

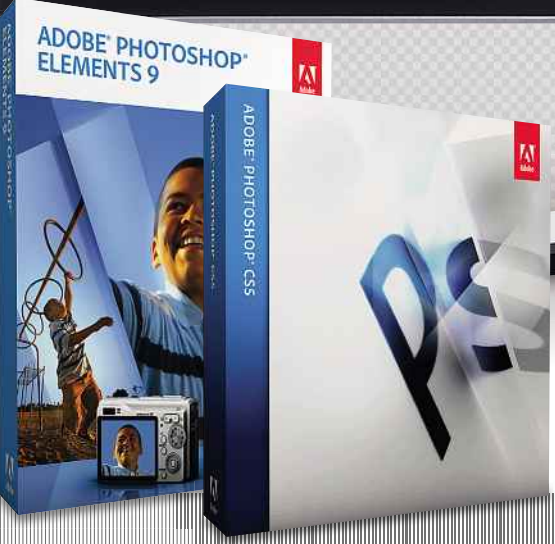
# THE PHOTOGRAPHERS' GUIDE TO **PHOTOSHOP**

EVERYTHING YOU NEED TO ENHANCE YOUR DIGITAL PHOTOS TODAY!



**NEW!**

**50+**  
STEP-BY-STEP  
PHOTOSHOP  
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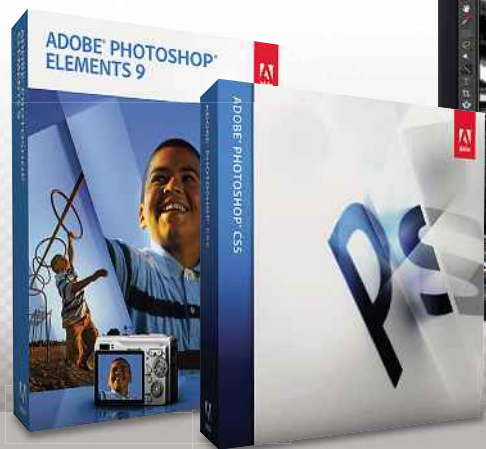


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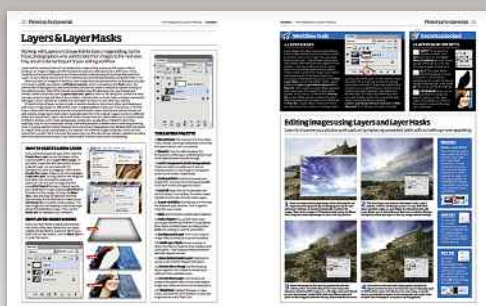
# THE PHOTOGRAPHERS' GUIDE TO PHOTOSHOP



**PHOTOSHOP CS & ELEMENTS TUTORIALS!**  
OUR EXPERTS SHOW YOU HOW TO MASTER TOP PHOTOSHOP SKILLS



**Introduction to Photoshop**  
Navigate your way through Photoshop's toolbar and interface with our in-depth guide



**Master advanced skills**  
Get a better understanding of how features work and can help improve your photography



**How to handle Raw files**  
Find out how to get the maximum information from your Raw files for optimum image quality



**Powerful Photoshop filters**  
Learn to master filter functions including Blur, Liquify and High Pass for truly stunning results



**Step-by-step techniques**  
Follow our expert advice and learn how to produce professional results quickly and easily



**Master black & white**  
Discover the best ways to convert colour to monochrome and achieve amazing images

**INSIDE!**  
OVER 50 EXPERT  
STEP-BY-STEP  
TUTORIALS

FROM THE EXPERTS AT  
**Digital SLR**  
photography

MAGBOOK



## Welcome...



"To capture stunning pictures, photographers need a creative eye as well as a firm grasp of in-camera techniques. More than ever though, the very best images are produced by those who have a good grasp of post-production and understand Photoshop. Regardless of the type of digital camera you use, once you have your images on your computer, Photoshop allows you to experiment, enhance and manipulate to your heart's content. Whether you're using Adobe's affordable Photoshop

Elements package or the more powerful but pricey Creative Suite, there are countless ways in which you can improve or completely transform your photographs. Of course, such a sophisticated tool requires time and effort to master, which is where *The Photographers' Guide to Photoshop* will help. Produced by photographers for photographers, this guide is the perfect introduction to Photoshop, guiding you through the key features and tools that you need to use, as well as providing you with a variety of techniques geared towards helping you make the most of your digital images. By following the jargon-free advice given by our team of experts, you can look forward to mastering many of the key Photoshop techniques every photographer should know, while having fun as you learn new skills along the way. We've covered various techniques, from basic skills that enhance images to more advanced options that transform them. All the best!"

**DANIEL LEZANO, EDITOR**

## Meet our team of Photoshop experts

All our experts are team members or regular contributors to *Digital SLR Photography* magazine. For more expert advice and inspiration, pick up the latest issue available on the second Tuesday of every month. For further information visit the magazine's website at [www.digitalslrphoto.com](http://www.digitalslrphoto.com)



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### LUKE MARSH

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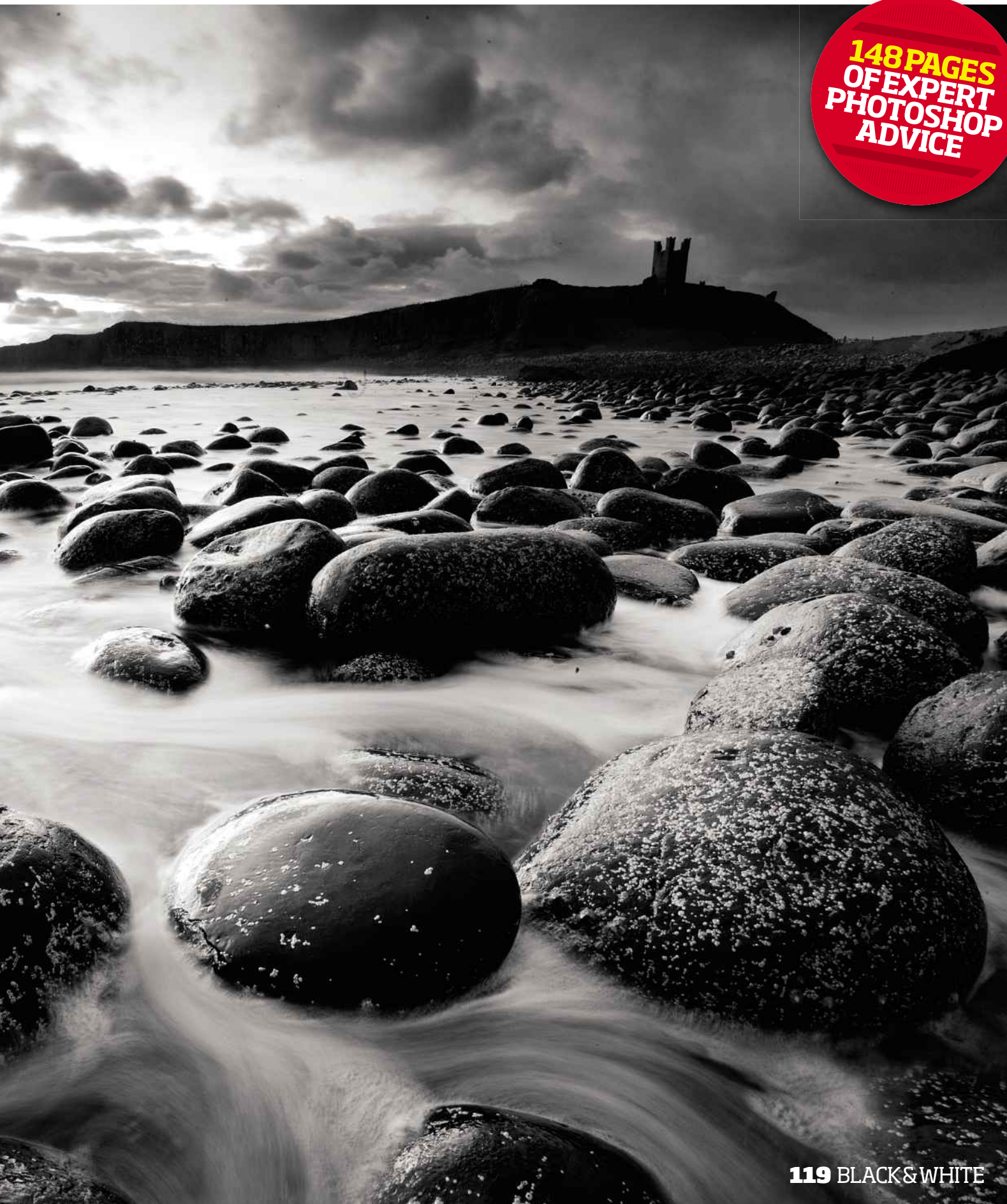
A selection of useful PC and Mac Keyboard shortcuts to help improve your Photoshop workflow

