

Merthyr Tydfil Camera Club

Studio Lighting Tutorial

Basic Photography Lighting

Lighting plays a crucial role in the world of portrait photography. It acts as the foundation upon which all other elements of the image are built. Whether you are capturing a corporate headshot or delving into the depths of character study, lighting has the power to transform an ordinary photo into something extraordinary.

The importance of lighting lies not only in its ability to flatter or emphasize a person's features but also in its capacity to convey your creative vision. Each photographer possesses a unique perspective and style, and the right lighting helps to bring that vision to life. It allows you to sculpt and shape the subject, highlighting their best qualities and capturing their essence in a way that resonates with both you and the viewer.

When it comes to portrait photography, there is no one-size-fits-all solution. Different lighting techniques and setups can be employed to achieve different effects and evoke various emotions. From soft and diffused lighting for a dreamy and ethereal look, to bold and dramatic lighting to add intensity and depth, the options are endless. It all depends on the mood and story you want to convey through your images.

Additionally, as a photographer, it is important to understand the technical aspects of lighting. This includes knowledge of artificial lighting equipment such as strobes, softboxes, and reflectors, as well as natural lighting conditions and how to manipulate them to your advantage. By understanding the interplay of light and shadow, you can create dimension and texture that adds depth and interest to your portraits.

Moreover, exploring different lighting setups opens up a world of creative possibilities. Experimenting with various angles, colours, and intensities of light allows you to craft unique and visually compelling compositions. Over time, you will develop your own lighting style, recognizing the signature look that defines your work and sets it apart from others.

In conclusion, lighting is indeed the cornerstone of successful portrait photography. It not only flatters and emphasizes a person's features but also serves as a powerful tool for creative expression. Mastering the art of lighting will enable you to produce images that not only captivate your audience but also resonate with you on a personal level. So go ahead, explore the fascinating world of lighting and unlock the true potential of your portraits.

In this tutorial we will look at the following seven basic photographic lighting set ups using only just one main light.

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

Basic Rembrandt Lighting

Rembrandt Harmenszoon van Rijn was a printmaker and painter. He was easily one of the greatest portrait artists in history and this is why the technique was named after him. We have just adjusted the Rembrandt lighting techniques from painting to photographing portrait photography.

Rembrandt lighting is used to create a mysterious or moody portrait. The viewer's attention should be drawn to the triangle of light on the subject's cheek.

Typically, this lighting was used for portrait subjects with round or full faces because it creates a slimming effect. Some Rembrandt lighting experts define this lighting setup as masculine and one that shouldn't be used on women. However, you will notice in today's world it is used on men and women and can be a valuable skill when mastering a single key light source.





What is Rembrandt lighting?

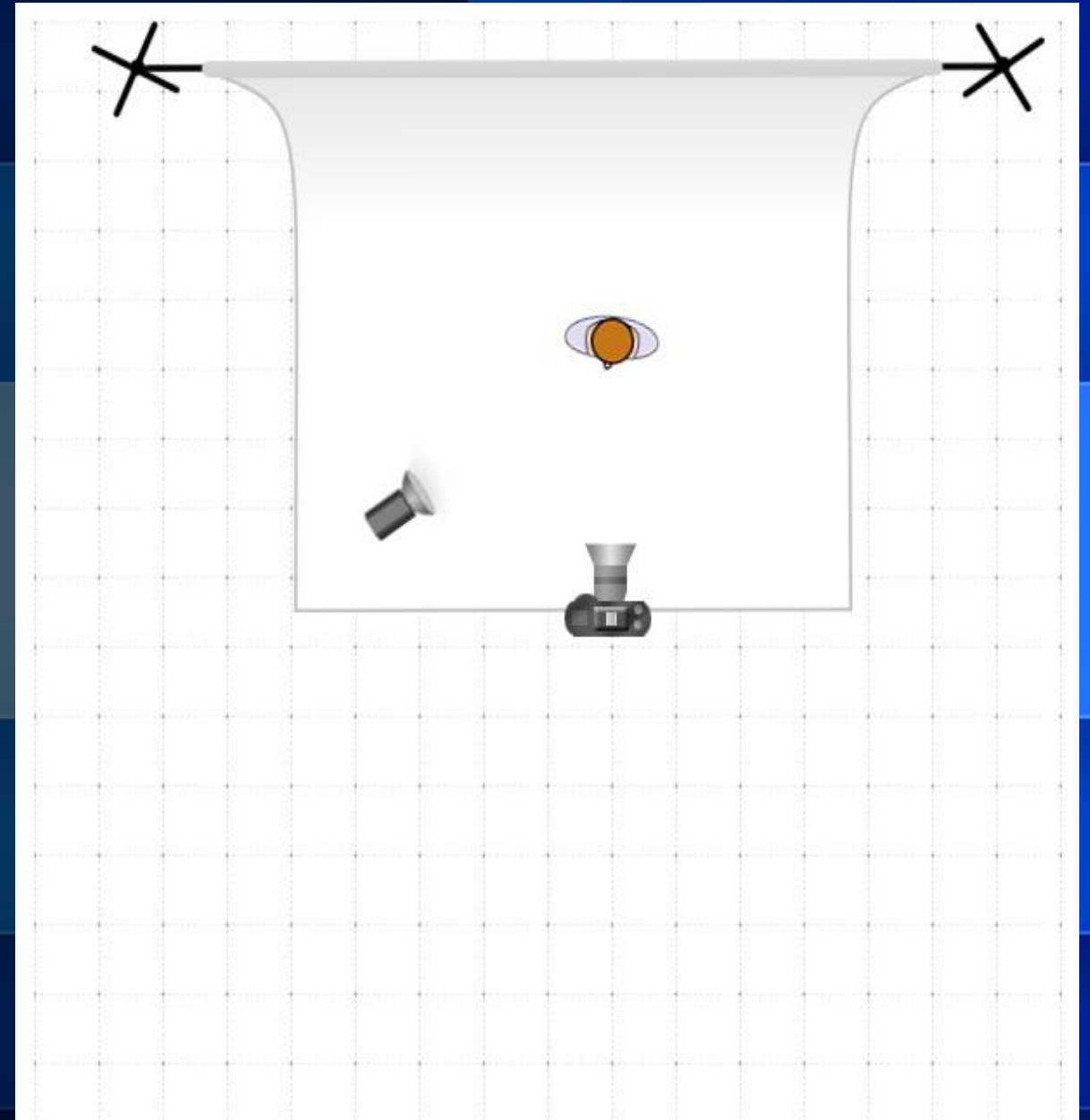
Rembrandt lighting takes its name after Rembrandt Harmenszoon van Rijn, a 17th-century Dutch painter who was known for using earthy tones and golden highlights to frame the faces of his portraiture subjects. What made his painting style distinct was focusing lighting on the subject's face and adding detail around it, tapping into an innate human attraction to the face.

