The Five Basic Portrait-Lighting Setups

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As you progress through the following lighting setups, from Paramount to split lighting, keep in mind that each pattern progressively makes the face slimmer. Each also progressively brings out more texture in the face because the light is moved father and farther to the side. As you read through the lighting styles, you’ll also notice that the key light mimics the course of the sun across the sky; at first it is high, then it gradually grows lower in relation to the subject. It is important that the key light never dip below the subject’s head height. In traditional portraiture, this does not occur—primarily because it does not occur in nature.

The setups described presume the use of parabolic lights. However, most contemporary portrait photographers prefer diffused light sources, which are very forgiving and which do not create sharp-edged shadows. If you choose to create the five lighting patterns described here using diffused sources, very little changes—with the exception that the key light is usually placed closer to the subject in order to capitalize on the softest light.

In such soft-light setups, the background, hair, and kicker lights may be diffused as well. For instance, strip lights and similar devices can be used to produce soft, long highlights in hair, on the edge of clothes, and on the background.

The overall aesthetic of using soft light is not only seen as more contemporary, emulating the images seen in the fashion world, it is also a lot easier to master. Big soft light sources are inherently forgiving, and since the subject is basically wrapped in soft light,
retouching is minimized. Also, the transfer edge, where shadow and highlight areas meet, is much more gradual than with undiffused lights.

The diagrams below show the five basic portrait lighting setups. The fundamental difference between them is the placement of the key light. Lighting patterns change as the key light is moved from close to and high above the subject to the side of the subject and lower. The key light should not be positioned below eye level, as lighting from beneath does not occur in nature. You will notice that when the key and fill lights are on the same side of the camera, a reflector is used on the opposite side of the subject to fill in the shadows.

**Paramount Lighting**

Paramount lighting, sometimes called butterfly lighting or glamour lighting, is a traditionally feminine lighting pattern that produces a symmetrical, butterfly-like shadow beneath the subject’s nose. It tends to emphasize high cheekbones and good skin. It is less commonly used on men because it tends to hollow out cheeks and eye sockets too much.

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**Paramount lighting**

**Key Light.** For this lighting setup, the key light is placed high and directly in front of the subject’s face, parallel to the vertical line of the subject’s nose (see diagram above). Since the light must be high and close to the subject to produce the desired butterfly shadow, it should not be used on women with deep eye sockets, or no light will illuminate the eyes.
**Fill Light.** The fill light is placed at the subject’s head height directly under the key light. Since both the key and fill lights are on the same side of the camera, a reflector must be used opposite these lights and in close to the subject to fill in the deep shadows on the neck and shaded cheek.

**Hair Light.** The hair light, which is always used opposite the key light, should light the hair only and not skim onto the face of the subject.

**Background Light.** The background light, used low and behind the subject, should form a semicircle of illumination on the seamless background (if using one) so that the tone of the background grows gradually darker the farther out from the subject you look.

### Loop Lighting

Loop lighting is a minor variation of Paramount lighting. This is one of the more commonly used lighting setups and is ideal for people with average, oval-shaped faces.

**Key Light.** To create this setup, the key light is lowered and moved more to the side of the subject so that the shadow under the nose becomes a small loop on the shadow side of the face.

**Fill Light.** The fill light is also moved, being placed on the opposite side of the camera from the key light and close to the camera–subject axis. It is important that the fill light not cast a shadow of its own in order to maintain the one-light character of the portrait. The only position from which you can really observe whether the fill light is doing its job is at the camera. Check carefully to see if the fill light is casting a shadow of its own by looking through the viewfinder.
Hair and Background Lights. The hair and background lights are used in the same way as they are in Paramount lighting.

Bill McIntosh created this homage to Hollywood lighting using a 31-inch umbrella as a key light and a weak umbrella fill light, about three stops less than the key-light intensity. You can see the Paramount lighting pattern on the man produced a small butterfly-like shadow under the nose. The woman’s face, because her head was turned slightly toward the light, has more of a loop lighting pattern. A characteristic of the Hollywood style was the weak fill light, which enhanced not only the lighting contrast, but the dramatic nature of the lighting.

Rembrandt Lighting

Rembrandt lighting (also called 45-degree lighting) is characterized by a small, triangular highlight on the shadowed cheek of the subject. The lighting takes its name from the famous Dutch painter who used skylights to illuminate his subjects. This type of lighting is dramatic. It is most often used with male subjects, and is commonly paired with a weak fill light to accentuate the shadow-side highlight.
**Rembrandt lighting**

**Key Light.** The key light is moved lower and farther to the side than in loop and Paramount lighting. In fact, the key light almost comes from the subject's side, depending on how far his head is turned from the camera.

**Fill and Hair Lights.** The fill light is used in the same manner as it is for loop lighting. The hair light, however, is often used a little closer to the subject for more brilliant highlights in the hair.

**Background and Kicker Lights.** The background light is in the standard position described above. With Rembrandt lighting, however, kickers are often used to delineate the sides of the face (particularly the shadow side) and to add brilliant highlights to the face and shoulders. When setting such lights, be careful not to allow them to shine directly into the camera lens. The best way to check this is to place your hand between the subject and the camera on the axis of the kicker. If your hand casts a shadow when it is placed in front of the lens, then the kicker is shining directly into the lens and should be adjusted.
Allegro Haynes is a talented violinist who plays with the Virginia Symphony and the Harbor String Quartet. She is frequently featured as a solo violinist. Bill McIntosh wanted this portrait to look as if it could be a movie set in the eighteenth or nineteenth century. He used a 31-inch umbrella as the key light and a weak umbrella fill set at about three stops less than the key. Two small kickers from the right and left rear of the subject lit her hair, and a small background light illuminated the painted background. The lighting pattern falls between the Rembrandt and loop lighting patterns.

Split Lighting

Split lighting occurs when the key light illuminates only half the face. It is an ideal slimming light. It can be used to narrow a wide face or nose. It can also be used with a weak fill to hide facial irregularities. For a highly dramatic effect, split lighting can be used with no fill.
Split lighting

**Key Light.** In split lighting, the key light is moved farther to the side of the subject and lower than in other setups. In some cases, the key light is actually slightly behind the subject, depending on how far the subject is turned from the camera.

**Other Lights.** The fill light, hair light, and background light are used normally for split lighting.
Split lighting divides the face into halves—one side highlighted, one side in shadow. Vicki Taufer used large softboxes to produce a wraparound light on the highlight side of the face and a silver reflector on the shadow side to produce a moderate lighting ratio and good facial modeling.

**Profile Lighting**

Profile lighting (also called rim lighting) is used when the subject’s head is turned 90 degrees from the camera lens. It is a dramatic style of lighting used to accent elegant features. It is used less frequently now than in the past, but it still produces a stylish portrait.

![Rim lighting diagram]

**Rim lighting**

**Key Light.** In rim lighting, the key light is placed behind the subject so that it illuminates the profile of the subject and leaves a polished highlight along the edge of the face. The key light will also highlight the hair and neck of the subject. Care should be taken so that the accent of the light is centered on the face and not so much on the hair or neck.

**Fill Light.** The fill light is moved to the same side of the camera as the key light and a reflector is used to fill in the shadows (see the rim-lighting diagram above).

**Hair and Background Lights.** An optional hair light can be used on the opposite side of the key light for better tonal separation of the subject’s hair from the background. The background light is used normally.