

Raw Therapee
for
Technical Photography

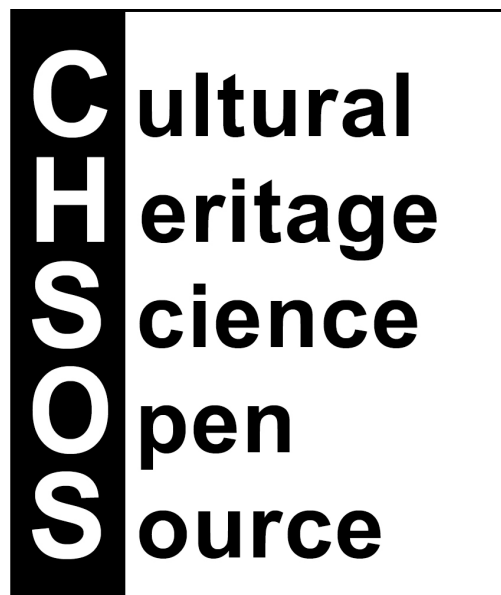


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Opening the RAW image to edit

Open Raw Therapee and start to browse for the raw images to edit using the "File Browser" tab.

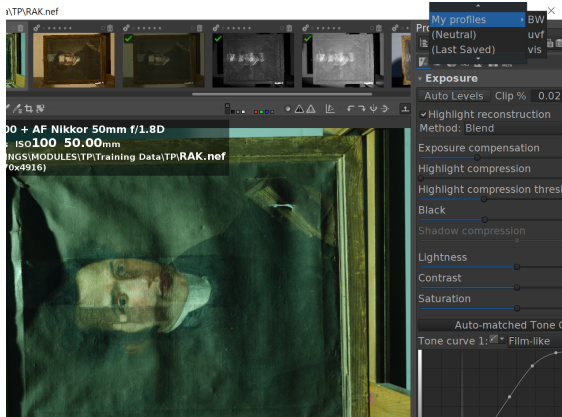
NOTE: To see the content of the selected folder you need to double click on it!

Open the RAW image to edit by double clicking and the image is opened in the EDITOR tab. From here we can do all the necessary editing.

VIS and PL

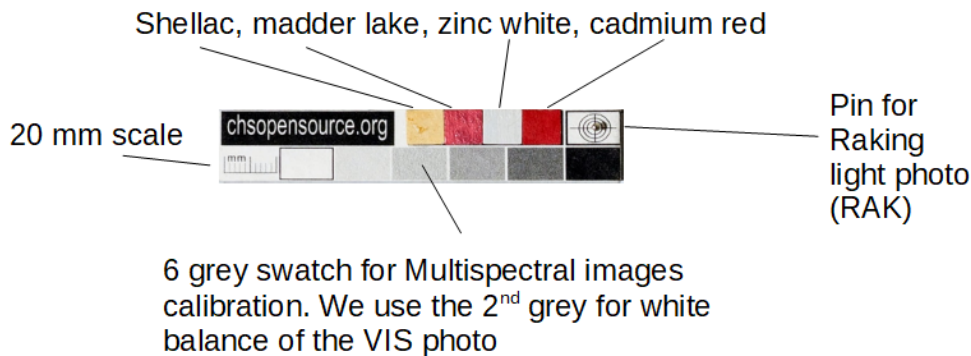
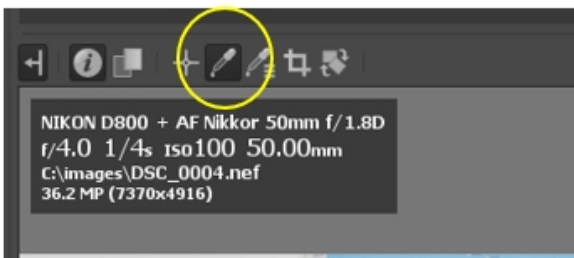
Processing Profile

For the visible photo, use the VIS profile which apply sharpening, color space and camera profile. Click on the top right corner, the drop-down menu PROCESSING PROFILE OPERATIONS / MY PROFILES/ VIS.



