

# *Portrait Lighting*

*Mackay Camera  
Group Notes*

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# Portrait Lighting.

The thought behind this is to let you do a “fitted” to the subject portrait.

Consider, a sweet 17-year-old would not (usually) be shot with harsh short lighting. However, a craggy 70-year-old wringer would require just that, harsh, hard light.

No camera info is attached here.

On the night you will be working in groups with some help and advice being given.

Do not expect to get perfect images.

however, by working through with your group you will accomplish more and remember more than if you were told “Set your camera to ISO 800, f8 at 1/200 of a second.

Set up, shoot, review, change.

This you will get into thinking about how the light impacts the model.

## SHADOWS

Shadows are important.

They “make” the image.

Notice that in all of the following types of Portrait Lighting, the definitions are of what the light/shadow interplay is doing.

Plain light directly onto the face is both boring, bland and uninteresting.

## Lighting Diagrams

The whole idea of lighting diagrams is to be able to reproduce an effect time and time again.

What is the best system?

I use the second best I have seen.

This is the clock system as used by Michael Zelbel of Smoking Strobes.

Until I find the best system this will have to do.

The subject is the center of the clock. (In this case, sitting on a stool)

The camera is at 6 at a given distance and height (say 2.5m away and 1.5m high)

You can then point the subjects body to a point (say 7)

Then the subjects head is pointed to a number (say 5.30)

Lights are positioned by number at a distance and height.

(Say Speedlight, diffused at 6.15 at 1m and 2m high on a boom)

Draw this out and you have Butterfly Lighting.

(See Appendix. )

This link is to one of Michaels YouTube videos.

Open YouTube and past the link in.

[Layers Lighting with Michael Zelbel and Phottix - YouTube](#)

*So, some definitions.*

## **Hard and soft light**

How and why.

Hard or soft light is defined by the shadows it casts.

The apparent size of the light source defines how the shadow will form.

A pinpoint light will give the hardest shadows. (The sun)

As the apparent size of the light source grows the angles at which the light wraps around an object increases and so the edges of the shadows begin to blur.

With a very large light source the shadow edges can almost disappear, giving flat lighting.

(Cloudy day)

This is usually not flattering either.

Hard or soft is totally independent from brightness.

Work backwards from the shadows.

Hard light gives sharp edged and well-defined shadows.

Soft light has soft blurred edges to the shadows.

Hard light can be diffused to soft with material diffusers and filters.

A very large bright light source at a distance will give hard light. (The sun.)

Hard light gives detail and shows up any lines, pores or other skin imperfections quite sharply.

Soft light flows over the skin, lighting it without the sharpness.

Flat light gives minimal shadows, removing definition.

<https://www.masterclass.com/articles/what-is-the-difference-between-hard-light-and-soft-light-in-photography#what-is-soft-light>

### **Lighting styles.**

Broad and Short.

Broad lighting comes from the side but lights up most of the face due to the angle the subject is facing.

Short lighting is mostly from the opposite side and therefore only partially lights the face.

For a Low Key image.

Soft broad lighting hides imperfections while hard short lighting highlights skin texture.

Gives a High Key effect.

Broad lighting is used in most portraits while short lighting is used for dramatic effect.

[Broad and Short Lighting in Photography: A Simple Guide \(digital-photography-school.com\)](https://www.digital-photography-school.com/broad-and-short-lighting-in-photography)

## **Portrait Lighting**

There are almost infinite ways to set up portrait photography lighting, but most are variations or combinations of seven key styles:

- Split Lighting.
- Loop Lighting.
- Rembrandt Lighting.
- Butterfly Lighting
- Broad Lighting.
- Short Lighting.
- Back Lighting.

I won't try to walk you through there.

Please look up this site for the basic setup and illustrations.

There is a small set of quick notes for reference following that.

<https://www.camerapro.com.au/news-and-reviews/post/essential-lighting-setups-portrait-photography>

### **Split Lighting**

Cut the face in half with the light so that one side only is lit.

Note that split lighting can be harsh (the unlit side of the face almost hidden) or soft (where the shadowed side is clearly visible).

### **Loop Lighting**

When you can see a small shadow of the sitter's nose on their cheek, lit by a single light above (and sometimes behind) the camera. It requires the face to be lit from a specific angle.

### **Rembrandt Lighting**

A "Rembrandt triangle" of light on the shadowed side of your subject's face is an inverted triangle of shadow cast by the nose. The triangle of light should be no longer than the nose and no wider than the eye. The light should be on the side of the face furthest from the camera to create true Rembrandt lighting.

### **Butterfly lighting**

The main source of light comes from in front and above, the shadow beneath the nose will appear like a butterfly.

