ON1 Workflow for Creating a Custom ICC Camera Profile with X-Rite Color Checker Calibration

Introduction:

ON1 Photo RAW 2020 customers can now create custom ICC camera profiles with X-Rite! If you are looking for a step-by-step tutorial you came to the right place. This PDF is the official quick start for creating and using your own custom camera profiles. To build a new profile, you will need a color profiling target and additional software that creates the profile. ON1 worked with X-Rite Inc. during the development process to create a workflow that simplifies the process to ensure consistent results when building your camera profiles. In addition to ON1 Photo RAW 2020, you'll need a reference target, such as one of the ColorChecker series, and X-Rite's ColorChecker Camera Calibration app.

Equipment required:

- ON1 Photo RAW 2020
- Camera
- X-Rite ColorChecker Passport (available for purchase at www.xrite.com)
- X-Rite Camera Calibration Software (free download at www.xrite.com)

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1. Photograph the ColorChecker Passport

Take a photo of the color checker on scene in the conditions you intend to photograph, after you capture the color checker leave your camera settings the same for the remainder of the shoot. Turn off automatic white balance on your camera; set it to the lighting conditions—daylight, tungsten, flash, fluorescent—in which you are shooting the target. Place the color reference target in the center of your scene, with even light. Take the photo.
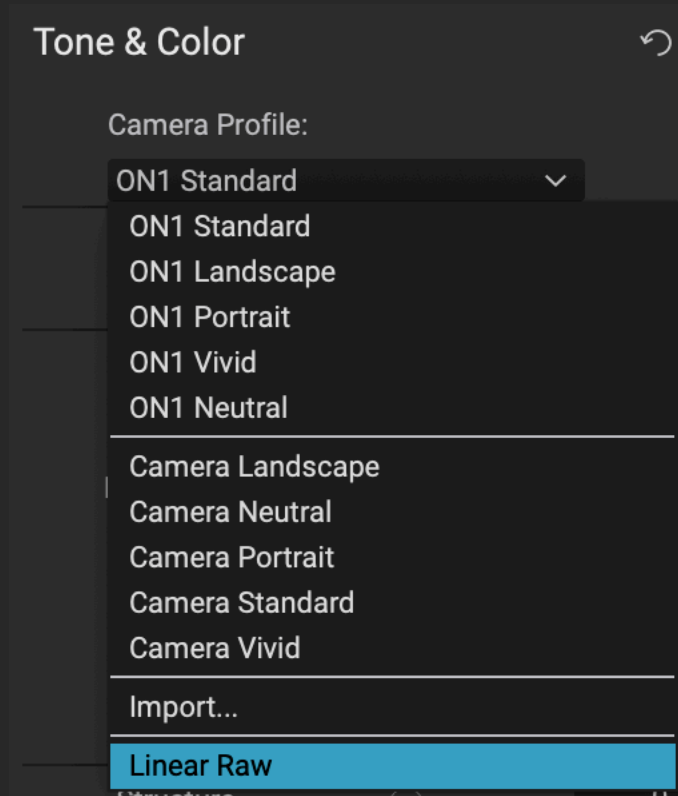

If you are unable to capture a photo at every scene and just want to create a single ICC profile you can do this as well. Just be sure to use the natural lighting conditions and avoid any color casts as much as possible for capturing an image of the color target.
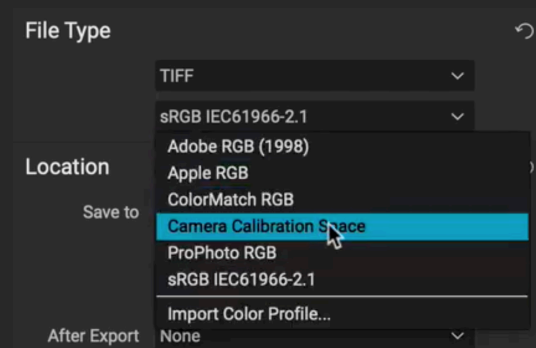
2. Preparing Image for Creating a Profile

Open the color checker photo you captured in ON1 Photo RAW 2020 Develop module. In the Tone & Color Pane click the Camera Profile drop down menu and select "Linear Raw."

