High Dynamic Range (HDR) Notes

These are supplementary notes to the HDR presentation that deal with the work flow.

Bridge/Lightroom

1	Prepare images to be processed.
2	Set white balance.
3	Remove chromatic aberrations.
4	Export as TIFF files.

Photomatix

1	Choose **Process	Generate HDR** from the command menu.
2	Choose the images to be processed, for example: • img_0009.tif • img_0010.tif • img_0011.tif The Generate HDR – Options dialog will be displayed. Select appropriate HDR options. These include: • Align source images (you will not need this if you used a tripod) • Reduce chromatic aberrations • Reduce noise • Attempt to reduce ghosting artifacts Press **Generate HDR** button. HDR will create HDR and display resultant image. This takes a long time to complete. Note that your monitor is not capable of displaying the full dynamic range of this file.
3	Choose **File	Save HDR As** from command menu. This will allow you to save time later if you decide to reprocess the file with tone mapping. The default filename is **img_0009_10_11.hdr**. I use the default because the name tells you which were used. Choose your own naming scheme if you don't like filename.
4	Now choose **Process	Tone Mapping** from command menu. Select appropriate options and press the Process button. See the section below for tone mapping options. After processing, the tone mapped version of the image will be displayed.
5	Choose **File	Save As** from command menu. The default filename is **img_0009_10_11_tonemapped.tif**
6	Choose **File	Save Settings** from the command menu. This will allow the tone mapping settings to be saved to a file. The default filename **img_0009_10_11_tonemapped.xmp**.

Note that if you have previously created an HDR file (see item 3, above) that you wish to reprocess with tone mapping, then choose File | Open from the command menu to open the file. You can than proceed to item 4.

Photoshop

All images processed with HDR tend to be flat. They will need to be optimized. because they tend to be flat. For examples, curves, etc in Photoshop or your favorite image editor.

Tone Mapping Options

Light Smoothing	Five radio buttons. Set to Very High (button 5) for a natural look. Set to Very Low to Medium (button 1, 2 or 3) for grunge look.
Strength	Set to low values for a light image. High values for a grunge look.
Microcontrast	Use positive values for images that have lots of detail. Note that Micro-smoothing defeats this option. So if you increase micro-contrast, then reduce micro-smoothing.
Highlights Smoothing	Use this to correct for halo in highlights.
White Point	I always set to zero. This prevents highlight clipping when processing later with Photoshop.
Black Point	Adjust to suit.

You can always use the **Presets | Load Settings** to ensure that the settings from the xmp file get loaded as a starting point for tone mapping.

The "Grunge Look" is a common look that some people prefer to create with Photomatix. This may be created using low values light smoothing settings and high strength settings. Photomatix also have a tone mapping filter that may be used inside Photoshop. This makes it easier to process an image multiple times. This allows a more extreme grunge look to be created.

Match Grun
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