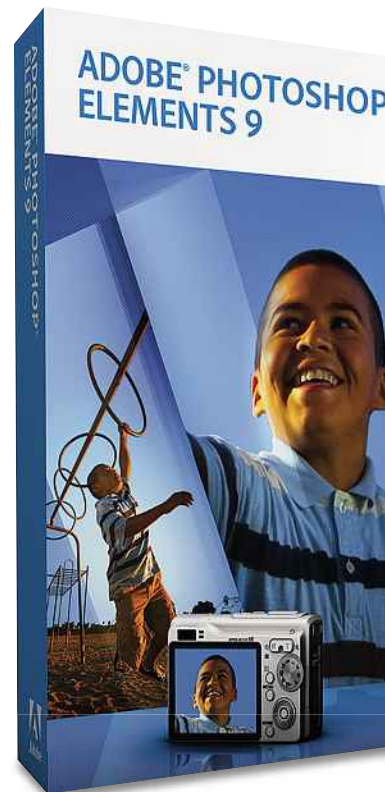


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**148 PAGES  
OF EXPERT  
PHOTOSHOP  
ADVICE**

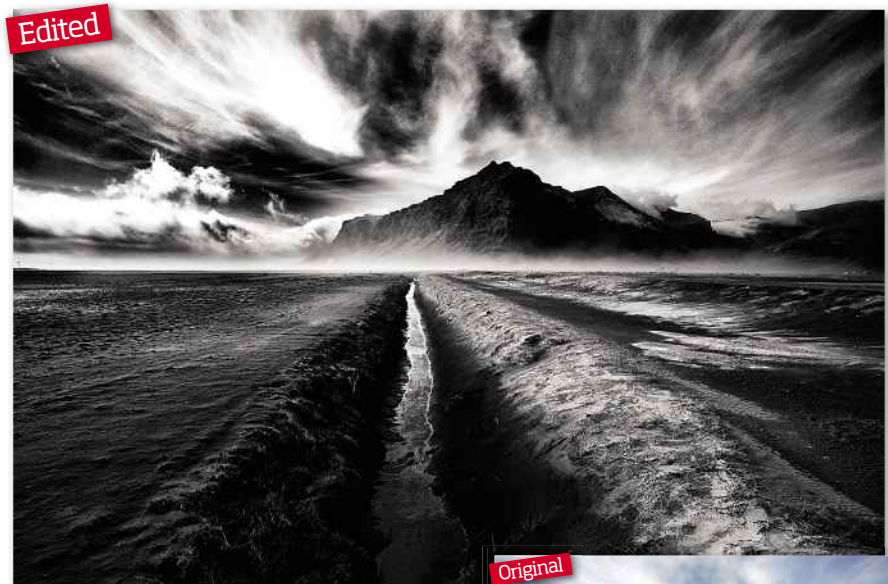




# PHOTOSHOP. THE DIGITAL PHOTOGRAPHERS' CHOICE!

PHOTOGRAPHY IS ABOUT CREATIVITY, always has been. Since its inception, photographers haven't simply been content to document their surroundings but have sought to enhance, embellish, beautify and distort their imagery, be it via the darkroom or with in-camera techniques. Photoshop is just another tool in the creative arsenal, though it happens to be a damn good one, the best possible. Everything that was done in the film darkroom can be recreated in Photoshop, and far more besides. Images that are now appearing in this digital age are really pushing the boundaries of the imagination. So if you haven't already jumped on the Photoshop bandwagon, it's really time to take that leap. You're missing out on the chance to really explore your creative self. Even if your ambitions are a little more modest, you'll find that there isn't an image in the world that can't be improved by Photoshop in some manner, even if it's a matter of a simple contrast tweak or basic blemish removal. And the best way to learn is just to get stuck in. After, of course, you've familiarised yourself with the basics in our feature-packed guide to the best imaging software on the planet! Here are our favourite reasons for using Photoshop...

**1) RAW CONVERSION:** All digital cameras come with their own brand software to help convert Raw files into an editable image state (ie JPEG or TIFF). However, not all are straightforward to use. Photoshop and Photoshop Elements come with their own Raw converter, Adobe Camera Raw (ACR), which just happens to be rather good at the job. Most people tend to plump for the Adobe engine rather than the camera manufacturer's own, not least because of its seamless integration with Photoshop.



**2) EXPOSURE CONTROL:** Photoshop gives you the kind of control over exposure that darkroom enthusiasts could have only dreamed of. Not only can you lighten or darken the image as a whole, but you can work on specific tones, lightening the highlights or darkening shadows, for example. You can also work on specific areas to 'dodge' and 'burn' in the traditional darkroom manner – darkening a sky perhaps, or bringing out a bit more detail in a landscape foreground.



**3) COLOUR CONTROL:** We're not just talking about warming things up or cooling them down. You can tweak colours in any way imaginable and locally as well as globally, changing the colour of someone's eyes, hair, or perhaps the colour of a particularly bad tie. And you can control colour saturation as well as hue, so you can make those sunsets really burn.

Photoshop allows you to go that extra mile. You can change a cloudy sky for a clear one, add trees where there were none, or even place a person in a completely different background scene. This type of montage is also known as compositing and has grown in popularity with amateur users and professionals alike.

**4) BETTER BLACK AND WHITE:** Yes, you can shoot black and white in camera but, no, it won't do. First, you'll be shooting JPEG and secondly, all you're doing is performing a basic desaturation, which means you'll be discarding vital information. Anyone who's printed in the traditional darkroom knows there's a bit more to mastering monochrome. Photoshop lets you control specific colour channels in the way that black and white filters did for film cameras.

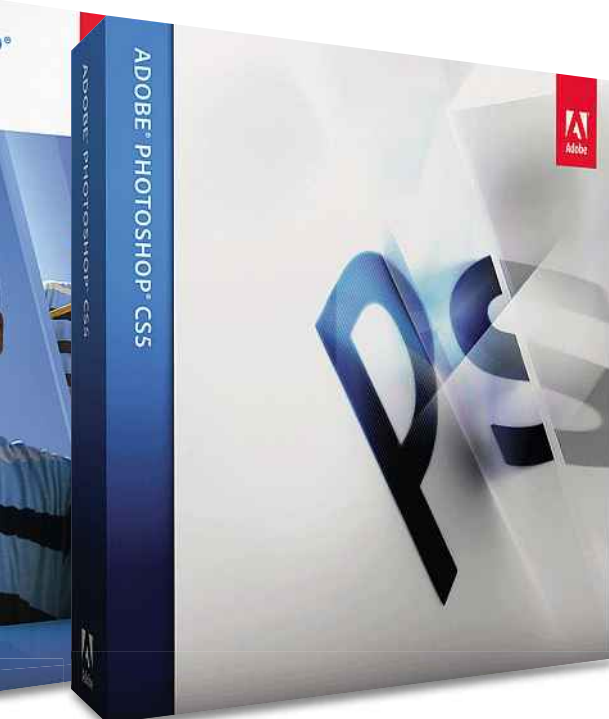
**7) SUBJECT ENHANCEMENT:** As well as taking out aspects you don't really like and sticking in stuff that wasn't really there, you can also enhance what you've already got. Aside from the colour and exposure controls for whitening teeth or pulling out grey hairs, you could change the shape and size of parts of your image with various Transform commands. And yes, that can mean slimmer hips and bigger biceps, but it could also mean ironing out the converging verticals of a tall building or scaling down a hand that's too close to a wide-angle lens.

