

BLACK & WHITE FROM COLOUR

By Ian Lyons© 2001

Just how often have you found yourself taking photographs with the camera loaded with colour film, and thought “*if only I’d brought some Black & White film I could get some really snazzy pictures*”. For some it isn’t a problem, they may have two cameras or even one of the medium format units with interchangeable backs. But for the bulk of camera owners “no choice” is usually the norm.

Well it really doesn’t matter much any longer, especially if using Photoshop, since changing from colour to monochrome is simply a matter of a few Mouse clicks and bingo! The most obvious way to get black and white from colour in Photoshop is simply to do a mode conversion from the menu bar – “**Image > Mode > Grayscale**”, this will discard all colour information. Personally I find this method produces rather flat images that require quite significant amounts of post scan adjustment in Photoshop. However, a better option exists in the form of “**Channel Mixer**”.

“**Channel Mixer**” is great a great new image adjustment tool that allows the user to mix/blend the colour channel balance of an image. In fact so powerful is this new tool that you can easily replicate the effect of placing red or yellow filters over the lens when using black and white film. Enough of the waffle, let’s get on with the method.



Mailbox, Berlin 1995 – a pretty ordinary record shot, lets see if we can make it better!

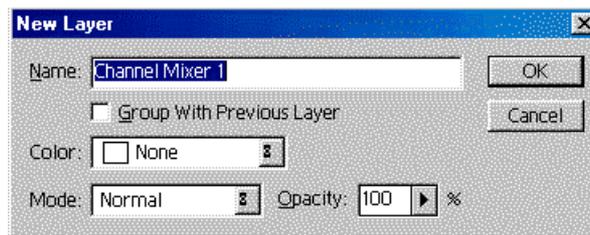
The starting point will always be a full colour image in RGB mode. Most film scanners will find capturing the full range of colours, etc. pretty easy, but had the original been in black and white it’s usually a different matter. The image above is the raw scan imported directly into Photoshop via my Nikon LS30 film scanner using LaserSoft’s SilverFast software.

The following steps will take you through the process of creating a simple black and white image, followed by a sepia toned image and finally you will create split-toned image.

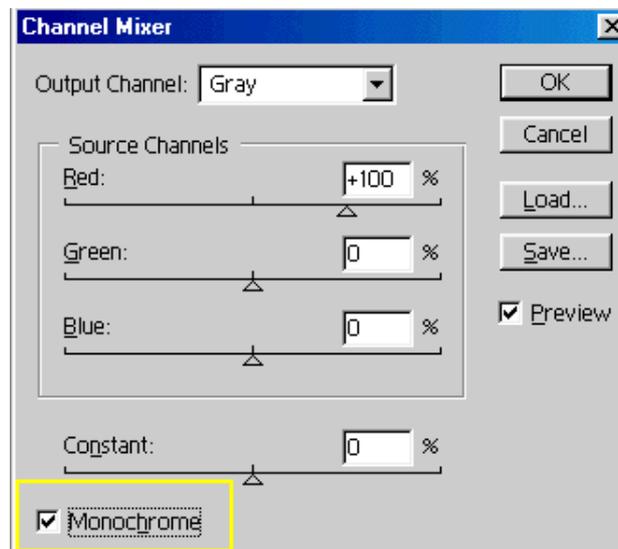
The Process: -

Step 1 – Channel mixer set-up

- In Photoshop open a full colour RGB image as per the above example
- From Photoshop Menu bar select “**Layer > New Adjustment Layer > Channel Mixer**”



- Next make sure “**Monochrome**” is selected.



