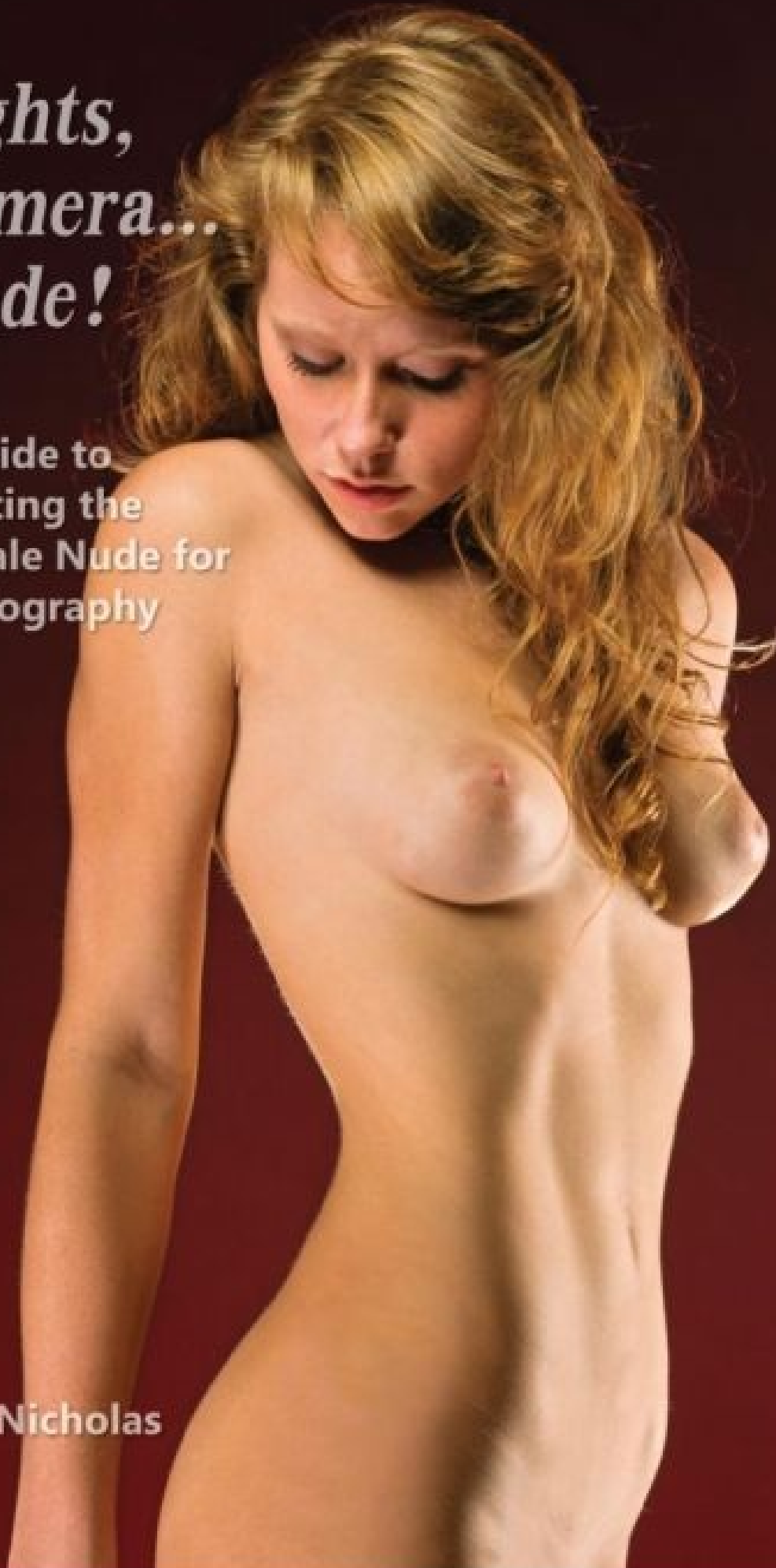
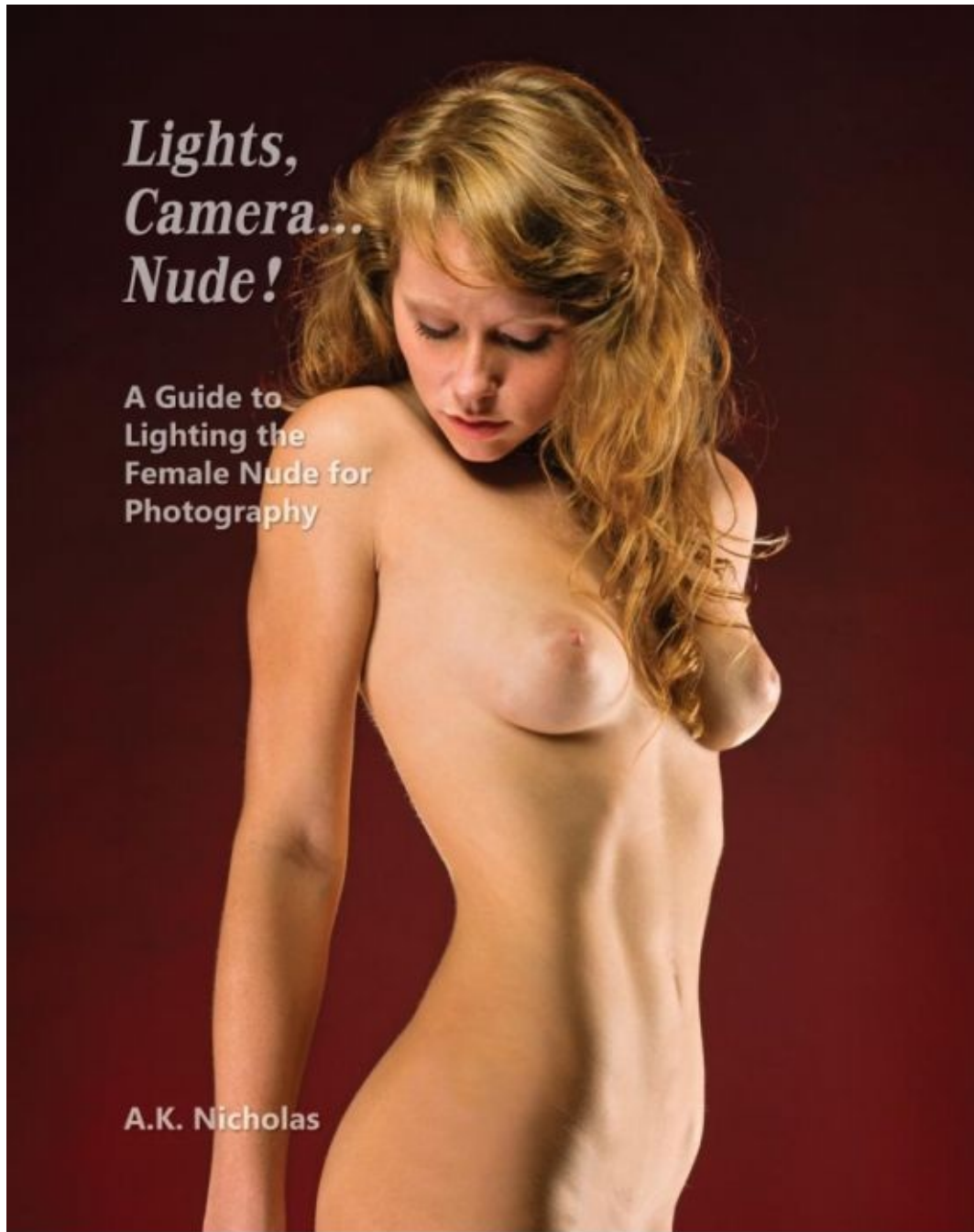


*Lights,
Camera...
Nude!*

**A Guide to
Lighting the
Female Nude for
Photography**

A.K. Nicholas





Lights, Camera... Nude!

A Guide to Lighting the Female Nude for Digital Photography

Formatted for Kindle

www.nudephotoguides.com

Front cover model: Hope Splawn
Back cover model: Narzahni Crumbie

Made in the USA. Charleston, SC

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Author/Photographer

A.K. Nicholas

Editors

Tia Sukin, Ph.D.

George Nicola, Ph.D.

Copy Editor

Michelle Lovi

Development Editors

David Roark

Shelley Doyle

Models

Jessica Anglin
Toni Callahan
Jacqueline Connell
Narzahni Crumbie
Anna Faulling
Ashley Gastrich
Sarah Hyder
Terra Jean
Lauren Keil
Aurora Lenk
Lauren McCants
Kaitlyn Piotrowski
Sarah Sink
Hope Splawn
Michelle Waters
Ariel Williamson
Lexi Wilson
Elizabeth Winters

Preface

An older artist, a relative of mine whom I greatly admire, once admonished me not to reveal too much of my techniques to others. She worried that I may lose my distinction as a photographer if others mimicked my techniques.

Contrary to her advice, I think a photographer's work is distinguished by hard work and creativity, and these traits cannot be merely copied. Although creativity and imagination may not be learned, I believe they can be developed through practice.

The techniques in this guide are not the traditional “textbook” way of learning nude lighting – there are already plenty of books to teach you to light textbook nudes. These are my techniques for lighting nudes; some of my methods follow traditional rules and some do not, and I honestly don’t keep track of which do or don’t.

I do hope you will learn from my techniques, and through hard work and practice evolve these techniques into something that is uniquely yours.

Overview of the Book

Lighting the nude model is distinct from lighting in other types of people photography.

This book is to help those who have tried some nude lighting, but are struggling to create interesting images. The serious photographer who is new to nudes will also benefit. This guide is about reaching that next level and making nude models look their best and most interesting.

This guide is about lighting the nude, so I'm not going to make you sift through a lot of lighting techniques for non-nude modeling. There is a lot you can learn about general lighting that is not covered in this guide.

This guide deals with lighting the whole figure in most cases, or at least three-quarters of the model's body. Don't look for information about lighting close ups of the face. Knowledge of portrait lighting is helpful, but not essential to begin shooting nudes.

You also won't find more than a brief explanation of general lighting concepts. I'm assuming that you already know some general photography; this isn't intended to be your first photography book, or encyclopedic. As much of the book as possible is devoted to lighting the nude. A list of suggested topics for further study, such as inverse square law, can be found at the end of the book.

With regard to models

This guide demonstrates lighting for photographing a beautiful model to bring out her best and most fascinating features. There are plenty of books that tell you how to hide your subject's flaws; this is not one of those books. You won't find any tips for making regular people look slimmer, taller, or more beautiful.

What you will find are illustrated examples and step-by-step instructions for creating photographs of beautiful nude women.

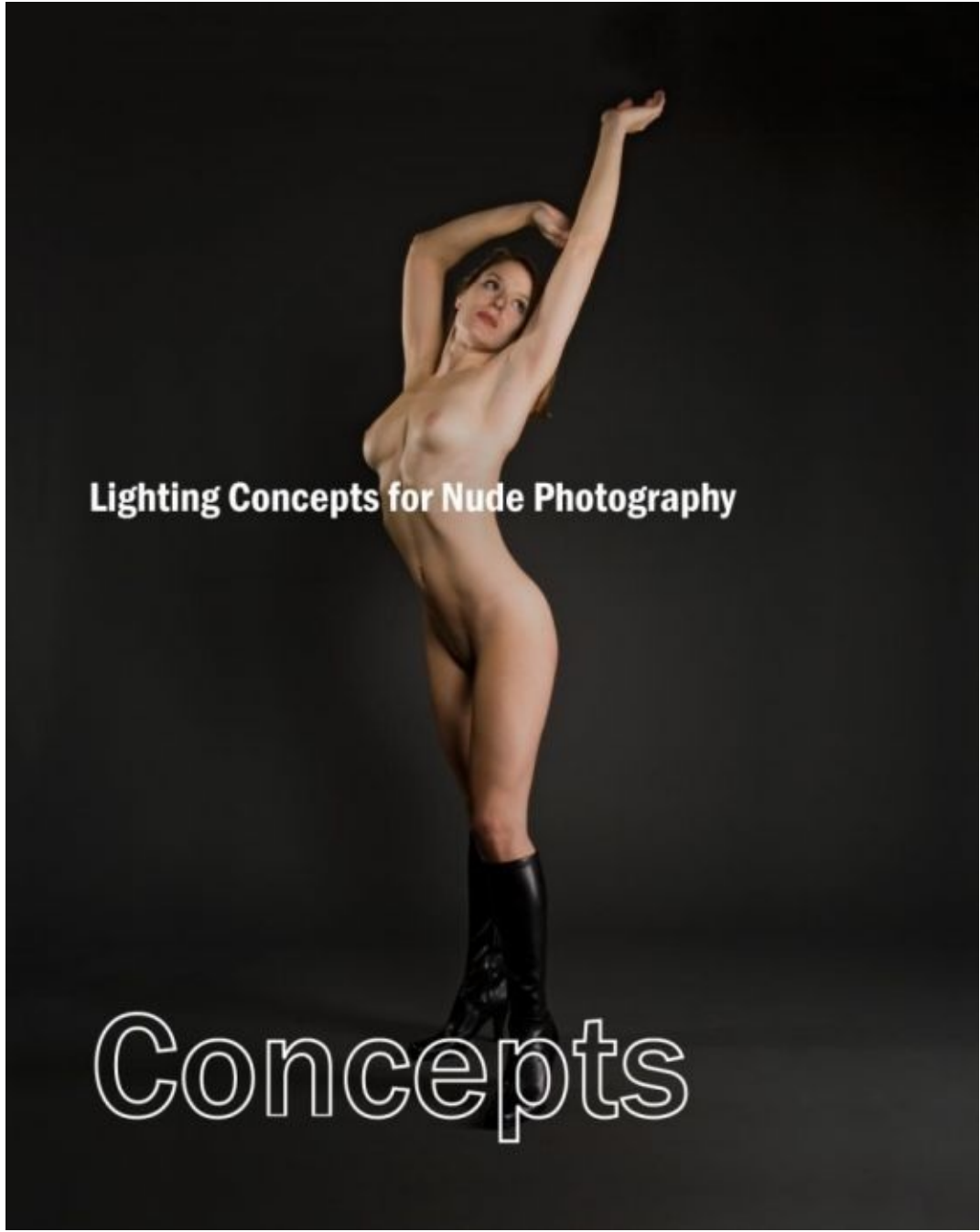
With regard to retouching

In this guide I have retouched minor flaws on the models (stray hairs for example). I have also corrected some minor defects in the backgrounds or defects from lens characteristics (chromatic aberration for example). However, because this is a collection of images to illustrate lighting, I've avoided any retouching that pertains to lighting effects (such as shine on a nose or forehead). Although such lighting defects can easily be removed with post processing, I let them remain in order to preserve as much information as possible about the lighting. Just as no model is perfect, no light arrangement is perfect and you will want to retouch most of your images—though post processing is a topic for a whole other book.

How to use the diagrams

Each lighting setup has one or more example photos and a diagram of how to place the studio equipment. Because the characteristic of each studio is different, and your equipment will vary, the diagrams are a starting point from which you will want to make minor adjustments.

Lights are numbered, and other set elements are identified by letters. Next to some lights is a height measurement signified by an up/down arrow (‡) indicating the number of feet above the level of the model's lowest body part (usually the floor) to the middle of the light. Also you will find a distance measurement signified by a left/right arrow (↔) indicating the distance from the front of the light to the closest part of the model.



Model: Sarah H.

Photo 1: Concepts title image

Lighting Concepts for Nude Photography

**“Light makes photography.
Embrace light. Admire it.
Love it. But above all, know
light. Know it for all you are
worth, and you will know
the key to photography.”**

— George Eastman

The Importance of Lighting

Before you jump in and start taking a bunch of nude photographs, take some time to set up your studio lighting; to stack the odds in your favor. Lighting is my top consideration in nude photography once I've found the right model.

Studio lighting allows the ultimate control over illumination, and with most nude photography taking place in the studio, the majority of the examples are indoor lighting.

Location lighting is the most enjoyable for me, combining creative challenges of a non-studio setting with the control of being indoors.

If you intend to use wardrobe and props with your nude — you may also want to develop fashion and still life lighting skills.

In this section I will explain some of the concepts that are used in the lighting diagrams that appear throughout the book. This is not an exhaustive explanation of all lighting concepts, and topics for further study appear at the end of the book.

Contrast Ratio

Contrast ratio, in the context of nude photography, establishes many aspects of the image including mood, compositional elements, and how much detail of the model is revealed. In this book I express this ratio with two numbers in this format: main:fill.

In two-light portrait photography a ratio of 3:2 is traditional; but in nude photos a higher ratio like 2:1 (main light twice as bright as the fill light) or even 4:1 often yields more dramatic images. It's a matter of preference and style. Lighting that obscures the model in shadow is often viewed as more artistic, while lower contrast images can risk looking pedestrian. Don't worry too much about the math, the following images illustrate the various ratios between main and fill lights.



