

Luminosity Masks

What are Luminosity Masks?

Luminosity Masks are a way of managing High Dynamic Range images such as in Contra-Jour shots where the Land is much darker than the sky and vice-versa, or in complex images involving trees where we need to manage sky light through tree branches.

We have learnt to take bracketed images usually in sets of 5 based around a good exposure and will select 3 images (usually) from those 5 so that, in addition to the correctly exposed base image, we can obtain a nicely toned sky and a good foreground which is not lost in shadow. When we do basic HDR blending in Lightroom and Photoshop automatically it does some of this for you, BUT it gives you no control and it often doesn't do a good job.

Luminosity Masks as applied using Photoshop allows us to make use of layer masks to create an accurate mask that is exactly tailored to the correct tonality required.

Photoshop users will know that it works by overlaying layers, like a water-colourist, laying down paint from the back (wash) and adding layers of detail as you come forward. So that depending upon the opacity of the layers, some of the information from the lower layers will shine through.

It's on these layers that we can add a mask to select which of the lower image comes through and which does not. In Photoshop adding a Black colour, as a mask, stops information from the lower layer coming through, and adding white allows information to show through. (Often painted as white over black mask). Also adding less white to form greys, allows some of the information to come through. So in summary, Full Black blocks everything, Full White allows everything through and varying greys allow varying amounts of light through in proportion.

So a Luminosity Mask is simply a device to allow various levels of light through.

In its' simplest form, you could overlay any image with a solid black mask and nothing would come through, but then over-paint that mask in places, using a white brush will allow those selected areas to shine through. The problem is that this is fairly clumsy and not at all accurate in terms of tonality and light levels. E.g. you could select the Sky using 'Select and Mask' and then turn that white to allow the sky from the lower layer to shine through. But, Skies aren't solid they are (usually made up of clouds etc.) and the adjoining edges to the land might be a bit too abrupt leaving a 'cut-out' effect. What we need is a mask that exactly reflects, in black and white and various shades of grey, the exact image we want to blend.

Fortunately we can do exactly this by reapplying the original image as a mask using the 'Add Image' feature. But how we do this and in what way is critical.

Selecting Images for blending

So lets walk through this process and go back to the beginning.

- We learned how to use filters, especially ND Grads and solid NDs to tame the light difference between Sky and Land to bring under control so that the sensor is not fooled or overloaded.
- We learned how to take bracketed images based around a well exposed initial BASE shot using different exposures automatically within the camera. Base + 2 Under and 2 Over for 5 Images or 3 Under and 3 Over for 7 images. How many you take will depend upon the variation between light and dark. We are only going to choose and blend 3 of them 95% of the time, so 5 is usually enough but 7 gives more choice. (But uses a lot of memory!).

- I am starting my “Journey” from within Lightroom, since this is how I do it. So inspect the images you have taken. Choose the base image and apply corrections and notional basic post processing for white balance, contrast, texture sharpness (not too much or OFF since it affects blending), Lens corrections, initial crop and composition. Then apply the same settings EXCEPT EXPOSURE to all the other images by using SYNC.
- Inspect the images to choose 2 images to blend , a darker than base and a lighter than base. The Dark image must show a nice sky reasonably correctly exposed and not blown out, and the Light over exposed images should show a nice ground area with not to many overblown shadows. Ie The images you chose must be sufficiently CONTRASTY in either Lights or Darks. If you don't do this you wont get a good blend!! Important!!
- Select the chosen images and then right click for>Edit in > Open as Layers in Photoshop.
- Photoshop will boot up and after several seconds will load layers, wait until it has completely finished leaving just 3 images stacked.

Order the images

- You now need to order the images correctly. And you're probably working with camera image file numbers you will note they have loaded in reverse order. Assuming your camera took them as Base + Darks + Lights (Brights), re-order the stack so that the BASE is at the BOTTOM, Next up is Darks and then Brights on the top of the stack, or file order from bottom to top.
- Next Align the images. Its very important to ensure all the images are correctly aligned together since even small changes or movements between shots in can blur and image in the final blend. Select all layers and then Edit> Auto-Align Images > auto.

