Luminosity Masks Program Notes
Gateway Camera Club January 2017

What are Luminosity Masks :

•Luminosity Masks are a way of making advanced selections in Photoshop
•Selections are based on Luminosity - how Bright or Dark an area is.
•Good post-processing - Applying the Right Adjustment in the Right Place
•Lightroom makes Global Adjustments, limited ability for Local Adjustments
•LM selections are a better tool to make very precise Local Adjustments
•LM's are a Powerful Tool to Make Your Images Really Pop

What you Will Learn about Luminosity Masks :
•Overview of the Photoshop Fundamentals behind Luminosity Masks
•Layers, Masks, Adjustment Layers, Selections, Blending Modes
•How Luminosity Masks make Selections in Photoshop
•An Overview of the most common ways LM's are used
•The goal of this presentation – to illustrate the Creative Possibilities
•Focus on what LM's can do, rather than the keystrokes needed
•Other resources give you a better understanding of the mechanics

Luminosity Mask Resources :
•You need Adobe CC Lightroom plus Full Photoshop
•I use Tony Kuypers TK Actions Panel V4 which sells for $30
•Sean Bagshaw produces excellent Video Tutorials about LM's
•I highly recommend Sean's videos ($45), as a great learning tool
•Other resources; Jimmy McIntyre, Greg Benz, and Aaron Dowling
•They sell action panels and video tutorials, but also have free stuff too
•Via email, I will provide links to each of these resources

How are Luminosity Masks Commonly Used ?

•Can use for Single Image Edits, or for Multiple Exposure Blends
•Use LM's to make Targeted Local Adjustments to Exposure, Contrast, Color
•Midtone Masks provide very fine control over how Contrast is adjusted
•Dodge and Burn layers to Balance Tonalities – Luminosity Painting
•Targeted application of Saturation and Vibrance via Masks
•Create Natural Looking HDR images via Manual Blending of Multiple Exposures

Why you Should be Using Luminosity Masks :

•You should use Luminosity Masks if you :
•Want very precise control over targeted post processing adjustments
•Want HDR image blends to look realistic, and not "Photomatixed to Death"

•Your processing to be driven by your own Creativity, and not by Presets
•Are looking for ways to make your images Stand Out from the Rest

The Downsides of Using Luminosity Masks :

Luminosity Masks are Definitely Not for Everyone
They have a step learning curve, and are often time consuming to use
You need to have a clear understanding of what adjustments your image needs
They are not a "One Click Fix", you often make multiple adjustments
They can create large file sizes with many layers
Requires strong understanding of Photoshop; Layers, Masks, Selections

What are Global vs. Local Adjustments ?
Global adjustments to exposure, contrast, saturation affect the entire image
Local adjustments target specific area or tonalities within the image
The Tone section of the Lightroom Develop module makes global adjustments
Lightroom makes crude Local Adjustments via the Adjustment Brush
These local adjustments are hard to control precisely, and are prone to halos.

Photoshop Basics – the Foundation for Luminosity Masks
•Selections, Layers, Adjustment Layers, Layer Masks
•Layer Blending modes, Channels
•A strong understanding of these concepts are just the starting point for LM's
•I'll provide a quick overview of these concepts

Layer Masks
Think of Layers as stacked transparencies
Only the top layer in the stack is visible
To see the Layer below, the Eyeball icon turns layer on and off
On the Layer Mask; **White Reveals, Black Conceals** the adjustment made
White Mask it shows the full effect of the adjustment made
Black Mask or Inverted mask hides the effect of the adjustment made
Paint on black mask with white brush to selectively apply the adjustment
Tones of Gray represent partially selected areas
You can vary the strength of the painting by adjusting the opacity of the brush
Show use of Graduated Filter to create Blend

Adjustment Layers
Two Parts – Adjustment Icon, and Layer Masks
Typical adjustments are Levels and Curves to effect Exposure & Contrast
You see the Image (that's highest in the stack) plus the effect of the adjustment layers
Layers have Blending Modes – Most useful Screen, Multiply, Soft Light
Screen Mode Lightens
Multiply Mode Darkens

Soft Light Mode adds Contrast

Selections & a Hint at the Power of Luminosity Masks
Selections are a way of picking areas for adjustment in an image
Two common methods are the Lasso and Magic Wand Tool

Example 1 Herbert Lake - make selection with lasso then add levels adjustment layer
Make a selection of sky with Lasso tool, the Marching ants appear around the selection
Add a levels adjustment layer – the selection appears on a mask
When viewed on a Mask, you see the selection area **White Selects, Black Rejects**
Any adjustments made only apply to the selected area

Example 2 Herbert Lake – make a selection of sky with the Magic Wand Tool
Selections can either be Hard Edged or Feathered selections
Hard Edge selections can create halos, and odd looking transition areas