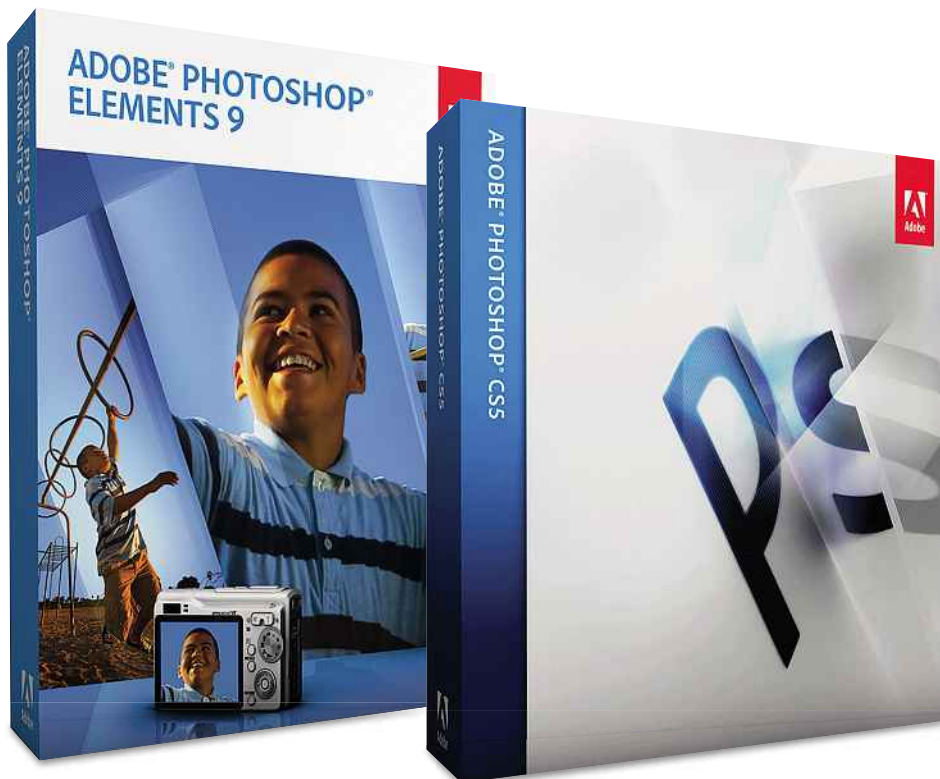
**5) BLEMISH REMOVAL:** On a basic level, this means polishing portraits a little by removing spots, moles and wrinkles, but this process can be extended to pretty much anything with the clever combination of Clone Stamp and Healing Brush tools. You can remove a telegraph pole from an otherwise picture-perfect landscape, an unwanted reflection from a window, and so on.

**8) WEB PREPARATION:** If you want to post your photos in a forum, an online gallery or your own website, Photoshop is certainly going to come in handy. You can resize them, sharpen them, convert them to sRGB mode and save them with the appropriate JPEG quality setting.

**6) MONTAGE:** Layers allow you to montage (otherwise known as composite) different images, in the same way that you might have once cut and pasted family photos. But

**9) SPECIAL EFFECTS:** Photoshop has a massive array of filters to enable you to achieve special effects. Turn photos into watercolour paintings, add frames and borders, add rain to a cloud scene, the list goes on.





## Which Photoshop: Elements or CS?

PHOTOSHOP COMES IN two distinct flavours. Firstly, you've got the full-blown Creative Suite professional version, which has run from its first installment back in 1990 all the way to Photoshop 7, then CS, CS2, CS3, CS4 and now CS5 (effectively Photoshop 12). Then there's the cut-down, beginner-friendly, consumer version called Photoshop Elements, now at version 9. To give you an idea of the price difference, you can pick up a copy of Photoshop CS5 for anything between £200 and £600 online, whereas you can get hold of the latest version of Elements for around £60.

Truth be told, unless you're planning complex composites that involve cutting out intricate shapes, you'll be fine with Elements. If you're at

the stage where you're good enough to be doing detailed cut-outs, you'll already know what the Pen Tool and the Channels palette are and how to use them and will probably already have access to a copy of Photoshop. You can perform all the basic edits you'll need as a beginner in Elements and a few intermediate edits, especially as Elements 9 now it features Layer Masks. As a first-time buyer, the only occasion you might want to plump for the full version is if you plan to use retouching as part of a semi- or fully-professional photographic workflow or have ambitions for advanced retouching. In this case, it's perhaps better to familiarise yourself with Photoshop from the start to save making the transition later on.

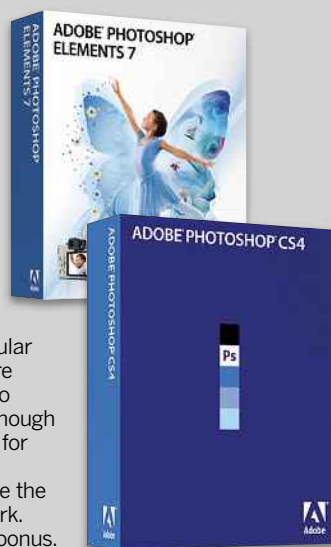


While the Elements interface is a little different to that found on Creative Suite, there are enough similarities so that photographers migrating from one to the other won't find it too alien.

## Which Photoshop: New or old?

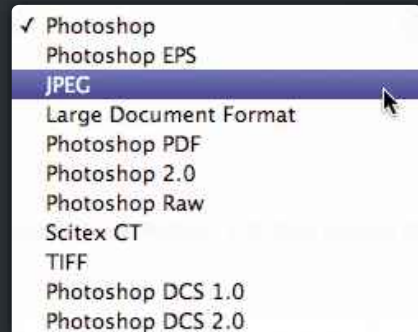
IF YOU'RE A FIRST-TIME buyer, there's little incentive to buy earlier versions of either Photoshop or Photoshop Elements as there appears to be little difference in prices and you have the added compatibility problems with newer digital cameras (for which updates are often only released for the latest versions). Owners of older versions may be forced to upgrade their copies for this reason. If you're not planning to invest in the latest and greatest digital camera and already own a copy of CS, CS2, CS3 or CS4, you'll have to weigh the upgrade price against new features.

It's worth noting that there's certainly nothing spectacular that you couldn't be without in earlier versions – there are plenty of pro retouchers and photographers who refuse to upgrade. Many of the new features are quite gimmicky, though the Photomerge advancements were a big improvement for panoramic enthusiasts in CS3, CS4's Clone Stamp Tool overlay and CS5's Content-Aware Fill function alone make the upgrade worth considering if you do a lot of clean-up work. Also, the addition of Layer Masks in Elements 9 is a big bonus.



## File formats

Check out the File Format drop-down list in the Photoshop Save As dialogue and get a shock at the multitude of options available. Panic not though; there are only really four formats worth discussing.







**PC & Mac shortcuts**  
 You can use shortcuts for some commands. Most Mac shortcuts use the **Cmd** (Apple key). Where it's not specified, we've stated Mac shortcuts in the text but if you use a PC, swap the **Cmd** button for **Ctrl**. Both PC & Mac use **Alt** and **Shift** keys, too

### RAW

This is the catch-all term given to the different proprietary file formats that come directly out of a digital camera when shooting in Raw (a Canon EOS 5D MkII Raw file, for example, has the extension .CR2). These files need converting into editable information via a Raw converter, such as Adobe Camera Raw (ACR), which comes packaged with both Photoshop and Elements. Shooting Raw allows access to the full range of information recorded by the camera sensor, giving more room to correct for exposure mistakes and to make edits to your image without chancing visible degradation. Raw files give you access to 16-bits of information, as opposed to a JPEG's 8-bits.

### PSD

The PSD file is a Photoshop format that allows all Photoshop information, such as layers and saved selections, to be easily stored and re-accessed at a later date. It's an uncompressed format and maintains the full 16-bits of information. While TIFF files do give you the option of including Photoshop layers, the file size increases disproportionately, making PSD the file format of choice for editing your images. When the image is finally flattened, it can be saved as a TIFF or JPEG, although it's always a good idea to keep the PSD file with all the layers work you've done in case you need to make any additional changes at a later date.

### JPEG

The JPEG is a compressed file format, designed to keep file size as low as possible with as little quality loss as possible. It uses what's termed a 'lossy' version of compression, meaning image information is thrown away for good. The amount discarded depends on the compression setting. A JPEG file retains only 8-bits rather than 16-bits of information, making it less useful as a format for image editing; the decrease in available information can produce signs of degradation if adjustments are pushed particularly hard. The reduced file size makes JPEG great for web reproduction, email and even magazine reproduction with a quality setting of 9 or more.

### TIFF

The TIFF is generally an uncompressed file format (though there is a 'lossless' compression option), and an alternative to the JPEG for distributing images once you've made all your edits in Photoshop and flattened the layers. File sizes are considerably bigger than JPEGs, so it's used as a maximum quality option if you're prepared to distribute images on a CD or upload them via FTP – forget email! Those without a copy of Photoshop are normally able to open a TIFF file without any problems. It can hold 16-bits of information, but as it's not generally used for editing, it's better to convert your images to 8-bits before saving as a TIFF to keep down the file size.

