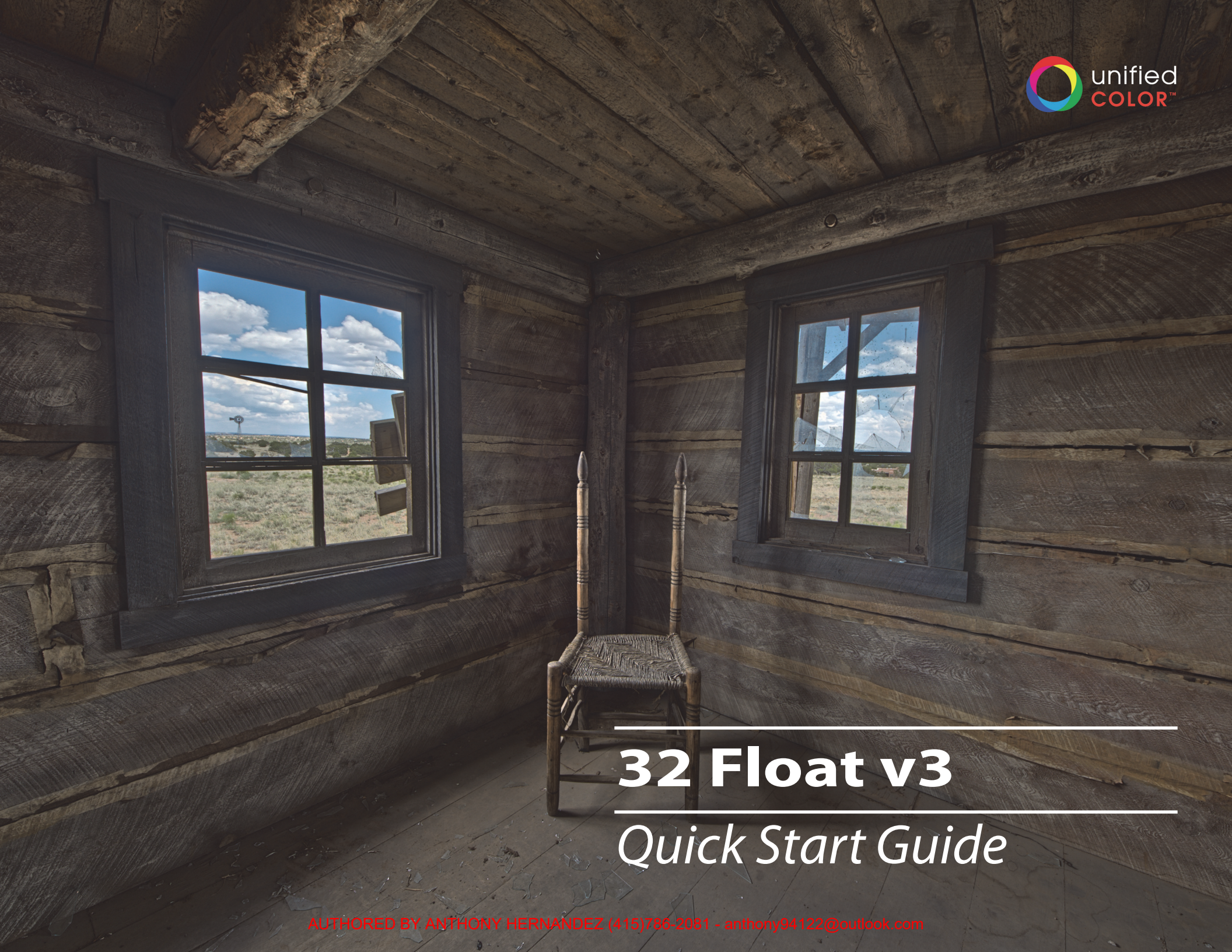

32 Float v3

Quick Start Guide

AUTHORED BY ANTHONY HERNANDEZ (415)786-2081 - anthony94122@outlook.com

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Photo copyrights:

- **Old Cabin, Santa Fe:** John Omvik

Unified Color Technologies, LLC
288 Harbor Blvd
Belmont, CA 94002
Phone: (650) 591-5511
Support: (855) 63-COLOR (632-6567)
Email: web.info@unifiedcolor.com
Web: www.unifiedcolor.com