Hint at Power of Luminosity Masks – Herbert Lake Example :
example – (L1 + Levels Adjust) (D3 + Curves Screen 100%) (L2 Curves Multiply)

Overview of TK Actions Panel V4
•Actions Panel is a Photoshop extension that you install
•It contains Photoshop actions, which are recorded commands that can be played back
•This automates the creation of Luminosity Masks, a significant time-saver
•The top section of the panel are one-click Photoshop command buttons
•Saves you from having to find commands buried in sub-menus, or remember keyboard shortcuts
•The Spectrum Tab is the most important part of the Actions Panel
•These one-click buttons automate the creation of luminosity masks

Overview of Actions Panel
•A common use of LM's is to apply adjustments in targeted areas on a single image.
•Many Luminosity Masks available Highlights, Shadows and Midtones
•The Panel also has Subtracted Masks – Combinations and Subsets (Zone Masks)
•Has Zone Masks that make selections similar to the Zone System tonalities
•Masks that target Colors – Color Channel (lower left), Color Range (lower right)
•The Actions Panel also has customizable "Infinity Masks"
•Saturation and Vibrance Masks

How to Make Selections with Luminosity Masks

•Luminosity Masks are created by Intersecting channels in Photoshop
•This is too technical to get into, and the Actions Panel automates it anyways

- All you need to know is that Luminosity Masks are a selection tool which creates masks.
- The selections are based on Luminance, or the brightness or lightness of a color.
- LM's target 3 main zones of an image: Highlights, Shadows and Midtones.
- Similar to layer masks, **white reveals**, **black conceals** and **grey partially reveals or conceals** depending on the luminosity value.
- Once you click on a luminosity mask, marching ants will appear around the selection.
- Conversely, the area outside the selection is unselected. This means it will be black on the layer mask and the part of the image underneath it will be concealed.
- **The marching ants are not the border of the selection, it's the midpoint of the feathering transition.**

Making Targeted Local Adjustments

Targeted Adjustments involve making a luminosity mask tonality selection from the spectrum tab, combined with an Adjustment Layer to adjust that selected area

- The Mask created by the selection contrains/controls the adjustments
- Exposure and Contrast can be affected by **Levels and Curves Adjustment Layers**
- Adjustment layers combined with **Layer Blending Modes Multiply (darken), Screen (lighten), Soft Light (contrast)**
- **Lights 4 and Lights 5** are useful to reduce Exposure in overexposed highlights
- **Darks 3** can be used to increase exposure in Shadows
- **The selections are self-feathering and blend seamlessly - No Halos !!!**
- Adding **Contrast to Highlights via Lights 2** also makes your images pop
- Strength of adjustments can be modified by adjusting layer opacity

Example – Teton Flowers
In Lightroom Highlights -31, shows +33
Lights 2 Levels, to darken highlights, then black brush paint out foreground on the mask
Darks 4 Levels, lighten foreground (Try Darks 3 first, Darks 4 works better)
Midtones 2 Curves soft Light Blend 50% opacity
MT 2 curves Screen Blend set at low opacity
Darks 4 Photo Filter to Warm Up foreground

The Magic Midtones

- Midtones are fairly broad tonal selections, useful for controlling application of contrast
- **Midtones 2** is often a great tool to add M**idtone Contrast** (similar to S Curves)
- Generally need to dial opacity down to a 20% to 40% level for best results
- Building up contrast via targeted adjustments to several tonalities produces much better results
- than just making global increases to contrast in Lightroom.
- **Adding Midtones contrast protects extreme highlights & shadows from contrast adjustment**

Color Masks to target specific Colors

•Allows you to make selections based on colors, rather than tonalities
•Two types of color masks; Color Range and Color Channels
•Color Channels masks work off channels, selecting Light or Dark tones of the RGB channels
•Target Red, Green Blue, Dark and Light tonalities of those colors
•Color Range Masks work off the Photoshop color Range tool
•Wonderful tool for controlling varying tones of blue in the sky.
•Example Arches – Channels Blues Lights 4 targets lighter blues in North Window
•Reds Lights 4 Targets Brighter Areas of the Arch

Dodging and Burning

Technique used to increase or decrease the exposure on certain parts of an image.

Dodging and Burning takes care of mistakes God made in establishing tonal relationships. - Ansel Adams

•Photoshop Dodge and Burn tools disadvantage - destructive changes (meaning not reversible)
•Actions Panel creates Dodge and Burn transparent layers set to soft light blend mode.
•Make adjustments by Painting with a White Brush to Dodge and a Black Brush to Burn.
•Because the adjustments are made on a separate layer, they are non-destructive (reversible).
•Best approach is to paint with a low opacity brush (5% to 15%), and gradually build up changes.
•You can either paint directly on the transparent layer, or paint through a luminosity selection
•**Luminosity Painting - Dodge & Burn through a Selection**, you affect only the targeted tones, and you get smooth transitions because of the feathering of luminosity masks.
•You can also **Dodge with a Color other than White** for even more creative possibilities.

