

Lighting Notes

This is a list of pointers, questions, advice, philosophy, and guidelines for lighting. These are aimed at studio lighting, but many are equally applicable to location work. They apply to portraits, but many also relate to objects. They are not in any order of priority.

1. **Simplicity** is the key. Start with one light: if that works, you need add no others.
A common mistake is to switch loads of lights on and hope for the best. Do not be that person.
2. It is about your subject, not the light. Lighting is a means to an end: communication.
3. Being able to light is a signifier of good photography - professionalism - for any photographer working commercially or editorially.
4. **What's the frame** – how wide or close? Close-up, headshot, half, three-quarters, full length, group? This will determine your choice of modifier size and distance from subject.

Example: A large soft-box or brolly will work close-in **and** wider. However, close in (with the modifier close to your subject), the light might be too soft and, therefore, a smaller modifier may work better.

5. **What is your style?** Some photographers always use the same or similar set-ups: Richard Avedon, Irving Penn, David Bailey, Platon, Martin Shoeller etc. Clients buy into that style. However, many other photographers adapt their lighting depending on the job. What is your style or approach?

6. **Classic or Photographic?** These are my terms to denote specific choices in the positioning of light.

‘Classic’ involves lighting more from the side and to the front and mimics well-established art-historical portraiture tropes from the Renaissance on. Lighting from a more sideward direction brings out texture and shape; increases shadow; makes the subject appear more three dimensional – you sculpt with light.

‘Photographic’. Light from a more frontal position. More description, less shadow. Less need for a fill-light or reflector as there is, by the lighting’s nature, less shadow.

‘Classic lighting’ increases atmosphere and mystery; ‘Photographic lighting’ produces a starker, more confrontational result.

7. **Who is the client?**

You, your subject, or a third party (editorial, commercial, agent, corporate)? You adapt to whoever is providing the brief and, therefore, paying the fee (including yourself with a self-initiated project).

8. **Consistency.** Knowing how to control light creates consistency and allows you to acquire repeatable results and a visually connected set of images.
9. Acquire a **portfolio of set-ups**. Get to know a range of set-ups that you can quickly deploy to cover any situation with 1, 2 or 3 lights. This is your fall-back, and each can be tweaked as the shoot demands.
10. Initially, shoot with **one light** (see point 1). Train your eye, hone your technique. If in doubt, shoot with one light; you can always make it work.

11. Preparation.

For a studio shoot, I might set up several lights in readiness just in case I need them. Key (main) light, separation, and background. This means that when I see the need to add a kicker light to an unlit shoulder or hair - the edge - I can just switch the light on. I might have an unlit white background giving me fall-off grey. A flick of a switch turns it to a clean white. I have options ready to go that will yield different looks. I might add fill too, and quickly shoot images with the fill if my key yields too much shadow depth (I might also quickly deploy a reflector to do this). Be prepared!

12. The 3 'F's: Fall-off, Feathering, and Flagging.

Know all 3 and you will be most of the way toward a mastery of light control.

Fall-off: Control the density of light on the background or across the frame with the ratio of distance from light to subject to background.

Feathering: Angle the light away from your subject to precisely control where the light falls. Use the edge of the light to illuminate or remove unwanted light from specific areas in the scene.

Flagging: Use flags – panels that block light from falling onto areas where it is not welcome.

13. My favoured soft-light set-ups:

Headshot:	3ft soft-box
Half/three-quarter length:	1.4-metre soft-box
Full Length/small groups:	2/1.75-metre soft-box or large brolly

I like using hard lighting but hard light only suits very specific subjects, whereas soft lighting suits just about any subject. Soft light is non-intrusive - subject focused; hard light draws attention to itself.

If in doubt, use soft-light modifiers.

14. Umbrella or Soft-Box?

Umbrellas splash light all over the place, soft-boxes allow precision in the placement and control of lighting.

Umbrella

😊 Cheap – excellent bang for buck; easy to set up; wide coverage of light so good for full-length and groups; different qualities with either bounce or shoot-through.

😞 Wide coverage can make control of light-spill difficult; fragile; act like sails outdoors; difficult to feather; awkward reflected highlight.

Soft-Box

😊 Controllable, “sculptural” light with easy feathering on and off preferred surfaces; quality of light; structure allows close positioning to subject; variety of looks with inner and outer diffusion materials; variety of form factors increase versatility; uniform shape to reflective highlight.

😞 Often expensive (certainly compared to umbrellas); Restricted ‘cone’ of coverage; can be a faff to set up and tear down on location.

15. If you need light above someone but don’t have the ceiling height (often the case with large modifiers), **sit your subject down**. Platon, for example, often gets his, usually famous, subjects to squat down on an apple box.

16. Use an assistant or at least find someone to **stand-in when setting up**. Test your lighting on a third party before getting your main subject in front of the lens. Don't fiddle around with lighting when you need to concentrate on getting the best image.

17. Consider the **end-result**: usage, cropping, editing etc.

This will determine how you frame your subject in-camera. Also, do you or the client require choices: different crops, backgrounds, variations in lighting, clothing, styling, makeup etc.?

18. Move and adjust your lighting (height, angles etc.) for different subject heights; sitting/standing; facing in different directions etc.

Unless you want 'horror lighting', always raise the modifier slightly higher than your subject's head. We are used to light coming from above.

19. You may need to adjust the power of your lights for different skin tones, hair colour, light or dark clothing etc.

20. You don't have to understand the **inverse square law** to use it. Controlling the amount of fall-off is a vital skill when lighting a subject but you don't need to understand how an internal combustion engine works to drive a car.

21. Light travels in a straight line. The angle of incidence (i.e., the angle direction that light falls on a surface) equals the angle of reflectance (the direction in which it reflects – bounces – off that surface). This has implications for light control, control of reflections etc.

22. Keep your distance (close).

I have referred to this before but position your light source the 'correct' distance from your subject. This is usually as close as possible but (obvs.) not in shot or where it might cause flare, or so close that the light coverage does not match your composition. With a large light source, the closer it is, the

softer the light. Back the light off and the light will become harder (sharper transition from highlight to shadow). A commonly used guide is to move the light no further away than the diameter of the modifier.

23. On a related point, how **soft or hard** the lighting is, refers to the transition from highlight to shadow. The softer the light (i.e., the larger the light source relative to the subject), the more gradual the transition into shadow. The closer a large light source is to a subject, the softer the light. Move it further away and the light will become harder (that is, the transition from highlight to shadow will become more sudden).

Counterintuitively, moving a light further back, while making the light harder, will also open-up shadows. This is because fall-off becomes more gradual at greater distances.

Hard and soft light is not the same as **diffused and specular light**. How diffused or specular an image appears, refers to the properties of the highlight detail (contrast) only, not the highlight to shadow transition. For example, a beauty dish with a silver surface, will give a more specular result than the same-sized modifier with a white surface.

24. You may come across lots of terms if reading about lighting or looking at YouTube videos. These include, **Rembrandt lighting, broad lighting, short lighting, loop lighting, butterfly lighting, 3-point lighting, 45°/45°, clamshell** etc. While these are all 'things' and might have varying levels of importance when talking about or demonstrating lighting technique, in the end it is down to you to set up lighting that looks right, suits your subject, and communicates what you want it to, alongside your chosen composition and the response - the performance - you get out of the subject.

Ultimately, the terminology doesn't matter. Breaking with convention can lead to an individual approach.