OPUS™

Lighting Products

Basic Lighting for Beginners

www.OpusProPhoto.com

$4.95

I . Turning pictures into masterpieces. It's all in the Lighting.

We take light for granted; it's everywhere. When you are indoors, it comes from common household lamps, TV and computer screens, even the glow of lights on a stereo or DVD player. Light also streams in through windows from outside. And when we step outside, the sun becomes the main light source. At night, we see by the light of street lamps, shop windows, and car headlights.

Light not only allows us to see things, it also gives shape, dimension and color to our world. But as we lack control of many of these light sources, it can cause problems when making great pictures. When it comes time to take a picture, we frequently find the light is "wrong." There is not enough of it, or light is coming from the wrong direction, or its color is not quite correct, or it is up too high or down too low -- and so on.

That's when we need to reach for a light source -- or two, or three or more -- to help us control the light when taking a photograph.

Most cameras being used today have a built-in electronic flash. This light source is good, although perhaps at times a little weak; get any more than 10 feet (3 meters) from your subject and the built-in flash's light power just isn't enough to deliver proper exposure and color to the image. Another drawback to a built-in flash is that the flash's light will only travel in one direction: the same direction in which the camera is pointed.

This is where OPUS Pro and OPUS Lighting Systems can help. You may well have seen news photographers with more powerful electronic flash units attached to their camera tops, often on a Stroboframe® flash bracket. Lifting the light above the lens provides a little more angled light direction. And you probably have seen movies and TV shows where fashion photographers capture beautiful models in a studio setup, with big lights, white backdrops, and some unusual looking light accessories. These lights and accessories are designed to give you control of the light and therefore, create a superior photograph.

II. How is Lighting used?

OPUS Pro and OPUS Lighting Systems give you control of light, and thus, let you control the look and "feel" of the image. OPUS Pro and OPUS Lighting Systems also improve your image's color fidelity.

OPUS Pro and OPUS lights are offered in a variety of power outputs, called watt seconds or ws:

* 40ws
* 100ws
* 150ws
* 250ws
* 300ws
* 500ws

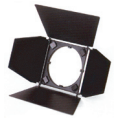
OPUS Pro and OPUS lights are of monobloc (monolight) design in that the power and flash are self-contained in one unit. Because the power and flash are not separated, this makes for a small and more easily transportable system. Sold as complete kits, OPUS Pro and OPUS Lighting Systems are available in various combinations of lights and accessories to suit every budget and need.

Please visit your favorite camera retailer or www.opusprophoto.com to learn more about OPUS Pro and OPUS Lighting Systems.

III. Tools of the Trade: Components of a Lighting System


Reflector Bowl


Snoot


Barndoors


Softbox


Umbrella


Honeycomb and Gels

Reflector Bowl:

Your OPUS light comes with a Reflector Bowl that attaches to the front of the light. This bowl helps to focus the light in the direction the monobloc is pointed. If you do not use the bowl, the light will not be focused. It will scatter and be less effective in delivering full light output directed to the subject.

Snoot:

A Snoot focuses the light even more, with its tapered barrel creating a tighter beam of light.

Barn Doors:

Barn Doors are designed to provide more precise control of direct light, allowing you to feather the edges of the light by placing one or more of the doors into the light.

Soft Box:

A Soft Box is like a tent over the head of the light. It permits the flash light to go through a diffused front surface. This will produce a very soft wraparound light with minimum shadows.

Umbrella:

Umbrellas used in lighting have nothing to do with keeping water off the equipment. Placed in front of the flash, umbrellas are designed to modify the direction and intensity of the light. There are three kinds of umbrellas:

Reflective Umbrellas:
Umbrellas with a dark exterior surface are designed to reflect light back towards the flash; you set up the flash and umbrella so the flash is pointed away from the subject, so the reflected light from the reflective surface of the umbrella illuminates your subject.

Diffuser Umbrellas:
An umbrella, with a semi-transparent surface. Diffuser Umbrellas are designed so that the flash light goes through the umbrella; you set up the flash so that the back of the umbrella is pointed at the subject, so the diffused light illuminates your subject through the diffused surface of the umbrella.

Convertible Umbrellas:
Convertible umbrellas are a combination of reflective and diffuser umbrellas. They provide a uniform diffused light and/or a reflected light. The white translucent umbrella can be used as a diffuser and delivers the softer light, while the black cover converts the umbrella into a reflective unit.

Reflectors (Five in One)

Reflectors are really just pieces of round or elliptical reflective fabric. Most reflectors are made with varying reflective shades of black and white, while some photographers prefer translucent white, silver or gold surface fabrics. Reflectors are designed to reflect the light towards the subject, so the reflected light from the surface of the reflector illuminates your subject. Depending on the color, the fabric reflects a cooling, neutral or warming tone to subject.