Photoshop 6 – Channel Mixer Dialog

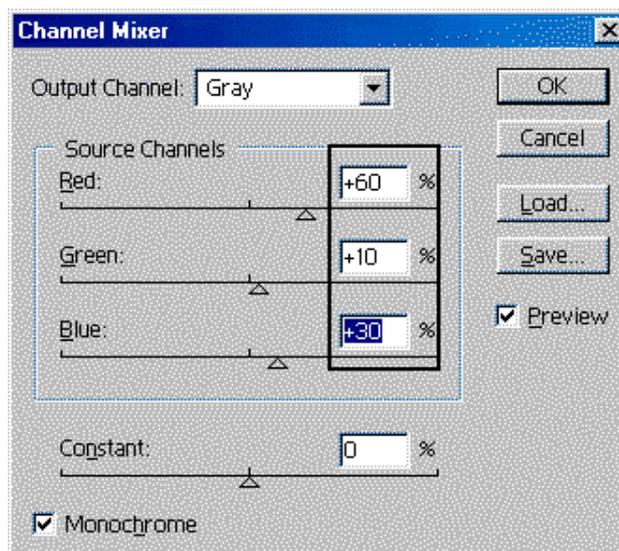
By selecting the "Monochrome" checkbox we are instructing Photoshop to convert the full colour RGB image into a monochrome preview, but the image still retains all the colour channel information. Note that in the screenshot of the Channel Mixer dialog that the Output Channel is Black, you cannot change it. However, even though the red channel is initially at 100% and the green and yellow channels are at 0%, you are free to mix them as you see fit. The objective is to optimise the image whilst ensuring that total percentage for the three channels adds up to 100% or as near as is possible. Interestingly combinations adding up to more or less than 100% will be either darker or lighter than the original colour image.



This image is rather flat, and the separation between the mailbox and sky is poor

Step 2 – Optimising the mix of colour channel information for black and white

- Simply move the red channel to a value less than 100%
- Adjust the green and/or blue channels to get your desired effect
- The following example has the effect of brightening the overall image and also separates the sky and mailbox



Channel Mixer set for balance of red, green and blue



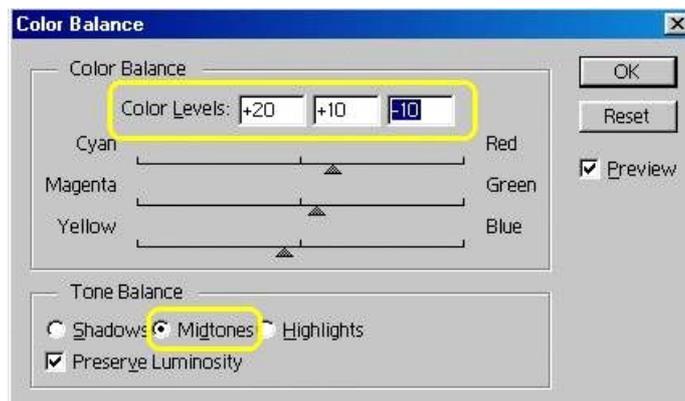
Black and White - Mailbox

As you can see the process involved is really VERY easy and the results that can be obtained are only limited by your imagination. Once you get the overall effect that you desire it is possible to fine-tune the image further using image adjustment “Curves”. But it doesn’t finish there, the number of options we can take to finish our image is really quite staggering.

Step 3 – Adjustments for full colour toning a black and white image

Whilst our image is now giving the appearance of a black and white picture it’s still in RGB colour mode. We can now add colour in a number of different ways. The description that follows is for a **Sepia** tone effect, but you can do blue, pink, etc.

- From Photoshop Menu bar select “**Layer > New Adjustment Layer > Color Balance**”
- When the Color Balance dialog appears make sure the “**Tone Balance**” is set for “**Midtones**”.
- Next adjust each of the colour channel “**sliders**” until you get the desired effect. Remember that since you are using adjustment layers the changes can be modified and fine-tuned at any time.
- Now repeat the **Color Balance** adjustments with the “**Tone Balance**” set for “**Shadows**”. The actual balance of colours should normally be roughly the same as used for the “**Midtones**” adjustment.
- Once you're happy with the balance just flatten the image using “**Layer > Flatten Image**”.