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Getting Started

Easy HDR Creation

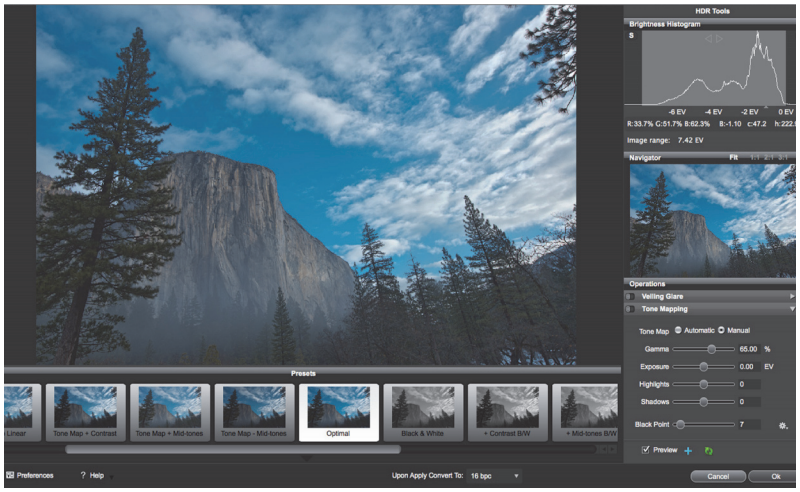
Please visit www.unifiedcolor.com for expanded tutorials and other information to help you get the most from 32 Float v3.

Creating an Image

Begin using 32 Float v3 by either creating or opening a 32-bit image in Adobe® Photoshop®. Please refer to the Adobe documentation for any needed instructions on creating or opening images in Photoshop. When you are ready to create the HDR image, launch 32 Float v3 by selecting **Filter>Unified Color>32 Float v3** within Photoshop.

Interface Overview

This section provides a quick overview of the 32 Float v3 interface.



Brightness Histogram

The **Brightness Histogram** displays the 32-bit image brightness channel in EV units (f-stops).

The highlighted range (**Display Zone**) shows you the brightness range of the 32-bit image that is visible on a computer display. The **Display Zone** moves as you adjust the display brightness.

Data to the right of the **Display Zone** indicates "blown out' highlights that are too bright for your monitor to display. Date to the left of the **Display Zone** indicates "lost" shadows that are too dim for your monitor to display.

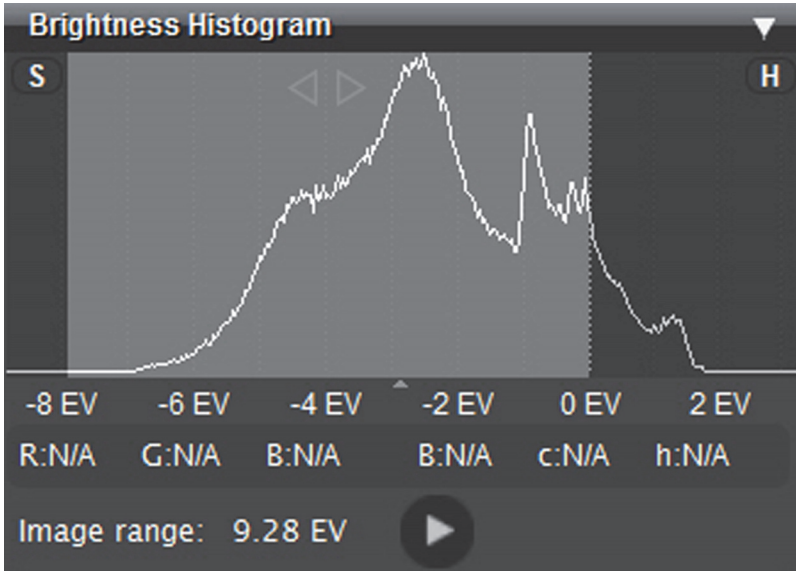
The 0EV point indicates the point of maximum brightness that the monitor can display. When the display brightness is set to 0, values below 0EV indicate the brightness levels in your monitor's range down to -8EV. Values above 0EV indicate values beyond the ability of your monitor to display (overly bright pixels). Values below -8EV are too dark to appear on your monitor.

The **Brightness Histogram** also displays the following information for the current pixel (under the cursor):

- **R, G, B:** Red, green, and blue channels. This value can be displayed as 8-bit values (0-255) or percent (0-100%).
- **B:** Brightness (in EV). This value corresponds with the brightness numbers in the HDR Expose 3.0 application.
- **c:** Chroma. This value displays the currently selected pixel's color saturation from 0 to 100%, where 0% is a neutral point and 100% is a fully saturated color.
- **h:** Hue. This value is measured in degrees (0-360°).

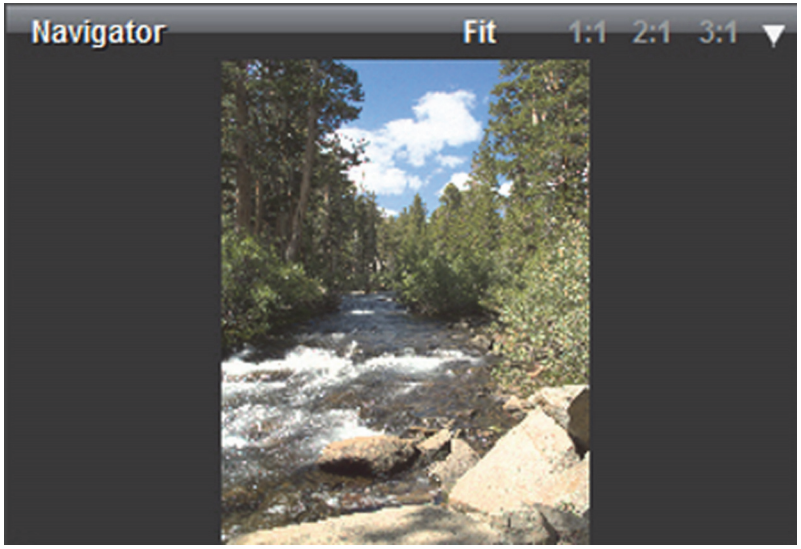
Easy HDR Creation (continued)

- **Warning masks:** Clicking the **Shadow** (**S**) or **Highlight** (**H**) button toggles highlighting areas that are too dim or too bright for your monitor to display.