Honeycomb:

A Honeycomb -- which gets its name from its distinctive grid pattern -- is also a light modifier. It delivers directional and even light without diffusion. In many instances, OPUS Honeycombs are packaged with color gel filters.

IV. Tools of the Trade : What every Photographer needs to Know.

Watt/Second.

Watt seconds (ws) is a term to define the amount of electrical power used to make the unit flash (the metric equivalent of a watt second is a joule). Basically, the higher the number of watt seconds, the more light that can be emitted by the flash. The output of the power can be varied using the control on each OPUS Pro and OPUS monobloc's back plate. Reducing the output of power reduces the amount of light emitted, thus, giving you greater control over the amount of light hitting your subject. Reducing power output also decreases recycling time of the flash.

Flash Meters.

Flash meters will determine the exact amount of light reaching your subject, and therefore the correct f/stop and shutter speed to be chosen on your camera. We strongly recommend the use of a Gossen Flash meter (www.Gossen.de) with your OPUS Pro Lighting System.

Environment.

The environment in which the flash is used will affect the actual amount of light reaching the picture subject. Both a large room (distant walls and ceilings) or a room with dark walls and/or ceilings are less likely to reflect light on your subject. Likewise, the use of umbrellas, diffusers, softboxes, grids, all help to enhance, reduce and control the quantity of light reaching your subject, giving you the artistic control required. Also remember to factor in ambient light (room lights or daylight coming in a window); while the flash may overpower it, ambient light will have an effect on the finished image. Most of these effects can be reduced or enhanced using various Tiffen filters (www.tiffen.com) designed for controlling color temperature.

Color Temperature.

The distribution of different light colors in continuous spectrum light sources is measured by its color temperature in Kelvin. The Kelvin scale of temperature measures from the lowest possible temperature (absolute zero) with the same interval size as the normal Celsius (Centigrade) scale. The color is recorded by these changes in light, while our eyes largely adjust automatically to them. The recording media (electronic or film) needs to be adjusted to the same color temperature as the light source by the use of camera lens filters or color gel filters at the light source (blue to increase the color temperature of the light, amber to decrease it.) When using a light flash system please note the modeling lamp does not have the same color temperature (measured in degrees Kelvin) as the flash. The flash is designed to deliver light at approximately 5600K, equal to sunlight.The modeling lamp has a color temperature output, approx. 3200K, like that of a household (tungsten) lamp, giving off a yellow-red light.

Illumination.

The OPUS Pro and OPUS modeling lamp is not designed to provide picture illumination. The modelling lamp is used for positioning the flash head, showing you where the flash's light will fall and where shadows are created from the subject.

It is important to note that the white balance system on a digital camera automatically sets the camera to deliver proper light color to the image when only one light color is used; if daylight and tungsten light sources are both present, the color in the captured image can be mixed and look unnatural.

V. Tips of the Trade : What every Photographer needs to Practice.

There are a number of excellent books on lighting that provide detailed instruction on how to use professional lighting systems. Here are some tips when using your OPUS Pro or OPUS Lighting System:

TIP #1. Reflective Light vs. Diffused Light.

A flash unit produces straight line light which make hard shadows on the subject (See Figure. 2.1) Reflective or bounced light produces a softer, less harsh light quality. With bounced light, the flash unit is pointed away from your subject. Reflective light becomes the indirect light source, bouncing off a reflective surface back towards your subject (See Figure 2.2)

The OPUS 46-inch Convertible Umbrella is one such reflector, softening the light and creating softer shadows (See Figure. 2.2). The white translucent option of the umbrella surface is ideal for portraits.

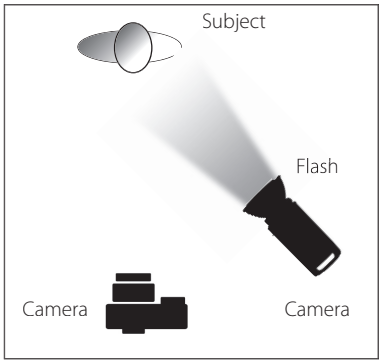


Figure 2.1
One point light setup

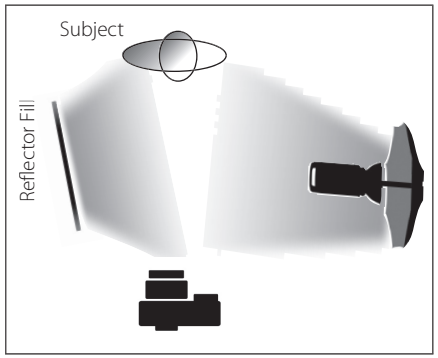
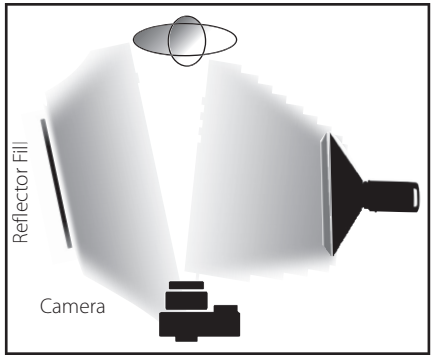


