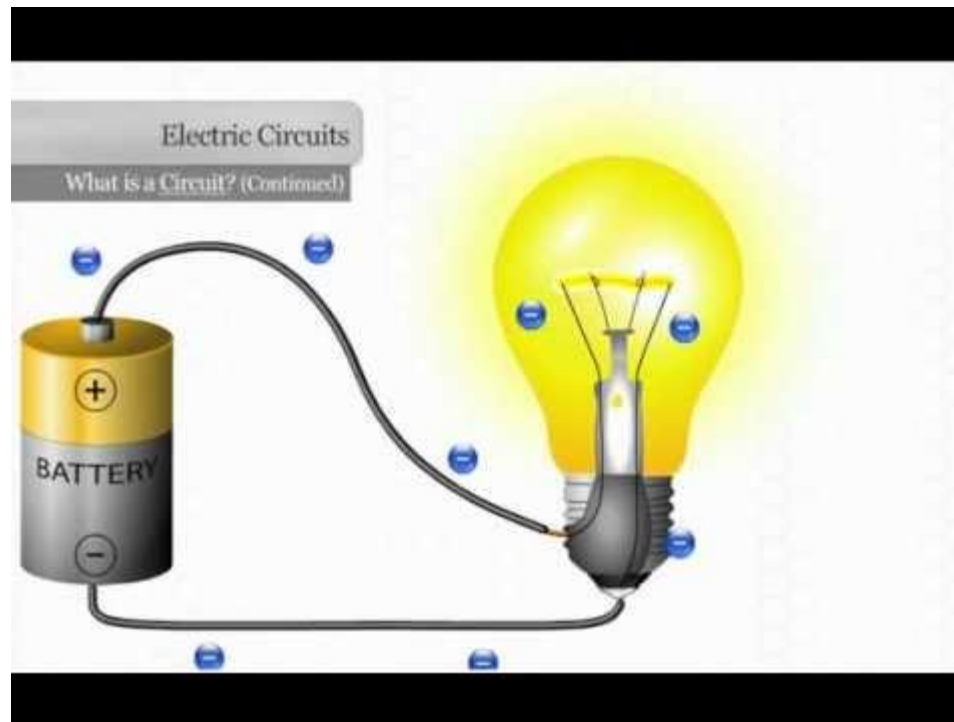
Reflect on what you have learned in the past about electrical current:

- **What is a circuit?**
- **How does a switch work to turn on and off a light?**

Electricity

A basic understanding of electricity will help you understand how a theatre lighting system works.

Watch this short video to refresh your understanding of a circuit.