Navigator

The **Navigator** lets you set a zoom amount and then pan around the image when zoomed.



Easy HDR Creation (continued)

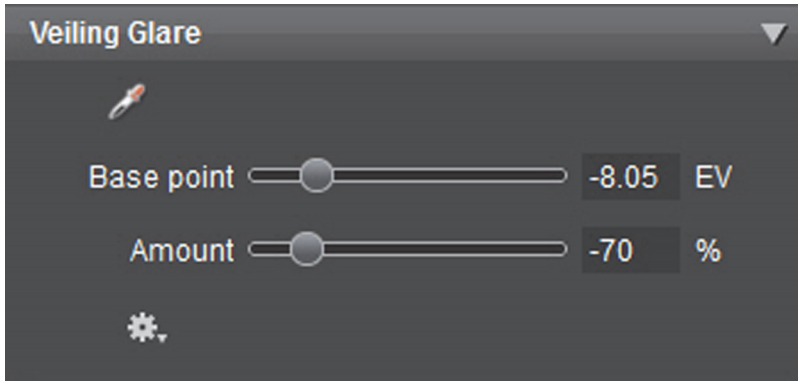
Operations

The **Operations** area of the 32 Float v3 interface contains the tools you will use to edit images to get the final results you want. In general, the 32 Float v3 workflow runs from top to bottom; however, you may use any workflow you like to edit your images.

Veiling Glare

The **Veiling Glare** tool can remove lens glare and/or haze. You can also use this tool to obtain very deep blacks, especially for night shots. This tool has the following functions:

- The default base point setting is the point of average brightness.
- Set the amount of glare to remove using the **Amount** slider.



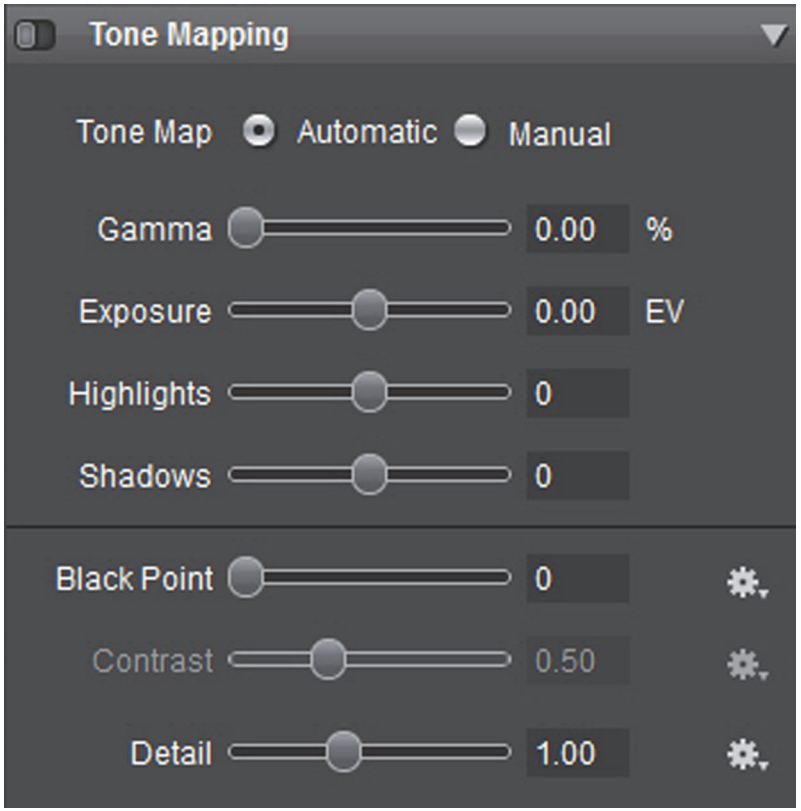
Tone Mapping

The **Tone Mapping** tool adjusts image exposure, brightness, and contrast. This tool has the following functions:

- **Automatic Tone Mapping:** Checking the **Automatic Tone Mapping** radio button lets HDR Expose 3.0 analyze the image and automatically set the proper **Exposure**, **Highlights** and **Shadows** values.
- **Gamma:** Adjusts the midtone and shadow brightness.
- **Exposure:** Adjusts the overall image brightness.
- **Highlights:** Lets you recover "blown out" highlight details by adjusting highlights back into display range.
- **Shadows:** Lets you recover "lost" shadow details by adjusting highlights back into display range.
- **Black Point:** Adjusts the neutral black point of the image.
- **Contrast:** Adjusts the global contrast of the image.