### **Back Lighting**

Backlighting means that you compose your pictures so that the primary light source is behind your subject. This can add a unique atmosphere to your photos while emphasising the subject. Backlight works as a dramatic effect that adds contrast and separates the subject from the background.

## So, Before we start.

*By attending this workshop, you are committing to supply the models with electronic copies of your images.*

*Yes, the models have been paid, but, they are still giving up their time and this is your part of their payment.*

## Camera and Flash Settings

### Speedlights

Set at 1/1 and 65mm

??????

Go into the manual settings of your speedlight.

Set power/duration at 1

Angle setting at about 65mm.

### Lens

From 50mm to 200mm “fast” fixed focus macro or dedicated portrait lens works best.  
(Or any good lens within that range.)

A fast lens separates out the background and helps with the bokeh.

### Camera Settings

Unless you really need more light try to work at ISO 100.

Use an f stop a bit above the widest setting.

(e.g. If f2.5 is the widest, use f3.6)

Set camera speed at the SYNC Speed for your camera.

(The fastest speed your camera will shoot at with the flash up/attached.

This is usually 1/200 or 1/250 second.

### **Now BRIGHTNESS.**

Too bright?

- Cut the flash output back.
- Decrease the size of the aperture, larger f stop number.
- Move the flash further away as per the inverse square rule.
- Faster shutter speed (note; cannot be faster than camera sync speed)

Too dull?

- Increase the ISO
- Open the aperture
- Move the flash closer
- Use a second flash unit
- Slower shutter speed (does not alter image with flash)

## Other Points

Some other random things to keep in mind

### **MANNERS!**

*You are working with models, always ask politely, say "Could you please .....".*

*Advise and ask before touching the model's clothes/props/accessories.*

**DO NOT TOUCH THE MODEL unless totally given permission.**

### **Relaxed**

If the subject is stressed or tense it will show.

Do you want this effect?

Calm and relax the subject and pose them without stress.

### **"S" Curves**

Straight is awkward.

By having a curve in the models body it looks and feels more natural.

### **Shoulder tilt.**

Experiment.

It changes the whole feel of the image.

### **Hands and feet**

Avoid awkward stilted positioning.

### **Softboxes**

Very good for producing soft light.

Bulky but worth it, even when doing outdoor work.

### **Diffusers**

Also good at producing soft light.

Use by day against the sun.

If using a flash, it needs to be far enough away and manually set to wide angle to ensure that the whole diffuser is used as the light source.

### **Reflectors**

Good for fill in light by using the reflected primary light source.

(Add light from under, the side, behind/above to change the effect.)

White gives neutral light.

Silver is slightly hard.

Gold is very "warming".

### **Flags.**

Mat black light absorbers.

For taking away light that is not wanted in the image.

Say, cutting out low light to give the face prominence.

For hiding backlighting, etc.

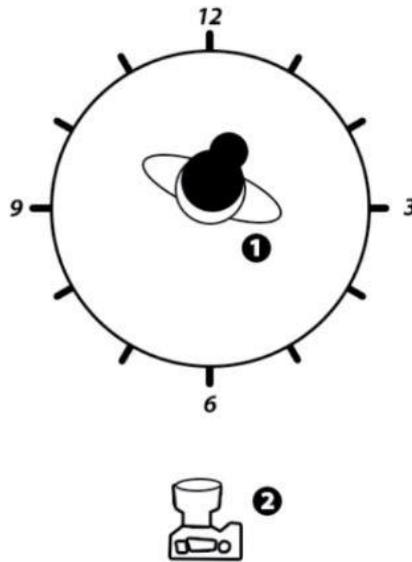
### **5 in 1 Reflector.**

Convenient and works as a diffuser, reflector and flag.

Worth having.

Hopefully, this was written with CASE and KISS so you won't need RIF  
Clear And Simple English.  
Keep It Simple Stupid.  
Read Instructions Fool.

## Basic Diagram.



The Model (1) is always at the center of the clock.  
Note if the model is standing, sitting, etc.  
The models body and head angles are noted.  
As well, head tilt and where the eyes are looking can be written in.

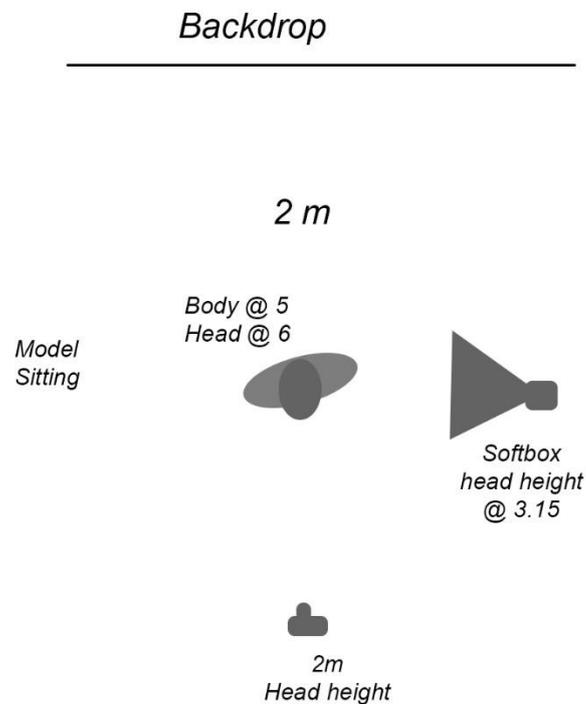
The camera (2) is at 6.00.  
Height can be written in also.