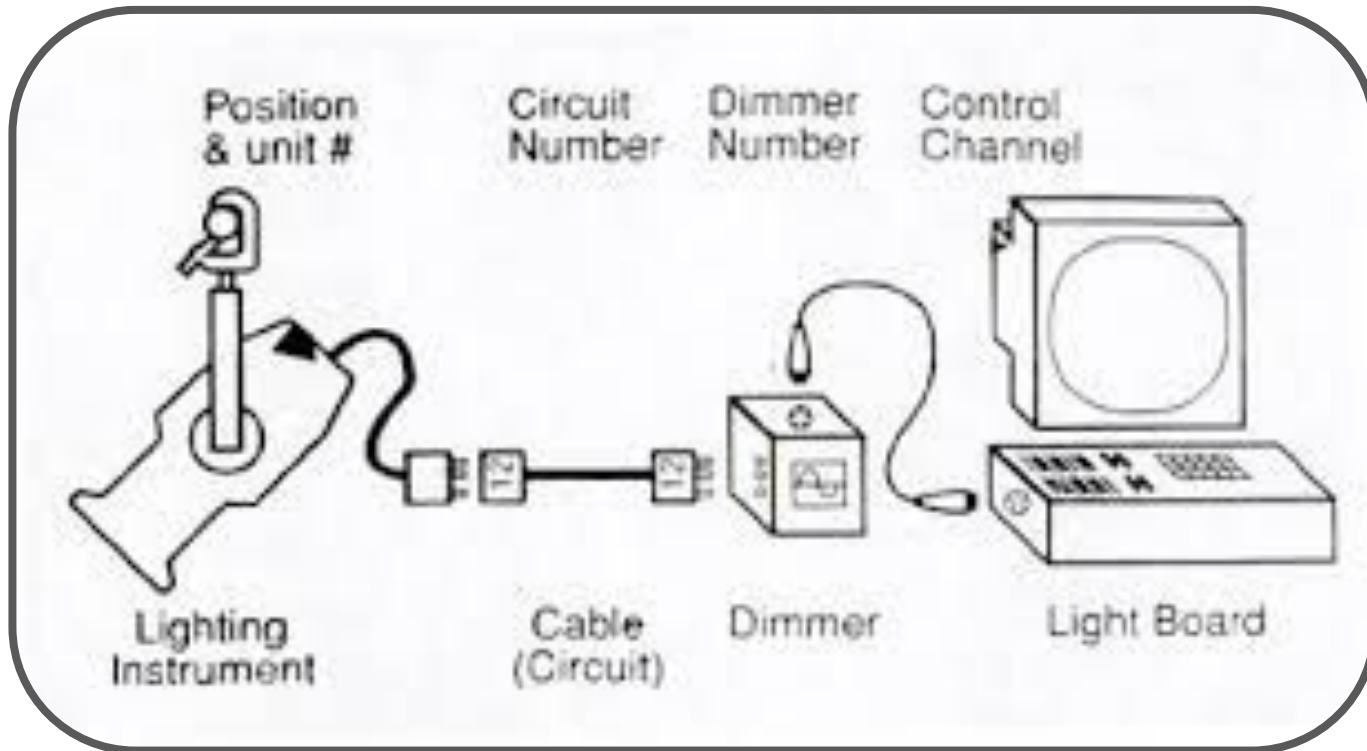




Important terms to understand

- A **circuit** is the complete path of the electrical current. A circuit number will be marked where you plug in the lighting instrument.
- A **dimmer** controls the intensity of the light.
- It may be helpful for you to think of the circuit as an outlet and the dimmer as an on/off switch.
- Each circuit in the theatre will hold a limited number of watts, this will vary from system to system. If you overload a circuit, you will either blow a breaker and/or create a fire hazard.
- Any lights placed on the same circuit **MUST** be on the same dimmer. They must be able to go on and off at the same time. In a perfect world each instrument would have its very own circuit (dedicated circuit).

Circuits, Dimmers and Control In theatre lighting



The Path of the electrical current: The lighting instruments are plugged into the outlet (circuit). The circuit runs to the dimmer rack which connects each circuit to a specific dimmer, which goes to the control board.

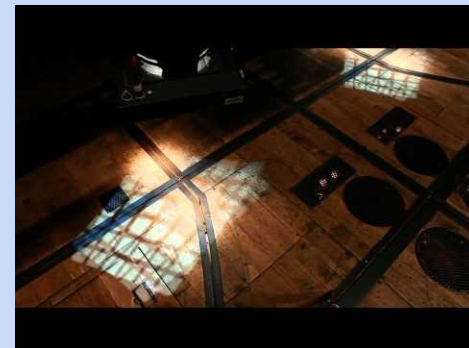
The Light Plot

The light plot is where the lighting designer maps out all of the information needed to light a show:

- **Location of instruments**
- **Type of instrument/wattage**
- **Circuit**
- **Dimmer**
- **Color**
- **Focus**

The light plot is a detailed and important document that is vital to the successful implementation of the lighting for any show. It's complexity depends entirely on the venue and the show.

Watch this short video:





Self-Assessment

What is the path along which electricity travels called?

Explain the function of a dimmer:

During a show, what is used to control the lights?

What is the purpose of a light plot?



Additional Resources

Here are some links to additional information about lighting plots:

[Lighting Design – Paperwork – Theatrecrafts.com](#)

[Video - Light Plots: How To Draft a Light Plot By Hand](#)

[Video - Broadway 101: How a Broadway Show "Lights The Lights"](#)