Photo 2: Contrast ratio 3:2

Model: Hope S.



Photo 3: Contrast ratio 2:1



Photo 4: Contrast ratio 3:1

You usually reduce the output of a light by lowering its power. You could move the light farther away, or add a diffuser, but these alter light quality (hard/soft) as well.

Set Up Your Studio to Affect Light



Photo 5: Color reflection

Model: Michelle W.

The size and colors of your studio affects your lighting. The walls, floor, ceiling, every object in your studio, reflects light. They reflect light towards your model —sometimes in ways you don't want.

In the images at the left you can see the green reflected onto the model. Avoid rolling any more colored background paper in front of the model than is needed; it will just reflect additional unwanted light, affecting skin tone.



Photo 6: Close-up, color reflection

In a small studio, white walls act like built-in reflectors kicking light onto your model. The smaller the studio, the closer the walls are to the model, the more light bounce you'll have. With a standard-height ceiling, it works in the same way, reflecting light back at the model from above.

Sometimes reflected light helps by filling shadows, but too much can spoil the image. You could paint some or all of the walls (and possibly the ceiling) black. Then you can add reflectors where you want them.

Instead of painting walls black, you could hang up black cloth, foam board, wide rolls of paper, or anything black that will absorb the light. A device designed to absorb light, sometimes called a "black reflector," *prevents* reflection. This is an effective way of experimenting before committing to painting walls. I can't tell you exactly how to paint your studio, because each room is different and it also depends on your photographic style and equipment. I will give you a diagram as an example.

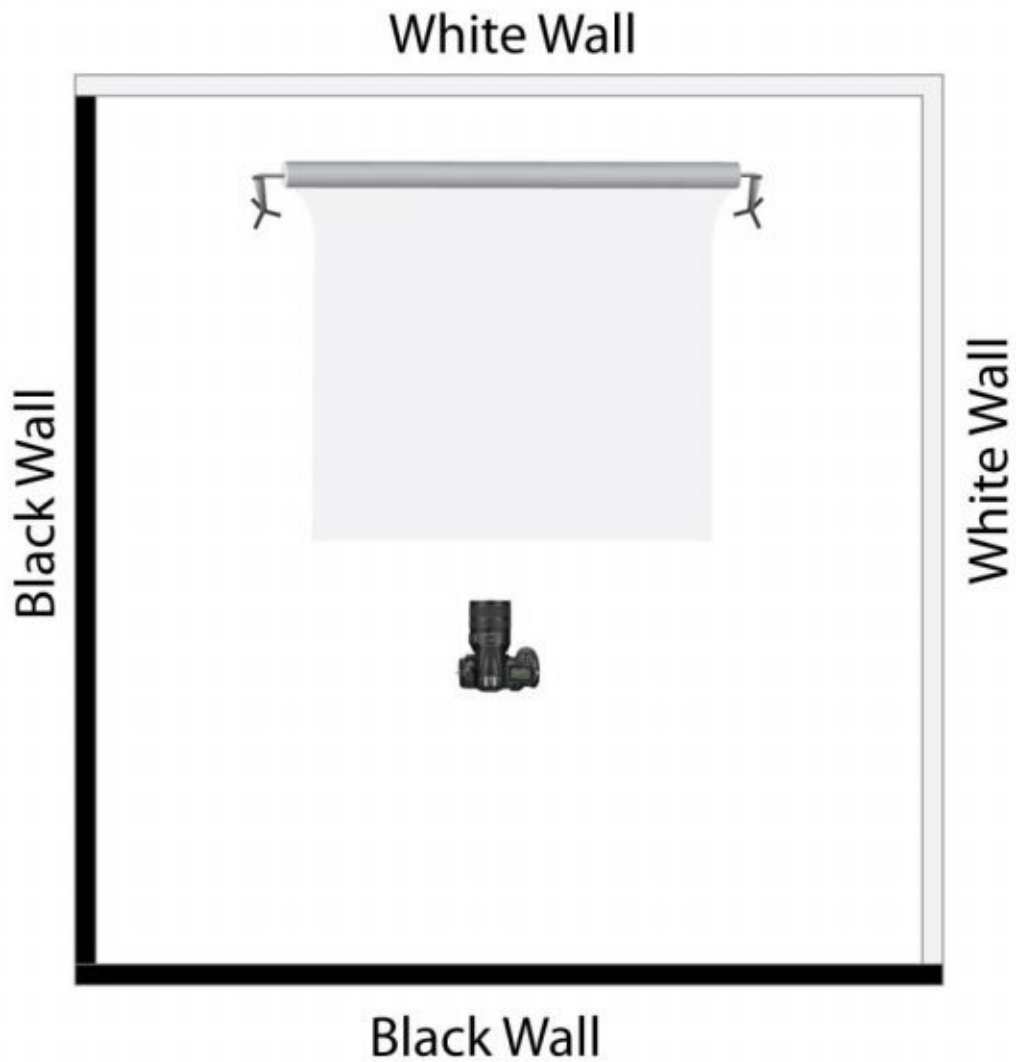


Figure 1:

Example Studio wall colors

If you have only one small, low-powered light and you paint the walls black you might not have enough light to get acceptable photographs.

Avoid colored walls that will reflect their hue onto the model — even an off-white such as cream colored. Green walls make for green skin; yellow walls, jaundiced skin; and so on. Stick to neutrals (white, gray, black).



Photo 7:

Studio surroundings affect light

Model: Ariel W.

You may have noticed that high-end cameras, tripods, and light stands are painted black. This is so that they don't reflect as much light — especially onto shiny props (like wine glasses) that you're trying to photograph. Many photographers also wear dark, neutral colored clothing for the same purpose.

Metering Your Lights

It's easy to see what your results will be using a digital camera's LCD screen. But don't skip the process of carefully measuring and analyzing every detail of your lighting. In nude photography, careful exposure is important to make sure the skin tones and other elements of the composition have the effect you want. You can carefully inspect test images as you set up the lights. However, a spot meter works well to get the background lights balanced. Measure the light at the model's position, near the four corners of your frame, and any other points of interest.



Figure 2:

Examples of metering locations

Model: Toni C.

In many images, such as shown in the figure below of Toni, I will meter the sides, center, foreground, background, and a couple of spots in the model zone. Having a regimen that includes metering can also help you avoid careless errors, such as forgetting to turn on one of your strobe heads. I strongly encourage a hand-held light meter, even if you always shoot with available light, and a remote trigger for studio strobes.

How Many Lights Do You Need?



Photo 7: Two lights

Model: Aurora L.

The short answer is, “at least one.” The long answer is really a question: “What

do you want your light to do?” There are all kinds of lights, each with a job. If you need a job done, you need to choose the correct light. For example, if you want light on the background add a background light, maybe two or four or more, depending on the effect you want, how large your background is, and so on. More on background light later. The point is that there is no magic number of lights. The shots in this guide used from one to six lights.



Photo 8: Five lights

These two images show the same model, same background, and just minutes apart. The only change is the lighting, but the results are dramatically different. The top shot used two lights, one on the model, and one on the background – the background light used a red gel to intensify the background color. The second shot used five lights. The effect of each is subtle, but the resulting tonalities are more complex.

An important lighting principle is to never add a light without a specific reason. Use as few lights as you need to get the desired effect. Every light you add increases the complexity of controlling the light. Resist the temptation to set up every light in the kit, and turn them all up to the max.

Large Close Light

A common mantras is to use as large a diffuser as possible, and to place it as close to the model as possible. The desired result is for the light “wrap around the model.” Examine the following three images using different sized diffusers.

With a small umbrella, the light coverage is narrow and the contrast is a bit harsh. Notice the quick light falloff across the torso and the length of the body.

With a medium umbrella, the light is a bit softer and coverage is wider.

With a large umbrella, the transition from light to shadow is more gradual. This is evident in the floor shadows and on the body. This smooth transition between lit and unlit areas is what some refer to as wrapping the subject in light.



Photo 9: Umbrella, 20"

Model: Narzahni C.



Photo 10: Umbrella, 48"



Photo 11: Umbrella, 84"

Accent and Separation Lights

These are neither fill lights, nor background lights. Accent and separation lights are placed behind the model, and aimed towards her. Some photographers adore them, some hate them, some overuse them, and some ignore them. Learn about them, experiment, and use them where you decide they work best.



Photo 12: Accent Light

Model: Hope S.

Backlight (can be a hair light) Backlights are typically above the subject, either directly behind or slightly to one side. Light colored hair can look great with backlighting.

Kicker (a.k.a. accent light) Kickers are placed at a low angle, and to one side. For reference, this is an effect that's classic in presidential portraits, but also has its role in nude photography. The kicker needs to be at least slightly behind (95-degrees, but not more than 135-degrees). Place the kicker on the same side as the

main light for a more traditional look.



Photo 13: Separation Light

Model: Ariel W.

Rim light (a.k.a. Rimmer) Placed behind the model, so that she blocks the light, a rim light points directly at the lens. Be careful that the model doesn't move too much, or the light will hit the lens directly, washing out the shot.

Don't point these lights at the lens without the use of a flag, or you'll get lens flare or other defects. Barn doors can help control accent light; a diffuser with a deckled edge can blend the light's edge. These lights can stand some overexposure and still look alright, but don't let them burn out too much of your subject.

Direction (Angle) of Light

Light can come from many angles: above, below, side, front, and behind the model.



Light #1 is almost straight in front of the model, leaving few shadows and little

to the imagination.

Model: Hope S.



Light #2 is positioned slightly to the side and shadows begin to appear along the side of the body.



Light #3 is at ninety degrees to the model; light and shadow divide the model down the center into almost equal parts. This can make a striking composition with a statuesque model.



Light #4 is slightly behind the model, only the sides of the model are lit. Cheek catches some light, as does the edge of the raised arm. Thinner parts of the hair near the edges are backlit. The face is mostly a mystery and the form is accentuated.



Light #5 is almost directly behind the model, and only her edges are lit. Only the part of the face turned towards the back light and the tip of the nose catch any light.

Quality of Light (Hard vs. Soft)



Photo 15:

Bare tube

Hard, very wide light

Some light is harsh and some is soft; the softness or harshness of light is called its quality.

With a bare tube light (no modifier) the entire studio is lit with light bouncing in almost every direction. The light on the model is harsh, produces deeper dark shadows and has a quick falloff at the edge of the

light. The un-flagged light also causes lens flare in the image.



Photo 16:

Seven inch reflector

Model: Elizabeth W.

Hard, narrow light

A 10-inch on-strobe reflector added to the light head narrows the angle of the output, creating a more dramatic effect. However, the light is harsher. This image, too, is just for comparison. I don't like the harshness of a light with reflector pointed directly at the model. If I do use a strobe with a reflector, it will be to bounce the light off a wall or ceiling when working on location.



Photo 17:

Softbox

Soft, controlled light

A softbox gives a more diffused effect and also keeps much of the light off the background.

As in portraiture, many photographers prefer diffused light for photographing nudes. Using softboxes, umbrellas, or other diffusers can give a softer edge to shadows and reduce hot spots. In general, larger diffusers placed relatively close to the model are better.



Photo 18: Shoot-through umbrella

Soft, wide light

Similar to a softbox at a fraction of the price, but with less control of the light, more stray light spills on the background and the floor.

Compare this shot to the final shot in the series (beauty dish with grid) and you will notice that the background and lower legs are not at all lit in the final shot.

Little light reaches the legs, compared with the next shot (bounce umbrella).



Photo 19:

Bounce umbrella

Soft, very wide light

With the umbrella positioned to bounce the light, a broader pattern of diffused light is produced.

Although the lit area of the figure is bathed in a generous and pleasingly soft light, the uncontrolled light bouncing around the room creates quite a bit of fill light as well as background light. If this isn't your intention, choose something other than an umbrella.

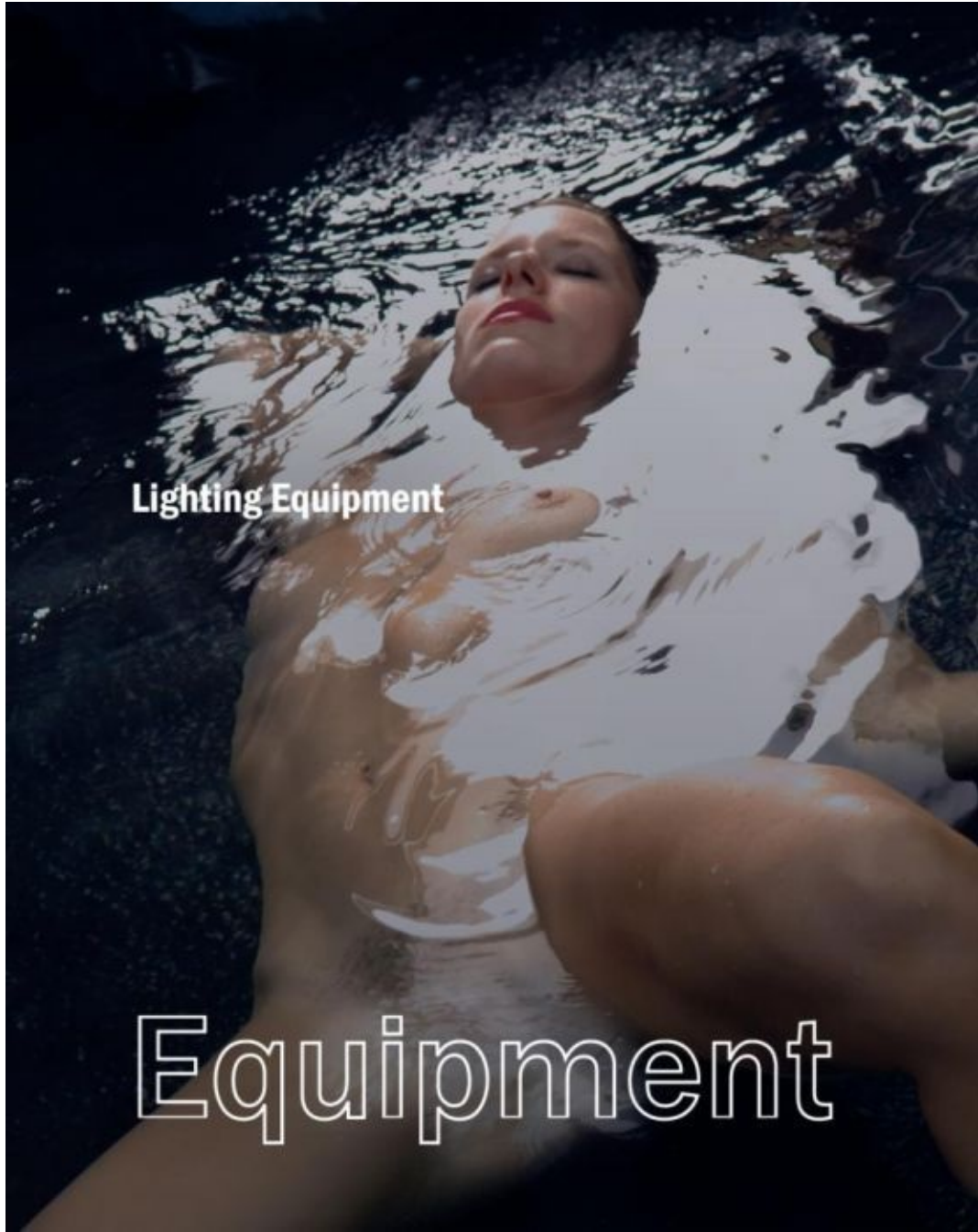


Photo 20: Beauty dish and grid

Soft, controlled light

A beauty dish affixed with a grid produces a diffused light focused at a narrow angle. Quality of light is a subject to which you can devote much study. The factors that affect the quality of light include type and size of diffusion material, reflector shape and size, and distance to subject.

