Imaging with Light Lighting Guide

Lighting need not be one of the most misunderstood and least known components for successful visual imaging. We hope, through this brief guide, to promote a basic understanding of lighting techniques based on actual examples complete with diagrams.

For the purpose of clarity and definition, the following glossary of lighting terms is set forth to establish a common ground for all those interested in the basic fundamentals of lighting.

Main Light: The principle light source striking the subject. (Also referred to as Key Light.)

Fill Light: Secondary light source used to accent the subject or fill shadowed area.

Hair Light: Normally positioned behind and above the subject at a 45° downward angle to the subject, it highlights the hair, thus adding greater detail.

Back Light: Accent light, placed directly behind the subject on a direct axis with the camera lens, provides a halo or rim effect, thus separating the subject from the background.

Background Light: Used to illuminate the background to desired degree, and, when color film is used, to control the color of the background. (Generally a broad light source.)

Bounce or Umbrella Lighting: Provides a soft, indirect, diffused light to minimize shadows.

These six basic light types are universal in their application and do not vary with changes in subject, background, color or location and may be accomplished with photofloods, quartz lights, or electronic flash.

Basic Lighting Techniques

A variety of effects can be achieved through variations in lighting and lighting placement as illustrated by the following basic lighting techniques.

*Note: All light meter readings should be taken from main light only.

Flat Frontal Lighting

1. Main light only – light source located on or near camera at eye level (similar to on-camera flash).

Subject positioned 6” from background. Single A120, 500 watt photoflood lamp with DP12 diffusion screen, positioned near camera at eye level 6 1/2’ from subject (notice heavy shadow on background).

2. Main light only – subject to background distance increased.

Subject positioned 6’ from background. Single A120, 500 watt photoflood lamp with DP12 diffusion screen, positioned near camera at eye level 6 1/2’ from subject. (This repositioning of subject diffuses background shadow and softens background tone.)

Light. It’s the primary element of any image. By creating and controlling light, you can control the mood, clarity, detail and texture of every image you create.

This lighting guide will introduce you to the fundamentals of portrait lighting, allowing you to begin to explore the power of light to make a statement, or create a style.

Our complete lighting kits give you everything you need to get started, or to advance from “snapshot” to “studio”. We offer a variety of kits to meet every need and circumstance.

Color filters, bounce umbrellas, clamp mounts, extensions, barndoors and filter holders are all available as your needs advance.

Smith-Victor offers the lighting sources and the light placement and control accessories you need to create memorable images - whether on film, video, or electronic media.

SMITH-VICTOR CORPORATION
High Frontal or “Butterfly Lighting”

1. Main light only - (Butterfly lighting refers to a butterfly-shaped shadow created beneath the nose achieved by positioning the light source at a 45° downward angle in relationship to the subject's face.) A glamour lighting technique best suited for women. Subject is positioned 4' from background. An A120, 500 watt photoflood lamp with DP12 diffusion screen is positioned 3' from subject.

2. Main Light plus Fill Light - Still using butterfly lighting, an A120, 500 watt photoflood fill light with DP12 diffusion screen, is positioned at a 45° downward angle opposite the main light 7 1/2' from the subject. This light reduces harsh shadows caused by main light and fills in shadowed areas.

3. Main Light, Fill Light, plus Hair Light - The addition of a hair light, an A50, 250 watt lamp, positioned 3' behind and 3' above the subject at a 45° downward angle, yields an accent on the hair, giving shape and body. (Refer to photos on “Hair Light Placement” for correct hair light applications. Barndoors are recommended on hair light to prevent light spill on face.)

4. Main Light, Fill Light, Hair Light, plus Background Light - The addition of a background light provides even illumination and separation of background in relation to the subject. An A80 with 250 watt photoflood lamp is positioned directly behind the subject to evenly illuminate the background.

FILTER PACKS

Convenient 6-packs of 12" x 12" light filters.