Everything is referenced from the model.  
From the model all lights, reflectors, diffusers, et all are located by time, distance and height.

*The following diagrams are guides simply to get you to “see” effects of different light.  
From this, experiment. Change. Think differently.*

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# Split Lighting.



## Split Lighting

Simple set up.

Variations;

- A reflector at 8.00, 2.5m high to put fill light back onto the “dark” side of the face.
- Use different coloured reflectors (gold, silver, white) to see the differences in the feel of the image.
- Reflector at 10.00 to give more hair-light on the “off” side.
- Diffuser between softbox and model to really soften the light.

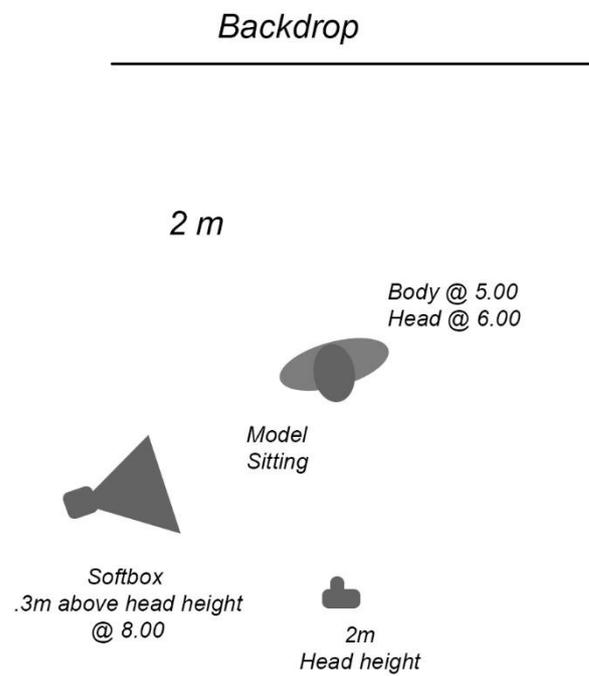
# Split Lighting



Note;

- Light evenly “split” down the center of the face.
- Angle and intensity can be changed to show only one side of the face.

## Loop Lighting



## Loop Lighting

The effect you are looking for is a small soft shadow on the cheek. It need not be very pronounced, but it goes below the nose.

Incredibly easy to get flattering images.

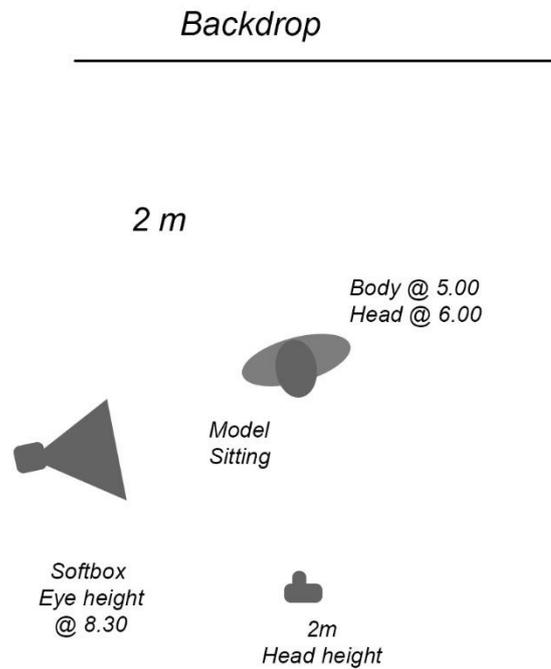
# Loop Lighting



Note;

- Looking for the slight shadow below the nose onto the cheek
- The shadow should not extend across the cheek.

# Rembrandt Lighting



## Rembrandt Lighting

So what is different from Loop Lighting?

- The shadow is larger and harsher.
- It is on the cheek, under the eye.
- Only slightly different but more dramatic.
- Works better with men than Loop Lighting.

## Rembrandt Lighting



# Butterfly Lighting

*Backdrop*

---

2 m

*Model  
Sitting*



*Body @ 5  
Head @ 6*



*Softbox on boom  
Facing model  
.5 in front  
2m high*



*2m  
Head height*

*Butterfly Lighting*

What are we trying to achieve here?