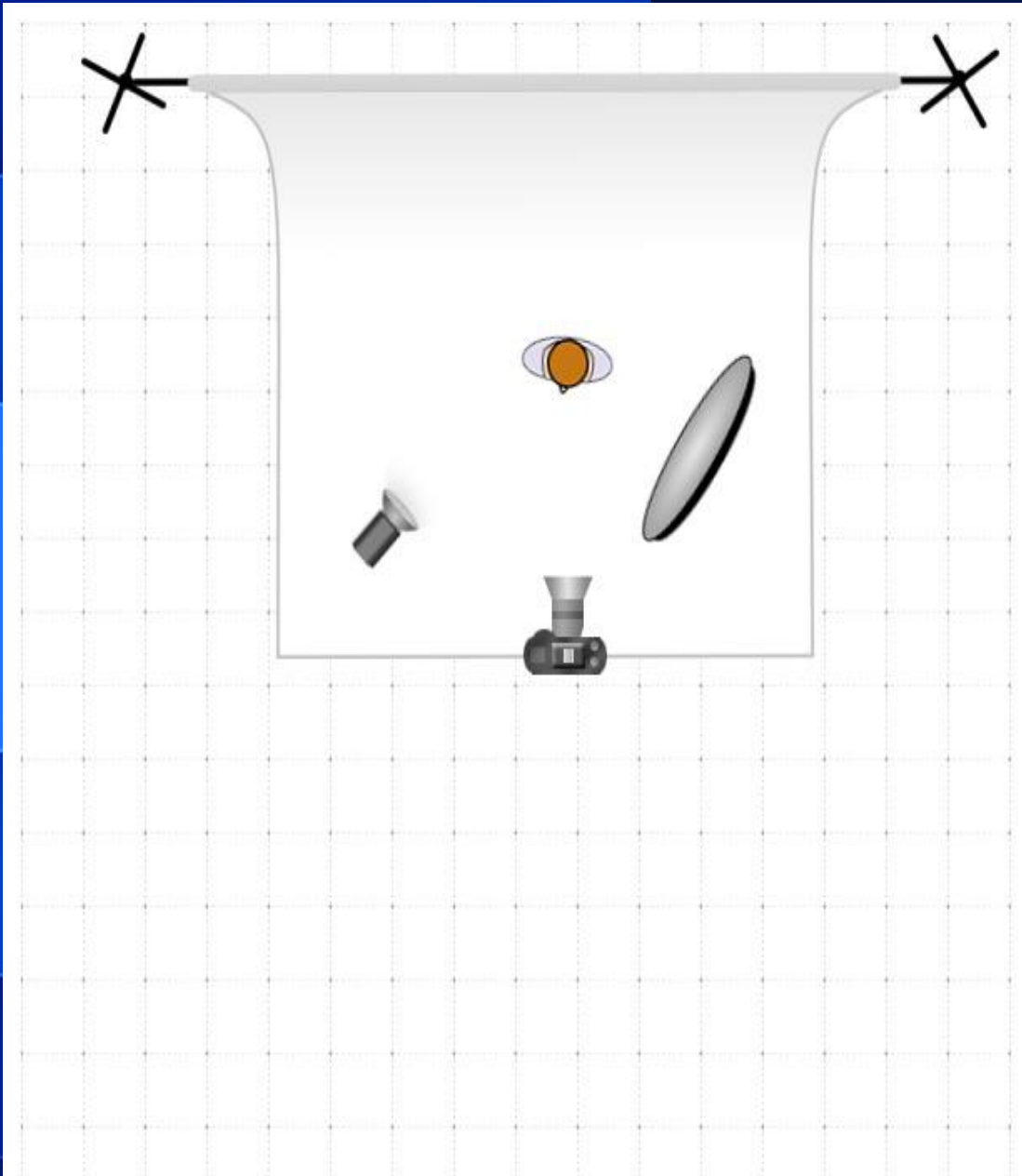
His approach results in one half of the subject's face is fully illuminated, while the other half is in partial shadow. One tell-tale sign of Rembrandt lighting is the presence of a small inverted triangle of light below the subject's eye, usually along the cheek, which is a result of the lighting setup. For perfect execution of this type of lighting, the triangle of light shadow must be no wider than the length of the eye, and no longer than the subject's nose.