Easy HDR Creation (continued)

- **Detail:** Adjusts the local contrast or detail enhancement of the image.

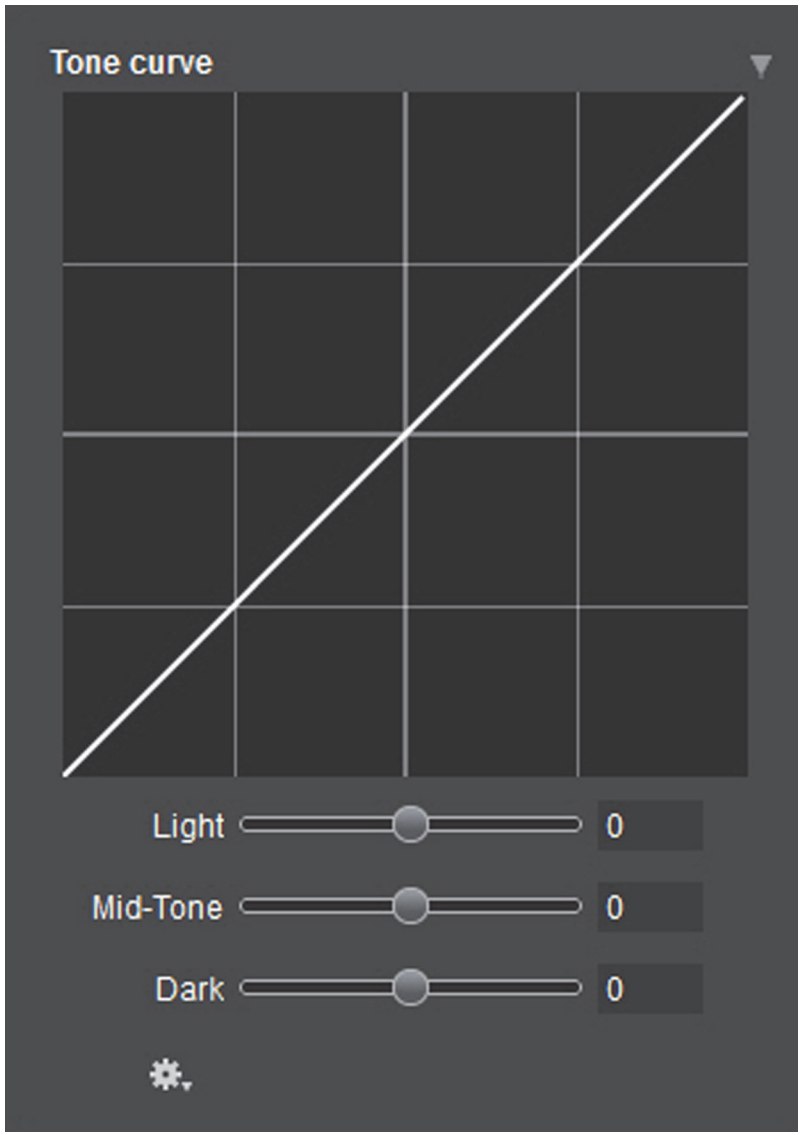


Easy HDR Creation (continued)

Tone Curve

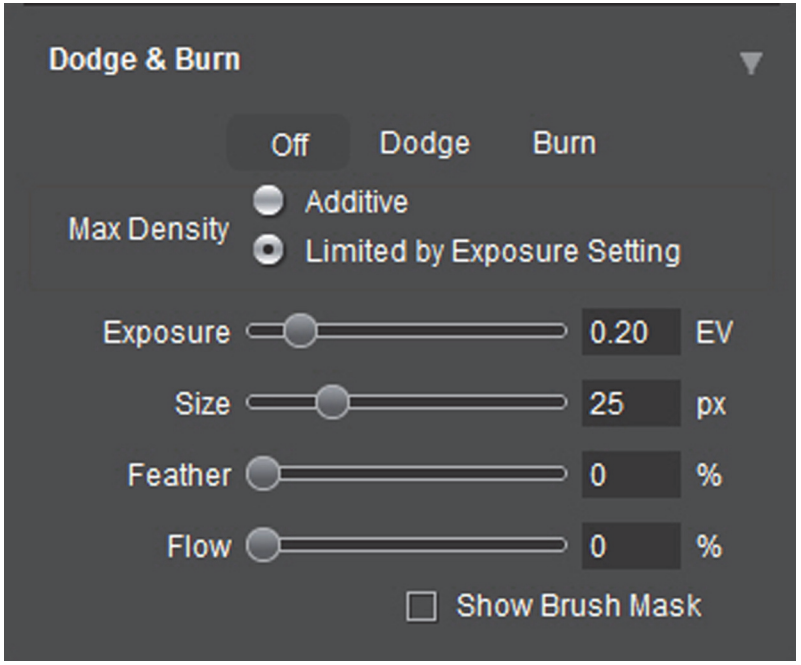
The **Tone Curve** function adjusts the contrast curve for highlight, mid-tone, and shadow tones in your image. This tool has the following functions:

- **Light:** Adjusts the highlight portion of the contrast curve.
- **Mid-Tone:** Adjusts the mid-tone portion of the contrast curve.
- **Dark:** Adjusts the dark portion of the contrast curve.



