

# Why do we light?

## **Accurately controlling what the viewer sees:**

In order to rapidly interpret the vast amount of information (72 gigabytes per second) that the brain receives from the eye, the brain 'looks' (has evolved to 'look' for) for 3 things: movement, the brightest object or area and the object most in focus. Using carefully controlled lighting we can selectively highlight objects or people within the visual field, combine this with a suitable choice of camera settings (lens focal length, iris settings and framing) and we can accurately create selective focus on the chosen object or person. In this way we can control precisely on what or where the viewers attention will be 'focused' ensuring your message is precisely (and unambiguously) conveyed.

## **Contrast ratio: No camera is as good as your eyes**

The human eye is capable of dealing with a dynamic contrast ratio of about 1,000,000:1. In other words it can cope with a bright sunny sky and still be able to see details within the shadows created by trees in a wood. Although, camera technology has vastly improved in the last few years even a (top end) professional (video) camera can still only deal with a contrast ratio of 1000:1. This means that vital information in the highlights and shadow areas can be lost. For example, filming a person working in an office in front of window through which can be seen the company logo on a vehicle. Without additional (photographic – film ) lighting, it is only possible to expose for the person in which case the window and everything that needs to be seen outside it would be burnt out or to expose for the window in which case the person would become a silhouette. Using carefully controlled lighting and camera settings the contrast ratio can be controlled thus maintaining vital information within the shot which would otherwise be lost.

## **Clarity of information**

The brain uses its vast library of basic shapes (acquired during childhood) to rapidly interpret what it is seeing. The shape of an object is very dependant on how light falls on it and the shadows that the light creates give the object its form. For instance, if a ball is lit from front (incorrectly) it can look like a flat disc rather than a sphere. Good (photographic – film) lighting will insure that the object is instantly and correctly interpreted by the viewer, insuring clarity of the information that you are trying to convey to your viewers..

## **Enhancing Reality**

Most work places (offices or factory floors) are lit to provide shadow free, flat lighting from overhead, making it easy to read computer screens and paperwork on desks. Unfortunately this tends to look flat, dull and uninteresting on camera. Creative application of light can improve and enhance the image of your operation that you wish to present to clients.

Any room can be made to look like a expensive luxurious apartment or run down slum using creative lighting. A car can be made to look boring and dull or exciting and dynamic with just different lighting.

In our studio we can take total control of the lighting and produce very exciting and precise images... we can play god (*dodgy territory possibly !!*) and transform day into night at the flick of a switch.

### **Controlling the viewers emotional reactions to objects, products and personnel**

We have all been conditioned to respond in different ways to colour and light, for example we associate the colour red with danger (stop), heat or passion. Using creative lighting in your video it is possible to subconsciously instantly control the viewer's reaction to the information that is being presented to them.

When filming people it is possible to create, using lighting, an immediate impression on the viewer of how they should perceive that person. This is the reason that many Hollywood movie stars will insist on having a particular Lighting Cameraman / DoP to light them so that they look their best.

### **Summary**

In short, creative professional lighting greatly enhances the message or image that your video is intended to convey by providing precise, focused, emotive (motivational) and clear images that communicate directly to the viewer (to the viewer's subconscious). A good picture creates a brilliant first and lasting impression in an instant, words take minutes of reading to create something close but not exactly what you intended.