This beginner-friendly lighting method takes some finessing but requires minimal equipment to set up. There are two approaches to Rembrandt lighting, one using a reflector and one using only a light source. For the single light method, you will need:

- indoor studio environment
- off-camera light source with stand

At its most basic, Rembrandt lighting consists of a single light source placed on a 45-degree offset from the subject, about 5 feet away. Positioned roughly two feet higher than eye level, the light source is angled slightly downward and hits the side of the face that is farthest away from the camera.





If You're Using a Reflector

If you want to achieve a softer and more natural lighting effect, you will need to supplement your shoot with a reflector. Begin by setting up the key light as instructed above. To use the reflector, place it at eye level, opposite of the key light at a 45-degree angle, 3-4 feet away from the model. The light from the reflector should be illuminating the model's face.

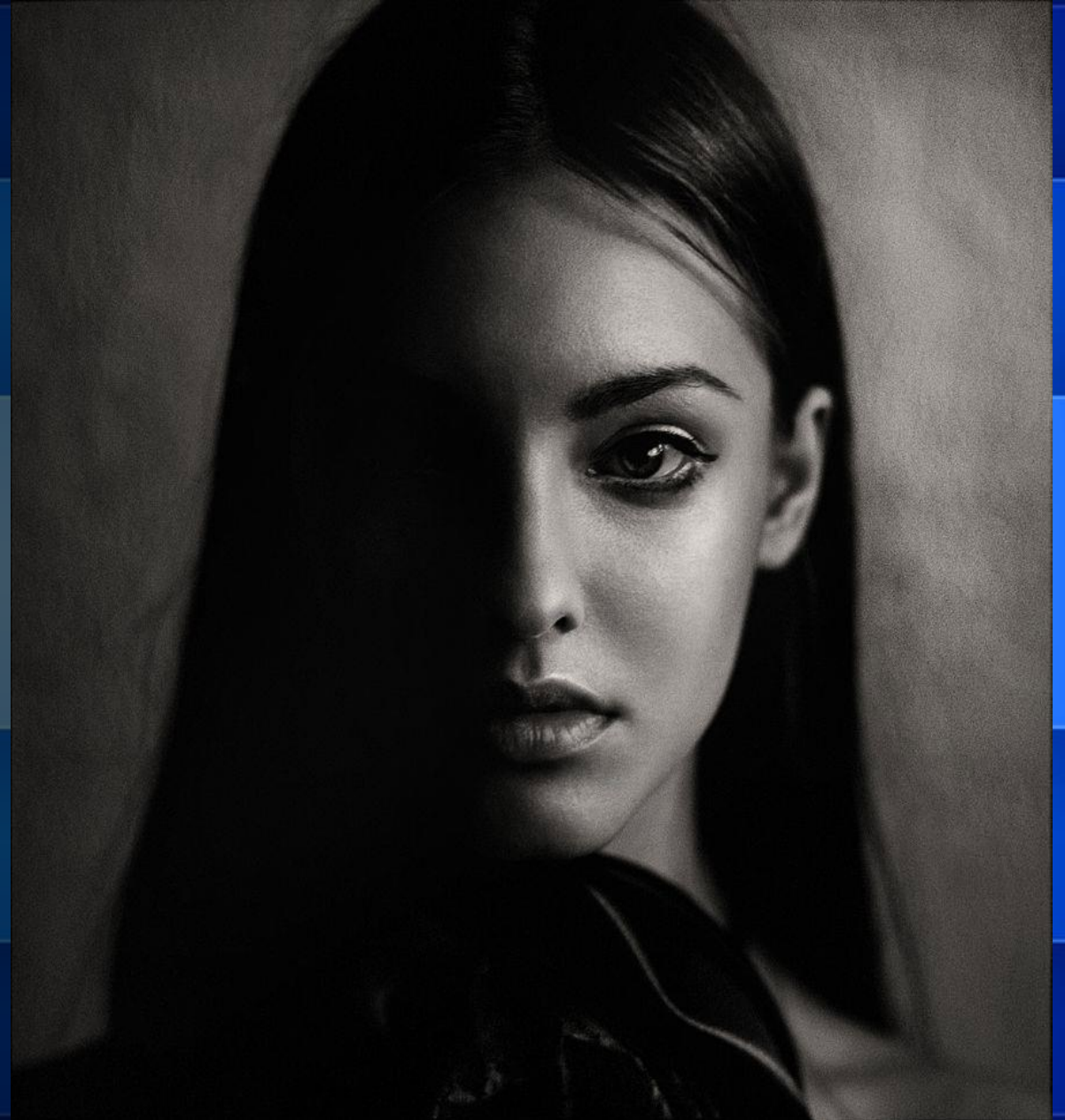
Split Lighting

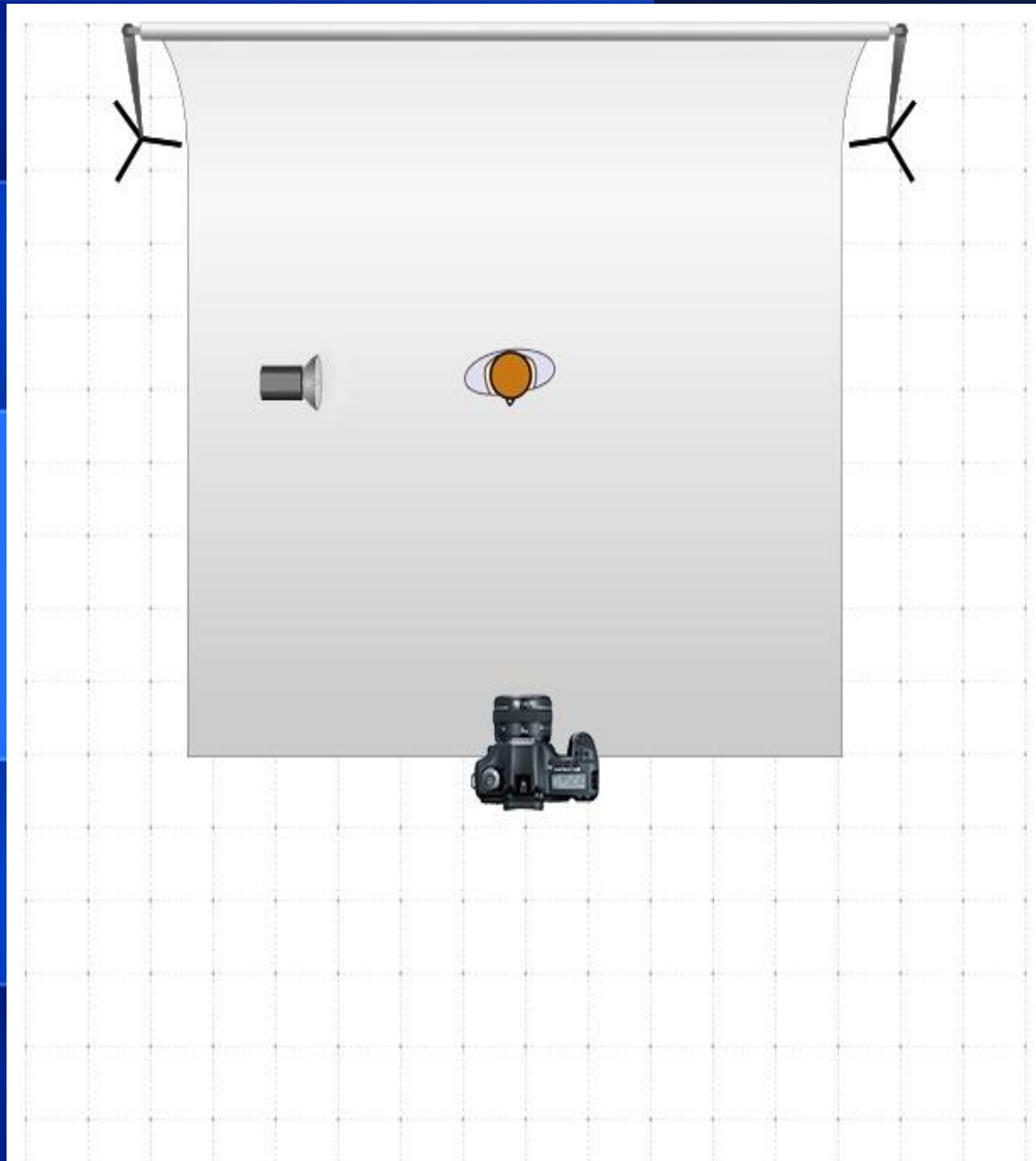
What is split lighting?

Split lighting is a lighting technique that lights up half of a subject's face while leaving the other half in a shadow, essentially “splitting” the face.

Split lighting creates a sharp contrast that makes for a more dramatic and often assertive photo. This is a common technique used in portrait photography as it can emphasize power, glamour, and drama.

Since split lighting is defined by a “split” lighting pattern of one bright side and one shadow side, the technique inherently entails high contrast. This high contrast makes this technique a very dramatic lighting setup.