## The Toolbar

Photoshop's Tools are generally quick and easy to understand as their descriptions usually outline their function well. A small black arrow to the bottom right of a tool icon indicates a sub-menu with further tools accessed by clicking and holding.

-  **MOVE** Can be used to move pixel information on a layer, text or an active selection. Just click and drag.
-  **ZOOM** Click to zoom in, or **Alt** and click to zoom out. You may also choose to use **Ctrl** (PC) or **Cmd** (Mac) plus the + or - keys.
-  **HAND** Used for moving around your image when zoomed in or access quickly by holding down the spacebar instead.
-  **EYEDROPPER** Select a colour from your image by clicking on the areas or hold it down to reveal any of the three tools housed underneath, including Ruler.
-  **MARQUEE** Use these tools to make a selection based on a shape such as a rectangle or ellipse. Simply drag to size.
-  **LISSO** Draw your own custom selections with this tool, either freehand or using magnetic polygon points.
-  **QUICK SELECTION** Houses both the Quick Selection and Magic Wand Tool for a semi-automated selections. Use by adjusting the Tolerance in the Options bar.
-  **TEXT** Type text directly onto your image using any of the installed fonts. Type horizontally or vertically and create selections based on your type.
-  **CROP** Crop out unwanted aspects from the edges of your image. Set a specific width to height ratio if needed in the Options bar.
-  **HEALING BRUSH** Replace blemishes with nearby clean pixel information and have it blend in with surrounding pixels. Also houses the Spot Healing Brush Tool, Patch Tool and Red Eye in CS4/5.
-  **CLONE STAMP** Allows you to copy and paste pixels from one area to another without the blending of the Healing Tool.
-  **ERASER** Remove pixel information manually or in a semi-automated manner using the Background or Magic Eraser Tool.
-  **BRUSH** One of the most often used tools, particularly for painting information in and out on of an image when combined with a Layer Mask. You control its opacity and edge Hardness via the Options bar. The Pencil Tool and Color Replacement Tool sit underneath.
-  **GRADIENT** Draw gradients directly onto layers or their masks. Also houses the Paint Bucket Tool for single colour fill.
-  **BLUR** Soften selected areas of your image or sharpen and smudge them with the two other useful tools housed underneath Blur.
-  **SHAPE** Draw shapes or lines using any one of the default shapes, or choose another with the Custom Shape Tool.
-  **DODGE & BURN** The Dodge Tool lightens and the Burn Tool darkens depending on the Exposure level set in the Options bar. You can choose whether to focus on Shadows, Mid-tones or Highlights and there's also a Sponge Tool for increasing or decreasing colour saturation.
-  **HISTORY BRUSH (CS4/5 ONLY)** Go back in time by painting previous states into your image in conjunction with the History palette.
-  **PEN (CS4/5 ONLY)** Allows the user to create curved as well as straight-edge selections to accurately outline solid-edge subjects.
-  **DIRECT SELECTION (CS4/5 ONLY)** This tool and the one it hides are for selecting and moving paths created with the Pen and Shape Tool.

## Menus, tools and palettes

THE PHOTOSHOP WORKSPACE can be a daunting place at first, with its vast array of features. However, once you grasp a basic understanding of just a few key areas, you'll be up and running in no time. Here we'll be looking at the workspace of Photoshop Elements and although there are differences between this interface and that of CS3, CS4 or CS5, Adobe does a great job with crossover between packages to encourage a progression for users as they become more experienced. The three key areas to understand are the Toolbar, which runs vertically on the left side and incorporates the Options bar running horizontally above it; the Menu bar, which runs horizontally along the top of the workspace and finally, the palettes. All these items can be hidden or made visible via the Window tab, allowing users to customise the workspace to their individual needs.



**QUICK MASK MODE (CS4/5 ONLY)** View selections as a translucent red mask rather than marching ants. When active, you can paint onto your image with a black or white brush to add or subtract from the selection. Press **Q** to turn it on and off.

## The Menu bar

**EDIT** As well as hosting options for general preferences and keyboard shortcuts, the Edit menu is home to Cut, Copy and Paste, though all these are accessed easier via their keyboard shortcuts. The Transform commands are located here too allowing you to perform things such as Scale, Rotate and Skew.

**IMAGE** All the popular image adjustments such as Levels and Curves can be found here, though usually you'll want to add these as Adjustment Layers via the button in the Layers palette, rather than applying them directly to pixel information. The Image menu also lets you alter size via the Image Size command.

**LAYER** The Layer menu is home to popular layer-based commands like Convert to Smart Object, Merge Layers and Flatten Image and you can also add adjustment layers from here. In truth virtually everything here is better accessed by keyboard shortcuts or buttons on the Layers palette itself.

**SELECT** Everything to do with selections is here, such as Select All, Deselect and Select Inverse. You can also modify selections via this menu with commands like Expand, Contract, and most commonly Feather. This menu also gives access to the very useful Transform Selection and Color Range commands.

**FILTER** Along with being home to a variety of special effects filters, the Filters menu also includes two of the most often used filters in Photoshop – Unsharp Mask and Gaussian Blur. These two filters are integral to much of the work done in Photoshop and can be employed for a variety of purposes.



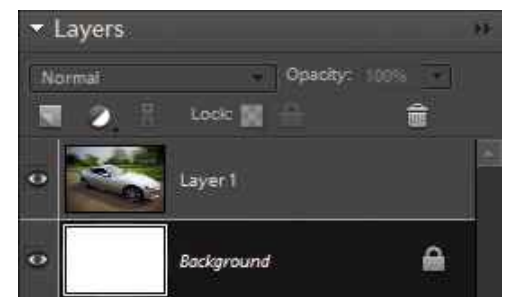
**Customise your space**  
The Photoshop interface is fully customisable. If there are palettes you don't use simply hide them in the Window menu. Also, you can drag and drop them into positions that suit you!

## Palettes

There are several interchangeable palettes accessed in the Window tab of the menu including Colour Swatch, Histogram, Info, Navigator, Styles and Effects. Here's two you won't be able to live without...



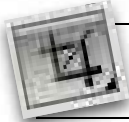
**HISTORY** Everything you do in Photoshop, whether it be applying a brush stroke, filter or deleting a layer, is recorded in the History palette. The number of steps kept in memory is specified in the Preferences palette (the default is 20, but 40 is safer). To go back step by step through your history click **Cmd+Alt+Z** (Mac) or **Ctrl+Z** for PC users.



**LAYERS** This palette contains all your pixel, vector and Adjustment Layers, as well as their masks. You can re-order and delete these layers at any time, organise layers into groups, turn them on and off with the visibility icon and, of course, add Layer Styles from the palette itself. There's also a context menu for more layer commands such as Flatten Image.

## Photo Bin (Elements)

The Photo Bin in Photoshop Elements is an organisational tool that shows thumbnails of all the files you have open in the workspace. Underneath the thumbnail you'll see the file name and when you click on a thumbnail that file becomes the active document. A right click on a thumbnail gets you to a shortcut menu where you can minimise, close or rotate the image, create a duplicate file or access the image's original camera data.



# Crop Tool

PC & MAC QUICK SELECT KEY = **C**  
FOR PHOTOSHOP CS & ELEMENTS



There is a lot of power in the Crop Tool that not many people know about, and yet it's probably one of the most used tools by photographers. Many people use the Crop Tool to remove elements of a picture, but there are a lot of hidden secrets, too, many of which we cover in this feature. Read on to find out how to correct converging verticals, expand, rotate and straighten an image, as well as ways to improve the composition of your images