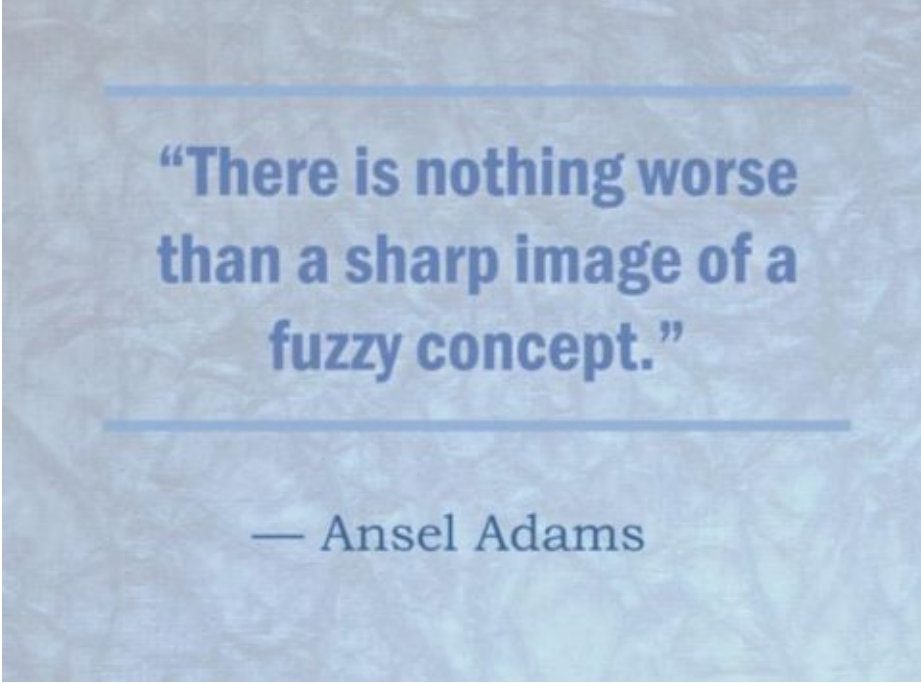
Softer light can be pleasing, and direct light can be dramatic. Mixing the two can yield a wide range of results; some attractive, and some unattractive.



Lighting Equipment

Equipment

Lighting Equipment



**“There is nothing worse
than a sharp image of a
fuzzy concept.”**

— Ansel Adams

About Equipment

As the quote at left suggests, I treat equipment merely as a means to an end. The concept is paramount to the image, but photographic equipment is a necessary evil, and knowing your equipment is part of paying your dues. For this reason I specify equipment throughout the book.

If you don't have the equipment listed feel free to experiment until you find something that suits what you aspire to do. And you can make some of your own modifiers if you wish. Once you've captured an outstanding image, nobody will know if you paid a lot or a little for your equipment.

A Word About Exposure

Digital image sensors capture much more information at the brighter end of the scale.

Your camera's sensor has a limited range. Under expose too much and you lose shadow detail, over expose and you blow out the highlights—this much is common knowledge.

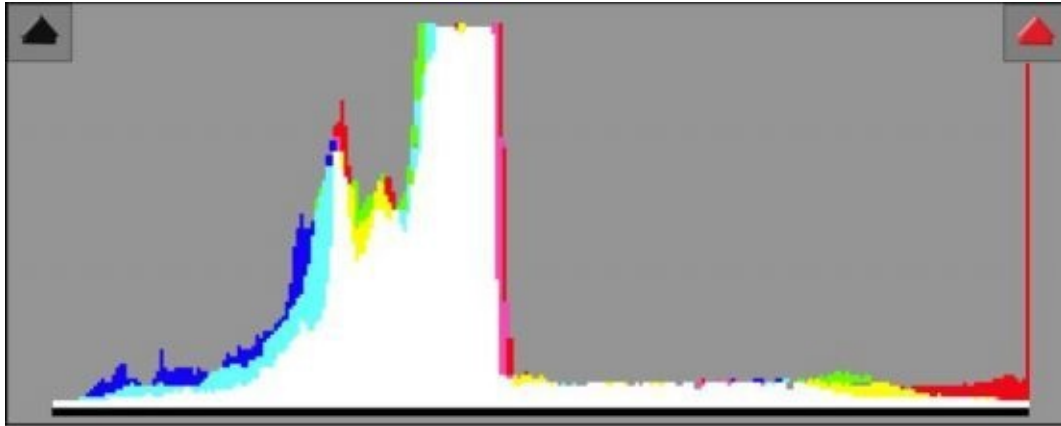


Figure 4: Histogram

What is not commonly known is that highlight and shadow information are not equal.

You can use a slight overexposure, *then correct later with software*. This yields better overall detail. Don't over expose with high contrast lighting. This is significant when shooting nudes because of large highlight areas on the body.

Be careful not to underexpose your image then lighten it with software, this will result in pixel noise and banding in the shadows. Keep an eye on the histogram to check exposure. To recap, the two main enemies of your image sensor's limited range are: too much contrast in the light and under exposure.

Light Kits

Before you begin photographing nudes you need to equip your studio with light and the various implements that help you aim and modify the light. Since many of the readers of this guide may not have amassed a huge inventory of equipment, I've refrained from including shots that require a large investment to reproduce.



Photo 22: Lights in the studio

Model: Narzahni C.

In this guide, I've defined four lighting kits. Each kit is numbered, kit #1 is the simplest, and kit #4 is the most complete. Each subsequent kit builds on the previous one, so kit #2 has everything that kit #1 has, and more. Treat the kits as potential shopping lists. Each kit corresponds to several lighting setups in this book. You don't necessarily have to buy the exact kit to achieve the effects in the corresponding lighting setups. Look at the lights in each diagram to choose what you need.

Here are some examples of the studio equipment I will discuss later in this guide.



Shoot-through umbrella



Reflective umbrella



Strobe with snoot



Beauty dish with grid



Monolight, 7"



Pack & head



Bare head, 7" diameter reflector



Strobe head with sock diffuser



Small softbox



Striplight softbox



Boom arm



Collapsible reflector

Power (watt-second) recommendations and sizes are approximate. Not all manufacturers make products to the exact same specifications. The exact configuration is not required to achieve the results seen here.

Bear in mind that differing lighting systems do not always have compatible connections between modifiers (such as softboxes) and light heads. Adapters can be clunky. If you're on a budget and are inclined to reduce clutter (who isn't?) try to get lights that share the same system for attaching modifiers.

Light Kit 1

2 Lights, Quick and portable

This starter kit has enough power to light the shot, is easy to transport, and is not too expensive. The monolight is a good first purchase, it's portable and you can use it later in your larger studio setup. If you're only going to have one light stand, spring for an air-cushioned one. Purchase a sturdy one, but not so large that you can't travel with it. You can often buy some of these items as a package to save money. If you're on a super low budget you can skimp a bit on the light wattage (I did decades ago, in college) but if these items seem too pricey, also consider sunlight!

The reflector provides fill light, and can save you money if you don't want to get a second light right away. Have an assistant hold it, or clamp it to a light stand or other surface.

Suggested Configuration:

- Lights
- One monolight, minimum 600 watt seconds
- Second monolight, minimum 300 watt seconds
- Modifiers:
- Small softbox 24"x24" or larger
- Two 48" shoot-through umbrellas
- One 48" collapsible reflector white/gold
- Light stands: Two 8'



Photo 23: Light kit 1

Model: Narzahni C.

Light Kit 2

4 Lights, Practical setup

This set up is economical and represents the minimum for attempting most studio lighting. The sock style diffusers are much more economical than softboxes and quite sufficient for background lighting. You can come close to many of the lighting setups in this guide using this list of equipment, but to achieve everything in the guide you'll need to spend more.

A shoot-through umbrella can be used to reflect light or diffuse by shooting through it. The sock type diffusers quickly slip over the light heads with an elastic band and can help you economically diffuse the background lights.

The monolights allow you a portable two-light system for location shoots as well as a backup should your main pack fail.

Suggested Configuration:

- Monolight, minimum 300ws
- Monolight, minimum 600ws
- [One power pack \(minimum 600ws\)](#)
- [Two strobe heads](#)
- Modifiers:
 - Small softbox 24"x24" or larger
 - Two 48" shoot-through umbrellas
 - One 48" collapsible reflector white/gold
 - [Two 40-degree grids to fit strobe heads](#)
 - [Four sock diffusers](#)
- Light stands:
 - Two 8'
 - [Two heavy duty 10'](#)

Practical Tip: Move freely. Use a wireless trigger instead of a sync cord.



Photo 24: Light kit 2

Model: Narzahni C.

Light Kit 3

5 Lights: Versatile Power

This light kit contains the equipment you would need to shoot the vast majority of images in this guide.

Suggested Configuration:

- Monolight, minimum 300ws
- Monolight, minimum 600ws
- One power pack (minimum 600ws)
- [Three](#) strobe heads
- [Modifier: white beauty dish, minimum 22”](#), with grid
- [Modifier: strip softbox, 17”x54”](#) or taller
- [Modifiers: two snoots to fit strobe heads](#)
- Modifier: one 24”x24” softbox
- Modifiers: two 48” shoot-through umbrellas
- Modifiers: three 40° grids to fit strobe heads
- Modifiers: three sock diffusers to fit strobe heads
- Light stands: two 8’
- Light stands: two heavy duty 10’

DIY* Tip: You can make an inexpensive snoot out of thin aluminum roofing sheets sold in home improvement stores. Take care, aluminum sheets can cut you. Tape the edges with foil tape for safety.

*DIY (Do It Yourself) tips can save you money, but will require more effort.



Photo 25:

Light kit 3

Model: Narzahni C.

Light Kit 4

6 Lights, plenty of options

With this kit you can recreate any image in this guide. Higher watt-second outputs than the minimums listed will give you more options for experimentation.

For the large umbrella in this kit I prefer an 84" silver parabolic lighting modifier, with white diffusion fabric so it can be used like a softbox.

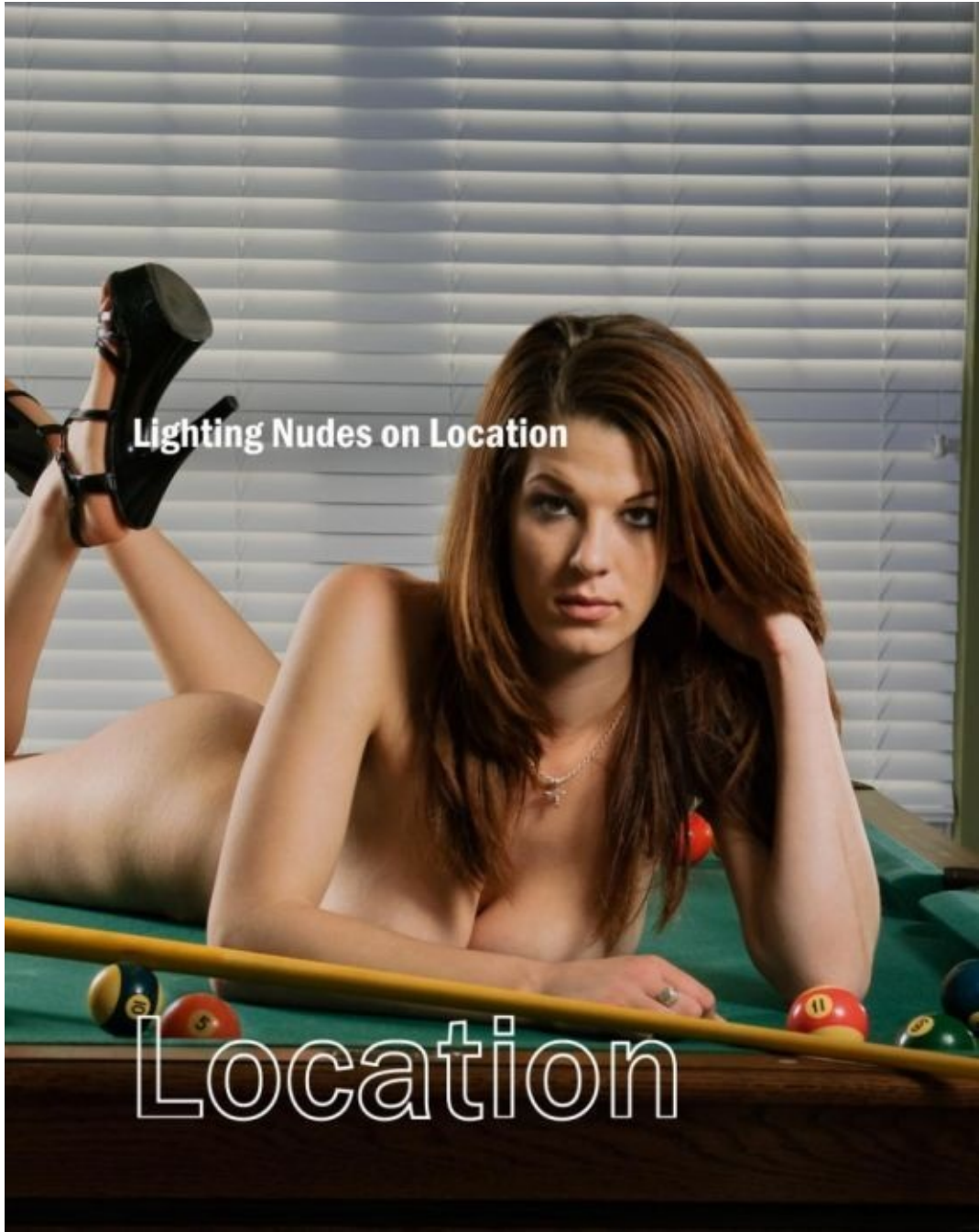
Suggested Configuration:

- Monolight, minimum 300ws
- Monolight, minimum 600ws
- One power pack 600+ws
- [Four](#) strobe heads
- Modifier: white beauty dish, minimum 22", with grid
- Modifier: strip softbox, 17"x54" or taller
- Modifiers: two snoots to fit strobe heads
- Modifier: 24"x24" softbox
- Modifiers: [four](#) 48" shoot-through umbrellas
- Modifiers: [four](#) 40° grids to fit strobe heads
- Modifiers: [four](#) sock diffusers to fit strobe heads
- [Modifier: umbrella/brolly box, min. 60"](#)
- [Modifier: gel kit and barn-doors holder](#)
- Light stands: [three](#) 8'
- Light stands: two heavy duty 10'
- [Light stand: 14' boom](#)



Model: Narzahni C.

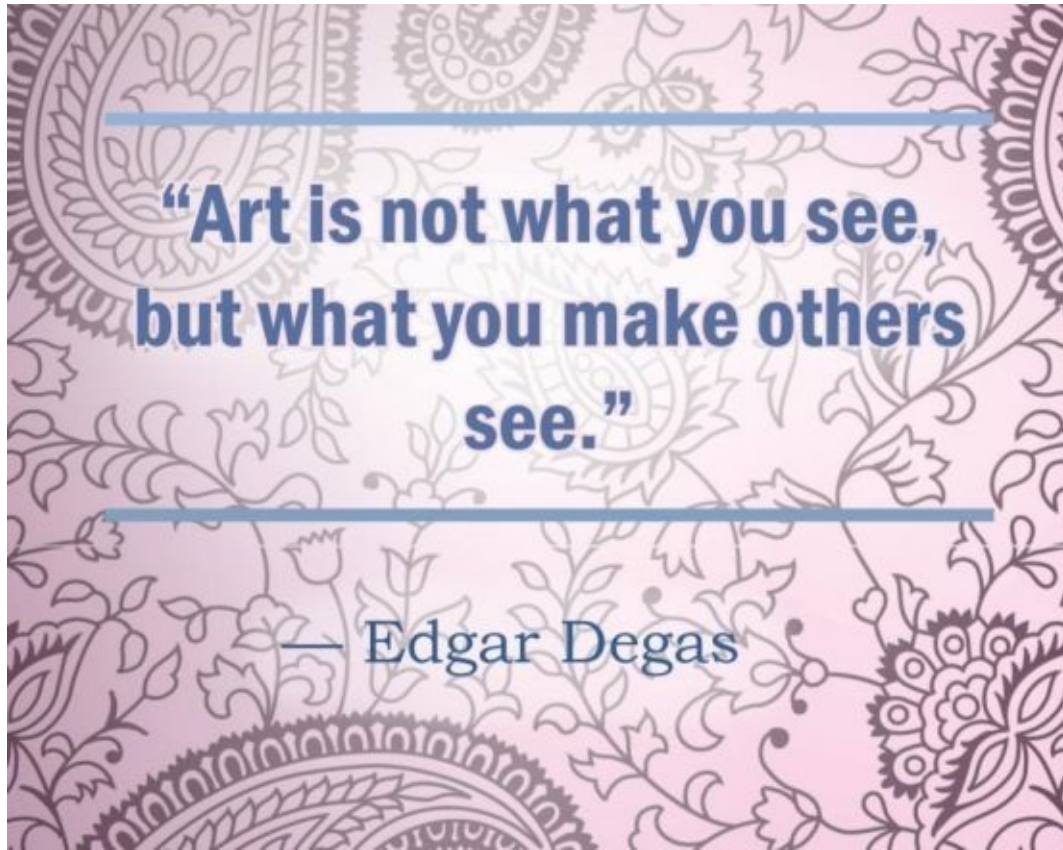
Photo 26: Light kit 4



Model: Anna F.

Lighting Nudes on Location

About Locations



Shooting on location provides interesting challenges. Among them is a level of physical energy—whether it’s trekking up and down ocean cliffs, chasing the elusive combination of background and natural light, or running up and down stairs of an indoor location to ferry your light heads to the next room.