White Balance

The next step is to white balance the image. Click “Spot white balance” tool for white balance. Click on the 2nd grey of the TP-MSI calibration card to white balance your image.



White balance from a reference image

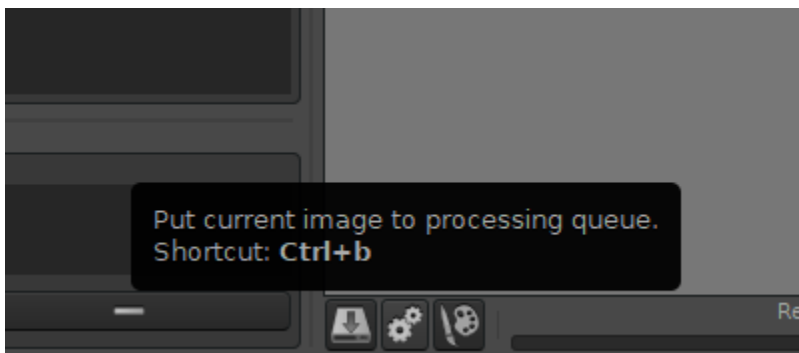
If we have a number of images to correct for white balance we can actually create a VIS profile that already has the white balance correction included. This is particularly useful for editing images where the white reference could not be put as when documenting wall painting very high and not accessible. If we use the same lamps and there is no other source of light, then the same white balance parameters can be used across all the images.

Exposure correction

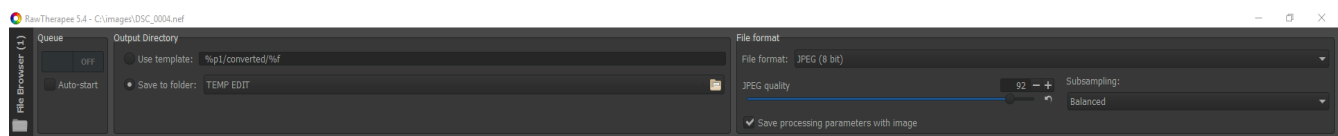
This step is not mandatory, but it is suggested if you want to be sure your documentation is done using the same exposure for your shots. Use the color “picker tool” to select a point on the second gray target of the TP-MSI calibration card and then, adjust the exposure to the recommended value 200 on the “exposure” tab, on the right.

Exporting to jpg

Click on the "gears" icon (bottom left) to “put to processing queue” the edited raw image.