As with Rembrandt Lighting, split lighting requires minimal equipment to set up. Split lighting is achieved by using only a light source. For the single light method, you will need:

- indoor studio environment
- off-camera light source with stand

At its most basic, split lighting consists of a single light source placed directly to one side from the subject, about 5 feet away and at 90 degrees to the Camera. Positioned roughly at eye level, the light source is angled slightly downward and hits the side of the face that is farthest away from the camera.

Butterfly Lighting

What is butterfly lighting?

Butterfly lighting is a lighting pattern used in portrait photography where the key light is placed above and pointing down on the subject's face. This creates a dramatic shadow under the nose and chin that looks like a butterfly. It's also called 'Paramount lighting,' named for the Hollywood studio and how they lit their most glamorous and beautiful actresses.

Butterfly lighting is perfect for portrait photography. It is one of the most flattering lighting techniques for sculpting facial features.



How to capture butterfly lighting.

Butterfly lighting setups are simple. In its purest form, it's a single source (key light) directly in front of and above the subject's face and the camera. If the shadows are a little too deep, a reflector can be placed below the subject to Bounce Light back up into the face.

The light created softens the face and creates shadows under the nose and chin. It may be better using a reflector below as a fill light for the chin area. Reflectors are great ways to balance light.

During the shoot, you or a crew member can hold the reflector, or you can have the subject hold it. Mess around with it a bit. A benefit of reflectors is that you can capture beautiful catchlights in the subject's eyes by adjusting the reflector.



Short or Narrow Lighting

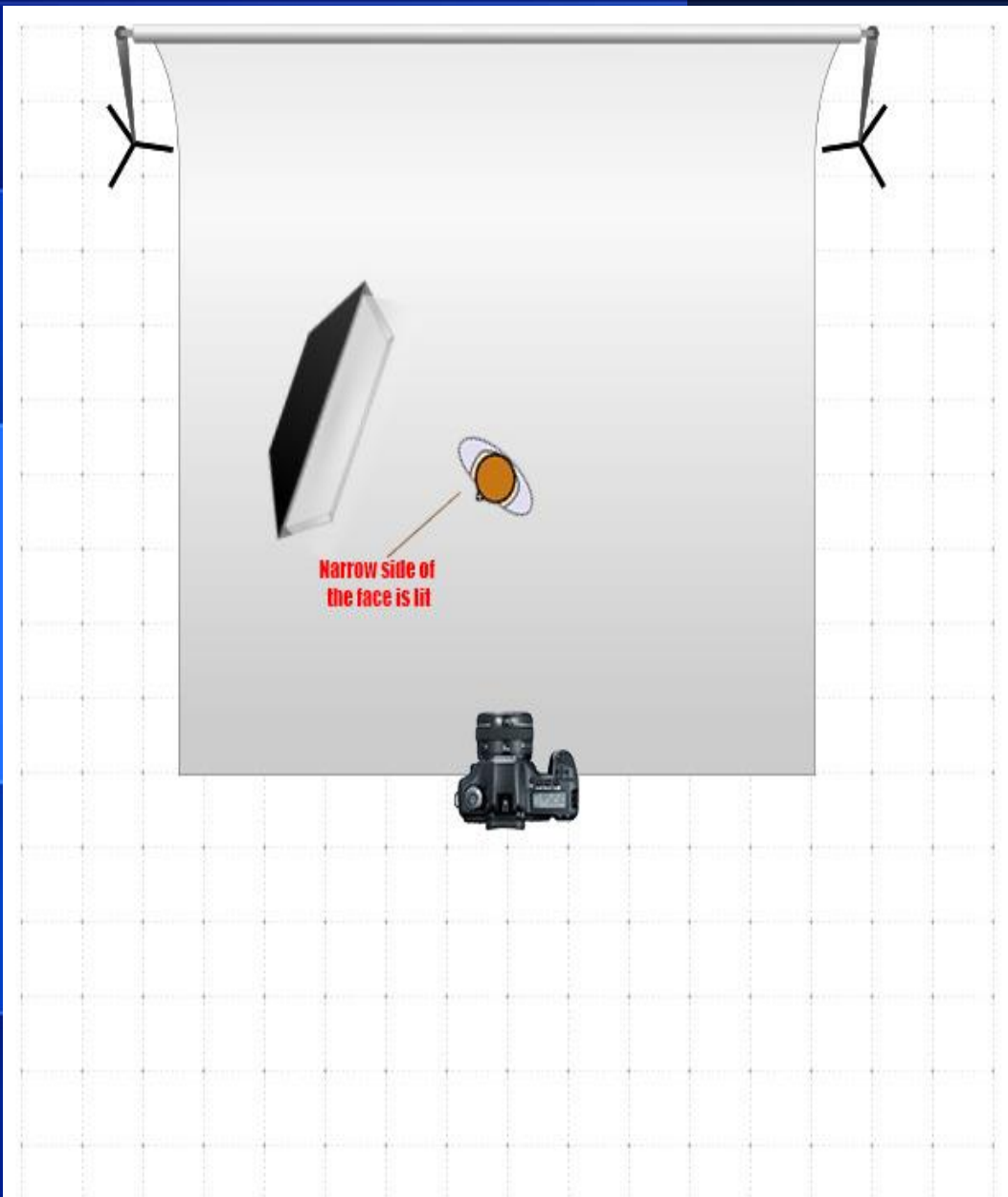
What is short lighting?