Figure 2.2
One light bouncing into umbrella to soften the light, with fill from reflector

High contrast photographs show sharp differences in the light and dark areas; use direct and/or bounced light reflected from a bright silver surface. Diffused light can be obtained by directing light through a translucent material, such as an OPUS diffusion shoot-through (translucent) umbrella, an OPUS softbox, or an OPUS diffusion reflector panel. (See Figure 2.3)

Figure 2.3
One light with softbox and reflector for fill



TIP #2. The Lights.

Light #1 (Primary).
The Primary light in a lighting setup is the main light or key light (usually the brightest light) and will be the one casting the most prominent shadows. It is positioned to enhance and reveal the contours and shapes of a subject's face. It also is used to light the most dominant features (or the anchor) of your subject's face

Light #2 (Fill).
The Fill light fills in the shadows created by the main light. A fill light can be a second flash, or just a reflector that reflects light from the main light into the shadows. It is usually less bright than the main light, placed on the opposite side of the camera, usually positioned close to the camera's axis. Lights selected for fill-in shadows are usually softer (non-directional), broad and diffused in their quality and coverage. They should never cast shadows onto the subject's face.

Light #3 (Background).
The Background light should provide sufficient illumination to separate the subject from the background and provide for flattering and harmonious tonal and color effects. Background lighting is most often brighter in the more central area surrounding the subject's head, and usually falls off gradually in brightness level towards the edges and corners of the composition

Light #4 (Rim / Hair).
In portraiture, a fourth light may be used -- a rim light, also known as a hair light -- to help separate the subject from the background such as creating specular highlights in your subject's hair. Lights of a crisp quality, small size are carefully placed above and to the rear of the subject to accomplish this task. They should not be overdone and should not overwhelm the effects of the dominant main light, nor should they cast shadows onto the subject's face.

TIP #3. Standard Lighting Techniques.

Broad Lighting.
When positioning the primary light in portraiture, Broad Lighting is the term for lighting the side of the face turned toward the camera. This lighting is used to broaden or widen a person's face and can also be used to make a very narrow face appear wider.

Short Lighting.
(Also known as Loop or Narrow lighting) Short lighting is by far the most used and flattering light pattern. It is positioned to illuminate the narrow side of the face - the one turned away from the camera's point of view. It has a slimming effect upon broad or wide faces and it places emphasis on the tall vertical lines of a person's face.

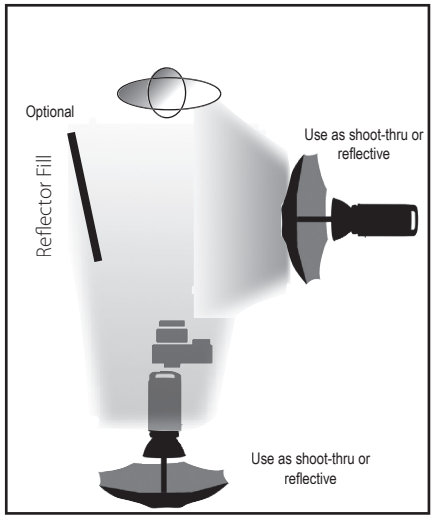
Butterfly Lighting.
Butterfly Lighting has the main light directly in front of the subject's face, with the light at a height to create a shadow directly under the nose and in line with it.

Rembrandt Lighting.
Rembrandt Lighting combines Short lighting and Butterfly lighting to produce a triangle of light on the cheek closest to the camera.

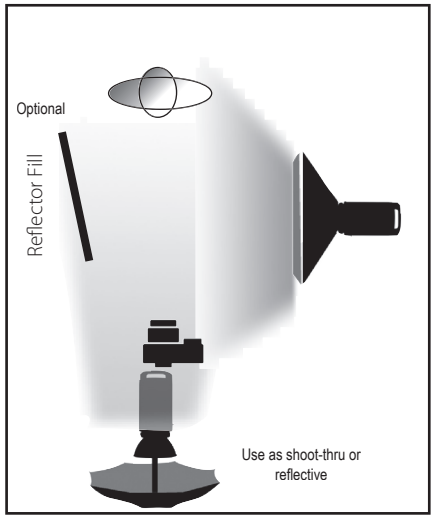
TIP #4. Lighting Ratios.

