Black and White Conversions from Colour

Using Photoshop

Can you tell me how many ways there are to convert a colour photo to Black and White using Photoshop?

I have listed ten ways here and I don't guarantee this is all of them. I had nine originally and thought that was the lot – couldn't conceive any other way to do it. I spent the day documenting them and lo and behold the very next day I came upon a new and different method.

None of these methods are right or wrong, some are easy and some are not so easy. It depends on the original image which method is the best to use with it.

 So lets get on with them:-

No Control Conversions

1. *Grayscale Method*

Go to Image|mode|grayscale to and you will be asked to discard the other layers – click OK.

To Improve
Use Curves or levels

Pros
You end up with a small file size

Cons
What you see is what you get
All layers are converted to grayscale
Colour information cannot be added later without changing the mode back to RGB

2. *Desaturation Method*

Go to Image|Adjustments|Desaturate (Shift+Ctrl+U)

To Improve
Use Curves or levels

Pros
It only converts the layer you are working on, so colour information can be saved.

Cons

What you see is what you get

3. *Gradient Map*

Make sure your foreground colour is set to black and your background colour is set to white. If it isn't press "D" on the keyboard.

Go to Image|adjustment|gradient map   on the menu.

To Improve

Use Curves or levels

Pros

It only converts the layer you are working on, so colour information can be saved. You can use this method to create other effects using preset gradients or even create your own gradients

Cons

What you see is what you get

4. *Layer Effects Method*

Before using layer effects you will have to flatten your image and unlock the background layer (double click on the backgound layer and press OK) and set the default colours in the tool box by typing D

Double click on the layer again to bring up the effects palette.

Click on the wording Color Overlay on the left hand menu – don't just tick the box. This will bring up the overlay choices

Click in the coloured box – move over to the toolbox for the eyedropper to pick up the black* you set earlier and press OK in the color picker box..

In the blend modes choose color.

The same results can be obtained using the Styles method
* Choose any colour you like here to get a monochrome effect with one colour approved by all the major photographic bodies.

To Improve

Use Curves or levels

Pros

Not as much post work as the contrast is slightly better than the desaturation methods used earlier

5. *Styles Method*

Before using styles you will have to flatten your image and unlock the background layer (double click on the backgound layer and press OK)

Go to the styles palette and press the small arrow in the top right corner.

Choose "Image Effects". You will be asked to replace the current styles so click either OK or append.

If you chose append the Black and White Photo is first on the list – if you chose append it is about 20 from the bottom just before the blue square.   (Sepia is 6th from the bottom next after the red square).
Click on your preferred effect.

Remember to reset the styles palette, by clicking the arrow again and choosing reset styles

To Improve
Use Curves or levels

Pros
Not as much post work as the contrast is slightly better than the desaturation methods used earlier

6. *Lab Method*

Go to Image|mode|lab color   on the menu. If you have a multi layered image you will be asked to flatten it as lab color can only work on a single layer.

Go to the Channels palette and click on the lightness channel .

With only this channel activated go to Image|mode|grayscale to and you will be asked to discard the other layers – click OK.

The image will be very light but see the "To Improve" tips to darken it.

You continue working in greyscale at this point or convert the photo back to RGB to add colour information.

To improve
Duplicate the layer and on the duplicate layer blend using Multiply and adjust the opacity of the layer until the result pleases

Pros
Different Results from the ones above

Cons

Using the Lab method means changing modes and all colour information will be lost so be aware of this if you wish to keep any colour information in the image you will have to create a duplicate image to add the colour back later

Semi Controlled Conversions

7. *Simple Hue Saturation Method*

Image|Adjustments|Hue/Saturation   (Crtl+U) or
Add a new adjustment layer in the layers palette and choose Hue/Saturation

Pull the saturation slider as far as it will go to the left (-100).

Adjust the Lightness slider to suit the image

To Improve

Use Curves or levels

Pros

Ability to adjust the brightness before finalising the conversion

8. *Channels Method*

Go to the channels palette and there are four channels available, three seem to be very different Black and White images and the fourth is colour.

The top channel is a composite of the other three.

Click on the red channel to what the channel looks like, then click on the blue and then green.

Finally click on the channel you would like as the Black and White image and choose Image|mode|grayscalee from the menu   or   click on the channel press C press to copy it, move to the layers palette click anywhere inside the palette and hit control V to paste the channel into a layer.

Pros

Gives more of a choice for conversion

Cons

Not very practical

Fully Controlled Versions

9. *Calculations Method*

Go to Calculations

Image|Calculations

Calculations makes a copy of two channels (they can be the same channel) and blends them together using a choice of any of the blending modes available in photoshop

You can choose which layer each of the channels comes from or to use all layers merged

The opacity of one of the channels can be adjusted, but there is no slider – you have to type in any value you want to change to.

When you have decided on the effect you want save the calculations to a new documents. Close the current document and start work on the new one.

If for some reason you want to carry on working on the current document blending the effects with the current image, save to a new channel. Open the channels palette and make sure the new channel is activated and press control C to copy the channel – move to the layers palette click anywhere inside the palette and hit control V to paste the channel into a layer.

Pros

Produces different results to any other method and experimenting with the blending modes is fun.

Cons

Not easy to use.
Hard to convert results into a useable format

10.   *Complex Hue/Saturation Method*

This method using Hue/Saturation can only be used using layer adjustments. It cannot be done using the Hue/Saturation from the adjustments menu.

Flatten your picture and add a new adjustment layer in the layers palette and choose Hue/Saturation. For the moment do not make any adjustments press OK to close it, because it is a layer adjustment we can come back to it later.

Lets add another Hue/Saturation adjustment layer – this time moving the saturation slider fully to the left or typing –100. Press OK to close the box.

Return to the first Hue/Saturation layer - Hue/Saturation 1. Click on the layer and change the blending mode to "Color".   Now click on the adjustment layer icon on this layer to bring up the Hue/Saturation box.

- First make any changes you want to make using the Hue slider
- Second use the Saturation slider
- Then the Brightness slider

Now change the edit mode to the individual colours and make change to the colours as above. If your image was originally predominantly blue – start with blue and cyan, then move onto the next predominant colour.

Using the sliders the changes using this method are very subtle, but they do happen. Watch carefully.

11. *Channel Mixer Method*

To use the Channel Mixer first go to the channel palette to decide which Channel is the closest to your preferred effect. Keep this in mind and then open the Channel Mixer

Image|Adjustments|Channel Mixer   or
Add a new adjustment layer in the layers palette and choose Channel Mixer

Tick the monochrome box so you can see in Black and White. This will give you a setting of 100% in the red channel and 0% in both the blue and the green. This is equal to the full red channel in channel palette. If the effect you want is somewhere between the blue and green channels, set the red channel to 0% and set the blue and green channels to 50% each.   Start playing with the sliders until you get the effect you are after. Just remember the "correct" exposure is a result of 100% throught all the channels.

Pros
You can control the results
Most used method of conversion used by medium to advanced PS users

Cons
A bit time consuming

Ansel Adams effect settings:
Red:160   Blue:140   Green:-200

Infra Red effect settings:
Maximum Green (always)
A low setting for Blue
Balance it out with Red

To make fine adjustments play only with the Red Blue channels
Red:20   Blue:-180   Green:200