Be prepared for a lower percentage of good shots on location compared to working in-studio, due to the challenges of lighting in unfamiliar surroundings and with limited equipment. However, the shots you do get can be amazing in ways that you could not have created in the studio.

Bathtub and Backlit Window



Photo 27: Bathtub and backlit window

Model: Anna F.

Lighting Setup# 1

Category: Location

Skill: Moderate

Light Kit:1
Heads:3
Model Zone: Medium

If you're lighting a location shoot, you'll be concerned with portability and time constraints. A beauty dish is more portable than an assembled softbox. A disassembled softbox is portable, but takes time to assemble. A monolight is more portable than a pack and head setup. Of course, using the sun, or window light, and a collapsible reflector or two are the most portable lighting system – but success depends upon having enough natural light at the destination to get the kind of results you want to create. These images were shot in a small room with a tub and window. A good deal of the warm color cast comes from light reflecting off the amber colored walls.

Photo 28: Bathtub setup lights a medium sized zone

Model: Anna F.



Model: Anna F.



Photo 29: Bathtub, backlit window

The conventional eight-foot ceiling presented both a limitation and a benefit.

Light #1: The ceiling limited the height of the main light, a 600 watt second

monolight with a 22-inch white beauty dish with a 40-degree grid.

Light #2: The low ceiling was useful as a reflector to bounce fill light from a bare flash head. The fill light was about three feet from the ceiling, aimed almost 90° straight up (tilted slightly away from the model to avoid direct spill). Without the bounced light, the edges of the image would be too dim due to the falloff from the gridded main light.

The desired effect is an image that has a subtly brighter center, but not the impression of a spotlight.

Light #3: Outside the window, a 300 watt second monolight provides the impression of light coming through the frosted window (there was no sunlight at the time of the shoot). The frosted window acts as a scrim, softening the backlight. The outdoor light creates some edge lighting (indicated by the arrow) to give the figure some more dimensionality. Notice that the top panes of glass, which are not frosted, appear dark.

Model Zone: The variety of overlapping light sources allows a moderate range of motion within the lit area, as demonstrated by the three shots here. With the beauty dish close to the camera it was easy to reach over and adjust the aim of the light when the model moved from kneeling to standing.

Due to the confined space, the bounce light (#2) and the photographer were both placed on a counter top to achieve these results.

Practical Tip: In a small space you might need to climb or put equipment on furniture.



Camera Settings	ISO 100	f9.0	@1/160	52mm lens
Lights				
Head 1	600ws	22" white beauty dish, 40° grid		
Head 2	150ws	Bare head, 7" reflector, bounced		
Head 3	300ws	Bare monolight, 7" reflector		

b. Background (frosted window)
 c. Camera
 m. Model
 v. vanity countertop

Lighting Diagram 1: Bathtub, backlit window

Stairway



Photo 29: Stairway

Model: Sarah H.

Lighting Setup# 2
Category: Location
Skill: Moderate

Light Kit:3
Heads:3
Model Zone: Medium

The image at the right was shot on location in confines of a custom designed, hand built, Sapele wood stairway.

The size of the model's lit posing zone is moderate. She can sit or stand and still be lit with only an adjustment of the beauty dish required. She cannot, however, move up or down the stairs much.

Once you've grown accustomed to the studio, with every light going exactly where it did last time, put in for a mental workout by venturing out on location. All the same kinds of problems you solved when you first set up your studio are back again, only in less ideal circumstances. The model is ready, and you still have to figure out why the light is not looking right. Too much bounce? Can't get the lights far enough or high enough because the room is too small? Overcoming the challenges of lighting on location is part of the fun.

Avoid on-camera flash

I advise against using on-camera flash. On-camera flash is great for sports and news photographers. The convenience is far outweighed by the drawbacks when shooting nudes. Red-eye, unflattering light, and an almost total lack of control to name a few. There may be rare exceptions, but why stack the odds against yourself? Even if you can't afford studio lighting, you can still have off-camera flash. For little cost and effort you can acquire a sync cord or radio remote for off-camera flash use. For outdoor photos, a reflector, even an inexpensive white cardboard reflector, is a superior alternative to on-camera fill flash

Light #1: A 22-inch white beauty dish, with a 40-degree grid is five feet in front of the model, and two feet above her head. It is angled downward at her face and upper torso. The grid contains the light to the model's upper body, allowing her legs to maintain some contrast with the edge lights.

Light #2: A strobe head with a 48-inch white bounce umbrella is ten feet to camera-right and three feet behind the model, and at the same height as her head. This light comes through the wooden stair rail slats to illuminate her upper torso. The effect of having this light behind the model can be seen in the edge lighting on the model's extended arm.

Light #3: A strobe head with a 48-inch white bounce umbrella is ten feet to camera-right of the model at the same height as her thighs.

What to Tell the Model: "Keep your face a bit away from the harsh side light."



Photo 31: Stairway lighting effect

Model: Sarah H.

Bounce from the side lights (#2 & #3) is contained by the wooden scrim on the right allowing the background to remain subdued, preventing washout of the white areas and allowing some contrast with the light areas of the model's body.

Model Zone: The model can only move up or down a step, and from left to right. To avoid harsh features,

tell your model to keep her face away from the harsh side light.



Camera Settings	ISO 100	f10.0	@1/160	33mm lens
Lights				
Head 1	600ws	22" white beauty dish, 40° grid		
Head 2	300ws	Strobe head, 48" white umbrella		
Head 3	300ws	Strobe head, 48" white umbrella		

c. Camera
 m. Model
 s. Stairway location

Lighting Diagram 2: Stairs

Pool Table



Photo 31: Pool Table

Model: Anna F.

Lighting Setup# 3

Category: Location

Skill: Moderate

Light Kit:2

Heads:4

Model Zone: Small

Two separation lights, each fitted with a sock diffuser and 40-degree grid, are behind and to our right of the model. One points back at her hair, and the other at her body. A strip softbox provides backlight from our left of the model. The face is illuminated by a single 22-inch beauty dish fitted with a 40-degree grid.

The room containing this pool table provided some challenges and some conveniences. A low-hanging pool table light was deliberately cropped out of the image, meaning the model had to remain low. The room's low ceiling provided a quantity of bounce, preventing total shadow darkness in all but the most recessed areas of the hair. With the camera placed outside the room, shooting through the doorway, the walls of the room provided flagging from the lights.

Light coming in from outside is enough to illuminate the window blinds, but not enough reaches the subject to affect the image.

Model zone: The model zone is small. The model must stay within a few feet of the center position, but can change between seated and crouched poses. Because the lights are so close the model cannot move much from side to side without drastically changing the contrast ratio.

With this lighting arrangement there is potential for the model's face to go into shadow if she turns it too far away from the main light.

What to Tell the Model

“Keep the beauty dish in your peripheral vision, so your face will remain lit.”



Photo 32: Shadowy face

Model: Sarah H.



Photo 33: Pool table lighting info

Model: Anna F.

Light #1: A light modified with a 22-inch white beauty dish and 40-degree grid is positioned in front and to the side of the model (45 degrees) slightly above her head and angled down to illuminate her front. It illuminates her face, as well as the front of her arms and her closer breast.

Light #2: A strip softbox behind the model provides edge lighting to her legs and right arm (camera left) as well as the area just behind her right shoulder.

Light #3: An edge light aimed at the lower portion of the crouched model helps visually separate her arm from the green felt.

Light #4: An edge light aimed at the upper portion of the crouched model improves details in her hair and makes it stand out a bit more from the background.



Camera Settings	ISO 100	f7.1	@1/160	82mm lens
Lights				
Head 1	300ws	22" beauty dish, 40° grid		
Head 2	300ws	17"x54" striplight softbox		
Head 3	150ws	Bare head, 7" reflector, 40° grid		
Head 4	150ws	Bare head, 7" reflector, 40° grid		

b. Blinds, daylight
 c. Camera, pointed through doorway
 m. Model
 w. Wall flags lights

Lighting Diagram 3: Pool table

Oversized Bathtub



Photo 35:

Oversized bathtub

Model: Anna F.

Lighting Setup# 3

Category: Location

Skill: Challenging

Light Kit:2

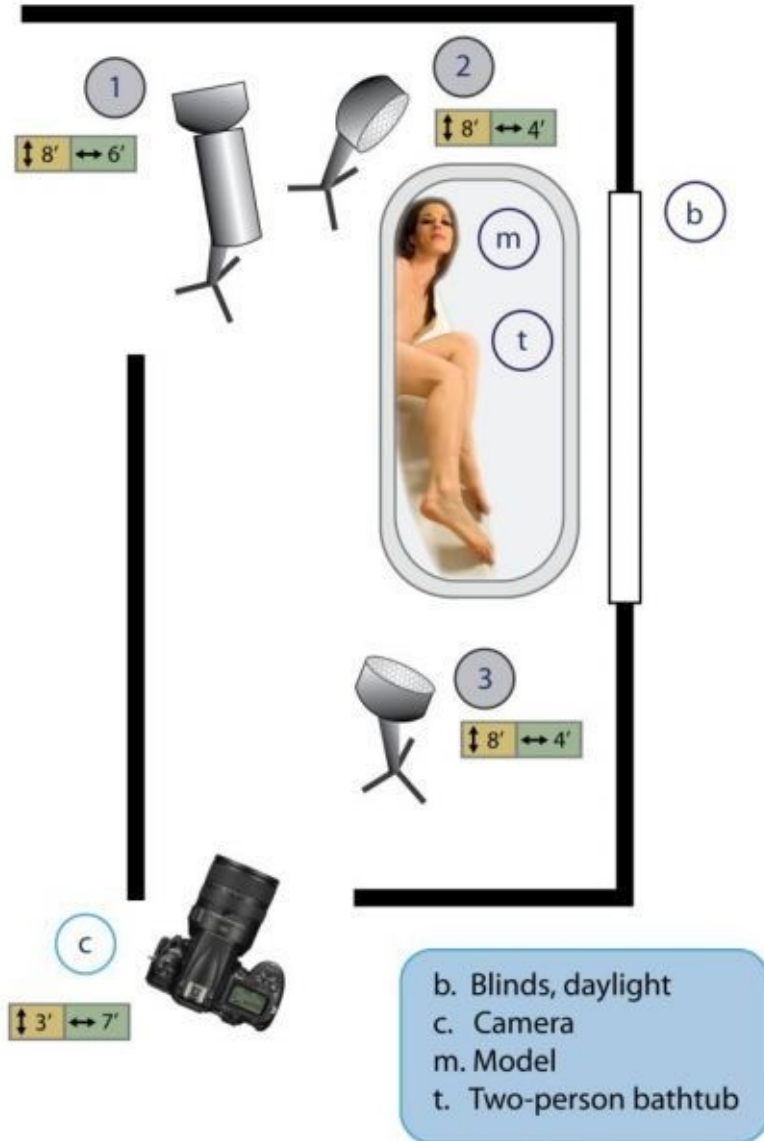
Heads:

Model Zone: Small

This oversized two-person German designer bathtub presents some allure and some challenges. The smooth glossy surface is a beautiful compositional element to light; however, it will likely reflect images of you or your equipment. The small room limits light placement. I didn't have room for separation lights or a large diffuser. I chose to light the model with two lights fitted with grids to make sure the model was brighter and has more contrast than surrounding elements. The model zone in this image is limited by the use of grid spots as well as the cramped nature of the room and props.

Light #1: A monolight, bounced off the ceiling, is placed high enough that it does not spill harsh light directly onto the model and low enough that it covers a generous area of the ceiling.

The bounced light illuminates virtually the whole scene, balancing the ambient light coming from the window.



Camera Settings		ISO 100	f9	@1/80	42mm lens
Lights					
Head 1	600ws	Bare monolight, 7", ceiling bounced			
Head 2	200ws	Bare head, 7" reflector, 40° grid			
Head 3	200ws	Bare head, 7" reflector, 40° grid			

Lighting Diagram 4: Oversized bathtub

Lights #2: A seven-inch strobe head, with a 40-degree grid, is placed high and as far away from the model's front as the room will allow. The light is directed at the model's head and chest. This location did not allow for back or edge lighting, so this high and narrow beam of light allows for some modest contrast.

Light #3: A seven-in strobe head, with a 40-degree grid is directed at the model's legs.

On Location with One Light

Lighting Setup# 5
Category: Location
Skill: Easy
Light Kit:1
Heads:1
Model Zone: Large

Model: Michelle W.



Photo 36: Lit with a single light

Model: Michelle W.

Good lighting doesn't require an elaborate studio full of expensive equipment. You can use just one light. Often a reflector (a wall will work) is required to get enough fill light for a satisfying photograph. Using only one light is inexpensive,

but there are other reasons you may want to try using a single light. A single light setup can produce quite dramatic high-contrast nudes or broadly lit bounce shots. Some professional photographers use single light techniques all the time.

This shot was lit with a single, 600 watt second, off-camera studio strobe (a monolight), bounced off the 12-foot ceiling of Michelle's one bedroom apartment.

Light #1: The flash had a ten-inch reflector and was aimed at the ceiling about six feet from the area directly above the model. The flash was aimed up at about 45 degrees. With the light several feet from the ceiling, this created a large, light source above and off-center from the model.

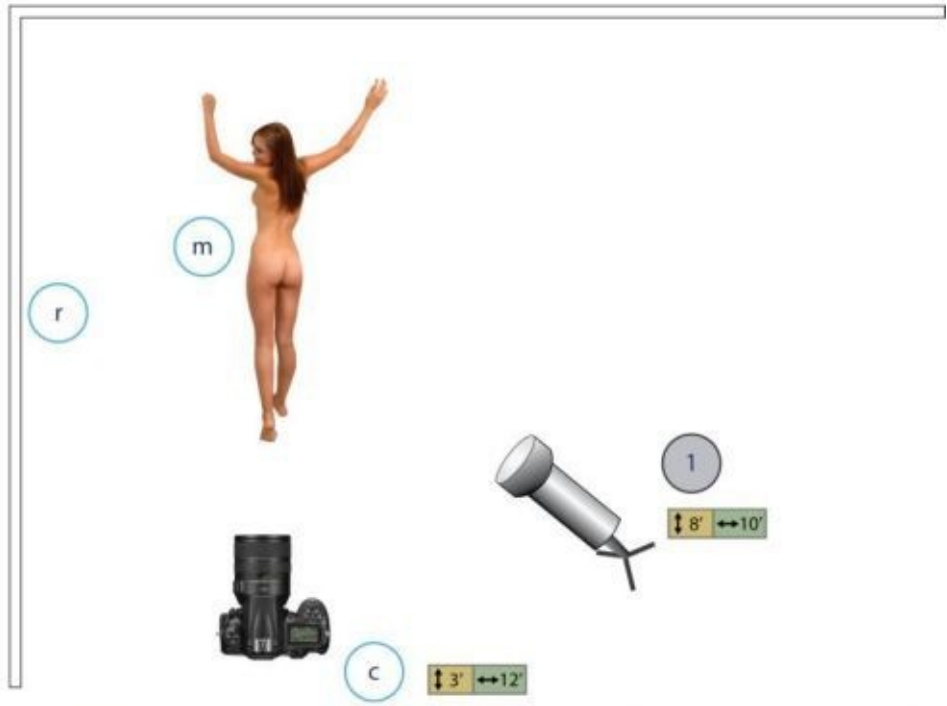
The white surfaces of the wall and refrigerator at the model's left serve as reflectors, adding fill light.

There is sufficient fill light and diffusion that there are no harsh shadows. However, there is a bright spot at the upper right corner, closest to the light source, and a bit of light falloff at the lower left.

Model zone: As with many bounced light setups, the model zone is large, allowing the model plenty of freedom of movement without needing to adjust the lights.

One **advantage** of this single-monolight approach and lighting setup is that the monolight, camera, and light stand all fit into a single carrying case. Changing the light is simple, and the studio light can be used in conjunction with available daylight.

Disadvantages of a single light setup can include difficulty controlling contrast and fill light. You may also have trouble achieving even illumination.