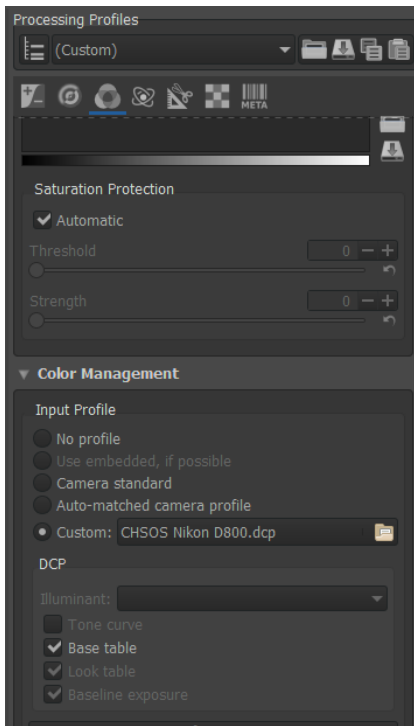
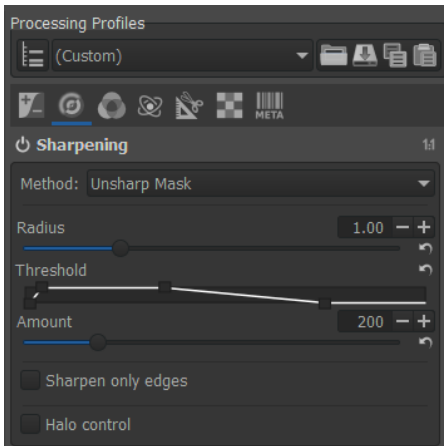
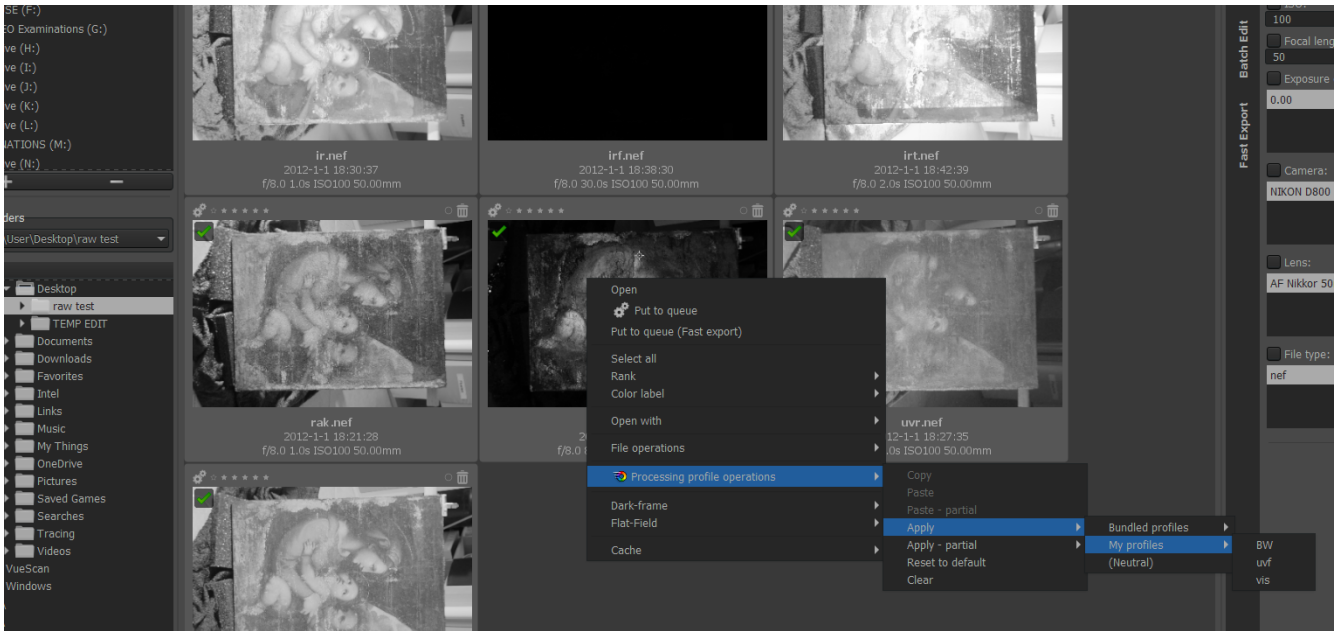


Now, select the “Queue” tab and choose the folder destination for the export file and the format and quality. Then click on the queue ON to start the process. The jpg image will be available in the indicated folder.



Other Notes

It is also possible to apply the VIS profile directly on the thumbnails of the images in the Browser tab.



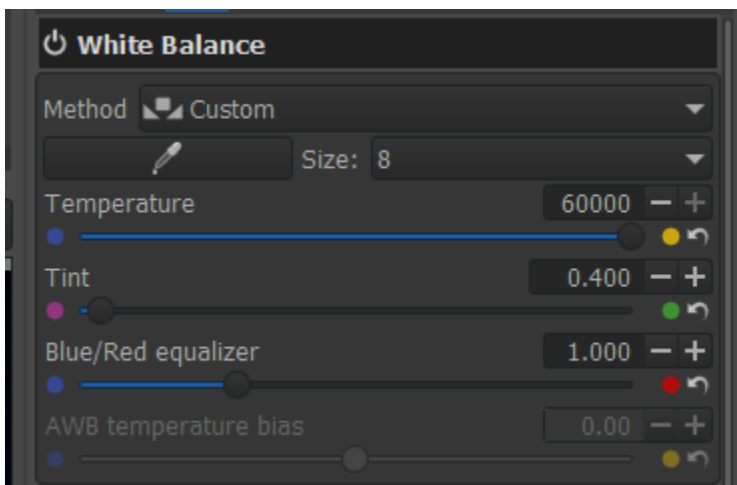
Following are the details of the parameters used for the VIS profile sharpening: Radius 1, Amount 200. Color space (sRGB) is selected under COLOR Tab / Color management / Output profile (sRGB Color Space profile).