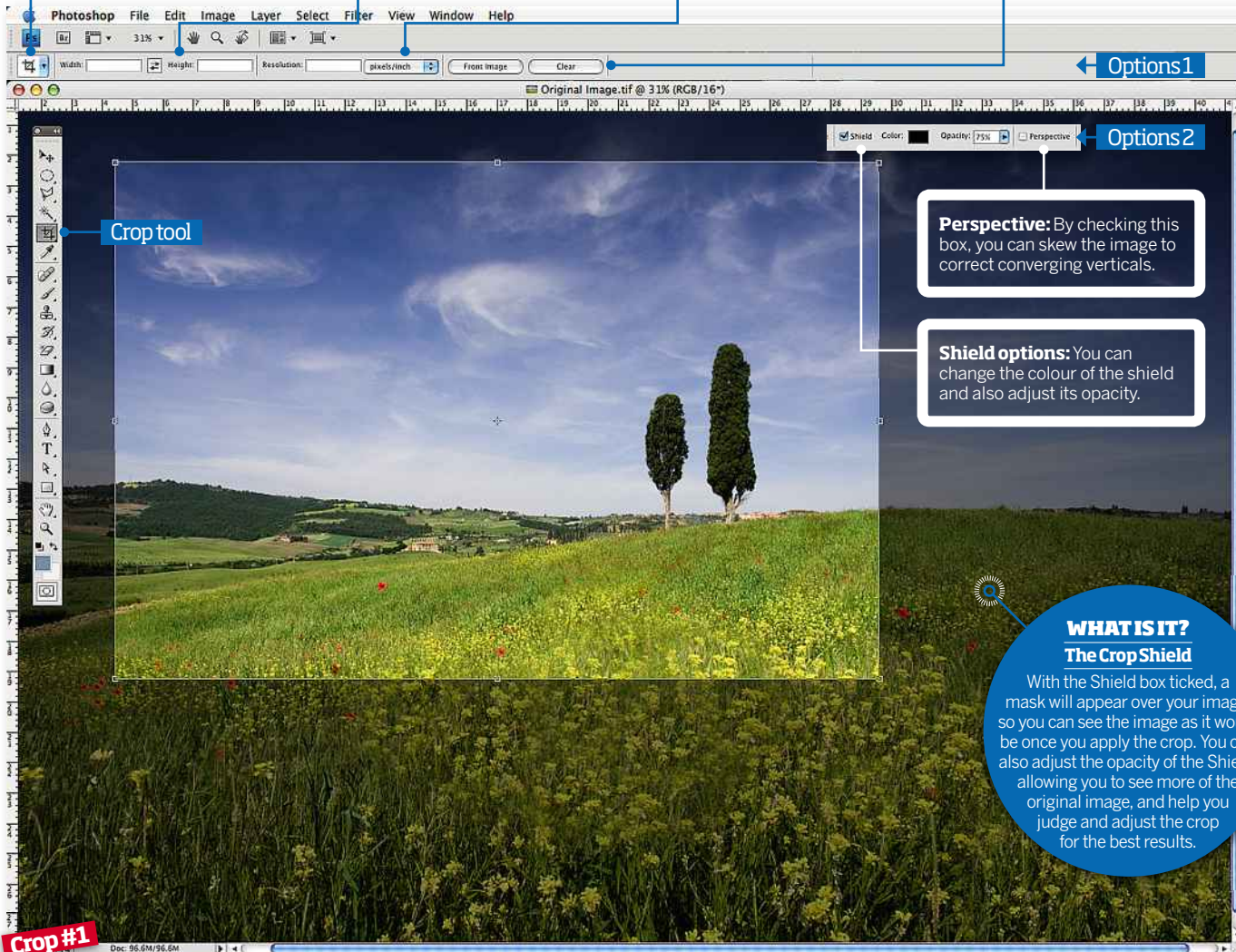
### Tool preset picker:

Click the arrow to show a list of preloaded Crop Tool presets.

**Height and Width:** Type in the dimensions that you want to constrain the crop to.

**Resolution:** Use to set the crop's resolution. For the best quality, type 300 pixels/inch.

**Front Image and Clear:** Front Image will load the image's dimensions. Clear deletes them.



## CROPPING FOR COMPOSITION

Experiment with different crop shapes to strengthen your image's composition. Here, we've tried putting the focal point in the bottom third of the image, producing a square crop with the focal point in the centre of the frame and creating a panoramic to show off the vista. For portraits especially, a tight crop on the subject can improve an image.



**✓ CROP TIP 1: EXPAND THE CANVAS**

**USE:** GREAT FOR ADDING ARTISTIC BORDERS

When most people think of cropping, they think of removing. But it's a little known fact that you can use the Crop Tool to add to an image. If you apply the crop constraints to an image and then pull them out, you'll be able to expand your canvas. To do this, select the **Crop Tool** and then the entire image by clicking in the top left-hand corner and dragging down to the bottom right-hand corner. If you want to add some canvas space, click on the middle widget at the top and drag it upwards. Do the same for the bottom and the sides. Use the rulers at the top and sides of the interface as a guide to make the sides even.



**✓ CROP TIP 2: CONSTRAIN THE CROP**

**USE:** ACCURATE CROP TO FIT A FRAME

If you want to constrain the crop to a certain size – for instance, a 5x7in, or, in this case, 15x5in to create a panorama – you can type these dimensions in the Height and Width on the top toolbar. To do this, click on **Front Image** to load the picture's parameters in to the Height and Width panel. Type in the new dimensions – in this case, **Width: 15in** and **Height: 5in** – keeping the **Resolution** at 300 pixels/inch to retain quality. Click on the image and drag the **Crop Tool** until it reaches those proportions. You can also move the position of the crop by clicking in the centre of the image and dragging it where you want it.



**HOTKEY**  
**Shift & Alt**

Instead of typing in the exact proportions for Height and Width, if you hold **Alt** while using the Crop Tool, it will constrain the proportions for you. Also, if you would like to resize a crop before committing to it, holding **Alt** while dragging a corner widget will ensure the sides of the crop remain proportional.

**HOW DO I...  
Activate a crop?**

There are three ways to commit to a crop: click the tick button in the top toolbar (to cancel a crop, click **X**); press **Enter** on your keyboard; or double-click the image itself.

**✓ CROP TIP 3: ROTATE THE CANVAS**

**USE:** GOOD FOR CORRECTING WONKY HORIZONS

Unless you use a tripod with a spirit level, when you open a landscape image in Photoshop, you may find that it needs straightening. There are several ways you can do this, namely via the **Image>Image Rotation** menu, but you can also do it manually using the Crop Tool. Once you've selected the entire image with the **Crop Tool**, if you hover your cursor over the corner widgets, you'll see it change to a curved arrow. Click on the corner widget and rotate the image until the subject looks straight and commit to the crop. As the image will now be tilted, you'll find that the canvas is showing. You'll need to crop this canvas out. Alternatively, if the extra canvas space works for your image, select the **Clone Stamp Tool** and fill in the blank canvas by making a selection from the edges of the image. See page 20-21 for the Clone Stamp Tool in detail.



**Secrets unlocked**

**✓ PERSPECTIVE CORRECTION**

While there are more powerful ways of correcting perspective and converging verticals, such as the Transform tools (see page 18-19), the Crop Tool is good for fixing common little problems quickly. Select the entire image with the **Crop Tool** and, as you do, you should notice the horizontal toolbar change to show Shield, Color, Opacity and Perspective. While the first three really only affect the way you see the image, Perspective is the powerful one. Often when you use a wide-angle lens to photograph a building, the image suffers from converging verticals, so the building looks like it's leaning back. Click on **Perspective** and then pull the upper left corner widget so the line on the left matches the building's angle, then do the same thing with the right side. You'll get an image that looks like it's cropped at an angle, but then when you commit to the crop, it will straighten the image out, applying a perspective correction to it.



**Corrected**

# Sharpening

With so many ways to sharpen an image, it's hard to know which one will give you the best results. We tell you which to use and how

Sharpening is designed to increase the clarity of an image by increasing the contrast between pixels. The aim is to sharpen each image just enough to compensate for the loss of sharpness that naturally occurs when an image is captured. Sharpening should be done with a scalpel: not a hammer. While there are a myriad of ways to sharpen an image – most of which can be found via the **Filter>Sharpen** menu – for ultimate control, photographers should use Smart Sharpen. The filter builds upon the excellent Unsharp Mask, providing the tools you need to get rid of certain types of blur, and work on the shadows and highlights independently. As a rule, do not sharpen in-camera, as you cannot correct it later, and while you can use the Clarity and Sharpening tools in Adobe Photoshop Raw, you are working directly with the image's pixels. If you wait to do sharpening in Photoshop, you can add a Smart Filter which, in much the same way as adjustment layers, creates a veneer over the image, so sharpening is non-destructive.