Camera Settings	ISO 100	f7.1	@1/125	35mm lens
Lights				
Head 1	600ws	Bare head, 7" reflector, aimed up 45°		

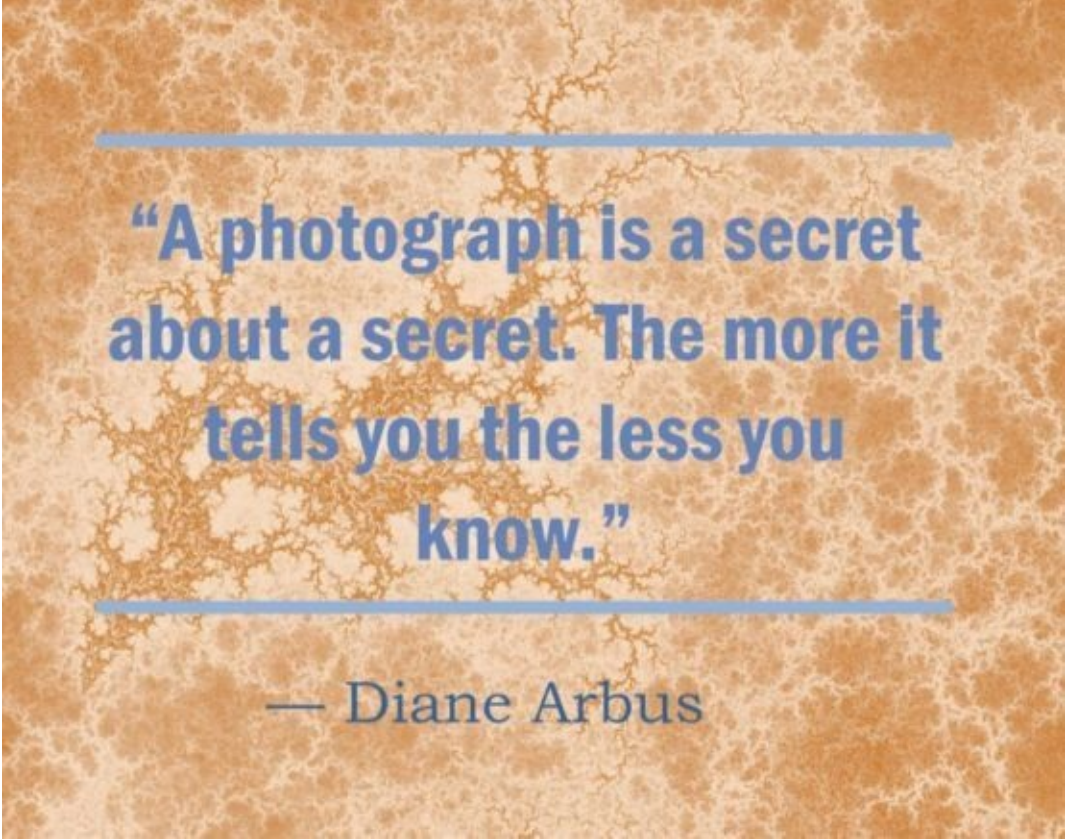
c. Camera
 m. Model
 r. Reflector (white wall)

Lighting Diagram 5: One light, location bounce



Model: Johnna S.

Studio Lighting Setups



**“A photograph is a secret
about a secret. The more it
tells you the less you
know.”**

— Diane Arbus

About Studio Lighting

Where you place your studio lights determine what is seen, and not seen. Nowhere is light more controlled than in the studio. It's no accident that many of the lighting setups in this guide are for the studio.

In the studio you have the ultimate control of the intensity, direction, and quality of each light. And to a large extent you can control reflections and color casts.

Restricting Light: Snoots & Gels



Photo 35: Restricting light: snoots and gels

Model: Lauren M.

Lighting Setup# 6

Category: Restricted light

Skill: Moderate

Light Kit:4
Heads:4
Model Zone: Small

Take away all the lights and the scene is black, add the first light and the model is revealed. Keep adding light and shadows are filled, the background appears, the face is highlighted, and the hair is lit. You can sculpt with light, determining what is seen and what is not by adding modifiers to restrict the light from spilling. The most restrictive is a snoot. In this setup, four snoots, each with a colored gel, are used to define the body through lighting.

The particular snoots in this shot are fairly wide as snoots go, slightly narrower than barn doors in their light output. Each snoot has a different colored gel.



Photo 36: Restricted light, snoots, gels

Model: Lauren M.

Lights #1 and #2: Two snooted strobes provide a warm light to the face and torso.

Light #3: A snooted strobe hits the lower torso and leg with reddish light.

Light #4: A snooted strobe provides a cool light, and helps neutralize the warmer lights where it overlaps and mixes with red from light #3.

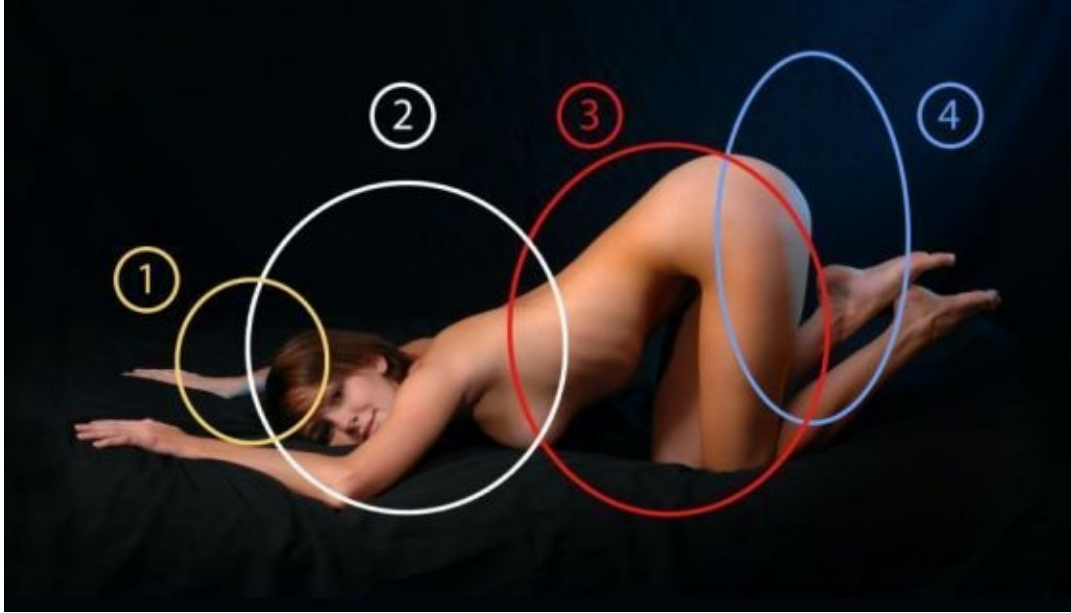


Photo 37: Restricted light info

Model: Lauren M.



Camera Settings	ISO 100	f8.0	@1/250	52mm lens
Lights				
Head 1	150ws	Amber gel, snoot		
Head 2	150ws	Warming gel, snoot		
Head 3	150ws	Red gel, snoot		
Head 4	150ws	Blue gel, snoot		

b. Background, black fabric
 c. Camera
 m. Model
 p. Platform, covered with black fabric

Lighting Diagram 6: Restricted light, snoots, gels

Sculpt with Light: Selective Lighting



Photo 38: Sculpt with light

Model: Narzahni C.

Lighting Setup# 7

Category: Sculpt with light

Skill: Moderate

Light Kit:4

Heads:2

Model Zone: Exact

Think as much about what you are *not* showing as what you *are* showing with light. Frontally angled lights allow you to see the pose. Often a more striking composition can be achieved with lights from above, and the side, and with less fill light. Again, when photographing the nude, use only the minimum number of lights you need.

The more frontal and/or diffused your light is, the more flat the model will appear, and the shadows will disappear. If a large diffused light is moved overhead, it begins to simulate the effect of natural daylight, showing your model as we are accustomed to seeing.

With side lighting and direct (undiffused) lighting, your model becomes more three-dimensional, and harder shadows begin to define the subtle curves of muscles and roundness of limbs. Side lighting also evokes a mood of late afternoon or early evening depending on the angle and quality of the light. Side lighting is normally more dramatic and is thus regularly used in lighting nudes.

Your background also helps you to sculpt with light. Darker backgrounds allow you to merge the unlit side of your model into the darkness without excessive fill light.

With a single gridded light, the figure emerges from shadow. The lights reveal the edges of the torso, while the feet recede into the darkness.

The model's face in this image is in shadow. The light on her front is controlled by a grid, and the light behind her only barely lights her profile.

Model Zone: The model's movement zone is exact due to the limited output angle of the grid on the strobe spotlighting her *derrière*. Her leg hides the monolight and light stand providing the backlight.

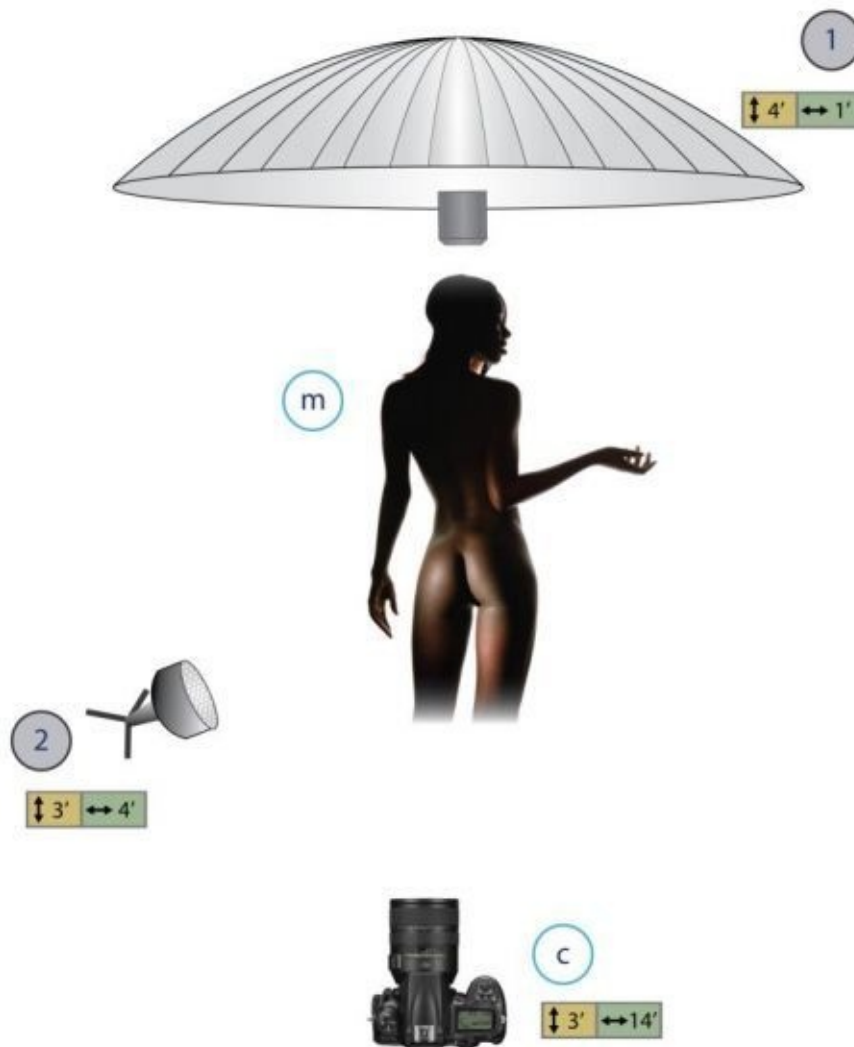


Photo 39: Sculpt with light

Model: Narzahni C.

Light #1: A monolight attached to an 84-inch silver parabolic lighting modifier, with a white diffuser (a.k.a. broly box, or umbrella softbox).

Light #2: A strobe head with a 7-inch reflector is covered with a sock diffuser, and a 40-degree grid. It is close to the model, producing a light circle on her body about two feet wide.



Camera Settings	ISO 100	f7.1	@1/200	75mm lens
Lights				
Head 1	200ws	84" Parabolic modifier, diffuser		
Head 2	150ws	Strobe head, sock diffuser, 40° grid		

c. Camera
m. Model

Lighting Diagram 7: Sculpt with light

Beauty Dish and Softbox



Model: Anna F.

Lighting Setup# 8
Category: Soft light
Skill: Moderate

Light Kit:3
Heads:3
Model Zone: Small



Photo 41: Beauty dish only

The photos here illustrate the different kinds of light output by various lighting modifiers.

Light #1: “wrong” location

In this shot the edge lighting is too harsh because the beauty dish is in the *wrong* location (at least for this setup), 90° to the right of the model, where the softbox should be. The model’s front is in darkness because the light coming from gridded beauty dish is too restricted to spill over to her face and body.



Photo 42: Striplight softbox only

Light #2:

Compare the previous shot to this one where the beauty dish is replaced with the softbox only, 90° to the right of the model. Notice the softer, fuller lighting due to this larger diffuser.

Without a grid, the light spills over more on the model and background.

Photo 43: Beauty dish and softbox (opposite)



Photo 44: Softbox and beauty dish

With the softbox (#2) and beauty dish (#1) combined, the beauty dish has been moved to a 45-degree angle to the model (see With the softbox (#2) and beauty dish (#1) combined, the beauty dish has been moved to a 45-degree angle to the model (see Lighting Diagram 8).).

The beauty dish is about 3 feet above the model, angled down at about 35-degrees. The softbox is as low as possible and flanked by two flags (black foam board clamped to light stands). Both lights are diffused, giving a soft effect, but the back leg is too dark.



Photo 45: Softbox, beauty dish, and snoot

Light#3: This light adds a snoot to the model's left and the back of the leg receives light, giving the figure definition. The shadows on the floor will give you clues as to the exact light angles.

With the snoot, a diffuser is attached to the light head at the back of the snoot.

The background remains somewhat dark due to the limits placed on the lights by the flags, grid, and snoot.

Model Zone: The model's zone for free movement is somewhat restricted by the light with the snoot. If the model moves too much, this light will need to be adjusted to keep it lighting her leg. The beauty dish may also need to be aimed to keep it on her face and prevent excessive overlap with the side lighting. The light pattern from the softbox will be slightly more forgiving due to the modifier's size and the angle of this light.



Camera Settings	ISO 100	f8.0	@1/160	34mm lens
Lights				
Head 1	600ws	22" white beauty dish, 40° grid		
Head 2	300ws	18"x54" strip light softbox		
Head 3	150ws	7" reflector, snoot, sock diffuser		

- b. Backdrop, 9' seamless paper (cocoa)
- c. Camera
- d. Black curtain prevents light bounce
- e. Flag, foam board, 24"x60"
- f. Flag, foam board, 24"x60"
- m. Model

Lighting Diagram 8: Beauty dish, softbox, snoot

Boom Spot



Photo 47: Boom spot

Model: Lexi W.

Lighting Setup# 9

Category: Studio

Skill: Moderate

Light Kit:4

Heads:2+

Model Zone: Medium



For these images, only two light sources are required.

Light #1: A boom arm holds the light above and behind the model, aimed at her hair and angled slightly toward the camera. A grid and barn doors on the overhead light prevents the light from spilling onto the background or hitting the camera lens.

Light #2: A large diffuser (a large sheet of translucent fabric) is placed to the left and slightly in front of the model. The light heads are aimed through the fabric. Diffusion material is available through photographic suppliers, or a sheet of fabric like this can be purchased at a fabric store. Fabric is easier to set up than a softbox, but the light is not as soft. You can optionally put additional light heads behind the fabric (in this case I actually used three lights totaling 450 watt seconds).

Reflector #3: A 48-inch collapsible reflector slightly fills in the shadows by reflecting light from the softbox. Because the reflector is not directly opposite the light it reflects only a limited amount of light into the shadow areas.

