

Lighting for Indie Filmmakers: A Few Basic Terms

Primary Lighting-Related Personnel

Director of Photography

Also called the DP or Cinematographer. Responsible for creatively lighting and composing shots. Works closely with the Director. Directs the electric (lighting) crew, the camera crew, and the grip crew.

Gaffer

Responsible for implementing the vision of the DP. Selects lighting fixtures and modifiers. Works with the Key Grip.

Key Grip

Moves and rigs (that is, hangs and secures) lighting fixtures and other large or heavy equipment or set pieces.

The Basic Lighting Palette

Key Light

The predominant light on a subject or scene. Can be aimed from *full frontal* light all the way around to *full side* light, with *three-quarter frontal* being very common. Can be angled from high to low. Can be hard or soft. Frequently motivated. Usually but not necessarily the brightest light on a subject. Working together, key light, fill light and backlight comprise the basic elements of a three-point light plan.

Fill Light

Light, often soft or diffused, used to fill in shadow areas and reduce contrast. Less intense than the key light.

Backlight

Light coming from behind and usually above the actor. Typically used to illuminate the actor's hair and shoulders. Intended to provide separation of the actor or subject from the background. Frequently not motivated. Must be positioned carefully to prevent lens flare.

Kickers, Edge Lights and Rim Lights

A kicker is a lower angle side light that adds highlights to the side of the actor's face. Sometimes is a different color from the key and fill lights.

Positioned somewhat further back it becomes an edge light. Positioned even further back and more behind the actor it becomes a rim light, outlining the subject without highlighting the side of the face.

Eye Light

A small light aimed directly at the actor's eyes to add sparkle and/or fill in shadows. Often camera mounted.

Background Light

Light directed at the background to show its character and/or provide separation from the actor.

Accent Light

A light dedicated to emphasizing a single object or area.

Ambient Light

The overall directionless illumination of a scene or set.

Natural Light

Light coming from a source in nature, typically the sun. Cheap and occasionally beautiful, but sometimes difficult or impossible to control and subject to unpredictable change.

Available Light

Any light from man-made sources which may already be present at the shooting location, such as practicals or overhead fluorescents. Frequently needs to be modified or augmented by additional light.

Other Lighting Concepts

Motivated Lighting

Placing and controlling your light fixtures such that the light they emit seems to be coming from light sources visible or implied within the scene, such as a practical lamp or window light. Helps to give a natural look to the scene.

Practicals

In lighting terms, any light fixture visible within a scene that actually emits light and which may need to be operated by the actors, such as a prop household lamp. (The term also applies to any device within the scene that needs to appear to actually work, such as a water faucet or a television.)

Color Temperature

The color of light can be measured and expressed as a numerical temperature in °K (degrees Kelvin.) For example, typical mid-day daylight is bluish in hue and measures in the range of 5400-5600°K. Not coincidentally, this roughly corresponds to the bluish color temperature of HMI lighting fixtures, rated at 5600-5800°K.

Tungsten lights are more yellowish in hue. Professional tungsten fixtures are rated at 3200-3400°K, while household lamps are even more yellow in the range of 2800-2900°K.

Fluorescent lights come in a variety of color temperatures. Some specialty fluorescents match daylight while others match tungsten. However, the fluorescent lights commonly found in homes and offices also have a green component to them which may need to be corrected.

Shot

A shot is that portion of a scene being captured by the camera, that is, all things visible within the frame. Shots can range from extreme long shots (such as a panoramic vista) to extreme close ups (such as just a person's eyes.) While not strictly a term related to lighting, it dictates how much of the scene needs to be lit and restricts where lights can be placed to stay clear of the frame.

Amps, Watts, Volts and Electrical Load

A full explanation of calculating electrical loads and safety is beyond the scope of this glossary. Besides, all you really want to know is, "How many amps will a light fixture of a given wattage require to run safely?" The basic formula is "watts ÷ volts = amps."

How do you use this formula? Example: Households and offices typically have 120 volt circuits rated at 15 or 20 amps. A 1000 watt light (aka a 1K) plugged into a 120 volt circuit will require 8.3 amps (1000 ÷ 120 = 8.3.)

Note: While 120 volts is the correct value to use in this example, consider dividing by 100, rather than by 120. Not only will the math will be far easier to do in your head, but you will have a small built-in margin of electrical load safety.