



Filters

The Target-UV has been calibrated to give the best color rendering using the following filters:

1. Kodak Wratten 2e pale yellow filter
2. Peca 918
3. Internal camera sensor filtration
 - For UV-IR or modified cameras that have had this filtration removed, a BG-38, blue-green glass filter is recommended

About this Workflow

This is an abbreviated workflow meant to provide a brief outline for those already familiar with the full UV Innovations Workflow (provided separately), see www.uvinnovations.com.

Please email us at info@uvinnovations.com for clarification, questions, or comments on this workflow.

For questions about sales and availability contact Image Science Associates at 1-888-801-6626 or www.imagescienceassociates.com

Troubleshooting

Some common questions and suggestions for troubleshooting are provided in a separate document. In addition to this resource, see *The AIC Guide to Digital Photography and Conservation Documentation*¹, for more detailed information on the use of UV-visible documentation, workflows, equipment, file management, and other general digital documentation instructions.

Summary of Workflow

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¹ Warda, Jeffrey (ed.), Franziska Frey, Dawn Heller, Dan Kushel, Timothy Vitale, Gawain Weaver. *The AIC Guide to Digital Photography and Conservation Documentation, 2nd Edition*. Washington, D.C.: American Institute for Conservation, 2011.

UV Innovations Workflow

Safety



Ensure that all users have protective eye wear. UV radiation is damaging to the human eye and skin. Have pieces of black foam core or other dark material on hand to cover sensitive artwork, as needed. Limit exposure to UV radiation by covering the lights when not in use.

Step 1: Setup For UV-Visible Documentation

Setup UV lamps and camera, in a non-fluorescent work space. Ensure that all visible light can be blocked from the documentation area.

- a. Roughly position the lamps and camera. Ensure that the subject will be evenly illuminated by the UV source.
- b. Place appropriate filters on camera lens. Kodak Wratten 2e and PECA 918 are recommended. An external BG-38 or other IR filter may be needed for modified digital cameras.

Step 2: Image Composition and Capture Settings

- a. Ensure that you have already saved your UV/visible white balance using the UV-Grey, and the recommended RAW settings for your software. If not, see relevant UV Innovations workflow, step 2 & 3.
- b. Choose Target-UV intensity for the object being documented (low/medium or high/ultra) based on their relative intensities. You may want to turn on the UV source (and turn off the overhead lights) to decide. See page 2 of full workflow, or the troubleshooting document for help choosing intensities.
- c. With the overhead lights on, or a working light, arrange artwork in camera field of view. Ensure that it will be evenly illuminated by the UV source. Place Target-UV in the center of the field of view below the artwork being documented.
- d. Focus your image. Use auto-focus, if desired, but switch the focus to “Manual” to lock the focus before shutting out the lights for image capture.
- e. Turn on UV source and turn off overhead or working lights. Make any final adjustments to the angle of the UV source to reduce shadows and ensure even illumination. Make sure your radiation source has adequate time to warm up.
- f. Check camera capture settings, particularly the following settings.
 - Use Aperture-priority or Manual exposure, as desired. Target-UV exposures typically work best with Manual exposure.
 - Choose f-stop: an aperture setting in the middle of your lenses range is recommended for maximum sharpness (f 11 is a good starting point)
 - ISO = 200 (or less than 400)
 - White Balance = as set from UV-Grey card
 - “Storage” Image Quality [RAW] [lossless compressed] [14-bit]
 - “Image processing”: Colorspace [ProPhoto, if possible, if not use Adobe RGB]

Step 3: Image Capture

Take picture

- a. Make sure room lights are off and no visible light can leak into your documentation area.
- b. Set exposure manually or using aperture priority.
- c. Position the mouse over “shoot” and then cover or shut off the monitor.
- d. Click the mouse to take the picture.
- e. Remove the monitor cover/turn on monitor. Turn on room lights, or working lights, as desired. For best viewing conditions for the images on your monitor, keep overhead lights off and limit the use of a working light. Dim monitor, if needed.
- f. Cover the object if necessary, or cover UV lamps.

Step 4: Evaluation of Images

- a. Open the Image in Photoshop Camera RAW, or other RAW processing software.
- b. Check framing and focus.
- c. Load UV innovations recommended raw settings using the method appropriate for your software.
 - Ensure that the color space is set to “ProPhoto RGB”. This is the default for Adobe Lightroom and some other RAW processing programs, but not Photoshop Camera Raw.
- d. Check exposure
 - Select the “color sampler tool” if using Photoshop, or similar program.
 - Click on or hover over the grey patch all the way to the left of the Target-UV (the brightest grey patch on the level you have chosen).
 - Adjust exposure slider until the RGB values equal 130 (50% RGB) +/- 3 units.
 - If required to get the RGB values as close to 130 (50%) as possible, adjust white balance of the RAW image.
 - ***Re-take the image if exposure requires more than 1/3 stop exposure adjustment in RAW.

Step 5: File Management

- a. Save the image(s) as desired. Enter Metadata. Save files as desired. DNG, and TIFF formats are recommended for archival storage of files. Ensure that TIFF files use “Prophoto RGB” color space. “Adobe RBG” is best for JPEGs that will be shared or for printing.
- b. Repeat workflow as needed with additional images.