Photo 46: Overhead light on boom spot

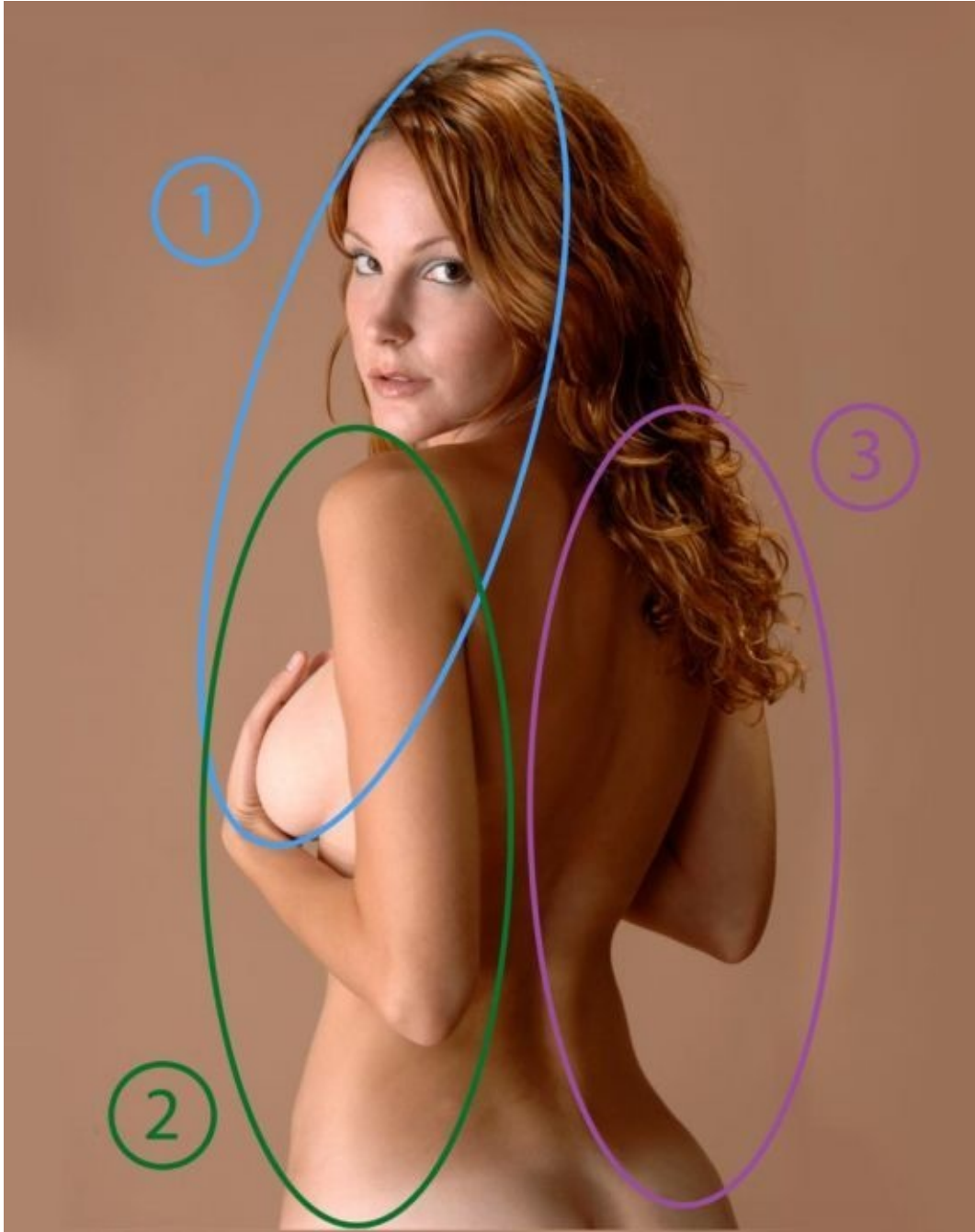
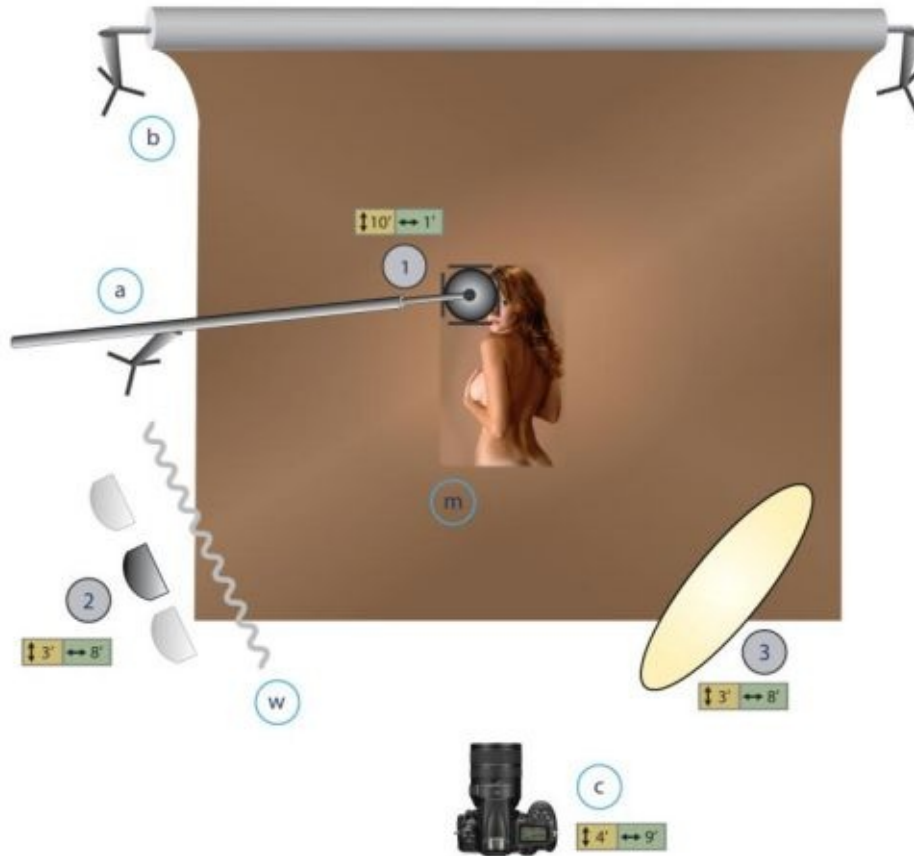


Photo 48: Large diffuser and boom spot

Model: Lexi W.



Camera Settings	ISO 100	f16	@1/250	70mm lens
Lights				
Head 1	150ws	Overhead, 40° grid, barn doors		
Head 2	450ws	Bare head(s), 7" reflector		
Ref. 3		Gold collapsible reflector, 48"		

- a. Boom arm, above & behind model
- b. Background, 9-foot seamless paper (cocoa)
- c. Camera
- m. Model
- w. White translucent cloth

Lighting Diagram 9: Diffuser, boom spot

DIY Tip: Rectangular panel reflectors and diffusers can be made by stretching fabric over PVC pipe frames. I have used 8-foot square, DIY frame clamped to a nearby surface, or with PVC T-joints as feet.

Low-Key Light



Lighting Setup# 10
Category: Low-key
Skill: Moderate
Light Kit:4
Heads:4
Model Zone: Medium

Relatively little light falls on the background because all the lights are restricted in their angle and are directed at the model. By adjusting the aim of the backlights the scene can be adapted to light some props; in this example an ironing board and iron.



Photo 49:

Low key with ironing board

Model: Lauren K.

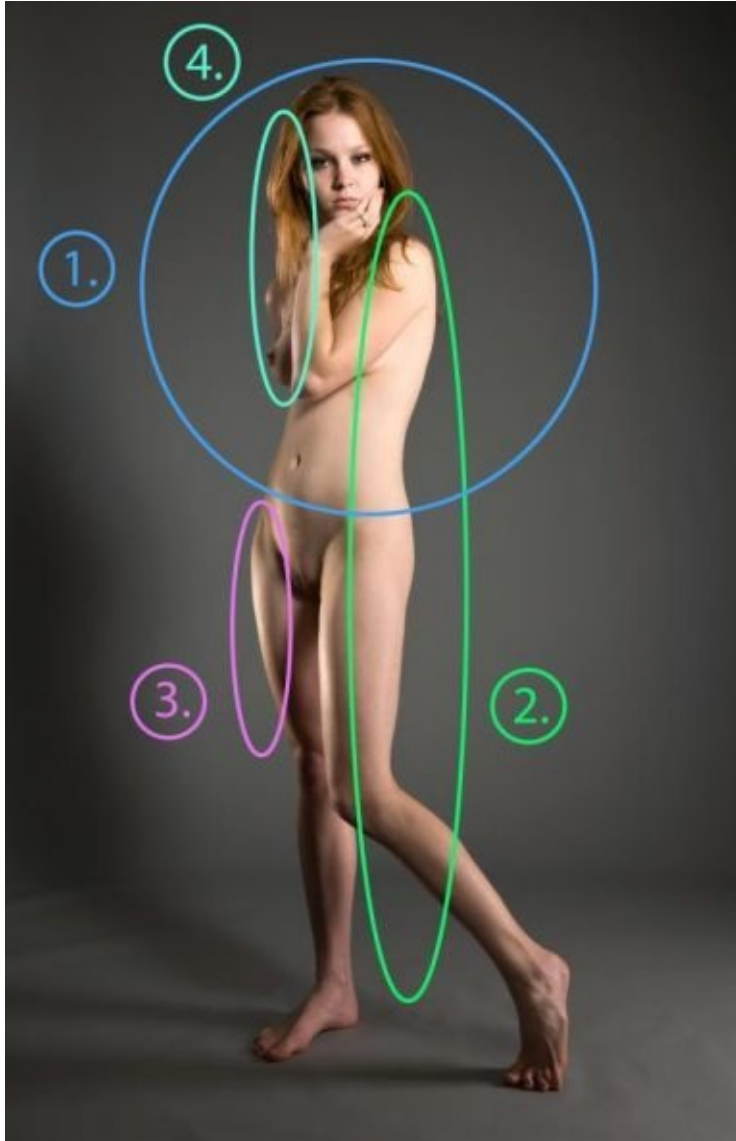


Photo 50: Low-key

Model: Lauren K.

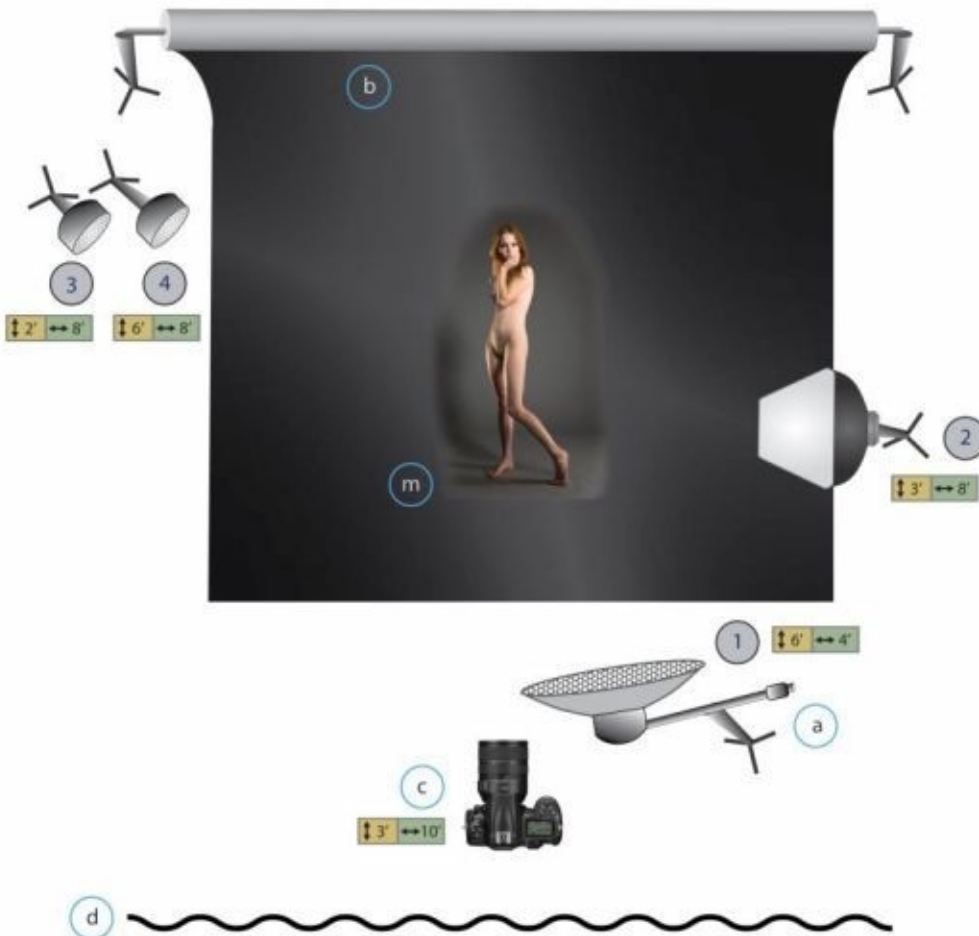
Light #1: The main light, is modified with a 22-inch beauty dish, fixed with a grid and mounted on a boom arm for easy adjustment. The beauty dish is approximately four-feet from the model's face, and slightly higher than her head, angled downward.

Light #2: A 17-inch by 54-inch striplight softbox provides a fair amount of fill light. The striplight is placed with its bottom edge as close to the ground as possible in order to light the lower part of the body and avoid burned out highlights caused by excessive overlap between the main light and the fill light.

Decreasing the power of the fill light would increase the contrast and further the low-key effect.

Lights #3 & #4 There are two backlights: a low one pointed at the legs, and a high one at the hair. Each backlight is fitted with a sock diffuser and a honeycomb grid on top of it. The diffuser softens the light, while the grid restricts the path of the light to a narrow beam.

Model Zone: For this setup, the model zone is small. The model can't move very far and stay in the lit areas because the background lights are grid-spots aimed specifically at the thigh and hair.



Camera Settings	ISO 100	f8.0	@1/125	45mm lens
Lights				
Head 1	600ws	Key light, 22" Beauty dish, grid		
Head 2	150ws	17"x54" Strip light, low to ground		
Head 3	100ws	Strobe head, sock diffuser, 40° grid		
Head 4	100ws	Strobe head, sock diffuser, 40° grid		

- a. Boom arm and counter-weight
- b. Background, 9' seamless paper (thunder gray)
- c. Camera
- d. Black curtain prevents light bounce
- m. Model

Lighting Diagram 10: Low-key

Gelled Backlight



Photo 49: Gelled backlight

Model: Hope S.

Lighting Setup# 11
Category: Backlight
Skill: Challenging

Light Kit:4
Heads:6
Model Zone: Exact

A strobe head with a standard 7-inch reflector and a red gel (translucent, colored plastic) is placed on a bean bag on the floor behind the model and aimed at the background. Using gels can create a dramatic effect, creating color contrast and drawing attention to a specific image area.

Caution: Gelled light can reflect directly or indirectly onto your model. If this happens the skin tone will be altered.

Model zone: The model must remain in an exact spot for her body to hide the background light and its cord. You will also have to position your camera precisely to keep the light and cord out of view.

For a shot like this it is not unusual for me to position the lens as low as possible by lying on one shoulder on the floor (preferably protected by an exercise mat).



Photo 50: Gelled light behind model

DIY Tip: A variety of plastics suitable for use as gels are available at art & craft outlets.

Model: Hope S.

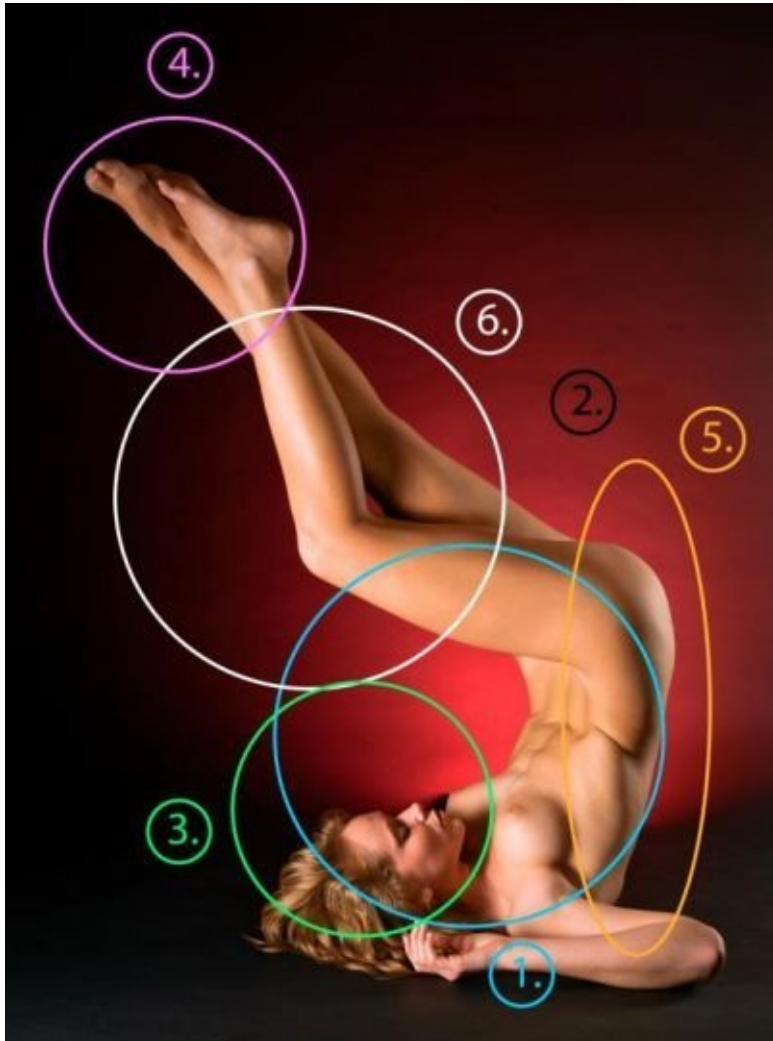


Photo 53: Gelled backlight

Model: Hope S

Light #1: A 22-inch beauty dish is suspended above the camera lens, slightly off-center, and aimed at the models head, torso, and edge of her thigh.

Light #2: A gelled backlight is hidden behind the model and aimed up at the background.