RAK

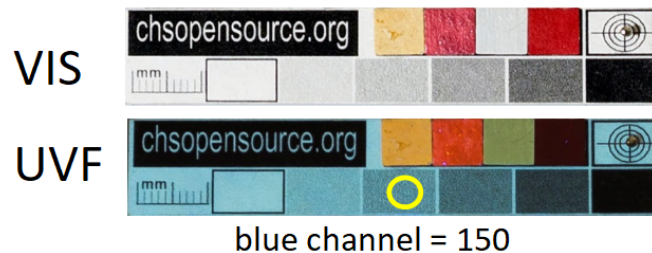
Raking light photography uses the same raw editing procedure as for VIS. Though, you cannot do the exposure correction as for VIS. Indeed, since the RAK photo would be filled of shadows and contrast, it is up to your choice to adjust the appropriate exposure to have the best information from your RAK photo.

UVF

For UVF photo we use the UVF profile which uses the same editing as for VIS plus the correction for the “white balance” for UVF photo which is established as Temperature 60000, Tint 0.4.



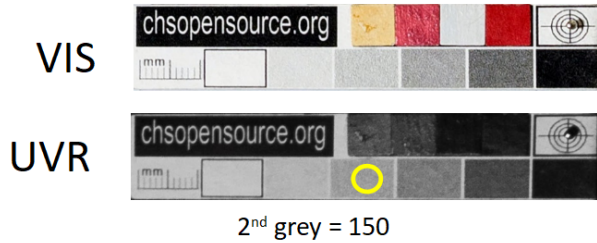
Check that the 4 color swatches in the TP-MSI calibration card have the correct colors, as below. Shellac --> yellow; madder lake --> orange; zinc white --> yellow; cadmium red --> black.



UVR

For UVR photo we use the BW profile which uses the correction for the Black and White under the COLOR tab. Since, this is an image of the "invisible" it makes sense we work with adjusting exposure, contrast, tones, in order to make the features more readable. When satisfied, we export the image as usual clicking on the "gears" icon.

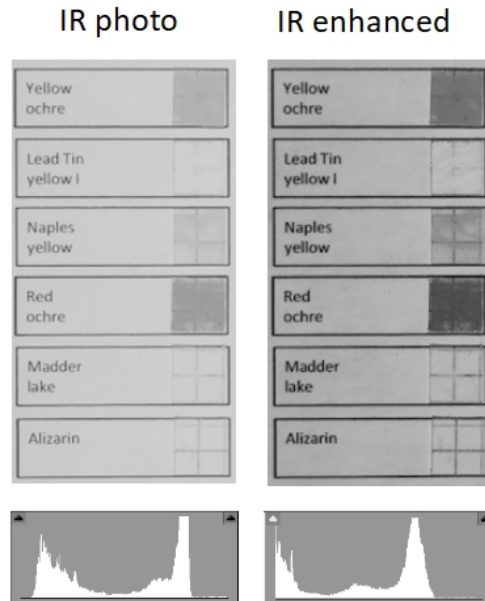
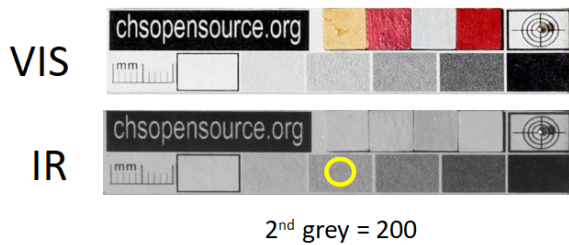
As for the exposure, a good value is to have the second grey at about 150 (grey value).