Color Balance dialog – midtones settings for Sepia Tone effect



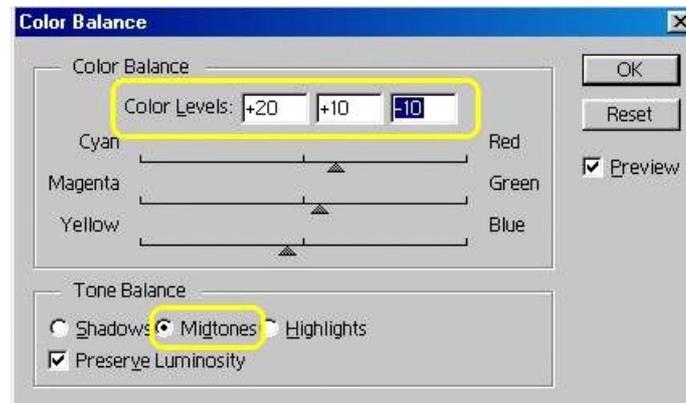
Mailbox – Sepia Toned shadows and midtones in Photoshop 5

Step 4 – Split toning

Split Tone printing was once the domain of only a few very talented darkroom printers. However, using Photoshop we find "Split Toning" is really very simple and a highly effective way of presenting our images. A split tone print is a black and white print that has only been partially toned or a mix of toning effects has been applied. When done correctly the effects can be really very subtle, and very attractive.

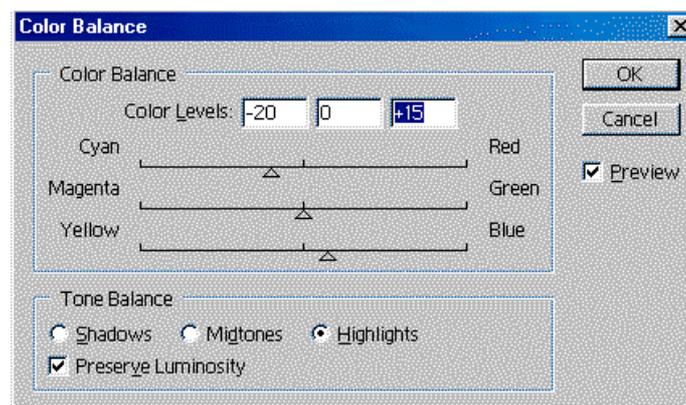
- We begin by creating the Black and White image using the "Channel Mixer" method described in Step 1, when satisfied with the tones we flatten the image using the "Layer > Flatten Image" command.
- Make a new "Adjustment Layer" i.e. "Layer > New Adjustment layer > Color Balance"
- When the "Color Balance" dialog appears we set the "Tone Balance" for "Midtones and Shadows".

- Adjust the "Color Balance" of the midtones and shadows for the desired effect. This will be our base colour.