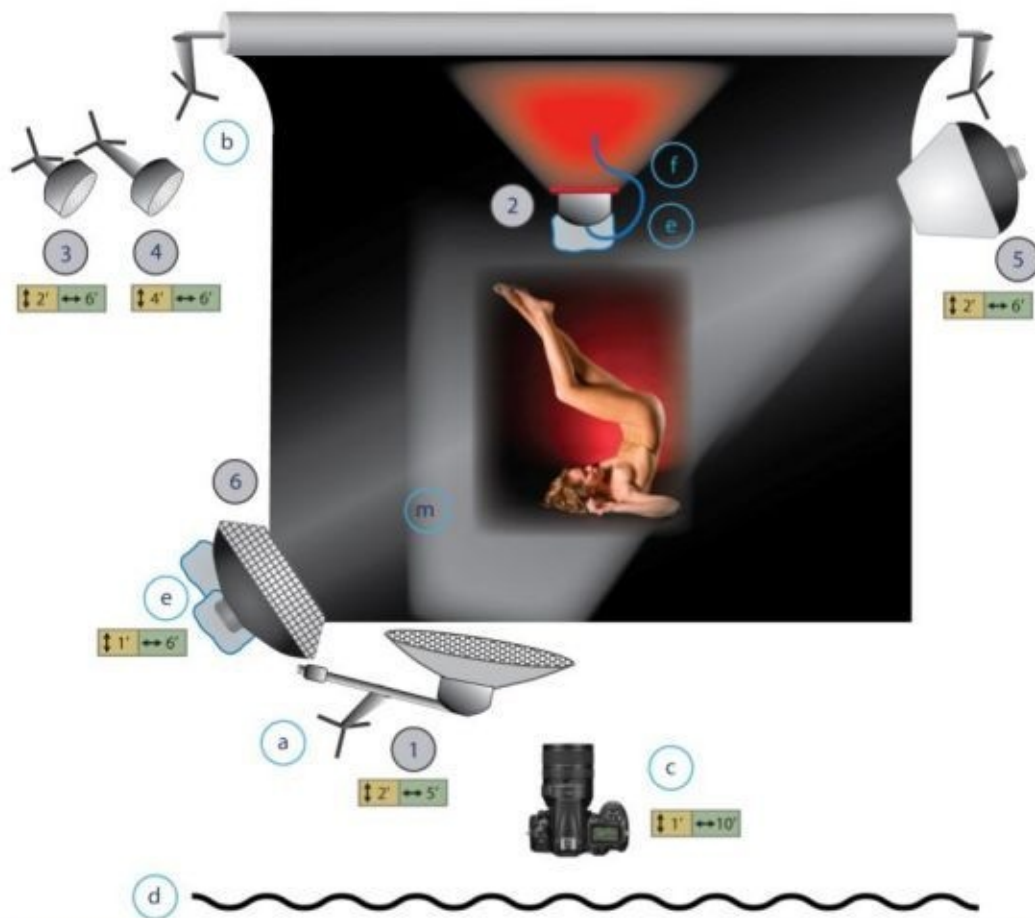
Light #3: A backlight is placed about two feet off the ground aimed down at the head.

Light #4: A backlight about four feet high is aimed at the feet.

Light #5: A striplight softbox backlights the edge of the model. The softbox is oriented vertically to match the model's position.

Light #6: A 24-inch by 24-inch softbox is on the floor and aimed up at the model's legs. A fabric grid controls the light output. Bean bags are used to position and aim the softbox.

Setup Tip: Place the backlight on the floor, then feed the cord through a hole cut in the background paper. Set the light on a bean bag instead of a light stand to steady it as low as possible.



Camera Settings	ISO 100	f16	@1/250	70mm lens
Lights				
Head 1	250ws	22" beauty dish, 40° grid, @torso, hair		
Head 2	150ws	Bare head, 7" reflector, red gel		
Head 3	75ws	Bare head, 7", 40° grid, @legs		
Head 4	75ws	Bare head, 7", 40° grid @torso, hair		
Head 5	600ws	17"x54" striplight softbox		
Head 6	150ws	24"x24" softbox, flexible grid		

- a. Boom arm, slightly above model's head
- b. Background, 9-foot paper (thunder gray)
- c. Camera
- d. Black curtain prevents light bounce
- e. Bean bags help aim lights sitting on floor
- f. Cord routed through hole in background
- m. Model

Lighting Diagram 11: Gelled backlight

Isolation with White Tile Board



Model: Tarra J.

Lighting Setups#12, 13

Category: Isolation

Skill: Challenging

Light Kit:4

Heads:6
Model Zone: Large



Photo 54: isolation

Model: Michelle W.

If you've tried to shoot for microstock, you've probably wondered how to isolate a model on a white background. There are a few keys to doing this: have plenty

of background lights, use glossy white tile board under the model, and don't overpower the background lights.

The key to even coverage of background light is not a lot of *light*, but a lot of *lights*. In other words, several weak background lights give more even coverage than one very strong light. You should have at least four background lights, and they should be diffused. You can diffuse the lights with softboxes, umbrellas, or any diffuser you want. The idea is to spread the light evenly over the background. Only turn the background lights bright enough to make it white around the edges of the model.

With sufficient coverage, overexposure of the background is unnecessary. Excessive background light will bounce around your studio and wash out the shot, cause chromatic aberration, and other problems. You can dodge out any gray corners during post-processing.

I use a roll of nine-foot wide white background paper. White tile board, the material that is used to simulate tile on bathroom walls, can be placed under the model to make a reflective surface. You want the non-embossed, semi-gloss tile board. It's available from home improvement stores in 4 x 8-foot sheets for less than the cost of a roll of background paper. Tile board is resistant to stains and scratches, and is easy to clean. White Plexiglas is a beautiful but expensive option.



Camera Settings	ISO 100	f9	@1/160	35mm lens
Lights				
Head 1	600ws	Strip light		
Head 2	300ws	Softbox on boom, @face		
Head 3	150ws	Bare strobe, 7" @background, high, left		
Head 4	150ws	Bare strobe, 7" @background, low, left		
Head 5	150ws	Bare strobe, 7" @background, high, right		
Head 6	150ws	Bare strobe, 7" @background, low, right		
Ref. 7		48" gold collapsible reflector, @body		

- b. Background, 9' seamless (white)
- c. Camera
- e. Flags, foam board 24"x36"
- m. Model
- s. Softbox, 300w
- t. Tile board (white)

Lighting Diagram 12: Isolation with white tile board

Photo 55: Isolation on white

The model is lit from one side by a strip softbox and a softbox on a boom. A collapsible 48-inch gold reflector adds a little color to her skin. No fill light is

needed due to the white background and the white studio walls and ceiling bouncing light all over the place. Four lights are used to illuminate the background, which is reflected by the tile board under the model's feet. A foam board flag on each side of the background prevents direct light from the lights from hitting the lens.

These images illustrate the purpose of each set of lights by selectively firing only some lights in each shot.



Photo 56:

Background lights only

In InPhoto 56 only the background lights are on. Notice that there is not enough light to completely bleach

the background white, the shadows projected forward by the backlights, and the reflection of the model under her in the tile board. only the background lights are on. Notice that there is not enough light to completely bleach the background white, the shadows projected forward by the backlights, and the reflection of the model under her in the tile board.



Photo 57: Main lights only

In InPhoto 57the main lights are on, but not the background lights. Still, enough light spills onto the

background to turn it a middle shade of gray. the main lights are on, but not the background lights. Still, enough light spills onto the background to turn it a middle shade of gray.

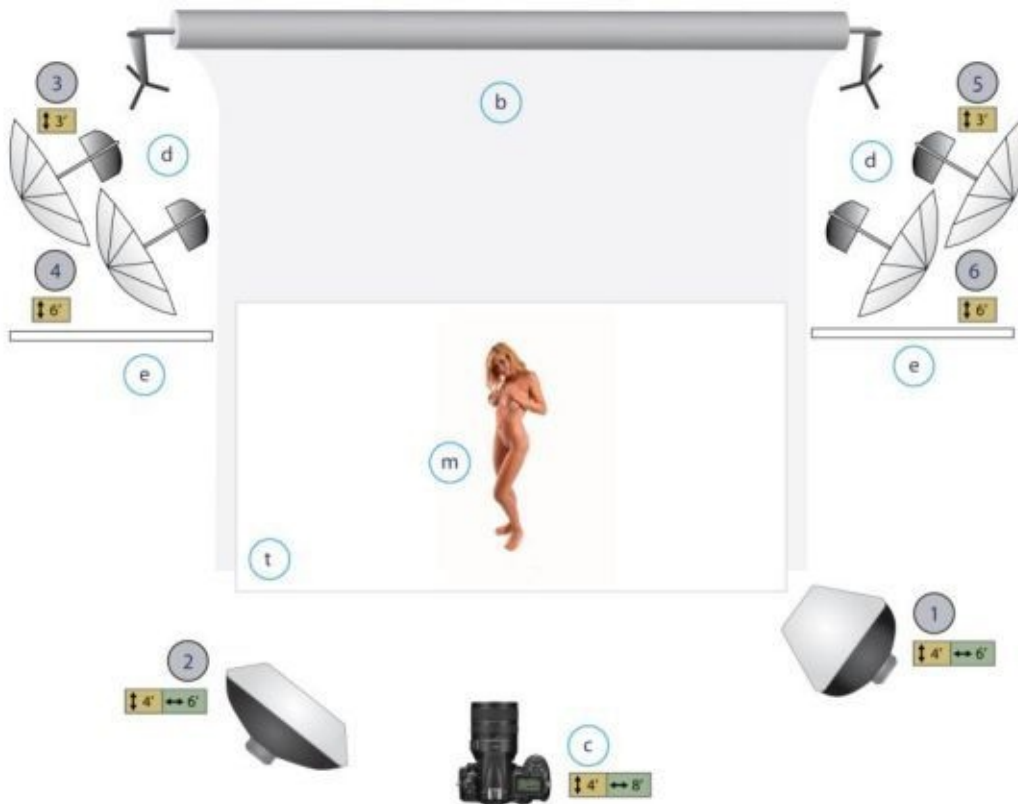
Model: Jacqueline C.



Photo 58: All lights

With all lights on in With all lights on in Photo 58,the background turns white and the floor

shadows begin to disappear., the background turns white and the floor shadows begin to disappear.



Camera Settings	ISO 100	f9	@1/160	45mm lens
Lights				
Head 1	600ws	17"x54" strip light softbox		
Head 2	300ws	24"x24" softbox		
Head 3	150ws	48" white umbrella @background, low, left		
Head 4	150ws	48" white umbrella @background, high, left		
Head 5	150ws	48" white umbrella @background, low, right		
Head 6	150ws	48" white umbrella @background, high, right		

- b. Background, 9' seamless (white)
- c. Camera
- e. Flag, foam board 24"x36"
- m. Model
- t. Tile board (white)

Lighting Diagram 13: Isolation on white with background umbrellas



Photo 59: Another isolation on white tile board

Model: Jessica A.

Alternately, you can use umbrellas with your background lights to ensure even background illumination. You will need flags that are large enough to block any umbrella light from hitting the lens in order to prevent lens flare. In the preceding lighting diagram, a key light and fill light give more even lighting and virtually eliminate floor shadows.

With some practice adjusting the lights you can achieve near-perfect isolation without needing any post-processing in Photoshop. Beware, however, that adjusting the lights to eliminate shadows from the background will affect the lighting ratio on your model.

You can restrict the effects of each light with the use of honeycomb grid attachments, barn doors, or flags to minimize spill-over into unwanted areas.

If too much bounced light washes out shadows on the model you may want to use a black curtain behind the camera to reduce the light bounce. You can also paint your walls black or gray to control how much light reflects off them.

Water Splash

Lighting Setup# 14

Category:

Skill: Moderate

Light Kit:

Heads:

Model Zone:

This image was created with five lights: two in front of the model, and three behind. A beauty dish with grid (**Light #1**) lights the upper torso, while a gridded softbox (**Light #2**) on the floor is aimed up at the lower torso. Two strobes fitted with 40 degree grids (**Lights #3, 4**) are behind the model at the left, one pointed at her upper torso, the other at her legs. A 17"x54" strip softbox (**Light #5**) is behind the model at the right. Plastic sheeting, bordered by towels, contains the splashing water after it falls.



Photo 60: Water splash

Model: Hope S.



Camera Settings	ISO 100	f8	@1/200	57mm lens
Lights				
Head 1	250ws	22" beauty dish, 40° grid		
Head 2	150ws	24"x24" softbox, flexible grid		
Head 3	150ws	Strobe head, 7", 40° grid, @legs		
Head 4	150ws	Strobe head, 7", 40° grid @torso, hair		
Head 5	600ws	17"x54" striplight softbox		

- a. Boom arm, slightly above model's head
- b. Background, 9-foot paper (ruby)
- c. Camera, 10 feet from model
- d. Black curtain prevents light bounce
- m. Model

Lighting Diagram 14: Water splash

Many studio strobes (unlike high-speed low-powered flashes) can have flash durations (*See glossary, t.1*) between 1/200 and 1/3000 of a second. Some amount of motion blur will be evident with longer strobes and fast movement, as is seen in the water here.

One Light in Studio

Lighting Setup# 15

Category:

Skill: Moderate

Light Kit:

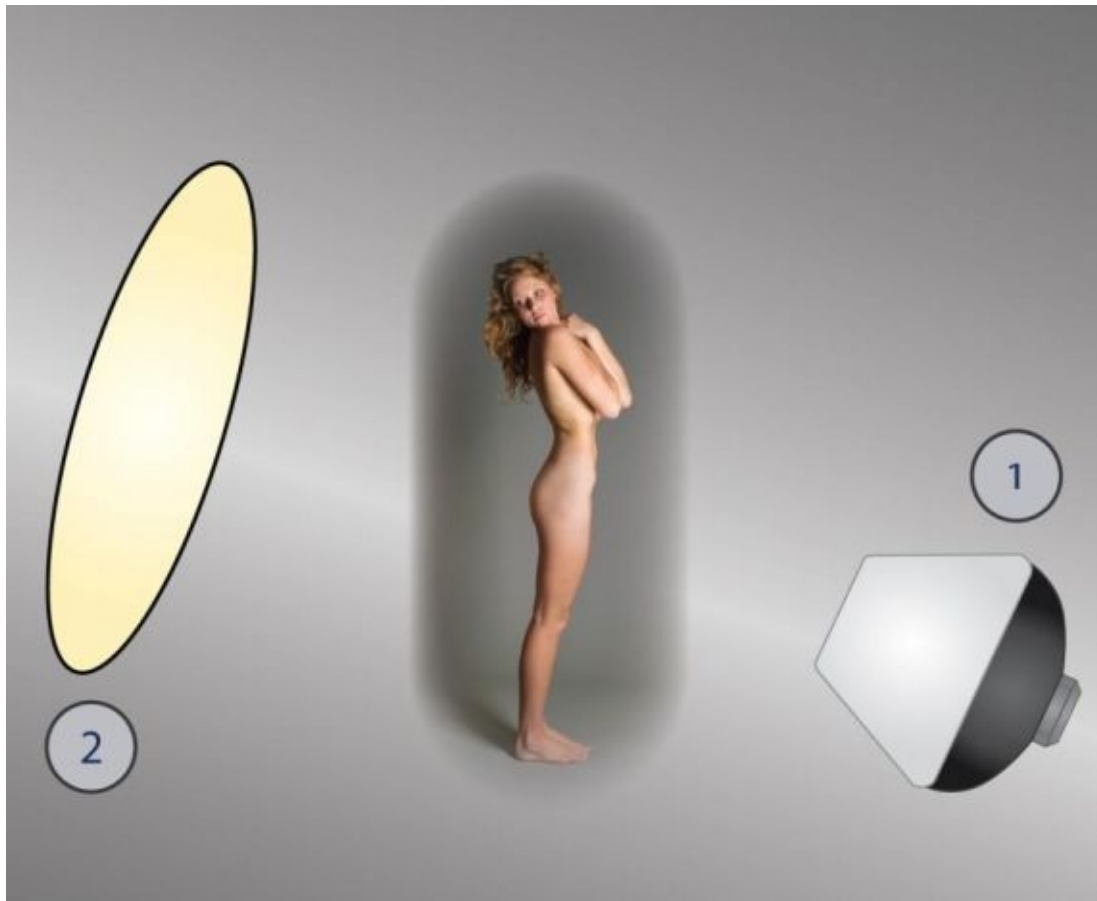
Heads:

Model Zone:



Photo 60: One light in studio

Model: Hope S.



Lighting Diagram 15: One light, studio

In this photograph, only one strobe (**Light #1**) is used, fitted with a 17”x54” strip softbox. Fill light is provided by a 48-inch collapsible gold reflector (**Reflector #2**). The lit **model zone** allows for moderate movement, as long as the model doesn’t step too close to either light or out of its path. **Advantages** include portability and dramatic contrast. **Disadvantages** include limited coverage and lack of versatility.