So far so good, now to begin applying the masks

- Assuming you have a stack of Three, now make the layers above BASE invisible by turning off the eye on each layer. THIS IS VERY IMPORTANT OTHERWISE THE MASK WILL BUILD FROM THE WRONG IMAGE.
- Next Select the Dark Layer Add a MASK to the DARK Layer. If you want label this layer 'Darks'
- Now go to the top menus and find 'Add Image', click and add an image that will select the image from below and convert it to a monochrome mask against the Darks layer.
- The menu selection shows Multiply and the image mask is NOT inverted. This is correct so just click through.
- Now make the Darks layer VISIBLE and you will see the sky from the Darks image remains correctly expose whilst the ground is blocked out.
- Adjust the opacity of the Darks layer if the effect is too strong.

Next

- Again with the Brights Layer, kept INVISIBLE, Select the Brights layer and apply a Layer Mask and 'Add Image' as before. This time though, click on the INVERT check box in the add image dialogue so as to block out the sky, we want the opposite from before. (Note: For Brights, there seems to be very little / subtle difference between applying the mask with the layer VISIBLE and /or INVISIBLE. Experiment with this to see what works best for you on your image).
- Now with the layer visible reduce the Opacity probably down to 20-30% since this could be very overexposed. Label this layer Lights or Brights

Loss of Contrast

Invariably, when you blend images, you tend to lose contrast. This occurs especially when your initial images, are low in contrast which leads to building an Image mask which lacks contrast and is 'leaky'.

You can overcome this somewhat by 'tightening-up' the masks to make them more contrasty. You can do this in the normal way using Levels or Curves. E.g. Click on the Darks Layer Mask and then click Command L on a Mac or Control L on a PC to invoke the levels dialogue and then bring down the level to make the mask blacker. Or you can use Curves (Command M /Control M).

And there you have it, Luminosity Mask blended images. Tinker with the layer opacities to get the best feel. By this method you should have accurately blended images if you chose correctly in the first instance. You can tinker further with the masks if you wish, by painting lightly applied black to let less light through or painting with white to lessen the black of the masks.

Next when you are happy, merge the visible layers if you wish to do more work on the image in Photoshop before saving, OR if you have done, flatten the image and then SAVE back to Lightroom

The image should then save back to Lightroom as a TIF (if you have the programmes set up that way).

Lightly reprocess the TIF in Lightroom for final tweaks and crop and shadow recovery if required.

And that's it!

There are other ways of creating Luminosity masks with proprietary software, which does much more than this basic method, which they build upon. But you have to pay for these. Get this under your belt then you can decide whether you want to go further.

There are two main players for this that are mainly automated versions of the above, Tony Kuypers' *Tk* and Jimmy MacInyre's *Raya Pro*. I personally use RayaPro5, which I find suites me better than Tk. I have tried both. The Raya Pro package comes with a complete training course in it's use, some of which is on our Resource Page.

(Photoshop Beginners, the free to air part). There are also additional processes and tools within Raya Pro.

So In Summary quick Step Guide:

1. Choose 3 bracketed images carefully to ensure reasonable contrast in 'Brights' and 'Darks'
2. Load into Photoshop via Lightroom or Via Camera Raw and stack images
3. Rearrange images BASE on bottom then Darks Then Lights and turn off eyes.
4. Make sure Dark exposure Layer is **invisible**
5. On Dark Layer Add a Layer Mask
6. Apply Image (Image>Apply Image) Leaving dialogue box unchanged click OK
7. Make Dark Layer visible to see effect and adjust contrast / opacity as required by selecting Mask on Dark Layer and bring down Levels to make mask more contrasty. (Command L on a Mac or Control L on a PC).
8. Select Brights image layer
9. Keeping Brights Layer VISIBLE, add a layer mask
10. Apply Image as before BUT THIS TIME click INVERT in dialogue Box. OK

11. Reduce Layer Opacities to suite and adjust contrast / opacity as required by selecting Mask on Bright Layer and bring down Levels to make mask more contrasty. (Command L on a Mac or Control L on a PC).