## ⚠ WARNING: OVERSHARPENING

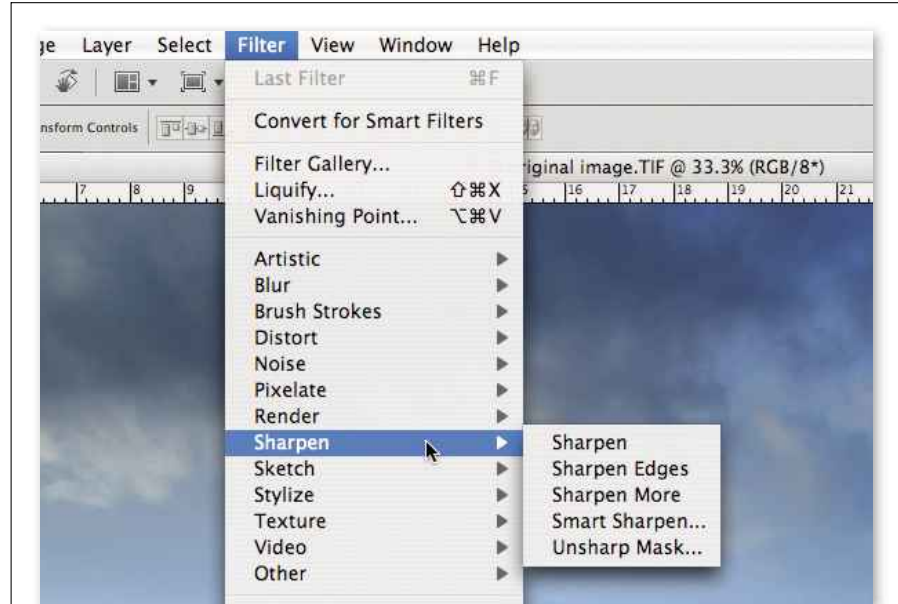
When you sharpen an image too much, you'll find that areas of colour or tonal change become pixelated. You may also find that black and white marks, known as artefacts, start to show up in the image. Another indicator of oversharpening is when a halo appears around the subjects.



## Tooled up!

### ✓ SHARPEN TOOL

Historically, the Sharpen Tool is the easiest but worst method of sharpening an image, as it introduces a host of artefacts. Now, with CS5, it has new algorithms that have made it the most powerful way to sharpen, as you can sharpen selectively and precisely using its brush. It's also tuned so it does not create artefacts.



## WHERE DO I FIND IT AND WHICH SHARPEN IS BEST FOR ME?

**1) Sharpen and Sharpen More** While these may seem the most obvious filters to pick from the list, they're actually the worst. The Sharpen More filter applies a stronger sharpening effect than Sharpen, but both offer no control over the way you apply them and directly affect the pixels.

**2) Sharpen Edges** This filter again directly affects the original pixels of an image and targets areas in the image where significant colour changes occur and sharpens them. Unlike the other filters, it only sharpens the edges of an image while preserving its overall smoothness.

**3) Unsharp Mask...** This is probably the most widely used way of sharpening and, until Smart Sharpen appeared, was the best method. While Smart Sharpen is considered the better option for photographers as it offers more control, you can still get great results from Unsharp Mask. It adjusts the contrast of the edge detail and creates the illusion of a sharper image. You can also add a Smart Filter to make your

adjustments non-destructive to your image. You have three sliders: Amount, which determines how much sharpening is applied; Radius, that controls how many pixels are affected; and Threshold, which determines how far different pixels must be from the surrounding area before they are considered edge pixels and sharpened. To access Unsharp Mask in Photoshop Elements 9, go to **Enhance>Unsharp Mask**.

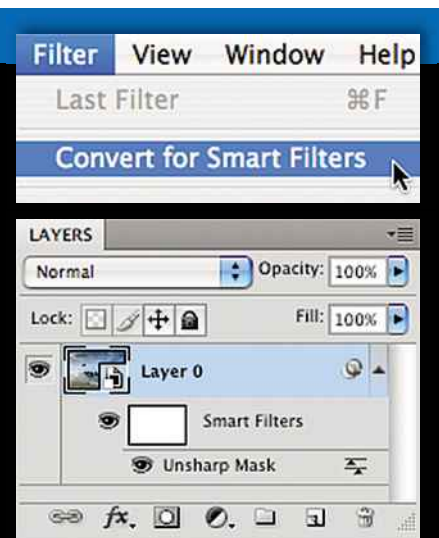
**4) Smart Sharpen...** Stated to be the best way to sharpen photos by Adobe due to its precise control, Smart Sharpen builds on the features in Unsharp Mask, but with the added option of being able to sharpen the highlights and shadows separately and to remove certain types of blur. Similar settings found in Smart Sharpen can be accessed in Element 9 by clicking **Enhance>Adjust Sharpness**, although you cannot target shadows and highlights independently, but you can target areas in need of sharpening by clicking **More Refined**.



## Secrets unlocked

### ✓ THE 'SMART' WAY TO FILTER

Whenever you use a filter, it's a good idea to convert your image to a Smart Filter first by clicking **Filter>Convert to Smart Filter**. Like an adjustment layer, a Smart Filter allows you to make alterations without affecting the original pixels of the image and allows you to revert back to editing the filter later, no matter how far you've gone into the editing process. Once you convert your image layer to a Smart Filter, you can pick your chosen filter – in this case, **Filter>Sharpen** – and make your adjustments. When you click **OK** and the dialogue box closes, you'll find your Layers palette has an extra layer called Smart Filters and below that the name of the filter you've applied (eg Unsharp Mask). If you ever need to make further adjustments, double-click on the part labelled Unsharp Mask. You can also adjust the opacity of the filter by clicking on the symbol to its right.



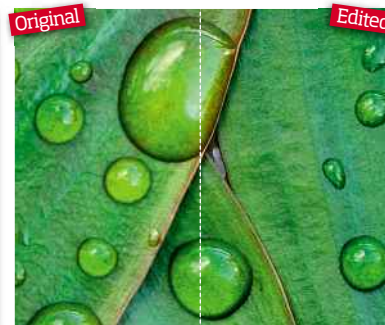
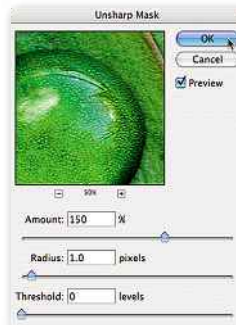
# Sharpening your images

Unsharp Mask is an age-old favourite for most photographers and can give great results, but for ultimate control and ability to reduce destructive artefacts, it's time to smarten up about the way you sharpen

## 1 UNSHARP MASK...

GOOD SHARPEN FOR ALL LEVELS

For the majority of photographers, this filter offers adequate control over sharpening. Before you make any adjustments, enlarge the **Preview** image to 100% to see the effects of the sharpening. While each image is different, for a high-resolution image it's best to adjust the **Amount** between 150% and 200%, set the **Radius** to 1 or 2 pixels and the **Threshold** between 2 and 20. When sharpening for the web, increase the **Amount** to around 400%, reduce the **Radius** to less than 1 pixel and the **Threshold** to 0, as there's less information.