Light Balancing Pack 650020
Three each: 1/2 Blue and Extra Blue

Color Effects Rainbow Pack 650021
One each: Red, Yellow, Blue, Green, Orange and Orchid

D-Pack Diffusion Assortment 650022
Two each: Light Silk, Medium Frost and Heavy Snow

SNAPPIES

Inexpensive and easy-to-use filter holders for reflector floodlights, lower wattage quartz halogen lights and flash units. Available for 5", 8" and 10" reflectors.
Rembrandt or 45° Lighting

1. This technique utilizes a main light placed at a 45° downward angle, in relationship to the subject's face, and 45° to the side of the subject. The shadow created by the nose is cast over the upper lip to the corner of the mouth, also causing a triangular highlight on the opposite cheek. Subject is positioned 4' from background. AL20, 500 watt photoflood lamp with DP12 diffusion screen, is positioned 3' from subject at a 45° downward angle to subject's face.

2. Main plus Fill Light – AL20, 500 watt photoflood lamp with DP12 diffusion screen, is positioned 7 1/2' from subject at a 45° downward angle.

3. Main Light, Fill Light, plus Hair Light – The addition of a hair light, an A50, 250 watt photoflood lamp, positioned 3' behind and 3' above the subject at a 45° downward angle, yields an accent on the hair, giving shape and body. (Refer to photos on “Hair Light Placement” for correct hair light applications. Barndoors are recommended on hair light to prevent light spill on face.)

4. Main Light, Fill Light, Hair Light, plus Back Light – The addition of a back light is used to create a halo or rim effect on the subject and to separate the subject from the background. An A50 with a 250 watt photoflood is positioned directly behind the subject to achieve this effect.

5. Main Light, Fill Light, Back Light plus Background Light – To evenly illuminate the background, an A80 with 250 watt photoflood lamp was positioned directly behind subject.

COMBINATION BARDOORS/FILTER HOLDER

Add color, diffusion, light balancing and light control to any of your reflector lights with this one accessory and the use of our Filter Packs! The BD/Filter Holder mounts on the rim of your reflector and rotates 360° for perfect positioning. Available for 5", 8", 10" and 12" diameter reflectors.
**90° or Split Lighting**

This technique utilizes a main light positioned 90° to the side of the subject at eye level to illuminate only half of the face. (Barndoors are recommended on the main light for this technique to prevent camera lens flare.)

1. Main Light only - Subject positioned 4' from background. An A120 with 500 watt photoflood lamp with DP12 diffusion screen and barndoors is placed at eye level and 90° to the side of the subject.

2. Main Light plus Fill Light - An A120, 500 watt photoflood with DP12 diffusion screen, used as a fill light is placed 7 1/2' from the subject, near the camera, at a 45° downward angle.

3. Main Light, Fill Light, plus Hair Light - Hair light is an A50 with a 250 watt photoflood lamp placed 3' behind and 3' above the subject at a 45° downward angle.

4. Main Light, Fill Light, Hair Light, plus Background Light - An A80 with 250 watt photoflood lamp is positioned directly behind the subject to evenly illuminate the background.

**DIFFUSION SCREENS**
Made of tough heat-resistant Lexan® plastic, these diffusion screens clip to the reflector rim and provide a soft, even effect. The quickest & easiest way to diffuse the output of your photoflood lights - without compromising color temperature! Available for 5", 8", 10" and 12" reflectors.

**PORT-A-BOOM COMPLETE BOOM STAND ON WHEELS**
401287
Includes MB-110, R88 8' light stand, caster set and carrying case.

**LIGHT STANDS**
Smith-Victor's lightweight yet heavy-duty light stands are built to professional standards.
When it comes to quality and value, Smith-Victor "stands above the rest" with a variety of both steel and aluminum stands to fit various needs and budgets.
Umbrella or Bounce Lighting

1. With subject positioned 4' from background, an A80 with 250 watt photoflood lamp is bounced off a 40" white umbrella. Stand was positioned 3' from subject with umbrella at eye level. (Umbrella position is flexible; two umbrellas are often used and are placed equidistant at 45° opposite angles to the subject.)

Note that background light has no influence on the subject and is used only to light the background.

Hair Light Placement

1. Incorrect Hair Light – Hair Light is placed too close to the subject causing undesirable light spill on face.

2. Correct Hair Light – The hair light properly positioned creates no light spill on face.

Choose softly flattering white or highly reflective silver umbrellas for bounce lighting. Heat resistant for use with quartz lights as well as strobe or photoflood. Black-backed models prevent spill-through of light onto your background.

Smith-Victor offers a complete line of photo and video tripods and tripod accessories including tabletop tripods, full-size professional grade tripods, tripod dollies and more.