Click **Export** and under File Type choose TIFF, and under Color Space choose Camera Calibration Space.
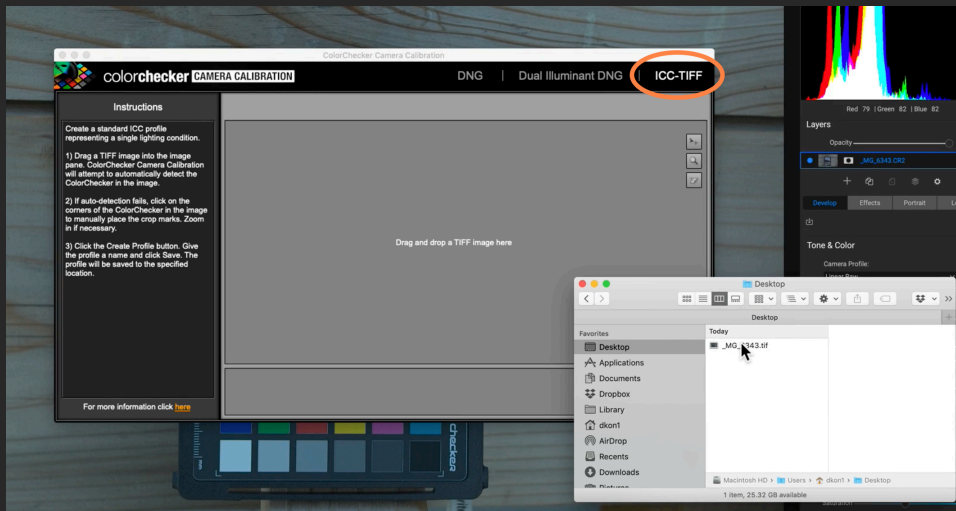
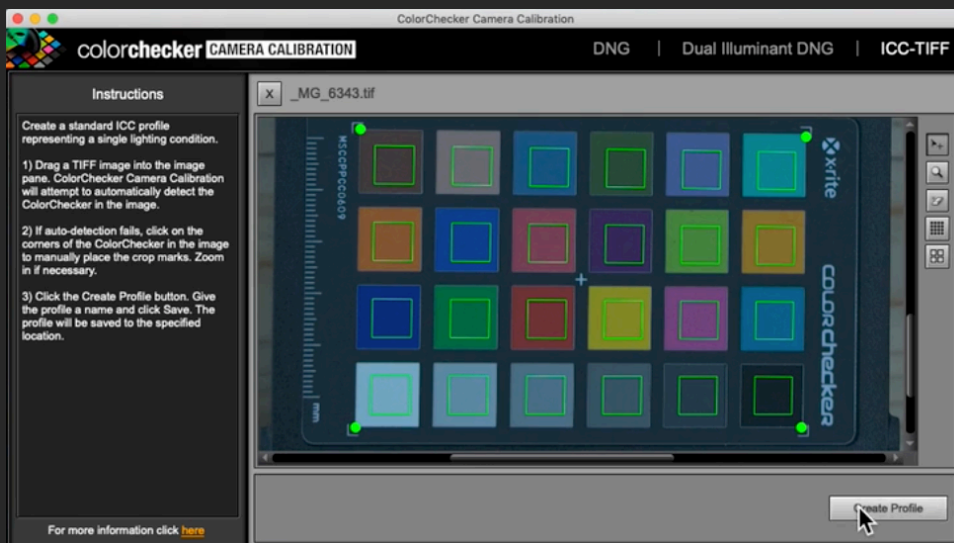Select a location and click **Export.**

3. Create the Profile with X-Rite

Launch the X-Rite Camera Calibration app available for download at www.xrite.com.

Make sure you select ICC-TIFF, drag and drop the Tiff file onto the target area.

