

BioCom 6/5/2010

Creating a Custom Digital Camera Profile (DCP) Using X-rite's ColorChecker & Lightroom**- Intro**

- o Digital Camera Profile (DCP)
 - two types: "General" and "Shoot-Specific"

- Installing the Passport Software

- o Passport software will recognize Lightroom and load its plug-in on install:

- Exposing the Passport Target [Assumes a Raw file capture]

- a) evenly light the Passport target to create your custom digital camera profile (DCP)
 - for a "General" DCP: illuminate with Sky & Sun or D65 control lighting
 - for a "Shoot-Specific" DCP with unique shooting light.
- b) I recommend bracketing in 1/3 stops. 5 shots will expose the Passport +/- 2/3 stops from the recommended exposure. You can choose the correct exposure by using the "J" key in Lightroom's Develop module to display any clipping in your exposures.
- c) The Passport target does not need to fill the frame (needs to fill 10% of a 10 megapixel camera). However, try to keep target parallel to the camera back to reflections. (If it is too small within the image, the color patches may not contain enough pixels to sample accurately)

- Creating the DCP using Lightroom & the Passport Software [Use latest version LR]

- o Import your file(s) of the Passport target into Lightroom.
 - (If you bracketed your exposures, you can choose the correct exposure by using the "J" key in Lightroom's Develop module to display any clipping in your exposures. Choose the first exposure that shows no clipping in the highlight/white areas of the target.)
- o Select the Passport target file to use for creating a custom profile.

- Applying the Passport Target

- o close then re-open Lightroom for your custom camera profiles to be available to use.
- o from the "Camera Calibration" panel, select the camera profile from the pull down menu.
- o For a "Specific-Shoot" profile, "sync" camera calibration with other photos shot under the same lighting
- o For a "General" profile, set this profile as the camera default in Lightroom. This profile will then be applied automatically when you import files from this camera.
- o Set Calibration as Camera Defaults [quick]
 - In Develop module" press "Reset" then "Alt" "Set Default..." , Update Current Settings
- o "Global" Develop Workflow [quick]: Apply camera calibration (preferably on Import); then WB, then Jack Davis' modified 4-Step Tango!

- Naming Custom Camera Profiles:

Lightroom will recognize the camera used to take the photo and thereby know what profiles belong to that camera. However, if you create several profiles for the same camera, make sure to save them with descriptive name to indicate the camera model and lighting conditions the Color target was shoot.

e.g. - Nikon D300; serial # 1234567890; target shot under Daylight

- Profile name: D300-7890 Daylight

e.g. - Smith's wedding shot with 2 cameras Canon 5D serial # 1234 and 7D serial # 5678

- Profile names: (camera 1): SmithWedding_5D-1234; (camera 2) SmithWedding_7D-5678

Using DCP with Photoshop and Multiple Computers

Once created in Lightroom, these DCP files are also available for Photoshop/Bridge/ACR. You can also copy your DCP files to use on other computers using Adobe Camera Raw software. Xrite also makes a software utility called "DNG Profile Manager" for managing your Digital Camera Profiles.

Class Link: http://www.theuncarvedblock.com/workshops/BCA_CamCal.htm