The lighting ratio of your setup is the difference in contrast between that portion of your subject illuminated by the main light, and that portion in shadow -- the difference between the main light and the fill light. A one f/stop difference is a 2:1 ratio; your main light is twice as bright as the fill light. A two f/stop difference is a 4:1 ratio.

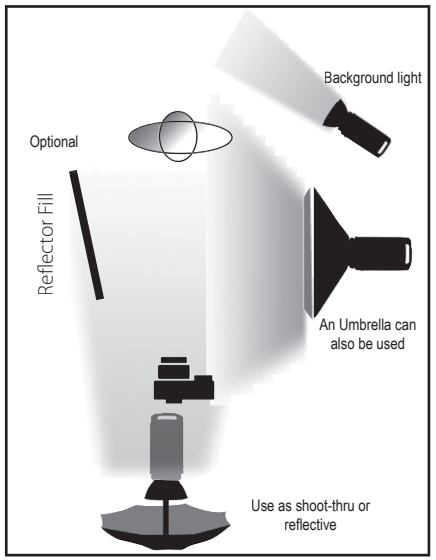
2 Light Setup
2 Umbrellas
The shoot-thru set-up will give a softer light.
The reflective set-up will provide more light.



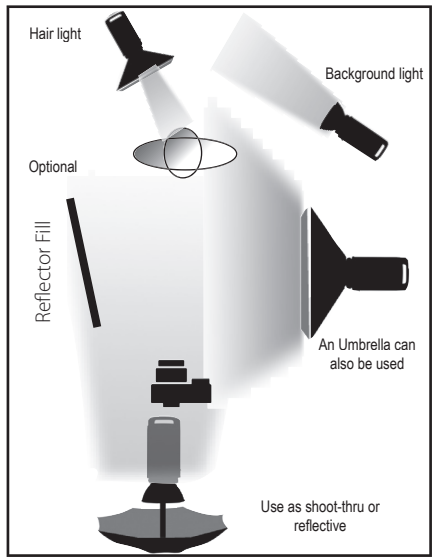
2 Light Setup
1 Umbrella / 1 Softbox
The softbox will create a softer light.
The larger the softbox, the softer the light



3 Light Setup
1 Umbrella / 1 Softbox / 1 Background light
The background light will create depth to the image.



4 Light Setup
1 Umbrella / 2 Softboxes / 1 Background light
The hair light will add the final touch to a perfect image.



VI. ACCESSORIES. More Necessities.

A number of accessories are available for your OPUS Pro and OPUS Lighting Systems:

Opus Barndoors

The hinged flaps move independently, allowing you control how wide or narrow an area the light covers.
Item # OPL-S03 for Opus Pro SE and H Series monolights.
Item # OPL-MA103 for Opus M Series monolights.

Opus Convertible Umbrella

The white translucent umbrella can be used as a diffuser and delivers a softer light. The black cover is for a stronger, reflective light. Measures 46".
Item # OPL-SM46 Fits all Opus lighting products.

Opus Softboxes

Delivers a uniform diffused light that's perfect for portraits, product shots and wrap-around lighting.
Item # OPL-SB1620 16"x20" for Opus Pro SE-Series monolights
Item # OPL-SB2436 24"x36" for Opus Pro SE-Series monolights
Item # OPL-SB3648 36"x48" for Opus Pro SE-Series monolights
Item # OPL-SB1620 16"x20" for Opus Pro SE-Series monolights
Item # OPL-LA04 16"x20" for Opus Pro H-Series monolights
Item # OPL-MA104 15"x15" for Opus M-100SR monolight

Opus 5-in-1 Reflectors

Combines 5 different lighting surfaces in one. White, gold, silver, black and translucent.
Item # OPL-R32 Compact size.
Item # OPL-R42 Our most popular size.
Item # OPL-R3660 Favoured by Wedding Photographers.

Opus 4 Channel Wireless Flash Trigger

Trigger your flash units from the camera without any cables. Eliminates the need for a sync cord and protects the camera's electronics.
Item # OPL-WTS Battery operated. Includes Receiver and Transmitter.
Item # OPL-WTSR Battery operated. Includes Transmitter.

Opus Reflector / Mini-boom

3 section reflector/light holder. Extends to hold a 42" wide reflector at any angle. Will support M-Series monolights. Compatible with all Opus reflectors.
Item # OPL-1103

Opus Light Stands

3 different sized light stands are available. Compatible with all Opus lights
Item # OPL-806 Heavy duty 8.5ft stand.
Item # OPL-KT66205 4 section 7ft stand.
Item # OPL-403 Background low stand.