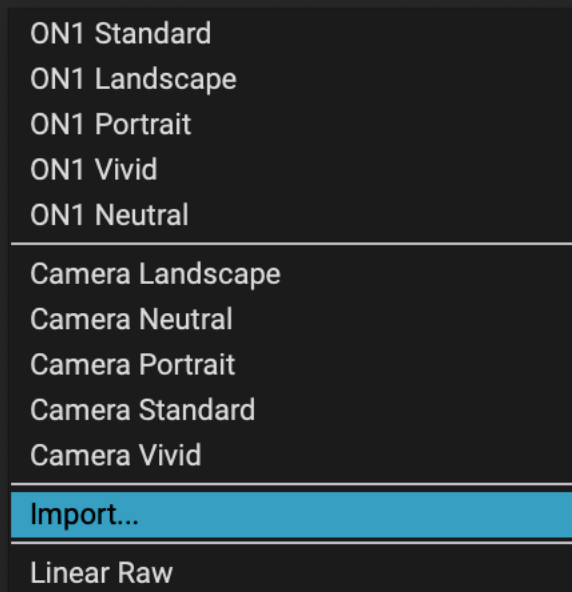It will automatically detect the color squares and overlay a rectangle you can refine if necessary.

Click **Create Profile**. Click Save.

4. Importing the Camera Profile into ON1 Photo RAW 2020

Launch ON1 Photo RAW Develop module. Under Tone & Color click the Camera Profile drop down menu and select **Import**.

ON1 Standard
ON1 Landscape
ON1 Portrait
ON1 Vivid
ON1 Neutral

Camera Landscape
Camera Neutral
Camera Portrait
Camera Standard
Camera Vivid

Import...

Linear Raw

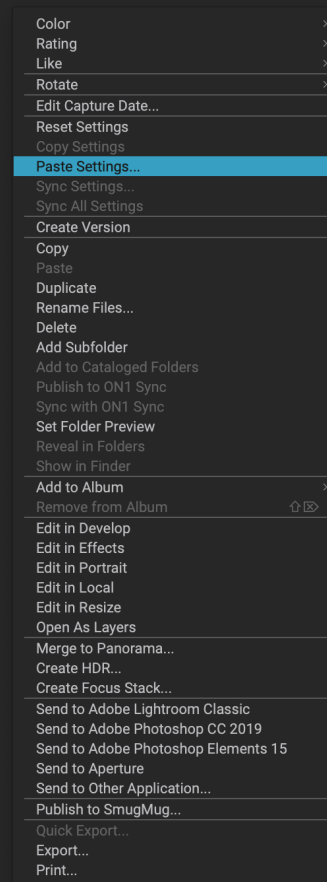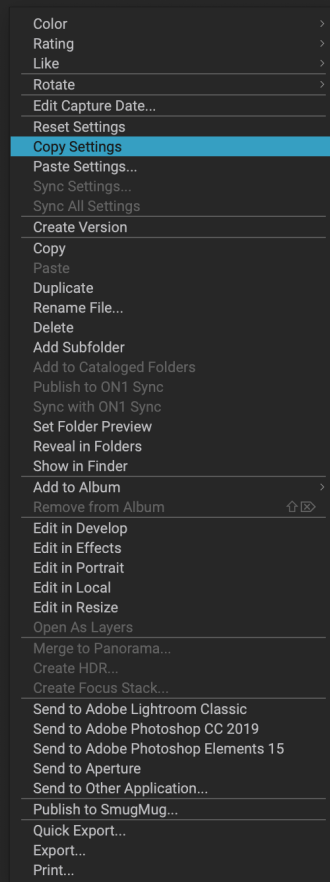Navigate to the Profile and click **Open**.

5. Applying the Camera Profile to your Images

Now that you have created and imported a camera profile it will be available in the list of Camera Profiles. Simply select the Camera Profile from the list and it will get applied to your image.

6. Bonus: Speed Up Your Post-production Workflow

You can batch apply a camera profile to a group of photos very easily. After you have applied the profile you want to use to a single photo. In ON1 Browse right click on the photo the profile has been applied and select **Copy Settings**. Then select other photos (hold down command (mac) or control (windows) to select individual photos or use the shift key to select all the photos in the series, then right click and select **Paste Settings**. This will apply the profile to all the photos you have selected.

7. Additional Resources

Other learning resources are available at www.on1.com/videos — including a video of the steps outlined in this guide. https://www.on1.com/videos/the-on1-x-rite-workflow/

ON1 Support Website: https://on1help.zendesk.com/hc/en-us

ON1 User Guides: https://on1help.zendesk.com/hc/en-us/articles/206373527

NOTE: You can find the different ColorChecker options on the X-Rite website at xritephoto.com/camerasolutions.

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