TIGER GREY CARD & WHITE BALANCE CARD

On the other side is a Tiger Grey Card & White Balance Card. Modern cameras do a great job under a wide range of lighting conditions. But the ISO rating is based on "snapshots" of "normal" subjects under daylight. That’s the standard. If you want to take photos under awkward lighting conditions such as artificial lighting or studio work, then this is a gadget that is handy to have. It is a "grey card" & a "white balance" card. This explains how to use it.

I invented it in the early 1970s to have a card that could simply be printed out on any printer that could print black. I devised it in 1980 to work on laser printers & laser copiers. It is fine on inkjet printers too (don’t use glossy paper).

When autofocus cameras/lenses were first introduced. Their autofocus would not lock focus on ordinary grey cards & would hunt. The Tiger Grey Card & White Balance Card does not cause this.

**Why on earth do I need this?**

Most of the time you don’t! It is handy if the lighting conditions are tricky (e.g. an artificially illuminated interior, a cathedral, a sports hall, etc.).

For most photography the camera is able to sort out the correct exposure & the white balance. But to do this it makes assumptions about the picture that it is taking.

- a) That the scene being photographed has an average reflectance of 16% (a darkish grey).
- b) That the scene being photographed is, on average, neutral in colour.

If you take a black cat on a pile of coal, the camera metering assumes it is all 16%, over-exposes & you get a grey cat on grey coal. If you take a picture of a white bride’s dress against a white wall, the camera assumes it is 16% & under-exposes, so you get a grey photo.

Similarly, when adjusting the white balance (AWB), the camera cannot differentiate between a white room lit with yellow light & a yellow room lit with white light.

The metering systems of modern cameras do a good job handling pictures that don’t meet the 16% conditions in “a” above. They try to capture highlights and shadows as best they can. But, if you are photographing someone with their back to a window, the metering system cannot know if you want their face correctly exposed or the scene outside. Likewise in studios and interiors the camera will struggle at times. You can, with a digital camera, use trial and error.

Professional photographers will use an incident lightmeter to measure the lighting that falls on the subject. They are valuable (and essential for studio flash) but set you back over £100. You hold the lightmeter by the subject and point it at the camera (not at the lights as some wrongly say).

An alternative way to measure incident light is to use an 18% grey card (it’s usually 18% although the ISO standard is 16%). You place it in the scene, so that it is illuminated the same as the subject & take a reading off that.

You can also get gadgets that look like translucent lens caps. They turn your camera into an incident light meter & a white balance aid. The very cheap ones that look like a ping-pong ball emerging from a lens cap are the best ones to buy.

These are all sure-fire ways to get the exposure right, because the light falling onto the subject is being measured, not the light reflected.

**Paint your own Grey Card**

You can paint your own grey card. “Flintstone” matt emulsion paint from Wilkinsons dries to exactly 18% grey. Sampler pots (about £1.00) are more than enough for a DIY grey card. You can paint a sheet of material or paint a panel on your hard case so that you have a handy grey object.

**Tiger Grey Card & White Balance Card**

Incident light meters are expensive, proper grey cards are not cheap & these lens cap things cost around £5.00.

But before you rush out & buy one of these gadgets, you can use this Tiger Grey Card & White Balance Card & try it.

**Making the Grey Card & White Balance Card**

Load this pdf to print the second page. Make sure that your printer prints a solid black (higher quality settings). Print onto a piece of matt white card or heavy paper. Don’t use glossy paper & don’t laminate it. If your printer won’t handle thick card, just print it onto the thickest paper it will handle & glue it to a piece of white card. You can trim it if you wish.

Because of the design, if your Tiger Grey Card & White Balance Card gets dirty or damaged you can simply print another one.

Although the Tiger Grey Card & White Balance Card is copyright, I give permission for you to make copies for your own personal use (not for sale or distribution). If someone you know wants a copy, please get them to write to me.

**Why isn’t it grey? Why all those lines?**

Well, no two printers can print the same shade of grey so getting 18% to come out right on your printer is hit or miss, but these black & white lines average out at 18%. The lines assist the autofocus.

**Using Your Grey Card & White Balance Card**

Place the card in the picture facing your camera so that it is illuminated like the subject & facing the position from which you plan to take the photo. Get up close (without casting a shadow) so that the card fills most of the viewfinder & take a reading.

With your camera on manual find the correct exposure & set the shutter speed & aperture to these readings & take your photos.

If you prefer you can leave your camera on automatic (P, TV, Av, etc.) & then set the camera’s +/- exposure adjustment to make corrections to the metering. I don’t recommend this. It is more complex to do this but can be handy if the lighting conditions keep changing.

**White Balance**

The process is the same for taking a white balance reading. You can use the white or grey side of the card.

Set the white balance using “Custom” at the same time that you set the exposure. The method for setting the white balance varies from one camera to the next, so you need to read the handbook. Normally you select the custom white balance icon, take a reading of the card (or a photo of the card) & then store it & use the custom setting when you need to. Many cameras will store 3 or more custom white balance settings so that you can choose which one you want to use.

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