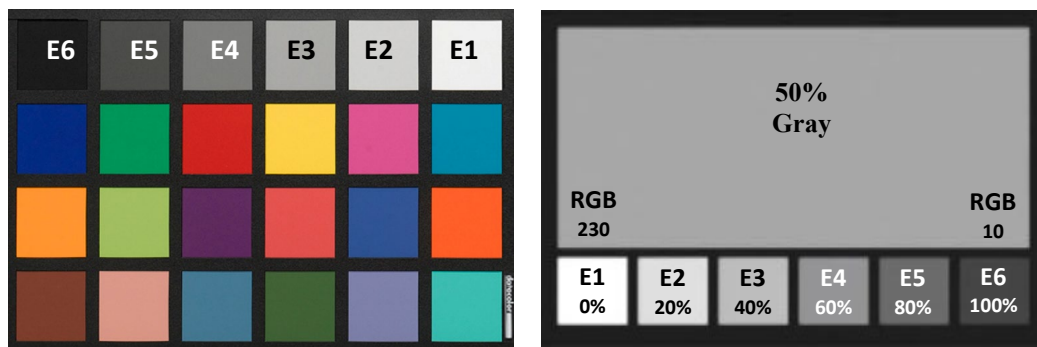# SpyderCHECKR 24 – Color Calibration @ DXO Photolab 7

Mounting the SpyderCHECKR

The SpyderCHECKR 24 is a card target, and can be placed as needed, using any type of support desired. A Joby Gorrilapod, or even a plastic business card holder can be used for placing the SpyderCHECKR 24 into a scene.

Lighting the SpyderCHECKR

Mount the SpyderCHECKR or place in a stable location.

Light it from a 45-degree angle. The ideal way to light a target is to use a single light source, with no reflector or diffuser, from an extended distance.

Generally, you would want the sweet spot in the center of the light field to completely overlap the edges of the SpyderCHECKR.

This assures that all portions of the target will have the same amount and color of light, reducing fall-off and color variation across the width of a target.

The gray side of the SpyderCHECKR provides an excellent tool for checking lighting consistency.

Target Photographing the SpyderCHECKR

The Calibrated Color Profile creation tool can only be used with **RAW** files. This is because with a JPEG file, the white balance and color corrections will be limited, while RAW files give you all the latitude for corrections.

To photograph your SpyderCHECKR:

1. Make sure it is well exposed to the light source

2. Frame it so that it fills a good part of the image, but don't fill up the viewfinder frame with the target because the sweet spot of the lens is near the center.
3. Make sure the camera is directly in front of the target. The SpyderCHECKR and the camera sensor should be parallel.
4. You can use Autofocus mode.
5. You can use auto exposure, Aperture Priority, or full Manual settings.
6. Shoot in RAW format
7. Take a few frames at different settings if you are unsure of any of the variables.
8. It is recommended to shoot the gray side of the SpyderCHECKR too. It will provide an excellent tool for lighting consistency adjustments i.e., W.B. and exposure adjustments.

*** After you have photographed the chart, or the chart with its subject, remove it and then continue your shooting session.

*** If you change the light source or change the subject, take a new shot with the chart.

Opening the Target Shot

Download your target shots and open them in DXO PL, as you would with any RAW image.

Lighting Consistency Adjustments:

W.B Adjustment (Any PL Version, not only PL7)

Any of the light or medium gray patches can be used to gray balance/white

balance your image in DXO PL.

The 20% gray patch (E2) is recommended.

Use the white balance eyedropper tool in DXO PL Color Palette and Click on the desired gray patch.

Exposure Adjustment (Any PL Version, not only PL7)

For exposure adjustment you must examine the RGB values, indicated just below the Histogram.

White levels Adjustment - Hover your mouse over the White patch (E1).

Look at RGB values and adjust the "Exposure Slider" until the White patch lists as approximately about RGB 230, 230, 230.

Black levels Adjustment **-** Hover your mouse over the Black patch (E6).

Look at RGB values and adjust the "Blacks slider" (or in some cases the

Shadows adjustment) until the Black patch lists as approximately about RGB 10, 10, 10.

If the value is below this level, it may be best to leave it "as shot" or reshoot with brighter illumination.

Now you can Copy & Paste the W.B. and exposure corrections into all other images which were photographed with the same lighting conditions.

Note:

Even if you did not purchase PL7 yet, in most cases these adjustments mentioned above, shall give you a good result even though without performing the color calibration

Color Calibration @ DXO Photolab 7

1. Open and select the image with the chart in DxO PhotoLab
2. Activate the "Calibrated Color Profile creation" tool in the "Colors palette", sub-palette Color Rendering / B&W
3. Place the mouse in the image, the pointer turns into a tracing tool.
4. Trace the selection rectangle to include all the color patches of the chart, and make sure the patches of the tool are positioned and centered on those of the chart.
5. If the color patches of the tool are inverted compared to those of the chart, the settings palette allows you to rotate by increments of 90°.
6. If the chart is not perfectly facing, you can modify the shape of the selection rectangle, by grabbing the corner or the side handles.
7. In the "Settings palette", in the lower left corner of the image, select the type of chart: Datacolor SpyderCHECKR 24 (if you do not see the palette, click on Show color profile settings in the lower toolbar).
8. The "Set White Balance" option allows you to neutralize, before saving the profile, the possible light source color cast. This does not change the setting displayed in the White Balance sub-palette and allows you to adjust it to your liking after applying the calibrated color profile to your images. **Note**: if you have performed the " Lighting Consistency Adjustments" (W.B. & exposure adjustments) as mentioned above, don't check this box.
9. In the lower toolbar, click on Save and Apply: a dialog box allows you to customize the profile name and choose the destination folder (by default, the profile is named after the image + the date of profile creation + the. DCP extension, and the destination folder is that of the image).

Notes:

1. Now the saved DCP profile could be applied to any photograph.

2. The application of a calibrated profile must be done upstream of the workflow in the Customize tab, and more particularly if you plan to correct the colors.
3. The Calibrated Color Profile Tool is only available in the DxO Wide Gamut working color space.