

PORTRAIT and STUDIO LIGHTING COURSE

WHAT IS LIGHT?

THE KEY LIGHT DIRECTIONS

HOW TO BUILD A MULTIPLE LIGHT SET UP

HOW TO METER FOR STUDIO FLASH

HOW TO POSE YOUR MODEL FOR HEAD SHOTS

HOW TO POSE YOUR MODEL FOR STANDING SHOTS

What is Light?

LIGHT is comprised of five main characteristics:

- Quality
- Quantity
- Colour
- Contrast
- Direction

By **QUALITY** we generally mean how hard or soft the overall light may be. Is it wrap around or directional? Do we see harsh shadows and specular highlights or virtually none at all? Softer, wrap around light is generally the ideal light for portraits and most photography as it happens. Houses which have north facing windows, in the northern hemisphere will always yield a soft interior light. perfect for art and photography practice. In a studio context we can control quality of light with such accessories as soft-boxes beauty dishes and shoot through or reflective brollies.

QUANTITY sort of speaks for itself. it is literally the amount of light which is available to us. It is the only thing which we can try to control with the camera itself. However, the whole

point about studio lighting is that we can control quantity of light at its source, and/or sources, with multiple light set ups.

COLOUR is also self evident. but the colours we choose, when using gels in the studio, we elicit a variety of responses from the viewer. We know that red advances and also has a slightly sinister, demonic, even violent feel to it when used in the extreme. Orange however is simply warm and can evoke sunset and sunrise or evenings by the fire. Blues are, of course, chilly and can again be rather sinister. Ever noticed in the movies how its always raining at a funeral and, more often than not, blue? Colour gels should be used with caution and thought. Remember that flash and daylight are very blue and you should adjust your white balance accordingly.

CONTRAST refers the quantity of different reflective values that there are in any scene. The more values that there are, the lower the contrast. However, remember that as the number goes up there will, eventually, appear to be no contrast at all. On a bleak, grey colourless day, it may appear that there is only one value, but what is really happening is that there are so many that we can't differentiate between them. As soon as the sun comes out in force, that number plummets and we can find ourselves being either blinded by very bright values, or plunged into deep shadow at the other end of the dynamic range. An understanding of contrast and how to either replicate it or mitigate it using studio lights and light accessories, is a vital part of studio lighting practice.

DIRECTION, as the name suggests, refers to the direction from which light falls onto your subject. This, naturally, is a large part of the point of studio lighting as we have almost total control over this. However, the softer a light source, the less obvious and, in a sense, important the direction becomes. Direction is more obvious when light itself is directional, i.e. uninterrupted and therefore quite hard, yielding hard, deep shadows. Light direction is key to the various lighting set ups which are often used in a typical studio. In fact, when using one "key" light, that is, your main source of illumination, there are five very common light directions used in studios when lighting a model.

THE KEY LIGHT DIRECTIONS

REMBRANDT - LOOP - BUTTERFLY - SPLIT - BROAD - SHORT

Rembrandt

Rembrandt lighting is characterised by the key light being placed relatively high and roughly 45 degrees away from the perpendicular axis. This produces a characteristic triangle of light on the shadow side of the face, along with a nose shadow that extends to the far corner of the mouth. It is a moody light generally used for character studies or more sombre fashion work.



Loop

Loop lighting is very common as it is probably the most flattering. It is named after the small loop of shadow which appears beneath and to one side of the nose. Also notice the “clean” right cheek and the long shadow on the opposite cheek. Loop lighting light nearly all of the face while imparting a sense of depth. The light is typically placed quite high and then tilted down and then place lightly to one side or the other of the model. its very easy to judge where to place your light and how far to tilt it by watching the position and depth of the nose shadow.



Butterfly

Butterfly lighting, also known as Paramount lighting, became a staple set up for Hollywood photographers of the 1930s. It is characterised by the butterfly shaped shadow directly beneath the nose and the sharp sculpting of the cheek bones. It is not for everyone and a lean, clean cut face with prominent cheekbones is preferable. It is produced, again, by tilting the strobe down and placing it quite high and directly in front of the model. It is not a good idea to place the strobe so high or so close that the nose shadow touches or extends over the mouth.



Split

Split lighting is not really a general purpose light, although it has its uses. It is produced by placing the light directly to one side of the subject so that half the face is plunged into shadow. It can narrow the face and also partially hide imperfections in the skin. In this example the shadow has been largely reduced, or made shallower, by the use of fill lighting.



Broad

This simply refers to a light set up where the the part of the face which is near the camera is lit. It is often a smile case of the model moving their head from one side to the other or the photographer changing their own position. As you can see, this will often yield a Rembrandt light on the far side of the face. It is a useful light but can sometimes make the lit side of the face appear fuller than it actually is, particularly with wider angle lenses. Use with caution.



Short

The term "short" in a studio lighting context simply refers to shooting your subject from the shadow side of the face, i.e. with the lit side away from you. Going extremely "short" would eventually yield what we call "low Key" lighting with nearly the whole face in darkness save for a pleasant solver of light tracing the contours of the profile.



