Part 12

LIGHTING ACADEMY

You'll find mains flash in most studios and the advantages of very brief, powerful lighting are clear and well documented. However, there's much to be said for using continuous light and this is what this feature is all about

WORDS & MAIN PICTURES WILL CHEUNG

Before leaping into the techniques of using continuous light, perhaps it would help if we define what we actually mean by continuous or constant lighting.

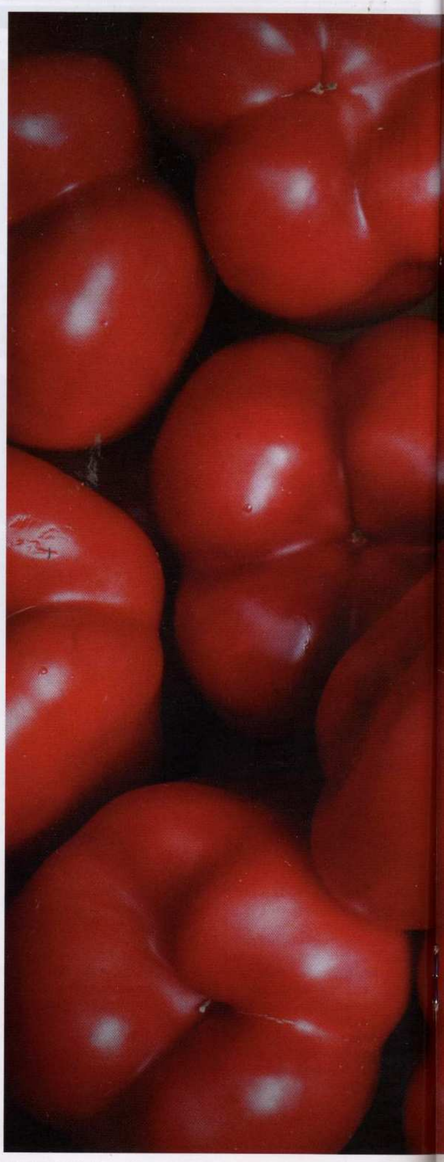
Daylight, of course, is continuous light but here we are talking about light generated artificially using that wonderful stuff you can't see called electricity – but this does not include flash which, clearly, is not a continuous light source.

Flow electricity through a tungsten filament in an inert gas-filled glass sphere and it glows producing light with a colour temperature around 3200K. With a digital camera using the Kelvin value or the incandescent preset will ensure correct colour reproduction. Many of the modelling lamps used in mains flash units are tungsten and such heads can be used to provide continuous as well as flash lighting.

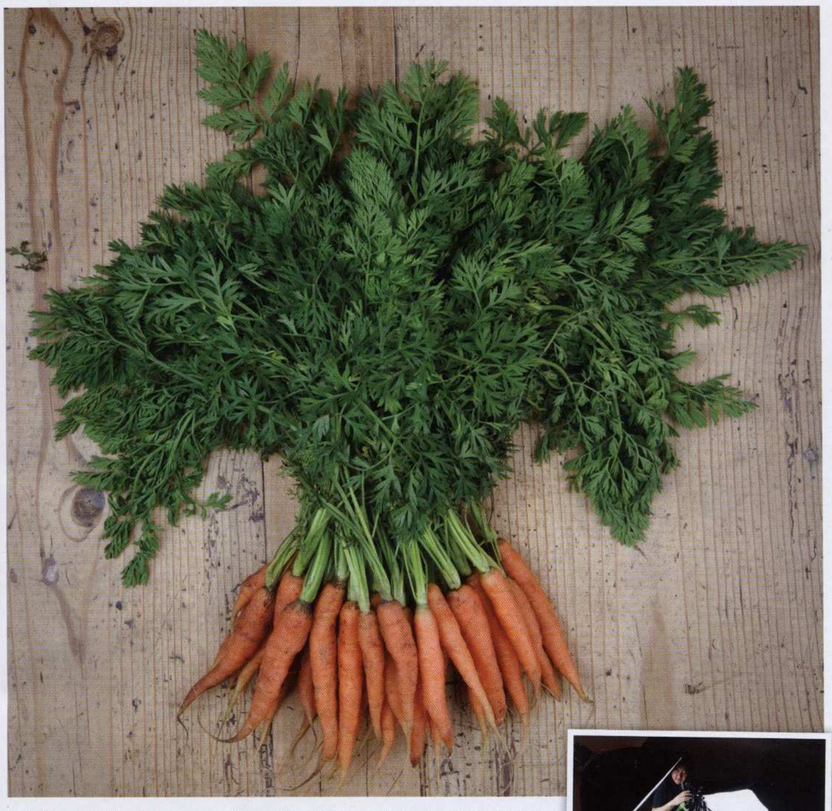
Fluorescent strip lighting produces light by sending an electrical charge through a gas-filled tube. This lighting type is in common use in offices, shops and kitchens because they are cheaper to run and the tubes last a long time. Such lights produce a discontinuous colour spectrum which in practice means it can be difficult to get perfect reproduction, especially if more than one tube is in use. On digital cameras, there's a fluorescent preset for this type of lighting – auto white-balance can give greenish-looking images. There are so many types of 'flo' tube that you should test each individual situation.

A big innovation in lighting has been the arrival of the compact fluorescent lamp, the CFL. This is the compact, energy-saving, efficient, long-lasting lamps that we all now use at home. It is also the type of lamp that the continuous light sources we test in *Photo Kit* this issue use. These give light with a colour temperature of around 6000K, ie close to normal daylight but slightly cooler.

That, of course, brings us neatly to the first technique point, ie colour temperature and white-balance. Because the output is around 6000K you can set your camera to the daylight preset or use a manual Kelvin setting. AWB is worth trying but you could get odd variances from shot to shot if you change composition, for example. However, shooting Raw format is advised and you can then tweak during processing. ➥



Peppers were shot using a Nikon D700 with a 105mm macro lens and an exposure of 1sec at f/22 and ISO 200. AWB was used. Lighting was provided by a single Lencarta Quad Lite at full power to the right and a sheet of white polystyrene on the left as a reflector.



Our table-top shots (literally) of various vegetables were taken using two Lencarta Quad Lites both at full power and the camera fixed onto a Manfrotto 055 tripod. The self-timer was used to release the shutter. The exposure was 0.8sec at f/19 and ISO 200. One tripod leg was in shot but the picture was visualised as a square image.

In *Photo Kit* this issue, there's a big review of continuous lighting systems so see that for our recommended products. Our Best in Test award went to the Lencarta Quad Lite which uses four 105watt lamps and comes with a softbox.

The only other lighting aid was a small sheet of while polystyrene board. The DSLR was a Nikon D700 with 24-70mm and 105mm macro lenses used. At ISO 200 with the lenses wide open, the shutter speed hovered around 1/90sec so hand-holding was possible. However, we used a Manfrotto 055 carbon-fibre tripod anyway and this also meant total freedom when we wanted more depth-of-field. We used various white-balance settings including AWB which worked just fine, although we had a Lastolite Ezybalance on hand too.

We hope this Academy goes to show what can be achieved in a small area with low cost continuous lighting. O

Our thanks to

The Hole in the Wall in Little Wilbraham near Cambridge for providing the location for this shoot. For details, click on www.holeinthewallcambridge.co.uk

NEXT MONTH: IN THE STUDIO, WE TAKE A CLOSE LOOK AT THE MODIFYING POWER OF REFLECTORS