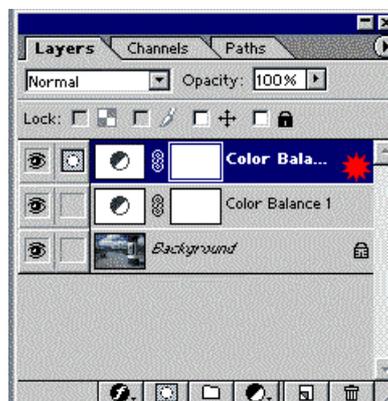


Color Balance dialog – midtones settings for contrasting Tone effect

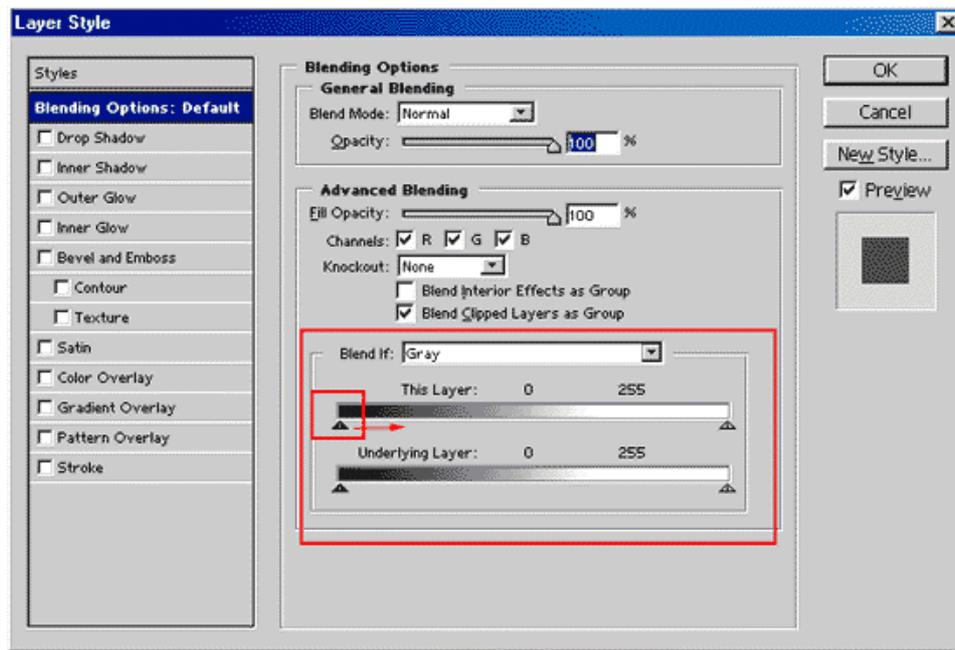
- Now we repeat the above exercise for the "Midtones and Highlights" but use contrasting settings.



- Next right mouse button click the "Color Balance" layer in the Layers palette, and from the pop-down menu select "Blending Options". Look for the section zoned in red on the screen grab below.

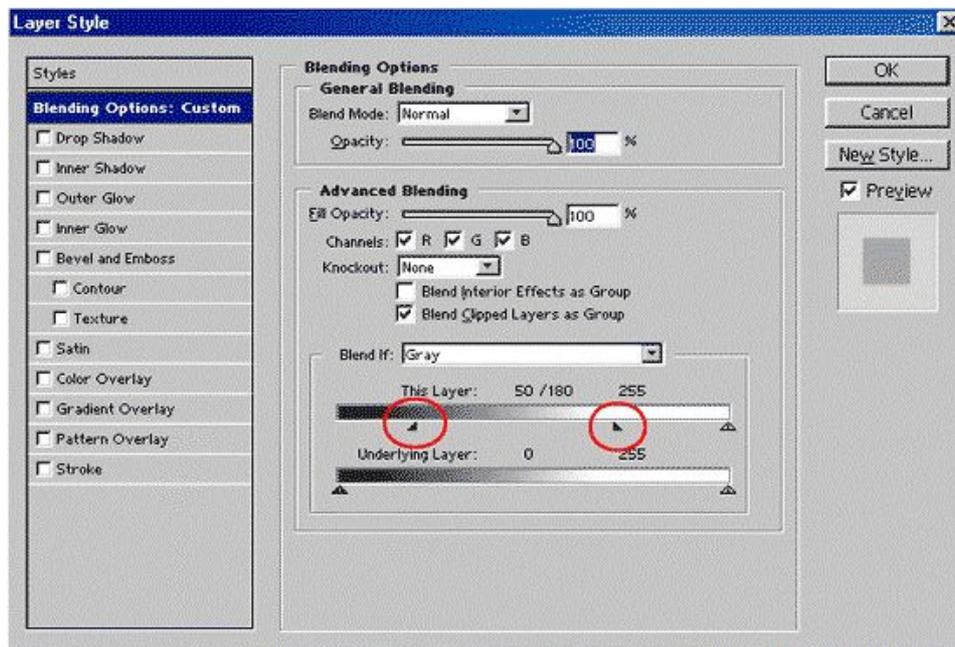


Layers Palette



Photoshop Layer Style dialog

- Now select the “**black triangle**” below “**This Layer:**” in the “**Blend If:**” section of the “**Layer Style**” dialog.
- Move the black triangle to approximately 50
- Hold down the “**Option/Alt**” key on the keyboard and Left mouse click the black triangle to split it.
- Now move the right half of the black triangle up to about 180/200



Photoshop 6 Blending Options dialog after adjustment of blending slider

The idea of adjusting the two halves of the black triangle is to optimise the range of tones that the second tone will impact upon. Feel free to experiment.



Mailbox – Split Toned in Photoshop 5