- Soft light.
- A small “butterfly shadow under the nose
- No dark eye shadows.
- Flattering light.
- Very symmetrical image.

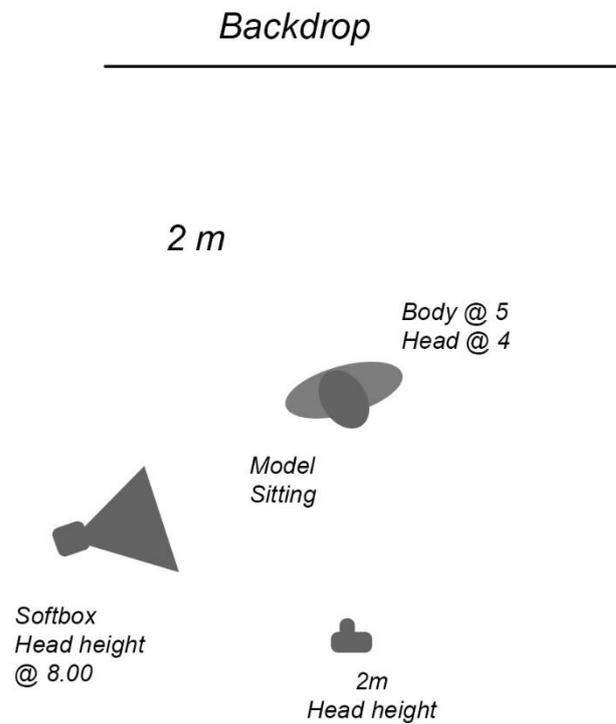
# Butterfly Lighting



Note;

- Looking for the slight shadow below the nose but not onto the cheek

# Broad Lighting



## *Broad Lighting*

Setup to light only one side of the face, but more than half the head.

Variations;

- Reflector at 4.00 to give some backlight to the dark side of the face.
- Diffuser between softbox and model to give very soft light.
- Change the height of the softbox.

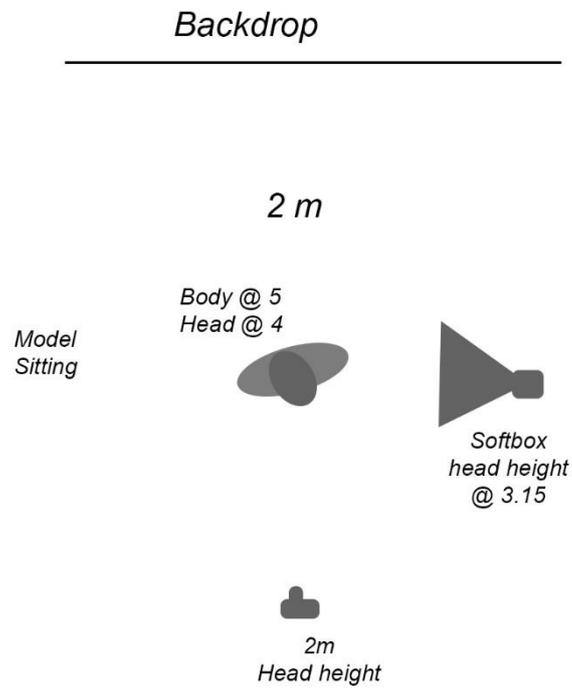
# Broad Lighting



Note;

- Most of the face is lit
- Broad lighting can be part of other forms of lighting; e.g. Loop, Rembrandt or Butterfly lighting.

# Short Lighting



## *Short Lighting*

Note this is exactly the same setup as Broad Lighting.  
The light source is shifted to the opposite side.

Broad lighting is about light.

This image is about shadows.

Variations;

- Move the light between 2.30 and 3.30 and note the change in shadows.
- Change the height of the light.
- Use reflectors to light the dark side of the face.
- Reflect light back onto the hair from 10.00.

# Short Lighting



Humphry Bogart by Louise Brooks

Note;

- Face mostly in shadow
- Usually shot with a lot of contrast for dramatic effect.

Not illustrating anything.

*Look at the light.*



I use these images to teach myself light.

What is here?

- Snoot at 5.30 above to give face shadows.
- Second light at 9.30, high, with barn doors cutting light off. Lighting hair and arms.
- Possibly another light 4.30 with barn doors to light left arm.

Photo appears to be by George Hurrell

The Master at work!



## **Who are the people in the pictures?**

### **The Casablanca cast**

*Split Lighting - Lauren Bacall*

*Loop Lighting - Claude Raines*

*Rembrandt Lighting - Claude Raines*

*Butterfly Lighting - Claude Raines*

*Broad Lighting – Humphrey Bogart*

*Short Lighting - Lauren Bacall and Humphrey Bogart*

Notes;