HOW TO BUILD MULTIPLE LIGHT SET UPS

A typical light set up with various light sources is referred to as a four-point set up, being: a key light, fill light, accent/kicker lights and background lights.

FILL LIGHTING



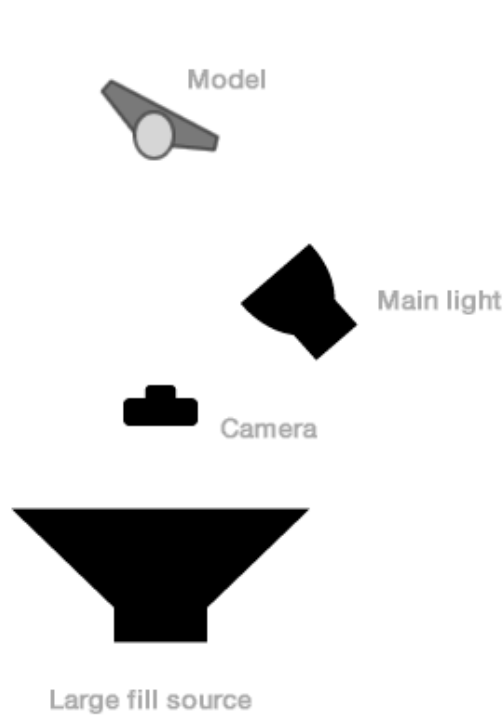
Main Light Only



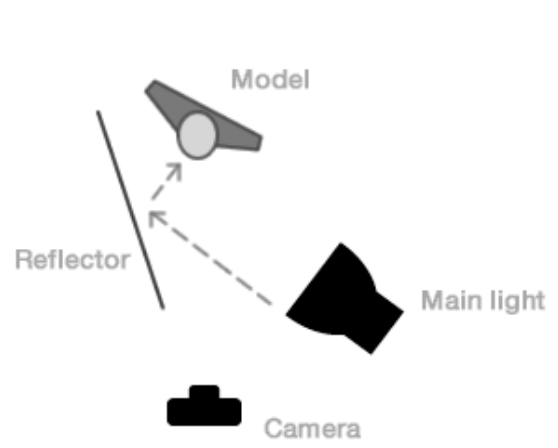
Main and Fill

Fill light does exactly what it says on the tin. It fills in shadows to a greater or lesser extent. The fill light in this example was bounced off a white wall behind the camera thus providing a flat fill. This has reduced the overall contrast of the face while not interfering too much with the actual modeling supplied by the key lighting itself. We could just as easily have bounced off the left wall or introduced a panel to reflect some of the key light back into the left hand side of the face.

Fill, or lack of it, is often an aesthetic choice but it is very often the case that you have to introduce fill in order to bring the contrast within the dynamic range of the camera.



