Lighting can be extremely complicated. Some movie and TV shoots use dozens of lights to assure proper scene lighting. Here's a primer to help dispel the mystery.
When looking at lighting kits, you will find there are literally hundreds of lights and accessories to choose from. It can be extremely daunting, but having some idea of how to light is essential and, luckily, there is a place to start.

Three-Point Lighting

Three-pointing lighting is the workhorse of interview-style lighting, and you’ll see many of the key principles of more complex lighting from it. It looks complicated at first, but when you see how easily it comes together, not only will you be surprised, but people who look at your videos will think you’ve done something pretty clever.

The three different “points” in this type of lighting are the key, the fill and the backlight. Each performs a separate task, and the whole would suffer without any of them.

Let’s See How It Works

In Videomaker seminars, setting up three-point lighting is always one of the things that attendees enjoy the most, because it gives everybody an opportunity to see exactly what each light is doing and how moving the light changes the scene. We’re going to do that on paper here, but experiment at home – find a volunteer to model, and watch your results on a monitor as you move lights in real time.

The Space

Before we look at each of the lights and what it does, let’s talk a little bit about the space requirements. The bigger and more powerful your lights, the more space you’re going to need to set them up. Three-point lighting requires some space behind the model, too. Today’s video cameras are much more sensitive to light than models of even a few years ago, and, as a result, lighting kits have become smaller.
The Key Light

The key is, as the name suggests, the most important light – it’s the primary light source that provides most of the illumination on your subject. You place this light about 45 degrees to the model’s right or left and about 45 degrees above, aimed straight at the face. The 45-degree angle isn’t written in stone – it’s simply a starting point. Feel free to adjust it later if necessary.

Also, don’t think that because it’s providing most of the light, it needs to be extremely bright. Check to make sure that you haven’t burned out your whites. You should get strong shadows and a good tonal range. If your key light is too bright, you need to move it back, cut down on the amount of light it’s emitting or stop down your camera’s aperture.

The Key Light

The Fill Light

The fill light is about two stops dimmer than the key – you can soften it by backing it up, changing the power setting (if your lights have variable power) or using a diffuser to cut back the amount of light. You place it on the opposite side from the key light, at about the height of the camera. There may be a temptation to put it at the same angle as the key – after all, we like symmetry – but don’t do that. One thing we’re trying to do here is use shadowing to make the two sides of the face look different, so try your fill light at an angle of 15 or 25 degrees, and adjust it to suit your aesthetic.

The Fill Light

The Back Light

The back light illuminates lights the space above and slightly behind the model. Photographers sometimes call this a rim light or hair light. Its purpose is to give some sense of separation between the model and the background. Using it in a dual purpose, the backlight can also become the background light, rimming the back of the subject while spilling across a background, especially one with some texture, such as fabric. This background light can be snooted or gobo’ed, illuminating some small part of the area behind the subject.

The Back Light

Image A is the final result of all three lights: key light (B), fill light (C) and rim or backlight (D). Additionally, we have a hidden fourth light throwing light onto our background.
How Big a Light Kit Do I Need?

The minimum number of lights that you need to do three-point lighting is ... one. You can actually do three-point lighting with a single light, by using the sun and a reflector as your key and fill. But for all practical purposes, a three-point lighting kit should have at least two lights and a reflector. Use key and back lights with a reflector for the fill. Reflectors can range from a $300 Photoflex kit with gold and silver collapsible fabric disk reflectors, a diffuser, and an adjustable stand to hold it properly, or it can be your cousin Leon, holding a copy of *Led Zeppelin IV* wrapped in tin foil or a folded bit of foamcore with coffee stains on it. If you really want to look super cool, you can buy one with a *Videomaker* logo from the magazine’s website (it’ll look great with your *Videomaker* hat).

The advantages of using only two lights are obvious: there’s less to carry, you have less chance of blowing the power and the reflectors are already diffused, which means you don’t need an extra umbrella or softbox. Nowadays, most three-point lighting uses diffused light. In the past, it included harsh lights, which accentuated shine on people’s faces and cast sharp, unflattering shadows.

A three-light kit can go from $150 up to several thousand dollars. Some come with hard-shell traveling cases, diffusers, softboxes, etc., and others are much more basic. It’s probably best to start simple and work with it until you know how much you’re liable to use it.

Is Three-Point the Best Lighting?

Why do we always talk about three-point lighting? What’s so great about it? Well, the truth is, it’s not so great, and it’s not the best or most creative lighting setup for any given situation. But the reason that you need to know it is that it’s a starting point, and it’s almost always good enough. Imagine you’re a photojournalist, sent on assignment to videotape an interview with a famous scientist. You show up in her lab only to discover she has 20 just minutes before she needs to be on a plane to Florida to tag sand fleas. What do you do? Three-point lighting. Because you’ve practiced, you know you can set it up in your sleep. On assignments where you have more time, you can experiment to find the best, most creative lighting solution, using this as a start. It’s an essential part of any videographer’s visual vocabulary.

Contributing Editor Kyle Cassidy is a visual artist who writes extensively about technology.
Additional Resources

- Lighting Terms
- Using Practicals
- Basic Training: Looking for Light
- Home Video Hints: How to Use Available Light
- Lighting Gels

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