Dodge & Burn

The **Dodge & Burn** function lets you dodge (lighten) or burn (darken) parts of an image in a color-neutral way by brushing over the desired area of the image.



This function has the following options:

- **Off/Dodge/Burn:** Select **Off**, **Dodge**, or **Burn** as desired.
- **Max Density:** Limits the maximum density you can achieve with multiple brush strokes. Selecting **Additive** means that succeeding strokes over the same area will be added to make the effect increasingly dark or bright with each successive brush stroke. Selecting **Limited by Exposure Setting** means that the **Exposure** setting will determine the maximum amount of change. For example, if the Flow and Feather amount of each stroke adds 0.1EV of density and the **Exposure** setting is 0.5EV, you will be able to make five brush strokes in the same area before reaching the maximum exposure limit. Subsequent brush strokes will have no further effect.
- **Exposure:** Adjust the exposure.
- **Size:** Adjust the brush size, in pixels.
- **Feather:** Adjust the amount of feathering around the brush edges, in pixels.
- **Flow:** Adjust the brush strength, in percent.
- **Show Brush Mask:** Toggles displaying a red mask showing the brush path on and off.

Color Settings

The **Color Settings** tool lets you adjust the colors in the image.

This tool has the following functions:

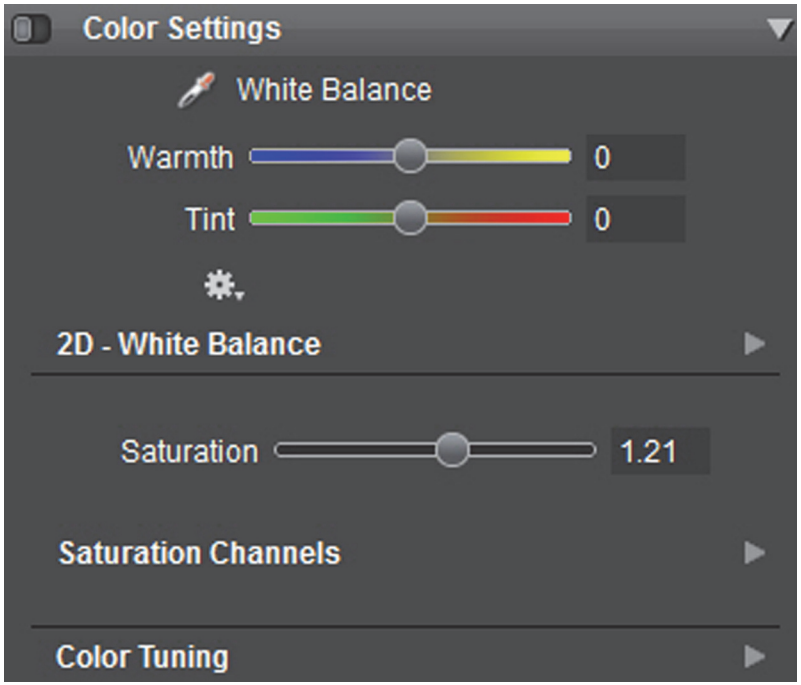
White Balance

The **White Balance** function lets you adjust the white point of your image.

- **Eyedropper:** Select a point in your image.
- **Warmth:** Adjust the warmth (yellow) or coolness (blue) of the white balance.