### HOT TIP

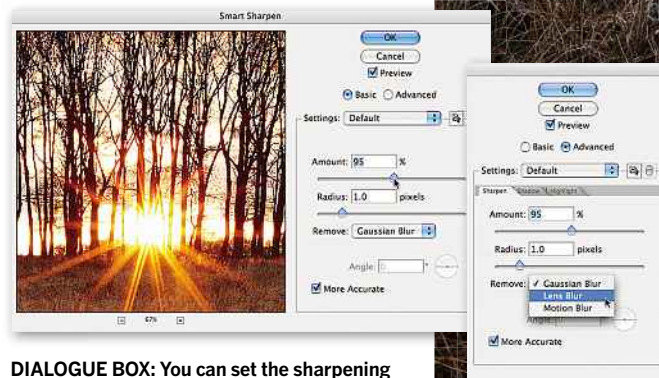
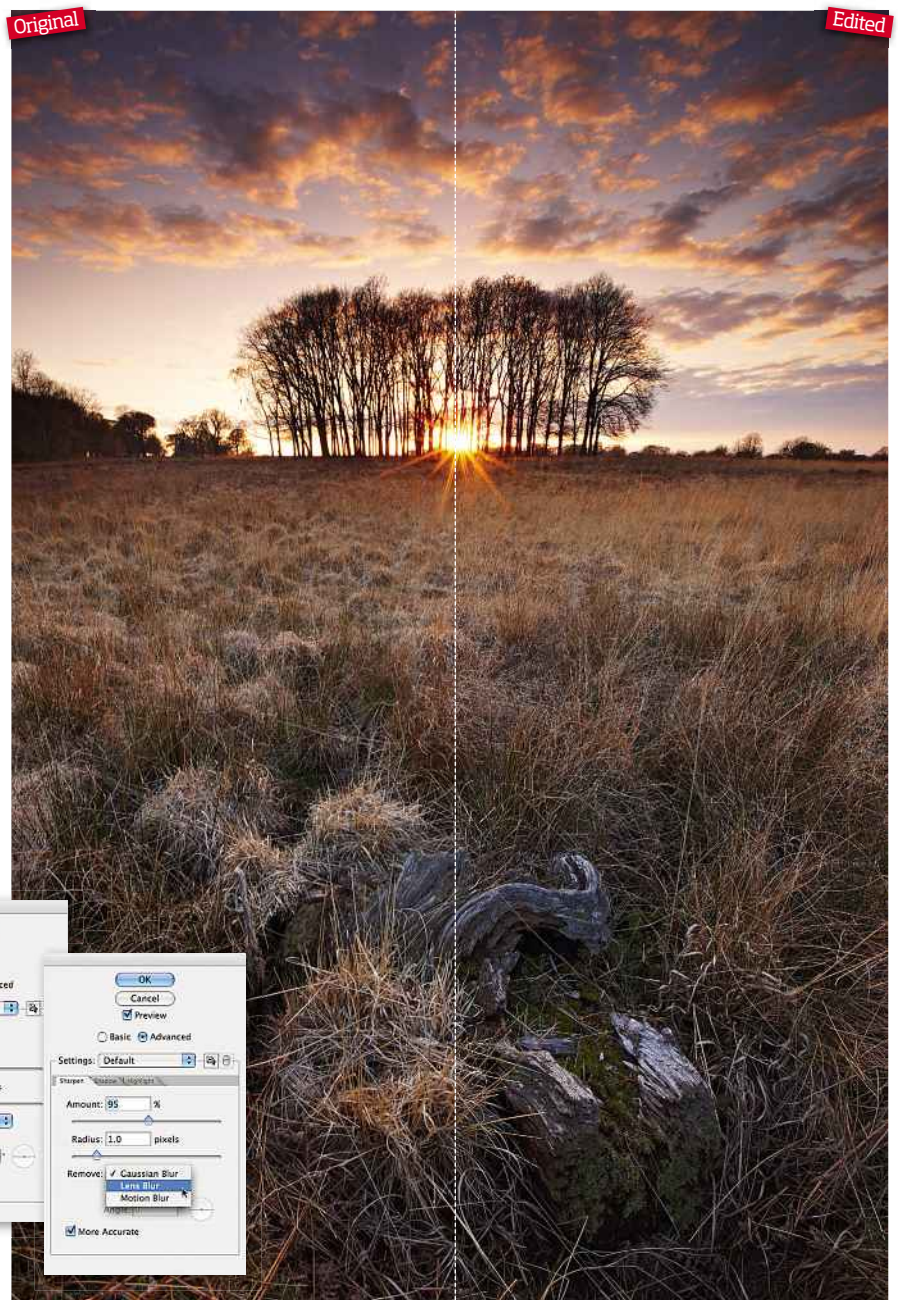
**Preview the original**  
If you want to see the image before sharpening was applied, hover over the preview image until a hand cursor appears and then hold it down to temporarily change the image back.

## 2 SMART SHARPEN...

ONCE MASTERED, THE BEST SHARPEN

The Smart Sharpen dialogue box has several controls, including tabs Basic and Advanced. So you can focus on the basic adjustments first, click on the **Advanced** tab and set all the sliders to 0. Back at the Sharpen tab, at the bottom of the dialogue box is a drop-down menu called Remove, which offers three ways of sharpening an image: Gaussian Blur, Lens Blur and Motion Blur. Unsharp Mask works to remove Gaussian Blur, but there's actually very little Gaussian Blur in an image and much more Lens Blur which, if reduced, targets halos and the finer details. Motion Blur is brilliant for reducing ghosting and slight camera shake. Unfortunately, it's not very intuitive, so you need to specify the angle of the motion. You can either do this by trial and error, moving the angle dial around until you can see the blur reduce in the preview, or use the **Ruler Tool** in the toolbar to measure the direction of the motion blur and then input the degree in the **Smart Sharpen Angle** box. Make sure the box called **More Accurate** is checked, too, before you adjust the settings, as this will ensure only the areas that need sharpening have it applied.

The sliders work in the same way as Unsharp Mask in that there's an Amount (set between 50% and 150%) and Radius (1 - 2 pixels). Now, to target any artefacts or halos caused by the sharpening, click on the **Advanced** tab and either **Shadows** or **Highlights** (depending on where the artefacts are). You can then use the **Fade Amount** slider to selectively reduce the sharpening in that area and the **Tonal Width** to control the tonal range modified and the radius. You may need to enlarge the preview to 200% to really judge the effects.



**DIALOGUE BOX:** You can set the sharpening algorithm to control the amount of clarity in the shadow and highlight areas.

# Noise

Noise can be the bane of digital photographers. We tell you how to minimise noise to improve quality

Noise is an unsightly and so far unavoidable side effect of digital capture. This form of electronic interference is usually revealed by underexposure, high ISOs and shooting in dark environments with a long shutter speed. Much of an image's noise is embedded in the shadows, which is why if you're shooting in Raw, it's always better to slightly overexpose a scene than underexpose it, as long as you're careful not to blow the highlights. When an image is darkened, the tonal range is compressed, hiding the noise, but if you try to lighten a digital image in Photoshop, you'll find coloured and light specks emerge from the shadows as the tonal range is expanded, making it look grainy.

There are two types of noise: chromatic that appears as red, green and blue specks; and luminance, which is when an image looks like it's been sprinkled with salt and pepper. Reducing either type of noise improves image quality, but can also soften the image, so you need to find a balance between noise control and retaining edge detail.

Photoshop CS4 and Elements 9 handle noise reduction in the same way and do a fairly good job of it. There are plug-ins and software that are dedicated to noise reduction, too, such as Noise Ninja and Nik Software's Dfine 2.0, which may handle high levels of noise better. Since CS5, Adobe Camera Raw offers a lot more control over noise reduction, which is ideal because you'll be working on an image when it has the maximum information. For CS4 and Elements, though, we'd advise using Photoshop filters as you can apply a Smart Filter first, allowing you to edit changes later and leave the original image pixels untouched.

## NOISE TIP: IMAGE STACKS

**USE:** TO COMPRISE A NOISE-FREE IMAGE

As noise appears differently in every frame, if you shoot a series of images from the same viewpoint and stack them in Photoshop CS4 or CS5 (Extended), it can automatically create an image with minimal noise by selecting areas that hold the least amount of noise. Click **File>Scripts>Load Images into Stack** and select your images by clicking **Browse**. Tick **Attempt to Automatically Align and Create Smart Object**, and then **OK**. Once it's finished processing, go to **Layer>Smart Object>Stack Mode** where a menu of options appear, each a command that determines how each layer interacts. Select **Median** as this targets the transparent pixels and smooths out any noise in the shadows. It also removes any unwanted elements, such as moving subjects that aren't present in every image.



## FINDING THE NOISE FILTER

**1) Add Noise...** This applies randomly coloured or monochromatic pixels to an image and is mainly used for creative effect.

**2) Despeckle** Directly affecting the image's pixels, Despeckle targets luminance noise but is the only noise filter not to offer photographers control over how it's applied.

**3) Dust and Scratches...** Enables you to hide picture faults such as hair, scratches and dust using two sliders: Radius and Threshold. The Radius determines the size of the area that's searched for dissimilar pixels. The Threshold value determines how dissimilar the pixels should be before they're eliminated.

**4) Median...** Although it only has one control (Radius), Median is widely used and does a good job of smoothing out noise while automatically preserving edge detail.

**5) Reduce Noise...** For the most control over how you reduce noise, retain detail and to target the different colour channels independently, the Reduce Noise filter is the one to use.

## NOISE TIP: DUST AND SCRATCHES...

**USE:** REMOVE SMALL MARKS FROM AN IMAGE

To get rid of noise and small imperfections, like the ones you get from scanning in an old photo, select **Filter>Noise>Dust & Scratches**. Set a **Radius** between 1 and 4 to eliminate defects (any bigger and the image will blur), and adjust the **Threshold** between 0 and 128 to bring back detail.



