

COMPETENCIES

- The need for a detailed and accurate floor plan
- The information needed for a specific project
- Scale drawings
- Information necessary for each lighting instrument
- Other details to correctly develop a light plot

Floor Plan

Before any lighting project can begin, an accurate floor plan of the venue must be available. Most fixed venues have detailed plans available showing all necessary dimensions of the facility. Civic centers, theaters, and most TV studios will provide this information to the lighting director. While most of the information will be correct, an on-site tour with a measuring tape is recommended. If some measurements are critical, always measure. If no floor plan is available, the lighting director must create one. Wall locations (length and height) and openings should be measured first.

Using drawing paper with a grid will help to scale the plan correctly. The preferred scale is 1" = 2', but if the area is large, 1" = 8', can be used.

Locate and measure equipment used to support the lighting instruments. These details should be added to the floor plan. This includes grids, trees, pipes, battens, and trusses. Lighting circuits are usually available near these supports; but if they are not, notes should be made to their location.

An additional elevation or side view of the venue is useful. Sight lines can be determined and instrument projection angles can be shown.

Lighting Plot

Essential Information

With an accurate floor plan, the lighting director must place the production design elements in their proper place. All flats, openings, set pieces, and performance areas must be sketched on the floor plan.

Lighting Instrument Location

The final work on the lighting plot is determining the exact location of each lighting instrument. Placement depends on the production type (TV, theater or concert), and basic lighting principles will be used.

There are no standards in the industry as what information must be shown on a lighting plot. The basic principle for designing a light plot is that it should communicate to the user what the lighting designer wants the final lighting to be.

Union requirements in large market theaters require detailed plots using a prescribed terminology. In most concert lighting situations, the light plot contains only the essential information and all the details are contained on the light plot itself.

Design templates are available to make it easier to complete the light plot. Outlines representing a range of instruments are included.

Instrument Schedule

All-inclusive lighting plots must have details of each instrument listed on the plot. This can make the plot very complicated, and unless it is on a large scale, very hard to read.

A supplementary list or Instrument schedule helps to reduce the possible confusion. Each instrument on the plot is given an arbitrary number and is detailed on the schedule. Instrument type, circuit, location on the plot plan, purpose, Wattage, color, and footcandles, are usually listed along with room for remarks.

Other Information

Because of space, electrical limitations, and economics, a lighting director does not have an unlimited number of instruments available. These limits must be known before the plot is drawn. Electrical power is usually the most obvious constraint. Instruments available for the project are next. An instrument inventory is necessary. Usually instruments can be lamped with different wattage lamps. This information should also be noted.

A survey of available circuits and their amperage is also mandatory. Termination points (female plugs) should also be noted. Dimmer capacity and intensity control equipment should also be surveyed.