A second light as a fill source

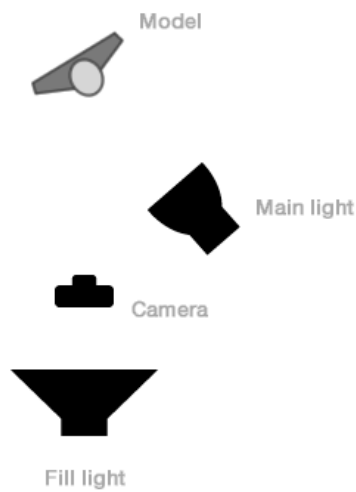


A reflector as a fill source

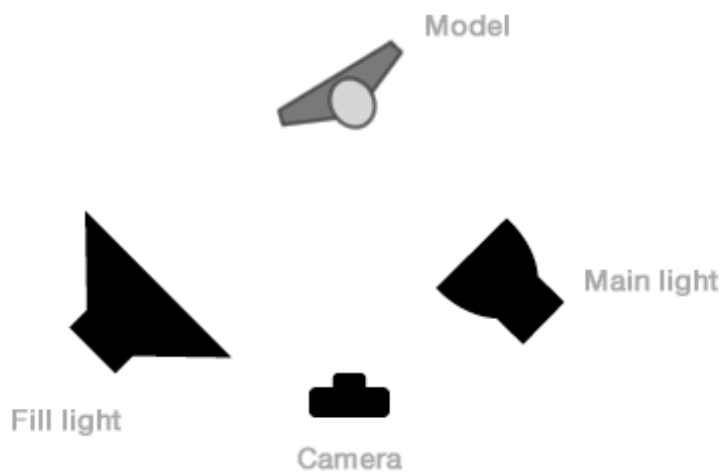


Butterfly with fill

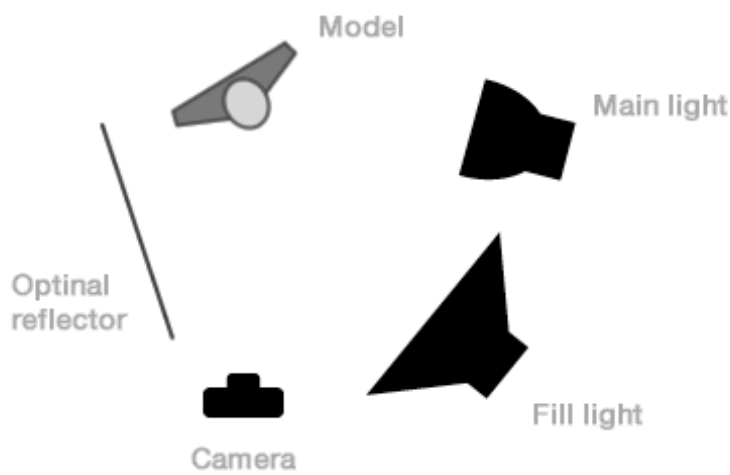
DIFFERENT TYPES OF FILL



On axis fill



Opposite side fill



Form fill

KICKER / ACCENT LIGHTING

These are separate light sources placed just out of view, behind and slightly to the left or right of the subject, or both, as in the example above. Rim lights sculpt and accent the sides of the face by producing thin slivers of illumination.



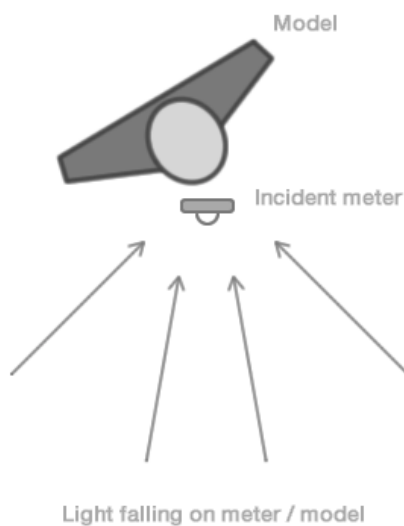
BACKGROUND LIGHT

Background light can be used to add separation between the subject and the background. In the example on the right, the light has been placed low to provide a graduated fill from bottom to top of the portrait. However, a neutral, even light can be achieved by positioning and correct metering of background lights.



METERING

Using a hand held meter to measure the light falling onto your subject as distinct from reflecting back at you is normally the way to go. The shutter speed is largely irrelevant when using solely flash, but be careful of checking the flash sync speed on your camera - normally between 200 - 250th of a second. Any faster and the shutter will fail to sync with the flash firing and you will get increasing blackouts in your image.



When metering, you are generally preoccupied with the aperture and, thus, depth of field. The ISO can be kept low as you now have such a powerful light source. If you require a shallow depth of field then you may run into problems as the flash may not turn down low enough to yield wider apertures. Move the lights back and/or use neutral density gels on the lights, and/or ND filters on the lens itself.

When shooting in RAW and using your histogram, most photographers agree that we should attempt to get the most information into the image as we can. A histogram is a graph indicating the number of pixels (y) occupying various areas on the tonal range (x), which run from black to white. The x axis is generally broken up into four or five vertical columns. Seeing as the amount of information in each area increases exponentially, as they run from left to right, it makes sense to place your highlights as far into the last column on the right as you can. Specular highlights, such as sun off chrome, or flash off spectacles etc, don't matter. Details in, say a white shirt, or glare of a sweaty forehead, most certainly do. Time for make-up! Or at least a towel.

Blown out highlights are indicated by “blinkies”. When the metadata is turned on these are black in the camera (for highlights), and red in photoshop and other post production softwares. The trick is to decide if these areas matter or not. When appearing on the skin of your subject they almost certainly do and you need to pull back your exposure until this information navigates back into the histogram.

HOW TO POSE YOUR MODEL FOR HEADSHOTS

This is such a visual area that I've included couple of links to a very good youtube videos:

<http://youtu.be/uf71jvosUrY>

<http://youtu.be/F9gVQFhCXEQ>

In fact the Slanted Lens is a pretty cool channel for most things studio.

But as stated in the first link and on my course, head shots are pretty much a question of where to position the shoulder and the direction of the nose as it moves around a 180 degree axis, moving through the **profile**, **three-quarter**, **direct** and **seven eighths** head poses.



Profile



Three-Quarter



Direct



Seven Eights

Once the nomenclature has been learnt, the poses become instantly recognisable in most fashion shots; direct, three quarters etc, as does the lighting of course. Can you now describe, in lighting and posing parlance, exactly whats going on in the shots above? Its a good observational habit to get into and makes shopping less off a drag! (for me at least).

STANDING POSES

Standing poses are far more dynamic, volatile area than sitting poses. Most subjects, once they are relaxed, fall naturally into these poses, after all, these are poses we strike every day without even thinking about it. And thats the problem - in a studio we do think about it.

A top tip is simply to remember that it all begins with the feet. Get the feet sorted out, meaning, in most cases, the weight on one of them, and the rest of the body generally falls into more natural poses. Then turn your attention to the shoulders and head, similar to the head shots and you'll find that the hands naturally find their own place. Remember how we went about it on the course.

For examples of siting poses and full length portrait please visit our Pinterest page - make sure they you bookmark it as we update it frequently.

<http://www.pinterest.com/dslrphotocourse/posing-guides/>

Also there will be a dedicated page with Portrait course notes on our website.

<http://www.dslrphotographycourses.com/portrait-photography-studio-lighting-course-notes>

OK, hope that all helps.

Good luck!

Jason and the Team!