Short lighting is a lighting technique used primarily in portrait photography in which the far side of a subject's face is lit relative to the camera. This leaves the near side of the face darker or entirely shadowed. The far side of the face is also known as the "narrow side," and the side closer to camera is also referred to as the "broad side" of the face. Executing this lighting technique well has just as much to do with the angle of the subject's face and the positioning of the camera as it does with the light itself.

Short Lighting Photography Characteristics:

- Distinguishes the narrow and broad sides of the face
- High in contrast
- The angle of a subject's face determines the intensity





When using the short or narrow lighting setup, the subject turns slightly away from the camera. This technique is often employed to create a more dramatic effect by casting shadows on one side of the face. In this setup, the main lighting source is placed behind the subject to light the part of the face that is furthest away from the camera.

By positioning the main light source behind the subject, it helps provide a rim of light around the edges, separating the subject from the background and creating a sense of depth. This technique is commonly used in portrait photography and cinematography to add depth and dimension to the image.

The short or narrow lighting setup is particularly effective when trying to emphasize certain facial features or create a sense of mystery and intrigue. It can help sculpt the face and create a more visually appealing composition.

Broad Lighting

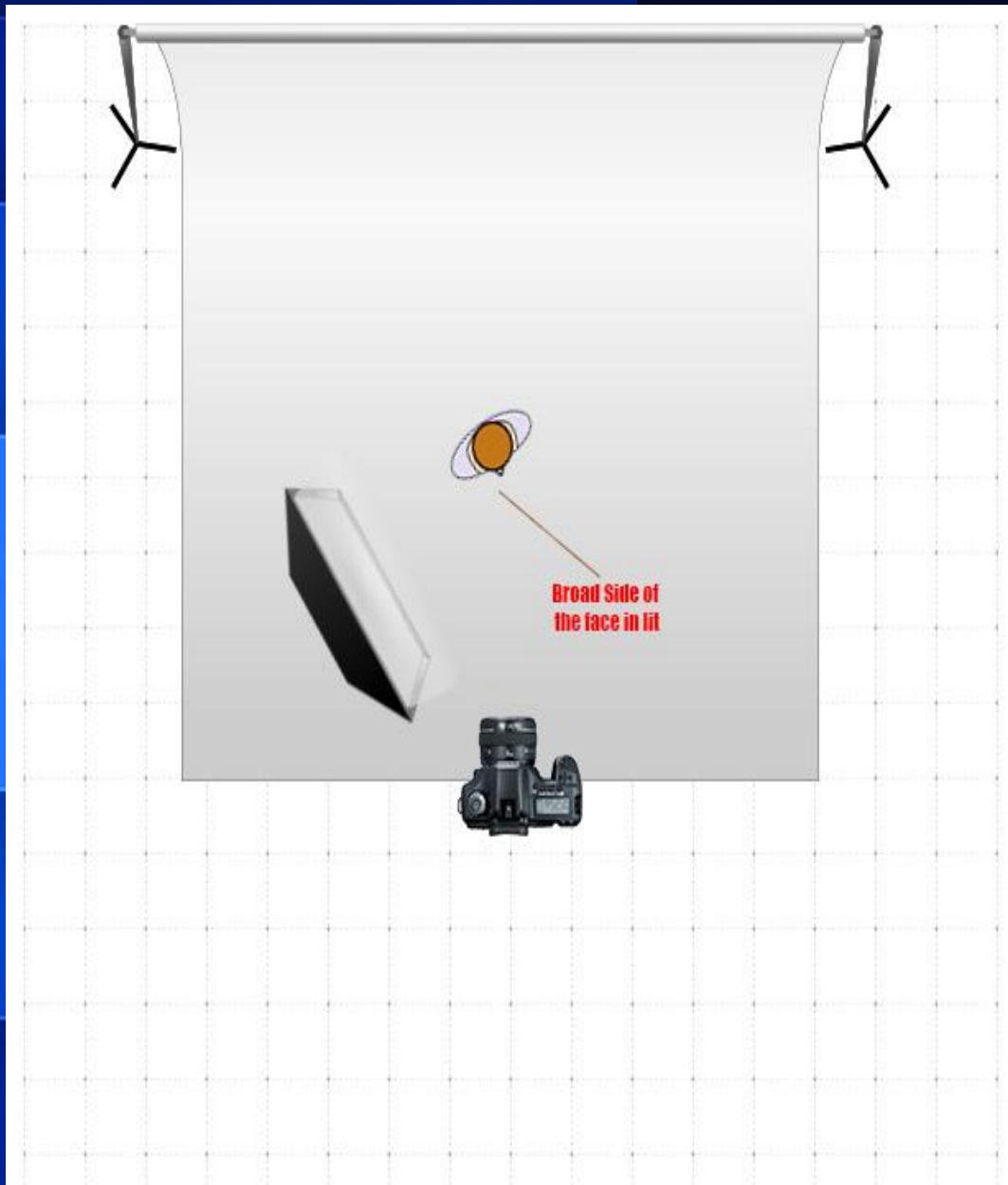
What is broad lighting?