IR

For IR photo we use the BW profile which uses the correction for the Black and White under the COLOR tab. Since, this is an image of the "invisible" it makes sense we work with adjusting exposure, contrast, tones, in order to make the features more readable. When satisfied, we export the image as usual clicking on the "gears" icon.

As for the exposure, a good value is to have the second grey at about 150 (grey value).

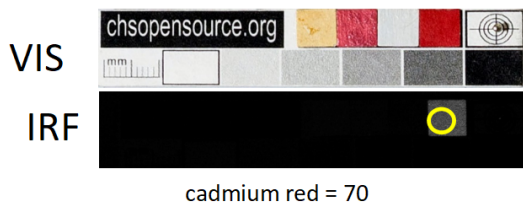


IRT

We apply the same considerations as for the IR. In this case we will not make an exposure correction, since the calibration card is not transparent and also because of the great variability of the supports, materials and thickness. Instead, we will, adjust the exposure of our shooting in order to get the most information. It's likely that we could need more than one acquisition, since there could be not likely one single good exposure.

IRF

We apply the same considerations as for the IR. For the exposure correction we will use the cadmium red swatch in the TP-MSI calibration card, and have it at about 70 grey value.



PP3 Profiles

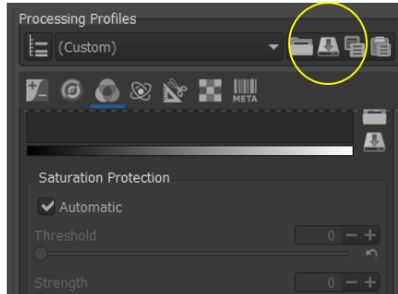
A pp3 file is created every time Raw Therapee opens an image. It stores all the editing we are doing on the image. If we want to get back to the original image without any editing, use the file browser to move to another folder and then delete the pp3 file related to that image. When we go back to the image, it will look like the original, no editing. We can try to open a pp3 file with Notepad to see it is just a list of all the editing parameters.

```
000214.jpg.out.pp3 - Notepad
File Edit Format View Help
[Version]
AppVersion=5.4
Version=331

[General]
Rank=0
ColorLabel=0
InTrash=false

[Exposure]
Auto=false
Clip=0.02
Compensation=0.82999999999999996
Brightness=0
Contrast=0
Saturation=0
Black=0
HighlightCompr=0
HighlightComprThreshold=33
ShadowCompr=50
HistogramMatching=false
CurveMode=Standard
CurveMode2=Standard
Curve=0;
Curve2=0;
```

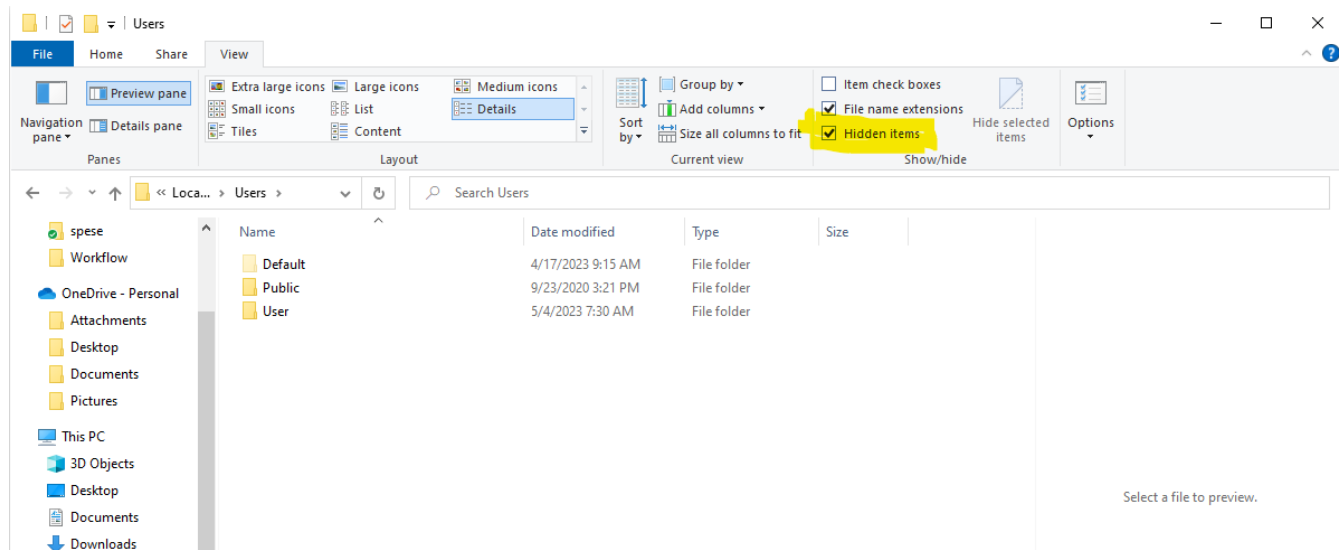
You can make your own profiles, rather than just use our VIS, UVF and BW. Edit the image as you wish and click the ‘save current profile” button.



