

STUDIO LIGHTING

Bringing photography into the studio with complete control over the lighting has many advantages in portrait, still life and commercial photography. There are now a number of affordable lighting kits available for “home” use.

The two types of lighting available are:

1) Continuous lighting

Using daylight calibrated bulbs, these are easy to use, as the camera's built-in metering system will function in the normal way (as when taking any photo). However the bulbs need to be very powerful (500 watts+) and they create a lot of heat, not always comfortable for the models.

2) Strobe Flash lights

These are more comfortable and less costly to run, and are the basis of most studio lighting -they are powerful flashes where the amount of light is controlled manually by built in dimmer switches, there are two types-

a) Strobe flash lights that flash when the camera is fired. The effect is difficult to predict.

b) Strobe flash lights with built in modelling lights, both controlled from the dimmer switch. These are the best option. The modelling lights do not generate too much heat, and are permanently on so we can see the effect of light and shadow on the subject. The strobe flash lights then flash when the camera is fired. The kits come in two/three light sets, and include stands, diffusers (soft boxes/ umbrellas) and triggers, at a cost of around £2-300.

Using studio lighting.

There are several things to consider, such as position, strength of lights, posing the models and composition, as in all photography.

There is one very important consideration to bear in mind however. Unlike on-camera flash, the strobes are not controlled by the camera's metering system. There is thus no automatic TTL metering **so we must set the F stop (aperture)/shutter**

speed/ISO manually, and independently of the camera light-meter reading.

We can do this in two ways-

a) With DSLR and mirror-less reflex cameras, using the camera manual mode, set 1/200 sec shutter speed, F8-11 aperture and ISO at 100. High end bridge and compact cameras need F4-5 settings. If your camera does not have a manual mode it will not give you a correct exposure. These settings will give a close approximation to a correct exposure and can be adjusted by changing the strength and position of the lights to give the desired exposure effect.

b) Use a particular type of light-meter which measures reflected light, and set the camera according to the settings given. These meters are expensive and a must in professional studios, but don't justify the cost in home studio conditions.

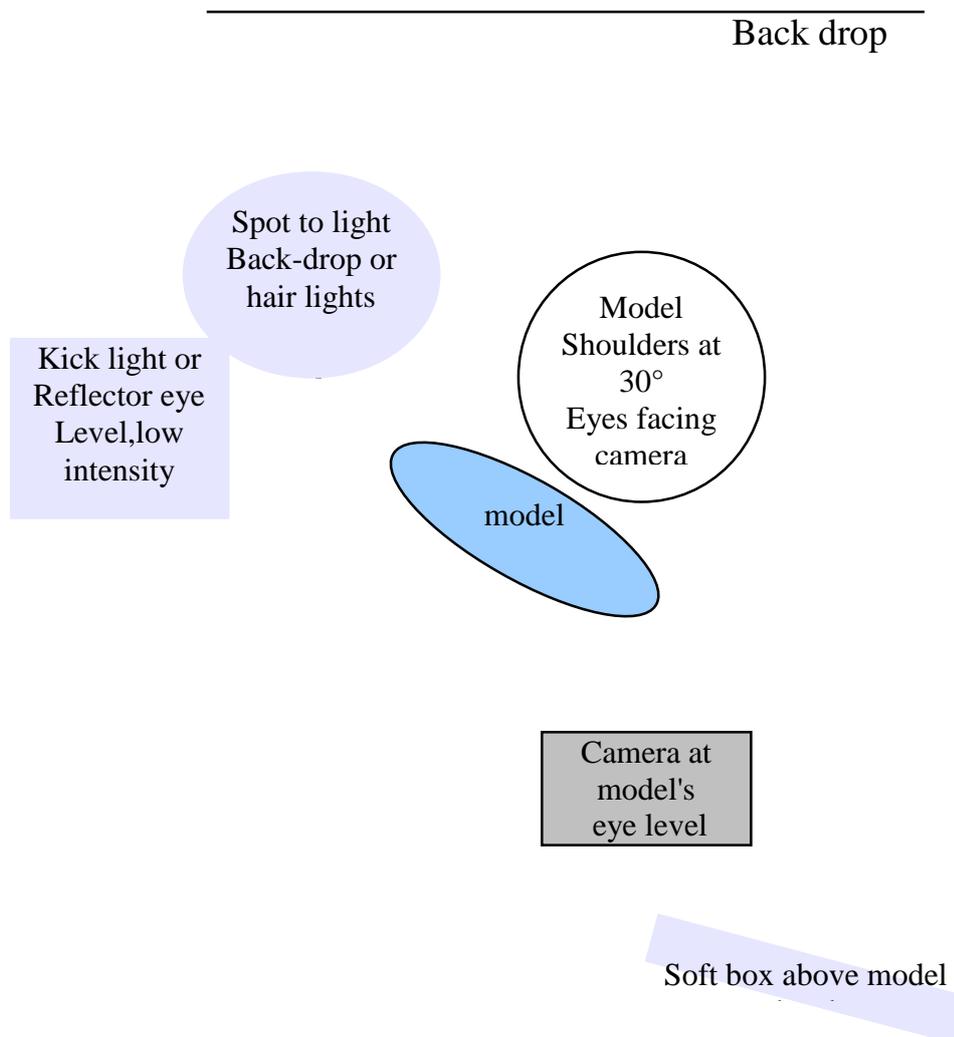
Triggering the system must be synchronised with the camera shutter, and can be done by cable if you have a sync socket on your camera. Otherwise an infra-red or radio trigger can be fitted to the camera "hot shoe". Radios triggers, with one receiver, are the most reliable, are cheap, and work on all cameras. Usually one will come with the kit.

NB on camera flash will trigger the strobes, and if set to manual flash in camera will sync the shutter with these, giving the desired result.

Using the camera on any other settings will give an exposure that reflects the modelling/ambient light only even if the strobes appear to fire (as they will not be in sync with the shutter.)

Positioning the lights

The position of the lights, subject etc. is a matter of person taste, but the usual suggested starting point is as follows-



The above diagram shows a basic set-up. It is best to start with a main light first, use a reflector, or kick light with reflector on the model's lap, and bring in high lights and back ground to taste.

Remember the bigger the soft box/umbrella the more defused and pleasing the light. For fashion/ beauty portraits, high levels of lighting(high key) is normally recommended. With more formal portraits, less lighting (low key) is normally better.

The aim is to create sufficient tonal variation on the face to give a sense of perspective without leaving ugly shadows. Once you start to play the creative possibilities are endless, and a whole new world of photography opens up to you.