

Image Adjustment

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Possibly the first thing to do when starting to work on an image is to produce a duplicate layer either from the Layer menu or from the Layers palette flyout. Working on the duplicate layer (which can be given a meaningful name) makes it easy to return to the original if things don't go according to plan. In the layers palette just drag the layer to the trash can and create another duplicate!!

Straightening horizons/making verticals vertical

This is usually the first thing I have to do with an image. I seem incapable of getting horizons level! Use the measure tool, which is found in the toolbox on the flyout just above the magnifying glass.

Click on one end of an object that you want to make either horizontal or vertical and drag along it releasing at the other end. In the info palette you will see the measured angle. If you now go Image>Rotate Canvas>Arbitrary you will see the angle already entered in the dialogue. Click OK and the image will be rotated by the correct amount. The crop tool can now be used to trim the image square

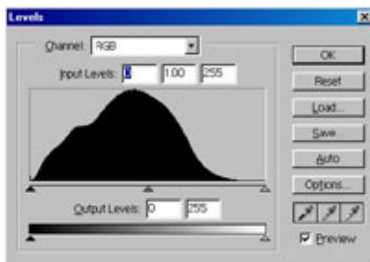
Adjustments and Adjustment Layers.

Most of the Image adjustment tools can be found, unsurprisingly, under Image>Adjustments menu and may be used from there. This applies the adjustments directly to the pixels of the image on the selected layer. I strongly recommend using adjustment layers instead. Here the adjustments are contained in a layer above the image and effect the layers below. Adjustment layers can be returned to and altered or even removed at a later stage if required.

Levels

Levels adjustment is likely to be one of the first refinements you will want to carry out.

If the histogram doesn't stretch all the way across the horizontal axis it means that the full range of tones is not being used in the image. The blacks are not as black as they might be and the whites are not pure white. The basic levels adjustment is to ensure that the white slider (on the right) and the black slider (on the left) are moved in to enclose the histogram. On the example shown on the left the white slider should be moved in quite a way and the black slider a little. This can be done manually or by clicking the auto button. The central grey slider can then be moved to adjust the mid tones.



At the bottom right hand side of the levels dialogue are three eye droppers, From right to left to set white, grey and black points. When using these it is useful to have the info palette visible. If the white eye dropper is moved over the image to the whitest point in the image the R, G and B values should be about the same. If they are not then the whites have a color cast. Clicking the eye dropper sets the white point and corrects this colour cast. Using the black dropper in a similar way sets the black point.

The grey dropper is used to correct colour casts, choose a neutral spot (without colour) and click on it. The colour balance of the whole image is adjusted based on the fact that you have told it what neutral should be.

If you are not sure where the lightest and darkest areas of the image are these these can be determined by pressing the Alt key and dragging the black and white sliders inwards. This method can also be used to position the sliders at the extremes of the histogram.

Advanced Levels Adjustment

Carrying out a simple levels adjustment as described above will improve the image but it is unlikely that optimum results will be obtained for the whole image. The next section shows how to use a number of levels adjustment layers to optimise particular areas of the image



This is Antony Guppy's original image as scanned. It is a very pleasing image with an attractive sky but I felt that improvements could be made.

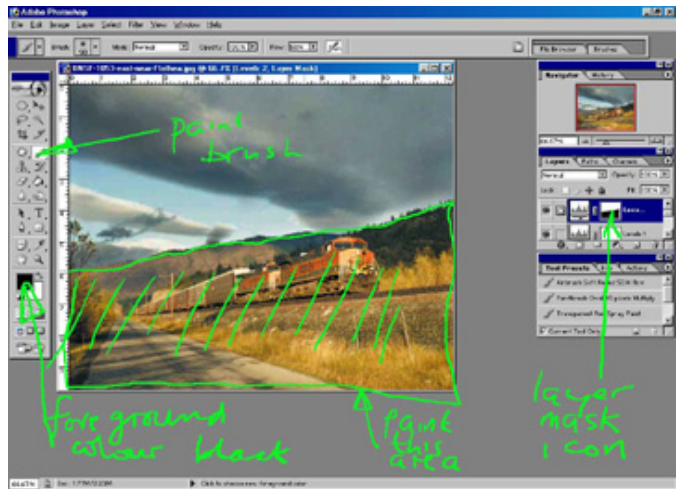
I first removed the wires using the patch tool in Photoshop 7@



Step one in the levels adjustment is to introduce a levels adjustment layer and adjust the overall levels. This has improved the image somewhat but more can be done. In particular more could be made of the attractive sky.



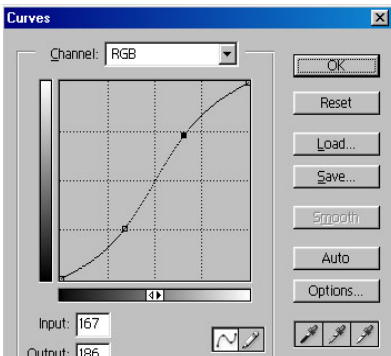
Step two is to introduce a second levels adjustment layer and adjust the overall image until the sky is as required. The sky is now OK but the overall image is too dark. To rectify this a layer mask is used. Click the layer mask icon and, using a soft edged brush with the foreground colour black, paint over the foreground. This masks the foreground from the effect of the second adjustment layer.



To finalise the image a third levels adjustment layer was used in the same way to slightly darken the locos, with a layer mask used to mask all the image except the locos. This was done by painting with black everything but the locos. Alternatively the layer mask could be filled with black and the area of the locos then painted with white to remove the mask in that area.

When using multiple adjustment layers it isn't necessary that they all be the same type. It may be effective for example to use a combination of levels, curves and hue and saturation adjustment layers to produce the optimum result.

Curves



To increase or decrease the amount of detail you can see in shadows midtones or highlights choose Image>Adjustments>Curves. To change the tonal range click on the curve to create a point; then drag the point to change its position. The rest of the curve will change shape to make a smooth transition. A curve such as that shown left will darken the shadows and lighten the highlights. If there is a particular tone that needs to be altered then open the curves dialogue, take the cursor into the image and click on the tone to be changed. You will notice as you click an indication on the curve showing where the tone is located. It can then be lightened or darkened by dragging that area of the curve. The three eyedroppers at the bottom right of the curves dialogue box work in a similar way to that described under 'levels'.

