# LIGHTING FOR CINEMA

UNIT-V

LIGHTING TECNIQUES

5.1

THREE POINT LIGHTING

5.1 Introduction to "Three Point Lighting"

Three-point lighting is a standard method used in visual media such as theatre, video, film, still photography and computer-generated imagery.[1] By using three separate positions, the photographer can illuminate the shot's subject (such as a person) however desired, while also controlling (or eliminating entirely) the shading and shadows produced by direct lighting.
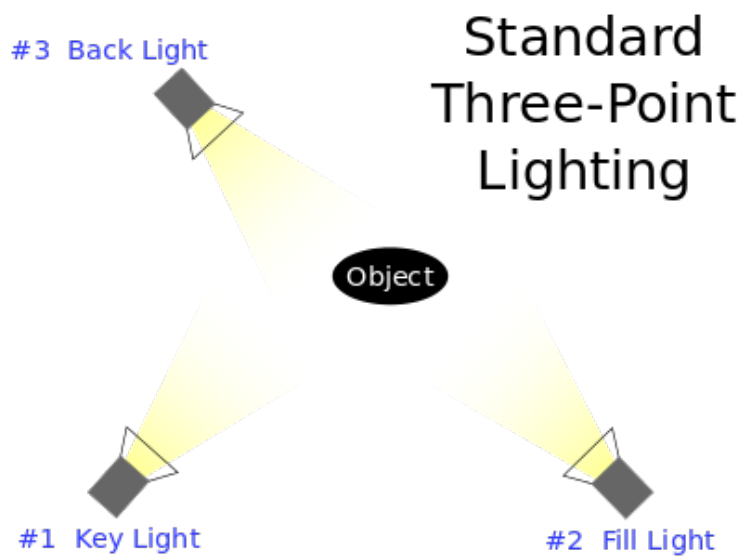
3 Point Lighting Setup

The light sources are labeled as such:

Key Light — Used as your primary lighting point
Fill Light — Used to fill opposite the key light
Backlight — Used to extract the third dimension

3 point video lighting is all about creating a three-dimensional look. By placing three light sources at strategic points around the subject, each light source illuminates a separate dimension of the subject and creates an image with greater representation of height, width, and depth.

Three point lighting deals with the relationship each light has with one another. This is called the light intensity ratio.

Generally, the key light to fill light ratio is 2:1.

This means that your key light should be twice as bright as your fill light. The relationship of intensity and placement can change depending on your goals, but the above ratio will give you a relatively cinematic look for narrative filmmaking and even some YouTube videos.

If you're doing a commercial or corporate video, you may want the ratio to be closer to 1.5:1 so that you get a much more inviting image. If you use a 1:1 ratio, your image may be too flat and devoid of dimensional benefits.

Film lighting is all based on light source intensity and angles:

Source of light — refers to the physical origin
Angle of light — refers to the path of approach
Intensity of light — refers to the amount/brightness

For instance, the sun is a single source of light, but it can approach your subject from various angles. You can use the sun to create a complete three point lighting setup for your video by cutting off angles with flags, bouncing light with reflectors, and diffusing light with various materials.

It's important to note that there are various ways to increase and decrease light intensity, but due to the way light works, each method will have a different overall effect — they're not interchangeable.

Diffusing the light will decrease the intensity
Dimming the light will decrease the intensity
Moving a light further away will decrease the intensity

Each of these methods change light intensity in their own unique ways. You may find yourself in a position where you need less light from a particular source, but simply moving the light further away will have a somewhat adverse effect when compared to, say, diffusing the light.

The most important thing to be said about how to build video lighting setups, including 3 point lighting in film, is that it all depends on your creative goals. If you need a clean and corporate look, you'll probably want to build a more standard 3 point lighting setup for your video. Your three point lighting setups should always depend on your creative goals.

If you take one light source out of your 3-point lighting setup, you won't receive the full benefits. Think of it like your favorite recipe for cookies; if you leave out one ingredient, the cookies won't be perfect.

The look can change based on the ratio of your light sources. If you have a very strong key light, but have a weak fill light, your subject will be unevenly lit — which can be a good for those creepy horror shots.

Want to create a creepy look for a horror film? Why not study some of the best horror films you should see as a fan of the genre. You can still use a three point lighting setup for the dimensional benefits, and adjust the setup (intensity + angle) in a way that still achieves intended look.

KEY LIGHTING SETUP

A key light is the primary light point for your scene. The key light is most often placed in front of your subject, at an angle, and thus illuminates one section of your subject.

Th key lights angle can range from 15 and 70 degrees, with 45 degrees being most commonly used. For cinematic 3 point lighting, the key light often lands on the front portion of your subject that is faces away from the camera, also commonly referred to as the "smart side".

Positioning you key light in this way is by no means required, but it will allow your less intense fill light to favor the camera which, in turn, will give your image a smoother look that is still well lit.

Take notice of the key light example in the diagram below:
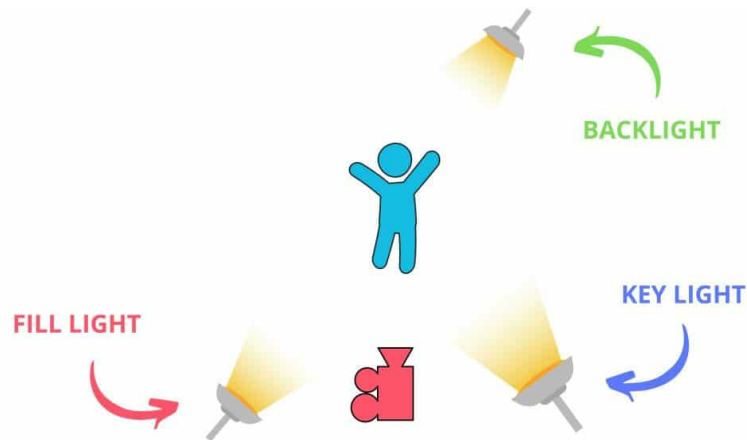
Place your key light anywhere you wish. Bounce it off walls or through material, just as long as it hits the front of your subject at an angle. Once you've decided where to place your key light setup, you can then accurately determine where to place the fill light and backlight.

Fill Lighting Setup

A fill light is the second light for your scene, and its purpose is to fill in missing light for your video. It is often placed in front of your subject, opposite to your key light, also at an angle to continue to create some depth, but also to bring out detail in the other side of your subject.

The angle at which you place your fill light does not have to be identical to your key light, but if you are going for an even, polished look for a commercial or interview, you may want to rely on symmetry.

Angle isn't everything, because the light intensity matters too.

The fill light intensity is generally suggested at around 50-75% of the intensity of your key light. In many marketing and commercial situations, you should actually go higher like 85-95% so as to get a more even look, but you can also go down to 25-45% to get some really cinematic lighting looks that you would see in narrative filmmaking.

Back Lighting Setup

A backlight (rim light, or hair light) is the third light for your video lighting setup, and its purpose is to offset the flattening of dimensions caused by your key and fill light. It approaches from behind your subject, often at an angle on the same side as your primary light point.

The most common placement for your backlight can be achieved by placing it on the same side as your key light, and then moving behind the subject so that the backlight is aimed toward the fill light.