Broad lighting is a type of lighting setup where the area of a subject's face that is facing the camera is lit more brightly. The term "broad lighting" comes from lighting the broad side of a subject's face. It is also one of the typical photography lighting setups for shooting portraits. This is the opposite of short lighting. Broad lighting is typically less flattering for a subject because it widens the face. However, it's beneficial to use subjects that have a narrower face and want the look of a wider face.

What is broad lighting used for?

- Illuminative effect
- Widening a subject's face
- More contrast against background
- Placing shadows on the short side of a subject





As with the short lighting set up, the subject again turns slightly away from the camera, creating a flattering effect by accentuating the contour of their face. In contrast, the broad lighting set up employs a different approach. In this arrangement, the main light source is placed in front of the subject, illuminating the broader side of their face that is facing the camera.

The deliberate positioning of the light source in this manner allows the light to fall onto the far side of the subject, resulting in a brighter and more illuminative image. The shadows, in this case, are cast across the opposite side of the subject, contributing to a more evenly lit composition.

Due to the nature of the broad lighting set up, the resulting images tend to exhibit a softer and less dramatic appearance compared to the short lighting technique. This is because the direct light on the broad side of the face eliminates harsh shadows and creates a more diffused illumination. While this can be ideal for certain subjects and situations, it may not always be the most flattering option.

Loop Lighting

What is loop lighting?

Loop lighting is a lighting pattern that creates a circular shadow on the subject's face just under the nose. You can achieve this by placing the key light 45 degrees to the side of the subject and raising it just above their eye line.

The circle or “loop” shape that sits just below the nose, is on the opposite side of where you place your light. It is also typically marked by a longer shadow under the chin and jaw due to the downward slope of the light. Loop lighting is one of the most common lighting setups used in portrait photography because it is flattering for most faces.

Characteristics of Loop Lighting Photography:

- Key light at 45-degree angle to subject
- Raise light above eye line
- Shadow of nose on subject's cheek





Main light placed at 45 degrees
to subject and above head height

Loop lighting has a simple setup. But knowing it, can add real depth to your portraits, without having to rely on the sometimes overly dramatic techniques, nor are you stuck playing it safe with flat lighting. At the bare minimum, loop lighting photography can even be achieved with one light source.

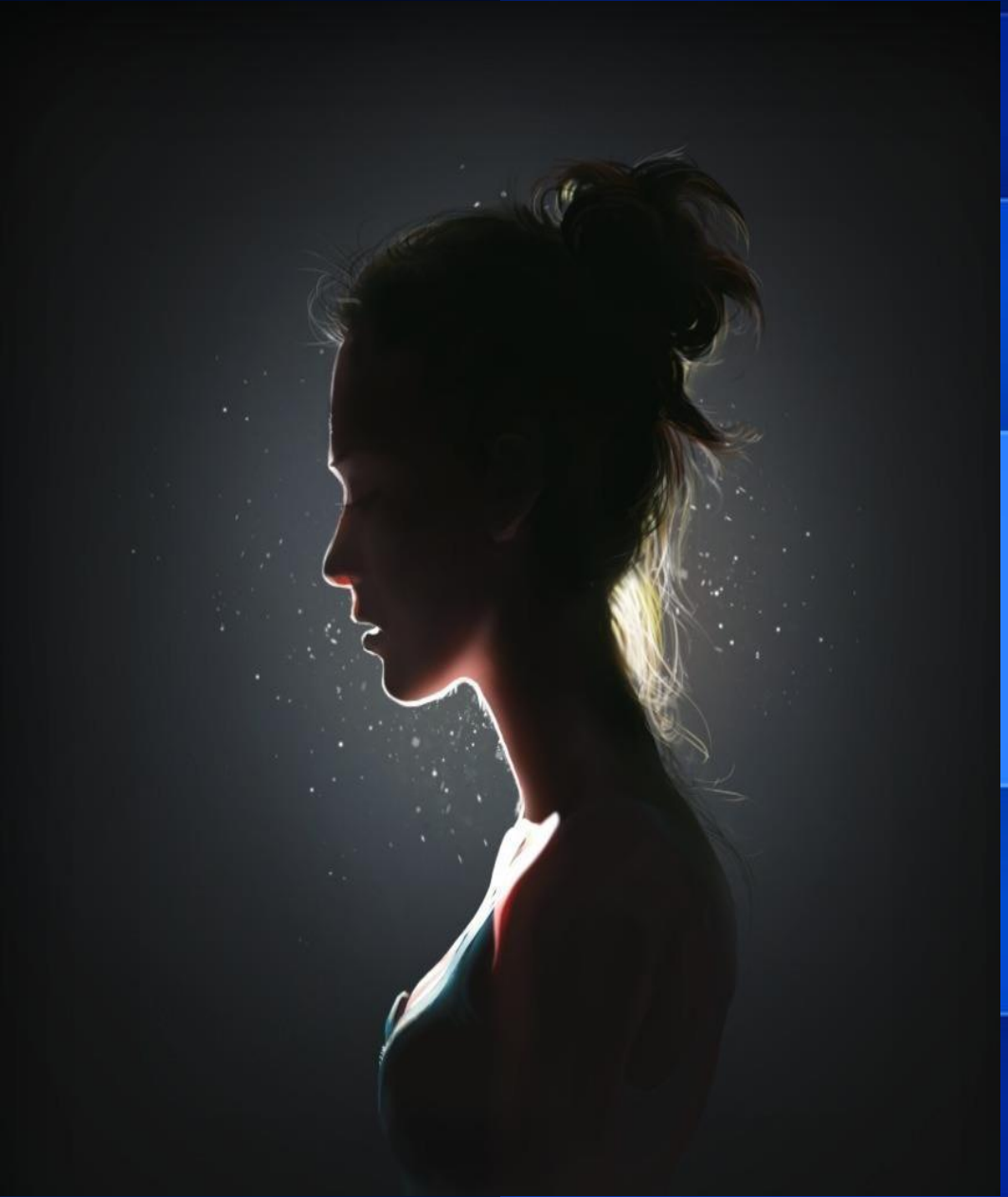
Steps to achieve loop lighting photography

