The DIY photographer:

Build your own flash units

Studio heads are expensive. You can expect to pay anywhere around R4000 to R6000 for a unit, second-hand. Which puts it right out of range of the DIY photog rapher.

But we didn't get the DIY label for nothing, now did we? Which means we make a plan. And the plan usually comes cheap.

First, you need ready-made light sources. How about some old Metz hammerhead flashes? They're too weak, you say. Yes, they are, but put them close enough to your subject, soften them sufficiently and you've got a plan.

In the above picture, the Metz flash is set to the auto setting, at f5.6. If you turn the middle dial completely to the right, it would take the flash out of its auto mode, enabling full power.

Why Metz? Or any other hammerhead? Because with all the new-fangled electronic flashes around, no-one wants them anymore. So you can pick them up cheaply.

What you should be looking for is anything from the Metz 45 upwards. If you can find a second-hand CT60 Metz, you're cooking. Just look in the smalls, or better still, put out an ad in the smalls and see how many people want to offload their kit on you. Next, try and find some power sources for them. They run off mains quite happily, provided you don't flash them too often too quickly.

Remember that these flashes can shoot on auto or manual. If you shoot on auto, it measures the light to the object, then bounces this light back at the flash receiver, and once it's decided it's put out enough light for the f-stop you've dialled into the top, it stops the beam.

Now imagine you've fitted a small soft box or umbrella to the end of the flash. The auto function would then cause the flash to bounce light back off it onto the flash receiver (a little 'eye' on the front of the flash) and stop the beam abruptly, long before the light has reached your subject. So your subject will always be under-exposed.

If however you put the flash on manual, and make it shoot on full power, the flash head overrides this auto exposure measurement function and shoots the full beam out onto the subject.

All you have to do is soften the beam with an umbrella, and move the flash further away or closer to the subject to light it properly.

Alternatively, you could use white shower curtain material over the flash lens to soften the light further. More about modes of softening studio flashes in a later issue.

Several little gadgets are available to help you fit umbrellas to flash units, one of which is an articulated system with a hotshoe adaptor on top.

This contraption, made by Hama, is very handy for the job, and will accept any flash onto the hotshoe holder on top, where the flash connects to the articulated unit.

You can use the base plate of the Metz flash to screw into the bottom of this gadget, screw the flash onto the base plate, and screw the whole contraption onto the top of a tripod to make it stand up.

Your umbrella then will fit into the special hole made for it on the gadget.

Whatever you do, it will require some handyman-sense. But since all camera gear screw threads were standardised a long time ago, you'll find that it is not too difficult to make things work.

Next issue – softening your studio lights by building your own soft box.