## >> How to achieve a consistent exposure with the mennon Gray Cards neutral 18%

When you are faced with "tricky" lighting, place the Gray Card in the scene to be photographed - close to the subject for which you wish the optimal lighting - and take a reading off of it, either with your incamera light meter or with an external handheld reflected light meter. Over the years camera manufacturers have standardized the 18% gray card for setting exposure for film. Reflected light meters (and in-camera light meters) are calibrated to give an accurate exposure when pointed at an object with a reflectivity somewhere near 18%. So pointing at the gray card you get the same result as using an incident light meter, as the light meter's result depends in this way only on the illuminance of the photographed scene, but not on the reflectivity of the subjects. For instance a brilliant white background or specular highlights in the surrounding cannot cause underexposure of the subject you want to shoot. You can be assured of consistent exposure across the photograph.

## >> How to achieve optimal color balance with the mennon Gray Cards during shooting

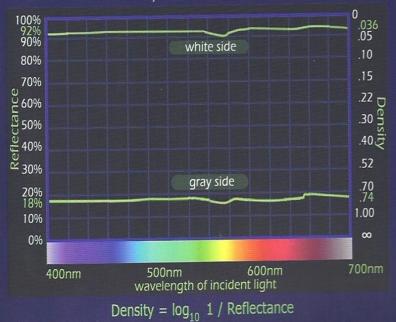
If your camera has a Custom White Balance mode, you can use this mode to obtain an optimal special setting for the actual lighting conditions by having your camera evaluate the gray card:

- 1. Pose the gray card so that it is illuminated by the same light as the scene or subject that you want to shoot.
- Follow the instructions in the manual of your camera about how to set the Custom White Balance mode.
- 3. After setting this mode, aim the camera so that the gray card completely fills the frame of the LCD monitor.
- Press the button for reading and saving the White Balance data, according to the manual of your camera.

By pressing this button you "tell" the software of your camera, that its sensor now records a "neutral gray" or "neutral white" object, which reflects all wavelengths of the light equally, and if some wavelengths are recorded more or less than others, it is only caused by the light situation. So the software can calculate a compensation for the illuminant color in the scene and save this compensation as Custom White Balance for this special light situation.

- > In well-lit situations always use the gray side of the Gray Card for custom white balance, since its reflectance is not as intense as that of the white side, which reduces the possibility of clipping, or exceeding the maximum possible reflectance value that the camera's sensor can record.
- > In low-lit situations the white side of the mennon Gray Card is better to provide an optimal signal level at the camera's sensor.

## The distinguishing feature of the monnon Gray Cards: The flat spectral reflectance curve



>> How to achieve color balance with mennon Gray Cards by editing the digital photos

If you cannot do a proper color balance during the shooting which is a the best option), you still can achieve color balance processing the processing a graphics editor like Photoshop:

- 1. Photograph the mennon gray card straight on under the same light conditions as the subjects you shot or still want to shoot.
- 2. Load this picture into Photoshop and click Image > Adjustments > Levels. In the "Levels" pop-up click on the middle eye drooper tool and Gray Point".
- 3. Position the eye dropper tool over the gray card in the picture and By this click you "tell" the software, that the area in the picture you do so should be "NEUTRAL GRAY", cause the showed item had that color. The software corrects all colors in the photo until the gray card in it is "ELLIFAL GRAY" like the original, thus removing any color cast from the rest of the picture as well.
- 4. Save this "white balance adjustment" as an \*.a'v file, so that load it again with other shots in similar lighting conditions, with the use the gray card in each and every shot.

## >> How to calibrate the development of your films and paper prints with a mennon Gray Cards

To achieve that the photographed subjects in your reproduced process colors and shades of gray as "close to nature" as possible, process as a second colors and shades of gray as "close to nature" as possible, process as a second colors and shades of gray as "close to nature" as possible, process as a second colors and shades of gray as "close to nature" as possible, process as a second colors and shades of gray as "close to nature" as possible, process as a second colors and shades of gray as "close to nature" as possible as a second colors and shades of gray as "close to nature" as possible as process as a second colors and shades of gray as "close to nature" as possible as process as a second colors and shades of gray as "close to nature" as possible as process as a second colors and shades of gray as "close to nature" as possible as process as a second colors and shades of gray as "close to nature" as possible as a second colors and shades of gray as "close to nature" as possible as a second colors and shades of gray as "close to nature" as possible as a second colors and shades of gray as a second colors and shades of gray as a second color and gray as a second

- 1. Photograph the mennon gray card under the same light conditions the subjects you want to shoot, ...
- neither being overshadowed nor being brightened up. Processing the film and the paper prints you must ...
- 2. Set the developing time and the exposure so, that the gray can the photo has exactly the same shade of gray as the original gray can the human eye can differentiate even the sightest shades of gray and accomparison, so that you are able to be as precise as you want.
- Keep these settings for the development of the whole series which you shot under these light conditions.

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