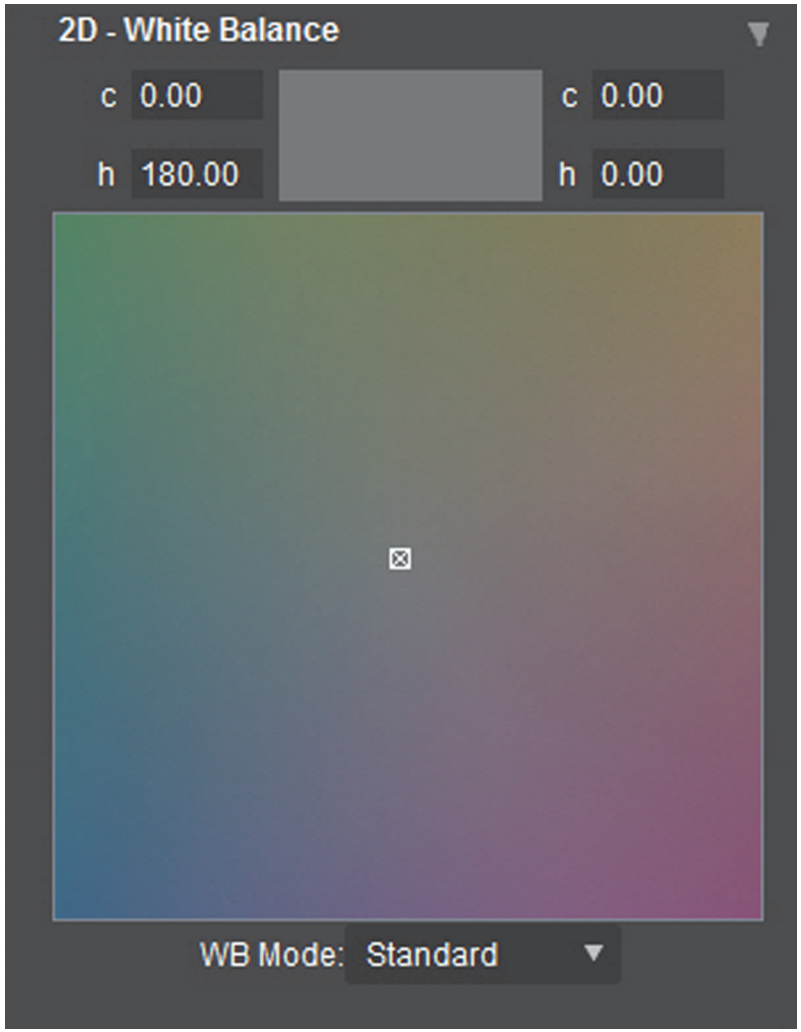
Easy HDR Creation (continued)

- **Tint:** Adjust the red/green tint of the white balance.



2D - White Balance

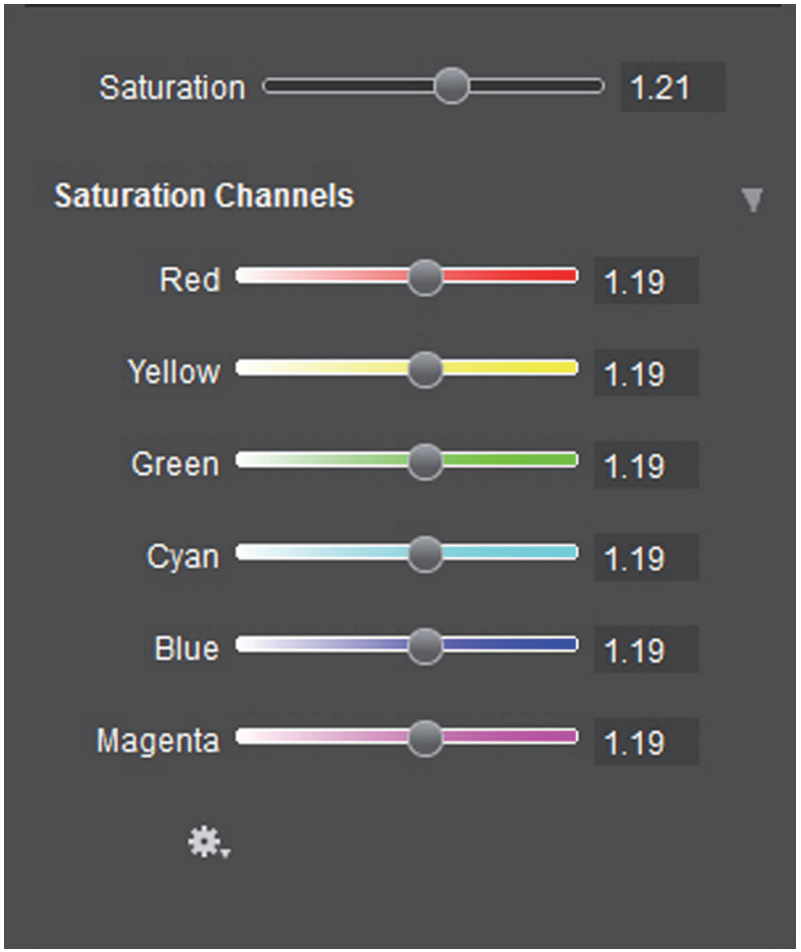
The **2D White Balance** function provides another method for adjusting the white balance of the image. The box indicates the current white balance setting. To change the white balance, click and drag the **X** marker to the new white balance setting.



Easy HDR Creation (continued)

Saturation

The **Saturation** function lets you increase or decrease the saturation of one or more colors.