Saturation and Vibrance Masks

•In Lightroom, Saturation has a much stronger effect than Vibrance
•Lightroom's Vibrance has a greater impact on cool colors like blue, and a lesser effect on warm colors like red, yellow, orange. Lightroom Saturation has a stronger effect on these warm colors
•This difference helps protect skin tones from being over-saturated
•Lightroom Vibrance darkens blues and affects tonality, as well as saturation. This is good if you are trying to mimic the effect of a polarizing filter. But it is bad if you have just spent a long time to get the tonality of a sky where you want it, only to have it then darkened by a Vibrance adjustment.
•The TK Actions Panel has 4 masks that target the degree of saturation in colors, and allow for a much controlled application of saturation to an image.
•The Saturation Mask targets the most saturated colors, fading into less saturated

•The Focused Saturation Mask is even more focused at selecting the most saturated colors
•The Vibrance Mask targets the lesser saturated colors in the image, and the Focused Vibrance mask target the least saturated colors.
•I use the Vibrance Mask increase saturation of the less saturated colors. This tool has the added benefit that it does not affect the tonality of blue, unlike Lightroom's Vibrance tool.
•I use the Focused Saturation Mask to Reduce saturation in over-saturated colors
•Most images can handle an increase in saturation in less-saturated colors via the Vibrance Mask
•Then I use the Focused Saturation Mask to reduce over-saturation in specific colors or areas.
•When you increase contrast in images, you also increase the saturation of colors. The use of the Focused Saturation mask to selectively reduce the saturation of colors allows you to increase contrast without having large increases in saturation.

Putting It all Together – Single Image Edit Start to Finish

Thors Well Example :
Lights 1 Levels Darken midtones via slider
Darks 3 Levels, lift shadows via slider
MT 2 Curves Soft Light blend 50% opacity
Lights 2 Photo Filter, Pick color from sky and boost up to 75%
Dodge the lighter foreground rocks
Vibrance Layer +30 to composite, then do a little extra in yellows

Creating Blends of Multiple Exposure Brackets for Natural Looking HDR

•Generally Produces More Natural Looking Results than HDR Software like Photomatix
•You control how the tone-mapping is done, instead of the presets of some HDR software
•Use 3 to 5 bracketed exposures, generally taken one stop apart
•In Lightroom make adjustments to White Balance, Lens Corrections, Shadows, Highlights
•From within Lightroom go Edit in Photoshop > Open as Layers in Photoshop
•Arrange darkest layer on top in the layer stack, lightest layer on bottom. Align Layers
•Determine which parts of which brackets you want to use for the blended image
•Find a Luminosity Mask that separates the sky, Lights 2 is often a good choice
•Paint on the sky mask with a white brush set to Overlay mode to get even better separation
•Find other luminosity masks to blend in mid-ground and foreground elements
•The goal is to create a blended image with balanced tonalities, that serves as a starting point for further process, just like in any other single image edit.

Moraine Lake Blending Example :
From darker layer, try a Lights 2 mask, it wont work, then try Lights 1 it will work better
Then make a Lights 3 selection to freehand paint white on mask at 100% opacity to darken sky further

Merge visible to create stamped copy
Then add Levels Adjustment layer, move MT slider to left
Then MT 2 Curves, Soft Light Blend 405 to add midtone contrast
Burn bottom corners, dodge the logs

Patriarch Tree Blending Example

From Top Layer do a Lights 1 Sky Mask, Overlay White to just the sky (not mountain)
On middle layer, make Darks 2 selection, then Invert to reveal foreground detail
On Layer Mask of layer 2, pain black over foreground to reveal even more
On bottom layer, add a levels clipping layer to put some contrast in foreground
Do an overall MT 2 Soft Light blend to add some MT contrast

Luminosity Mask Resources :

Tony Kuyper
http://goodlight.us/writing/tutorials.html

Sean Bagshaw
http://www.outdoorexposurephoto.com/video-tutorials/video-tutorials/

Aaron Dowling
http://www.aarondowlingphotography.com/luminosity-action-panel/

Jimmy McIntyre
http://www.shutterevolve.com/luminosity-masks-tutorials-digital-blending-course/

Greg Benz
https://gregbenzphotography.com/lumenzia/

A nice discussion comparing different Luminosity Masks alternatives
http://discuss.topazlabs.com/t/luminosity-mask-buying-guide/18094