Profiles installation

If you are installing Raw Therapee on another PC, you can install also our profiles (VIS, UVF, BW). Profiles can be added using 2 procedures.

1. Add custom profiles directly into the computer drive. Be sure to have access to the PC as administrator. Also, be sure to check "hidden files" from your File Explorer, otherwise you cannot see the "AppData" folder.



Generally, this is the location:

C:\Users\User\AppData\Local\RawTherapee\profiles

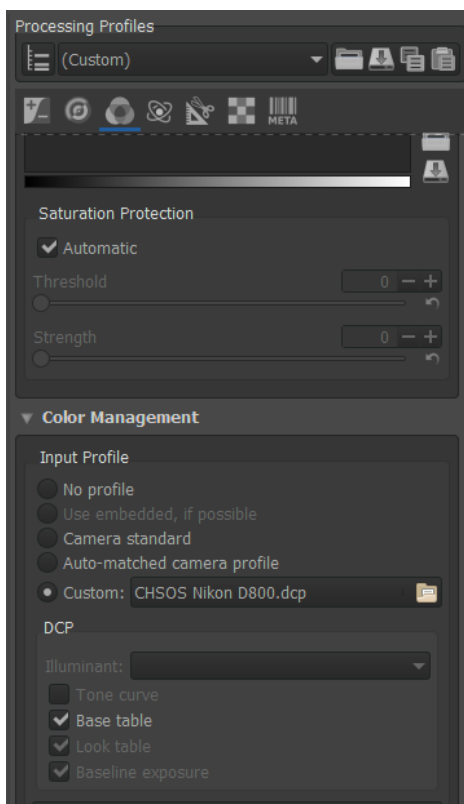
Relaunch RT and the profiles should be available under “my profiles”.

2. Click the “Editor” Tab and use the “Load a profile from file” button and “save profile” button to load and save the custom profiles provided on a USB drive. These buttons are located on the upper right corner. It is not necessary to load an image.

Camera Profile

If you are installing Raw Therapee on a new PC, or you are changing camera, you also have to load the camera profile. We do this process for VIS and UVF profiles so that the correct camera profile is loaded automatically for each profile. First we load the camera profile (DCP format) in a folder of our choice. The software stores the camera profiles in this folder: C:\Windows\System32\spool\drivers\color\ Again, this folder could be a bit different depending on the Operative System.

We start with the VIS profile. We load it, then we load the camera profile for our specific camera from the COLOR tab. We save this VIS profile updating the original one. We do the same for the UVF profile.



Batch processing (Pano stitching)

To process a series of images, like in a panoramic acquisition, we first open the image containing the TP-MSI calibration card and we do the needed editing. Then, we go back on the File browser tab and we do right-click on this photo and select "*Processing Profile Operations > Copy*". At this point, we select the images we want to apply this profile to, right-click and select "*Processing Profile Operations > Paste*". In one quick operation you have replicated the same tool settings in the whole series of images.

Additionally, RawTherapee lets you apply only a part of the copied processing profile, for example only the "Resizing" tool. To do this, use the "*Processing Profile Operations > Paste Partial*" option instead of the "Paste" option.