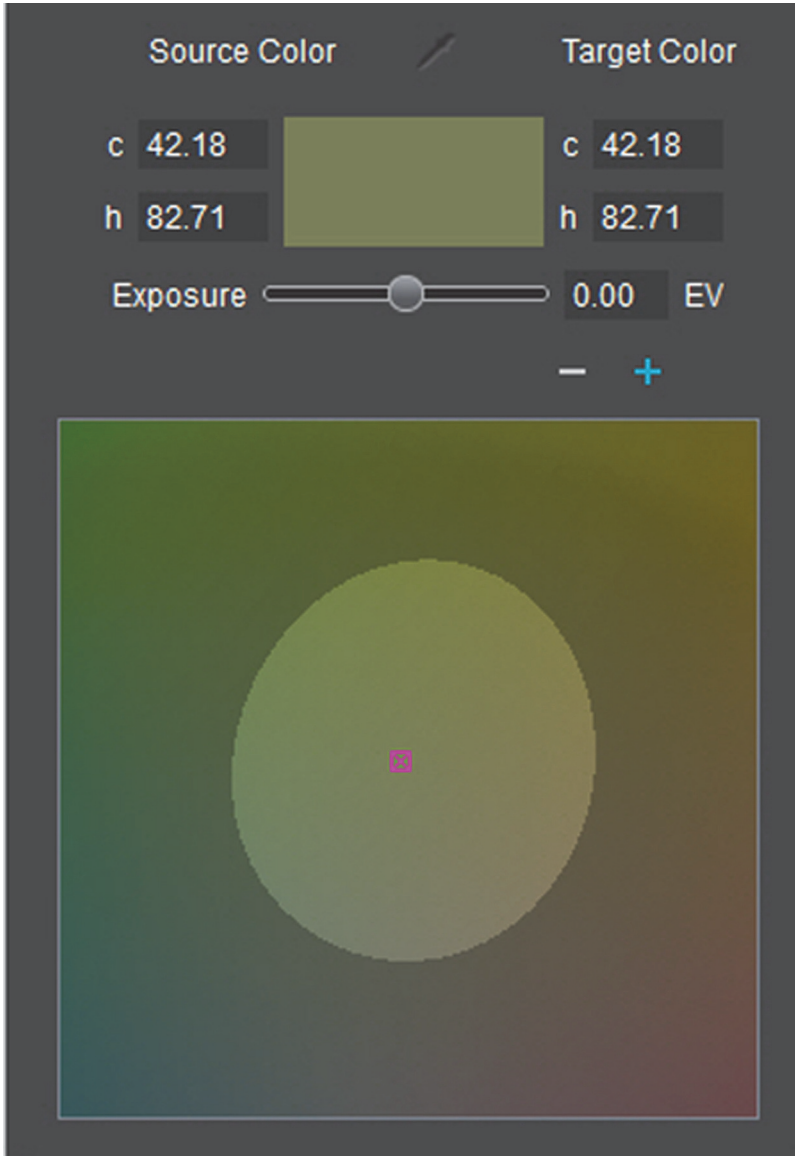
Adjust the saturation using the following controls:

- **Saturation:** Adjust the overall amount of saturation in the image. Values above 1 increase the saturation of all color channels; values below 1 decrease the saturation of all color channels.
- **Channel Saturation:** Adjust the saturation for each of the six color channels.

Easy HDR Creation (continued)

Color Tuning

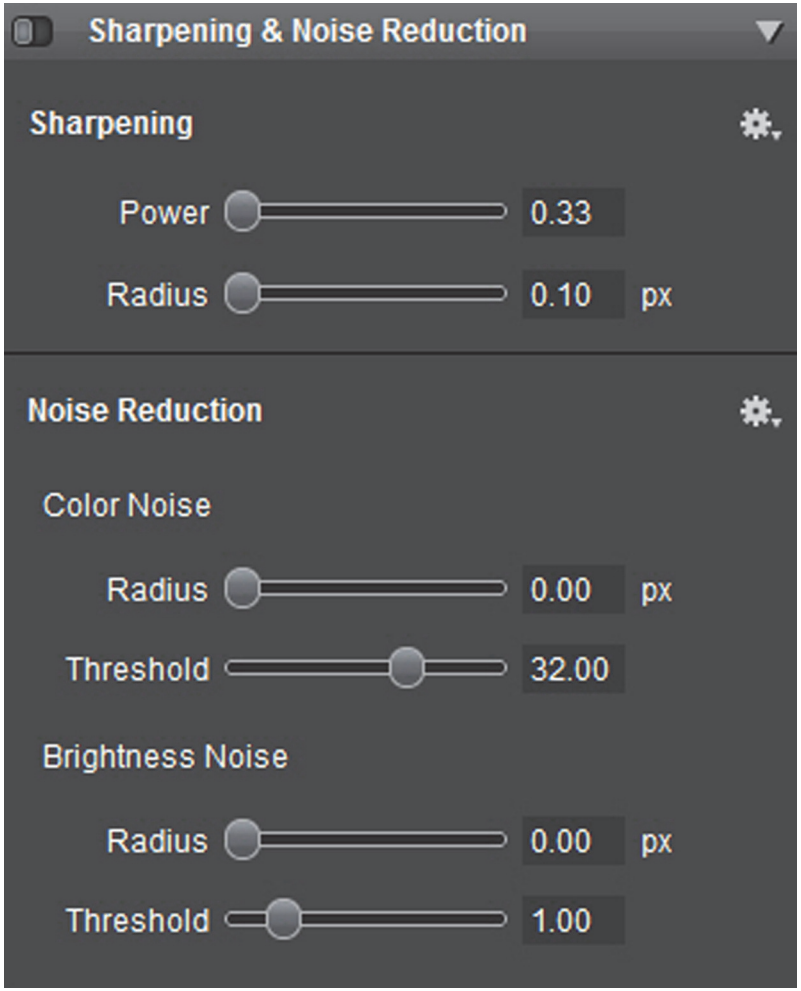
Color tuning lets you fine-tune specific color tones without affecting any of the other colors in your image. The **Color Tuning** function lets you select and tune up to three source colors at once and automatically gives you an available tuning range based on your selected color(s). If desired, add another point by clicking the **Add New** button (**+**) and repeating this procedure for the second and/or third point(s). If necessary, you may delete the most recently added point by clicking the **Remove Last** (**-**) button. The **Exposure** slider lets you change the brightness level of the selected color range when color tuning your image.