1. Pose your model
2. Set the light just above eye level of your subject.
3. Next, move the key light to around 45 degrees on one side of your subject. See where the shadow from your subject's nose falls. Angle the light down so the shadow is cast across your model.
4. Move your light from side to side and up and down. Take time to find your desired shape. The subject's face shape and nose will affect the shadow's shape and so your angles might need adjusting. 30 degrees might end up being ideal or even well above 45 degrees.

Tip: The shadow should be small. This lighting pattern is best for those with oval-shaped faces. The downward angle can lengthen the face, and even give the appearance of high cheekbones.

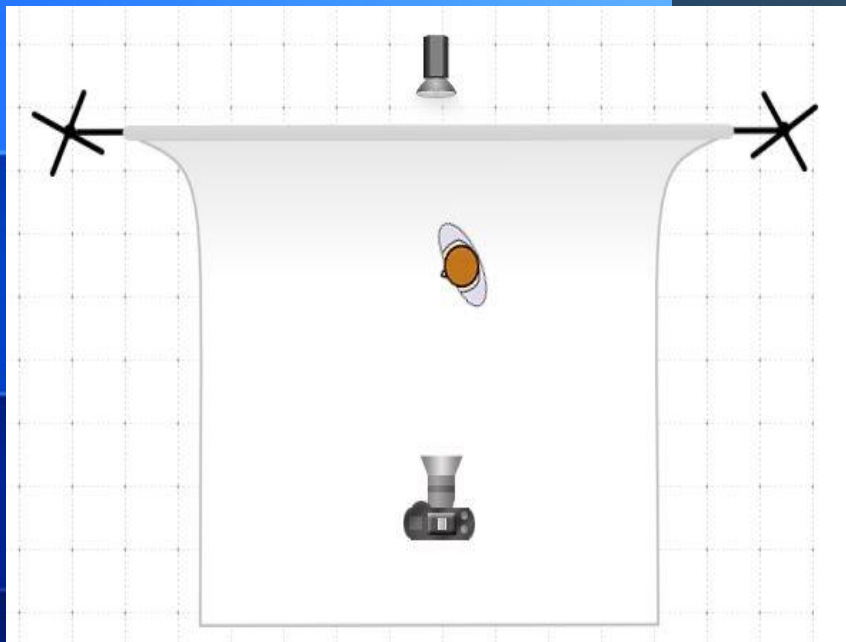
Back Lighting

Back lighting, also known as rim lighting or edge lighting, involves positioning the light source directly behind the subject. It can be used in the studio or during golden hour to create a bright outline or 'rim light' that defines the subject. This technique adds depth and dimension to photographs by separating the subject from the background and accentuating their shape and form. It can be achieved with artificial or natural light and is particularly effective for subjects with interesting shapes or textures. Experimenting with back lighting can elevate your photography and create captivating images.





The best method of achieving this look is with a large rectangular softbox. This will create a background which is lit towards the subject and the photographer. The softbox needs to be larger than the subject, in the diagram (top left) a 3ft by 4ft softbox is placed horizontally behind the subject, but if no softbox is available the same effect can be again achieved by using a large plain white sheet as a backdrop as in diagram (bottom left). It is important to keep the sheet as smooth as possible as large folds and wrinkles may create unwanted shadows. Place a light a short distance behind the sheet so to light the whole sheet.



With back lighting, the front of the subject will be almost completely dark, which can lead to very dramatic images. The lit portion of the backdrop may be very narrow so place the subject close as possible to it.