Dithered Images

Color correcting photo images stored in files with 256 or maybe less colors is often not working 100% correct. The main problem is, that these image files use dithering in order to simulate more shades to the human eye than there are in the image. There is currently no way to color correct these images with full quality.

Scanning Newspapers

Similar to the problem with dithered images described above, scanning halftoned images from newspapers and magazines may not work completly. ICS might not work completly to your liking when scanning halfoned images. These images do not really contain shades like it might appear to the human eye. Shades are simulated (halfoned) by a pattern of dots with 4 colors (CMYK). In case the results are not to your liking, try to scan using a lower resolution or try getting the original photo.

Viewing conditions

The basic principles as for most other CMS software applies to ICS. In order to get correct results from ICS, the view conditions must be reproducable and well defined. The white point of your monitor defined `ICSPrefs` should have a luminance level of at least $75cd/m^2$ and preferably $100cd/m^2$. If possible, the ambient illumination should be below 32 lux.

What does this mean:

- The CMS is unable to work correctly if your monitor is next to a window and/or the room is illuminated by the bright sun from outside. Not only does this often cause a big increase in flare on your monitor, causing colors to be perceived different. The daylight also changes over the day making it impossible to get consistent results.
- It is recommended to at least view the monitor in a dimmed room. The background/surround of the monitor should be neutral in color (it's time to renovate your room anyway ;-) and the luminance of the background should roughly be roughly 20% of the white luminance of the monitor. While a perfect setup would require a viewing box for your monitor, you can at least avoid major color faults by following these hints.
- In order to avoid changes of illumination during the day you should illuminate your room artificialy and not by indirect light from outside.
- Keep flare on your monitor to a minimum. ICS does color correct for a small amount of flare but not if it is major.

Calibrating video, film, photo or digital cameras

Yes, you can use ICS for calibrating other devices than scanners. For instance, you can calibrate your video, photo, film or digital camera. The basic procedure is similar to those described for the scanner. You basicly have to take an image from a calibration target using your camera. After transfering the image from film/video to a computer image, you simply cut the image in order to get the calibration target area as required by ScanTarget for calibrating. Than you can transfer the actual images and use the generated profile for color correcting the images.

But there are some notes beginners have to take care of in order to make this method work. For instance, viewing conditions are usualy unkown when using a camera. Usualy only professionals have correct and known light condititions. Now this is usualy a minor problem for ICS as long as all images were taken using the same conditions as the used calibration target image. So after changing light conditions you usualy have to take another shot from the calibration image in order to calibrate ICS again for the different conditions later on. On digital still or video cameras a manual white balance is an important feature in order to have control over the light conditions.