Noise Reduction

The **Noise Reduction** tool eliminates brightness and/or color noise from the image. Noise appears as colored dots in dark areas of the image and becomes more evident at higher ISO values.

- To reduce color noise, select the desired radius in pixels using the Color Noise **Radius** slider or field, then adjust the strength of the color noise reduction using the **Threshold** slider or field. Larger values increase the amount of noise reduction but may obscure fine details.
- To reduce brightness noise, select the desired radius in pixels using the Brightness Noise **Radius** slider or field, then adjust the strength of the noise reduction using the **Threshold** slider or field. Larger values increase the threshold EV. Image areas that are below the threshold EV will have noise reduction while levels above this value will retain their original pixel values. High levels of noise reduction may obscure fine details.



Working with Presets

Presets let you save image editing settings to apply later. You may import presets from other computers or export them to other computers to share them with other users using the **Preferences** window. You may also delete presets.

Applying a Preset

32 Float v3 uses two types of presets to speed up image editing:

- Global presets contain multiple settings for multiple tools. Apply a global preset by opening or merging an image and then clicking the desired preset in the **Presets** area of the 32 Float v3 interface.
- Feature presets contain presets for a single tool. Apply a tool preset by clicking the **Preset** icon (gear) in the desired tool to open the **Feature Preset** menu for that tool and then selecting the preset to apply.

Adding Presets

To add a global preset:

1. Adjust your image as desired.
2. Click the **Add Preset** button in the **Presets** area of the 32 Float v3 interface to open the **Add preset** window.
3. Enter a name for the preset in the **Preset Name** field.
4. Select the tool options you want to include in the new preset by checking and clearing the appropriate checkboxes. You may include tool presets in this global preset by using the pull-down menus to select the desired tool presets.
5. Click **OK**.

To add a new feature preset:

1. Adjust the tool values as desired.
2. Click the **Preset** icon (gear) and then select **Add Preset**.
3. Enter a name for the new preset in the **Add Preset** window and then click **OK**.

Deleting Global Presets

To delete a global preset:

1. Hover your mouse cursor over the preset you want to delete. A red **X** appears in the upper left corner of the selected preset.
2. Click the red **X** to delete the preset.

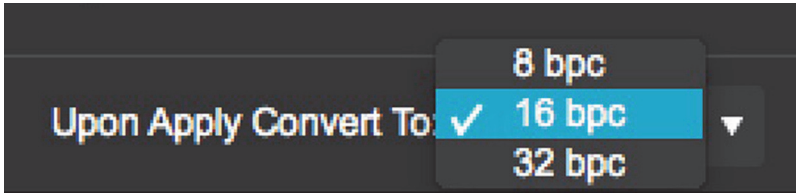
Applying Your Changes

To apply your changes and return to Photoshop, click the **Apply** button at the lower right of the 32 Float v3 window.

Conversion Settings

The **Upon Apply Convert to** pull-down menu at the bottom of the **32 Float v3** window lets you specify how the processed image should be returned to Photoshop. The available options are:

- **8 bpc:** 8 bits per color
- **16 bpc:** 16 bits per color
- **32 bpc:** 32 bits per color



Selecting **8 bps** or **16 bps** will tone-map the image and convert the original image to an 8- or 16-bit image with the processed image returned as a new Photoshop layer.

Selecting **32 bps** will process the image and return it as a 32-bit layer that you may need to convert in Photoshop at some future time. Returning a 32-bit layer recommended if you want to process the same HDR image in different ways by calling the plug-in multiple times to process different areas and then use layer masks to composite the final result.

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Unified Color Technologies, LLC
288 Harbor Blvd
Belmont, CA 94002
Phone: (650) 591-5511
Support: (855) 63-COLOR (632-6567)
Email: web.info@unifiedcolor.com
Web: www.unifiedcolor.com