Outdoor Lighting



Outdoor Nude Lighting Setups

Outdoor

**“You don't take a
photograph, you make it.”**

— Ansel Adams

About Outdoor Lighting

You can use daylight as it is (available light), or add fill light with a flash or reflector.

Fill flash should be off-camera for best results.

There is nothing wrong with using available light – but it requires the ability to recognize the lighting situations that are conducive to good photography, a far different task than creating your own lighting situation.

Outdoor shoots can happen anywhere you can combine suitable lighting with enough privacy to avoid interruption. For the preceding photo, the setting was a nook of the model's back yard, nestled between trees.

Despite the challenges, shooting nudes outdoors offers spontaneous options for poses, backgrounds, composition, mood, light and color.

Model: Sarah H.



Overcast Day with Strobe Fill Light

Lighting Setup# 16

Category: Outdoor

Skill: Easy

Light Kit:1

Heads:1

Model Zone: Large

Photo 62: Overcast day with strobe fill light

Model: Kaitlyn P.



Photo 63: Outdoor with water and car

Model: Kaitlyn P.



Light #1: The sun, with the sky as a mega diffuser, is the most abundant, powerful, and the lowest price light source you will ever find. But sunlight is also fickle and unreliable; but with some practice, outdoor light can become your ally.

Model: Kaitlyn P.

When shooting this photo, it was so overcast that the studio strobe that I brought outdoors provided about half the light on the model.

Light # 2: A softbox to the right of the camera, at about a 30-degree angle to the axis of the camera, provides fill light. Notice the fence, top of the car, and back of the car are dark and flat. These areas were lit with natural light, too far from the strobe to receive much light from it.

The 1/60 second shutter speed allows some blur to dramatize the falling water, but is fast enough to freeze any movement from the model.

Be mindful that fill light from a strobe can create an artificial look outdoors. For example, notice the hot spot created by the strobe on the front fender of the car.

Practical Tip: Weigh down your light stands or the wind can blow them over.



Camera Settings	ISO 100	f7.1	@1/60	67mm lens
Lights				
Sun 1	f5.6	Sunlight, overcast		
Head 2	300ws	24"x24" softbox, 8' from model		

c. Camera
 f. Fence (backdrop)
 m. Model

Lighting Diagram 16: Overcast day, strobe fill

Swimming Pool, Reflector



Photo 63: Shooting nudes outdoors offers many spontaneous options

Model: Sarah S.

Lighting Setup# 17

Category: Outdoor

Skill: Moderate

Light Kit:1

Heads:1

Model Zone: large



c. Camera m. Model p. Pool

Camera Settings	ISO 100	f3.5	@1/100	52mm lens
Lights				
Head 1	600ws	Bare head monolight, 7" reflector		
Sun 2	f2.8	Sun, overcast day		
Ref. 3		Gold collapsible reflector, 48"		

Lighting Diagram 17: Swimming pool

A collapsible reflector is an easy outdoor fill light. Position the reflector on the shaded side or in front of the model where it catches direct sunlight and reflects it back toward the model. Bring a couple of assistants to hold reflectors, and to act as lookouts if you're concerned about interruptions from onlookers.

Light #1 creates some sparkle in the water and helps boost the diminutive sun lighting.

The more elaborate your outdoor lighting setup, the more assistance you'll need and the more time you'll spend setting up and moving your equipment.

With natural light, there are multiple light sources. The sun is the main light, and fill light is reflected by the sky and ground. Just as in the studio, light outdoors bounces off many surfaces. On a cloudy day, the fill light is more pronounced, and the sun more diffused, lowering contrast.



Submerged Nude

Lighting Setup# 18

Category: Outdoor

Skill: Moderate

Light Kit:2

Heads:2

Model Zone: Medium

Photo 65: Submerged nude

Model: Sarah H.



Camera Settings		ISO 100	f7.1	@1/125	52mm lens
Lights					
Head 1	300ws	Strobe head, 48" white umbrella			
Head 2	300ws	Strobe head, sock diffuser			
Sun 3	f3.5	Sun, overcast day			

d. Doorway walls, flagging lights
 c. Camera
 m. Model
 p. Wading pool, black plastic, water
 w. White wall (reflector)

Lighting Diagram 18: Submerged nude
 Model: Sarah H.

In this shot, water from a running hose and a bit of rain provide ripples in the pool in which the model poses.

Light #1: An umbrella creates a round reflection in the water, also visible is the light bouncing off the white wall behind the umbrella, squared off by the outline of a doorway. This can be eliminated by hanging black fabric on the wall.

Light #2: A gridded strobe head adds some punch to the model's face and torso.

Light #3: Overcast sky provides fill light, about 2 stops less than full exposure.

Three characteristics make water shots distinct:

Translucence is simply the property of water that allows you to see through it.

Reflection causes you to not see through the water, but the light source when the camera angle is the same as the angle of the light coming from the other direction.

Refraction causes the appearance that the right leg is larger than the left. Refraction can add interest or distraction to a submerged nude.

Continuous Light

The preceding lighting diagrams mainly show how to use studio strobes (flashes). Strobes are the preferred by nude photographers because the powerful, on-demand output makes easily stops most motion and achieve desired depth of field. However, you can photograph nudes with continuous light that suits your budget.

The main advantage of continuous light, especially to those who are beginning or expanding their nude photography skills, is that what you see is what you get. Disadvantages include difficulty in color balancing and excessive heat.

In the photo below, the only illumination was two strands of rope lights. The exposure was 10 seconds at f 3.5. Although the low level of monochromatic illumination in this example is impractical for many poses, it evokes a range of possibilities available with continuous light of various intensities.



Photo 66: Continuous light

Models: Stephanie S., Alicia J.

Lighting Exercises

This assortment of exercises provides a guided path for learning through exploration and experimentation with lighting. Each exercise should take about 20 minutes to perform, not including setup. Analyze the images on your camera's screen as you go, but don't forget to examine them closely on your PC afterwards.

Body Cropping

1. Attach a long fixed lens, or a zoom lens that has a long focal length. Choose a lighting setup that interests you and begin photographing cropped images of your model. Shoot approximately 6 to 12 inches of the model at a time.
2. Check out the lighting of each shot. Is your lighting effective and interesting for the whole model?



Photo 67: Close-up (strawberries optional)

Model: Ashley G.

Spinning model

1. Choose a lighting setup that interests you.
2. Have the model slowly turn as you photograph her.

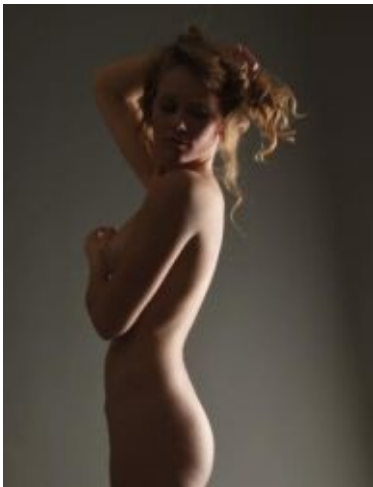


Model: Toni C.

360° Lighting Angles

1. Place a light in front of the model and take a few shots.
2. Next, move the light slightly to the side and take some shots.
3. Then try 90 degrees to one side, slightly back, and all the way back; keep moving around the model until you've shot eight different light locations.
4. Examine your shots to see how the light differs. In the backlight shots are you getting lens flare or chromatic aberration? If so, work on resolving these problems by altering the intensity or angle of the light. See the sections on chromatic aberration and lens flare in the problems & solutions section.







Light by Light

1. Set up any multi-light configuration in this book.
2. Unplug or turn off some lights to compare the effects of each light.

Lighting Problems & Solutions

In this section I'll show illustrate a few examples of lighting problems, along with suggested solutions.

As you read through the lighting problems, bear in mind that any given lighting setup may be right for one subject, but wrong for another. In the absence of a subject and pose there is no such thing as the “wrong lighting.” Each light configuration is to make a particular subject and pose look its best. The only “wrong lighting” is lighting that is mismatched to the subject or objective.

So keep an open mind. Just because a particular lighting setup is show here as an example of a problem, it is because it's not the best one for that particular subject and pose.

Light Coverage

Not enough coverage -- light has too much falloff and doesn't reveal all intended aspects of the subject.

In this image, light is directed only at the torso, leaving the lower half of the body flat, shadowy and dull. The tip of the elbow has a blown out highlight.



Model: Hope S.

With two frontal light sources, one above (beauty dish) the head pointed slightly down, and the other

(gridded softbox) on the floor aimed slightly up, the whole body is lit.



Too much coverage -- light reveals aspects of the subject that you want to remain mysterious. How much to light is your preference. Adjust the angle of your lights to hide part of the model in shadow. Also see Too much coverage -- light reveals aspects of the subject that you want to remain mysterious. How much to light is your preference. Adjust the angle of your lights to hide part of the model in shadow. Also see Sculpt with Light: Selective Lighting, p.24, p.

Excess Light

Typically you want to avoid situations that result in one area of the model receiving so much light it washes out:

- Blown-out highlights from key light too strong
- Blown-out highlights from fill light overlap
- Separation or accent lights (hair, kicker, rim) too strong.
- Contrast ratio too high.



Photo 66: Excess light

Model: Ariel W.



Photo 67: Excess light

Model: Aurora L.

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Flat, Dull, Low Contrast

To improve dull, flat images that are uninteresting because of low contrast:

-
- Change contrast ratio by increasing/decreasing output of one or more lights
- Move one or more lights to be less frontal
- Add one or more separation lights
- Use a grid or barn doors to restrict light to areas of interest



Photo 68: Flat light

Model: Jessica A.

Chromatic Aberration



Photo 69: Chromatic aberration

Chromatic aberration results in a color fringe where dark areas (such as the model's hair) are adjacent to a bright area. Less intense backlight can reduce chromatic aberration.

Lens Flare

- Adjust the angle of light, or use a flag (foam core works) to avoid letting light directly strike the lens. Always use a lens shade.
- Lens flare can occur when the background light is too strong.



Photo 70: Lens flare

Model: Ashley G.

Color Reflection

A color reflection can occur when unwanted non-white light bounces onto the model's skin.



Photo 72: Color reflection

Model: Jessica A.

- Roll out only as much background paper as needed.
- Flag gelled lights or restrict them with grids.

- Hang neutral colored reflectors.

Hard Shadows



Photo 74: Hard shadows

Model: Lauren M.

Hard light and a model near the background leads to hard-edged shadows on the background. Either soften the light with a larger diffuser, move light closer to the model, and/or move the model further from the background.

Conclusion

I sincerely hope that the information in this book inspired you, and gives your technique a push in the direction of superior lighting. There is no substitute for hard work, and though this book may save you some time in compiling much of the information you need to light the nude, you still have to put in the time to learn by doing. Try, fail, and try again. There will be times when you get frustrated, and there will be times when you become content not to push yourself. It's at times of difficulty that I remind myself that every great athlete, musician, and photographer had to practice and pushed themselves hard to get where they are. They attempt the difficult, over and over, so that it becomes learned, then rote. It is not by playing it safe that you train for greater accomplishment—it is by pushing your limits so that repeated efforts eventually becomes a new skill.



Photo 75: Model in studio

Model: Ariel W.

Glossary

backlight (a.k.a. hair light) Typically above the subject, either directly behind or slightly to one side. Light colored hair can look great with backlighting.

barn doors A lighting modifier consisting of two or four flaps that keep light from spilling out of the desired area.

boom A light stand that holds a light above the model.

chromatic aberration Displacement of the red and blue channels of an image due to lens characteristics; results in color fringes where light and dark areas meet.

diffuser A translucent material placed in front of a light to soften and reduce its intensity.

falloff Decline in quantity of light at the edge of the area the light covers.

fill light A light of less intensity than the *key light*, that fills shadows.

flag An object designed to block light, usually an opaque panel.

grid A honeycomb pattern grid that directs light in one direction. More restrictive than barn doors. Controls light to a specific angle (20°, 40°, etc.)

heads & pack Studio lighting consisting of a power pack and usually several lighting heads. Light heads are attached via special power cords.

key light The main (most powerful) light pointed at the model

kicker (a.k.a. accent light) At a low angle, placed to one side of the model, at least slightly behind (95-degrees, but not more than 135-degrees)

model zone My term for the area where the model can move and still be well lit.

modifier Any device that controls the quality, quantity, and or direction of light.

monolight A portable, self contained light with flash tube and power in one unit, plugs directly into household power.

rim light, (a.k.a. rimmer) Placed behind the model, so that she blocks the light; points directly at the lens.

snoot A lighting modifier that restricts the light to a narrow beam.

spot meter A light meter that takes readings from a very narrow angle of view, usually 1-degree. Usually a hand-held device (not built into a camera)

strobe A photographic flash.

watt second (WS) A measurement of a strobe's power output.

Resources

Password for Freebies from the Author's Website

For free stuff, including digital images, visit nudephoto-guides.com/reader
You will need to supply the username: **lighting**, and password: **studio4**

Online Resources

For up-to-date resources visit nudephotoguides.com/resources

Equipment Reviews

shutterbug.com
strobist.net

New & Used Equipment

abesofmaine.com
adorama.com
bhphoto.com
calumetphoto.com
keh.com
paulcbuff.com
samys.com

Forums

inspiring-photography.com
newschoolofphotography.com
photo.net
photocamel.com
photosig.com
thenewnude.com
thephotoforum.com

Technique

photozone.de

Suggested Topics of Study

The following general photography topics are not covered in detail in the guide but are helpful when lighting the nude. If you're not familiar with any of the following, a basic photo lighting book or web search can help you.

- Additive color theory
- Color temperature
- Depth of field
- Inverse square law
- Light metering, spot metering
- Lighting ratio/ Contrast ratio
- Flash duration (t.5 and t.1)
- The Zone system
- Warming filter for lights
- White balance

About the Author



A.K. Nicholas has spent over twenty years photographing hundreds of nude models. He has an art degree and Master's in business; and has worked both as a professional photographer and a freelance artist. He comes from a family of artists and has traveled to more than three dozen countries.

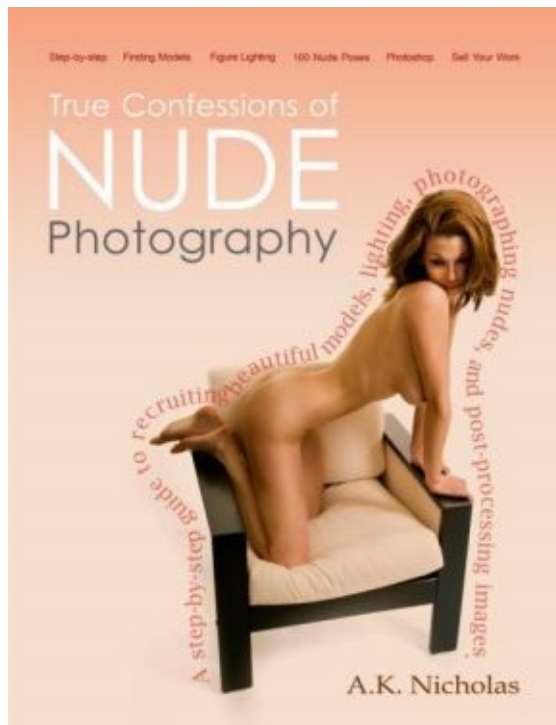
He creates photographic images that are exhibited in galleries, licensed for publication, and used for photography instruction. In his books you'll learn from his twenty years of successes and from mistakes with hundreds of nude models.

His first nude photo shoot occurred as an art student, and quite unexpectedly. After asking a classmate if he could photograph her, she entered the studio and fully disrobed, assuming that he had meant a nude photo shoot.

From the age of nineteen, Nicholas' photographs have sold through exhibits in commercial galleries, been licensed through stock photography agencies, and appeared books and other publications.

Another Book from A.K. Nicholas

If you enjoyed this book, you'll want to check out A.K. Nicholas's first book at:
www.nudephotoguides.com



True Confessions of Nude Photography

- **A Step-by-step guide to the techniques of nude photography**
- **Finding Models:** 10 mistakes that cause you to lose a booking.
- **Working with models:** 5 tips for working with first-time models.

- **100 nude poses:** a guide for ideas and inspiration
- **Photoshop techniques:** isolating figures, adding backgrounds, adjusting skin tone.
- **Selling your work:** microstock, galleries, posters.

A step-by-step guide to recruiting beautiful models, lighting, photographing nudes, post-processing images, and maybe even getting paid to do it.

A range of processes are explained step-by-step. It's more than just a collection of photos; you'll see full lighting diagrams as well as frank discussions of techniques and pitfalls in making the images. The book explains how to prepare in the days and weeks leading up to making a nude photo shoot. From finding your first nude model to selling your first nude photo, the guide presents complete, concise instruction on lighting, posing, and post processing with Photoshop.