## HOT TIP

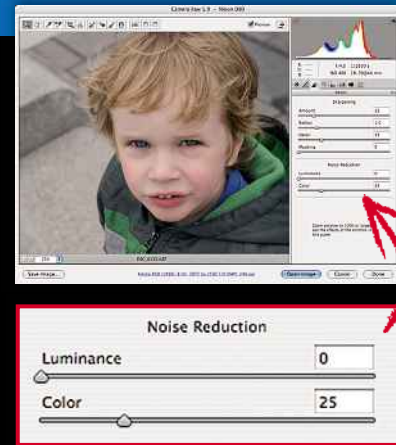
### Smart Filter

Before you apply a filter, it's a good idea to convert your image to a Smart Filter as it allows you to make alterations without affecting the image's original pixels, as well as correct any adjustments later. To do this, with the image layer selected, click **Filter>Convert to Smart Filter** then select the filter you wish to apply. For more information on how to create and use Smart Filters, refer to page 78-79.

## Secrets unlocked

### NOISE AND ADOBE CAMERA RAW

When you open your image in Adobe Camera Raw, under the Detail tab you'll find noise reduction options have been expanded to include more controls in addition to CS4's Luminance and Color, allowing for similar control as you would get with the Reduce Noise filter in Photoshop. Zoom in to an area of shadow at least 200% and set all the sliders to 0. Drag the **Color** slider to the right until all the red, blue and green specks disappear. Next, move the **Luminance** slider until the white specks are reduced, being careful to watch for loss in detail. Then use a combination of **Luminance Detail**, **Luminance Contrast** and **Color Detail** to bring back some of the edge details you may have lost.





## How to reduce (or add) noise in your pictures

Noise has the power to make or break a picture. Find out the best way to reduce chromatic & luminance noise in Photoshop as well as how it can be used creatively to give an image a gritty, old-time edge

### 1 REDUCE NOISE FILTER

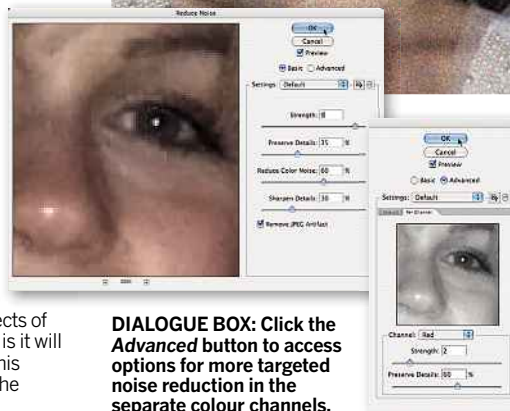
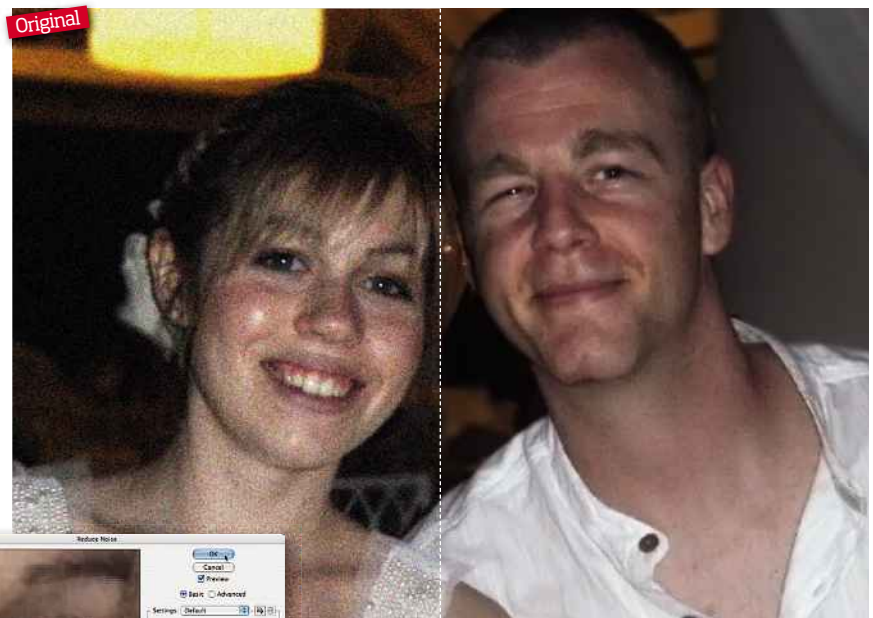
IMPROVE IMAGES SHOT AT A HIGH ISO

This is one of the most effective ways of reducing noise as it offers a lot of control, enabling photographers to preserve detail as well as target noise. In its basic form, you have four controls: Strength, Preserve Details, Reduce Color Noise and Sharpen Details.

- **Strength:** This controls the impact of the filter and you'll notice the higher you set it, the more an image is softened and detail is reduced.
- **Preserve Details:** Using this control, you can specify the level of detail that should be kept so an image is not rendered blurry when noise reduction is applied.
- **Reduce Color Noise:** Controls how much chromatic noise is reduced.
- **Sharpen Detail:** Restores sharpness in places noise reduction softens.

For the best results, take all the sliders back to 0 and zoom in to the image preview to at least 200%; you want to see the filter's effect on the pixels. Adjust the **Strength** setting first, checking the image's shadows, highlights and midtone areas for noise. If your image has a lot of colour noise, you should adjust the **Reduce Color Noise** slider in conjunction with the **Strength** slider until you're happy with the noise level. Now slowly drag the **Preserve Detail** slider to the right until you start to see the noise reappear in the image. A value of 100 will preserve the most image detail but reduce luminance noise the least.

When using the **Reduce Noise** filter, make sure you click on the **Remove JPEG Artifact** option. One of the side effects of compressing your image to JPEG format is it will create box-like patterns of pixels. Using this setting, Photoshop tries to smooth over the artifacts to make them less pronounced.



**DIALOGUE BOX:** Click the **Advanced** button to access options for more targeted noise reduction in the separate colour channels.

#### For the more advanced...

If you click **Advanced** in the **Reduce Noise** dialogue box, two tabs will appear: **Overall** and **Per Channel**. It's the latter that holds the power, enabling you to target noise in the red, green and blue channels independently for more precise adjustments. You may find that luminance noise is more prominent in the Blue channel. Once you pick your Channel from the drop-down menu, you need to adjust the two sliders: **Strength** and **Preserve Detail**. For the best results, balance both these sliders. **Strength** determines the amount of noise reduction applied while **Preserve Detail** mellows the effect by maintaining edge details.

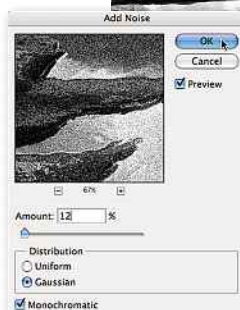
### 2 ADD NOISE FILTER

GIVE YOUR IMAGES AN OLD FILM EFFECT

Most of the time, photographers want to minimise noise, but there are occasions when it can be used for creative effect, such as if you want to make a black & white picture look older than it is. It's also useful to blend areas that have been retouched. For instance, if you paint over an area or apply blur, chances are you will have areas that look smooth amongst areas of noise. Adding a bit of noise to the retouched area can help it look less obvious. When adding noise, it's a good idea to work on a duplicate image layer so you're not affecting the image's original pixels and can undo any adjustments you make. With your image open, go to **Layer > Duplicate Layer** and then click **Filter > Noise > Add Noise** and adjust the filter's settings as you see fit, before clicking **OK**.

These are the three main settings:

- **Amount:** Use this slider to control how much noise is applied.
- **Distribution:** This determines how the noise is applied. Uniform keeps noise consistent throughout the image, while Gaussian produces a more speckled effect that in some cases makes the noise more pronounced. Experiment to see what suits your image.
- **Monochromatic:** Makes the noise black & white.



#### HOT KEY

##### Alt to reset

If you hold down **Alt**, the Cancel button in the dialogue box will change to Reset so you can revert back to the original image and start again. This will work for most of the dialogue boxes you use.

Reset

#### HOT TIP

##### Preview the original

If you want to see the image before noise was applied, hover over the preview image until a hand cursor appears and then hold it down to temporarily change the image back.

# Transform

NO KEYBOARD SHORTCUTS

Learn how to scale, skew, rotate and generally 'transform' your image to give a better result

Each of the Transform commands enable you to change a different geometric aspect of a layer or pixel selection. They are powerful but destructive tools, working by manipulating pixels, but can also be very useful if you need to correct lens distortion or if you have to change the shape and size of a subject. Among the commands that allow you to manually adjust layers are preset commands for common rotations and flip orientations.

Transform only affects layers selected in the Layers palette (**Window>Layers**). If you want to adjust all your image's layers simultaneously, click on the top layer, then the bottom layer while holding down **Shift**. Or hold **Cmd** and select the layers you want to alter individually. For you to transform any image in Photoshop CS4, you will first need to unlock the Background Layer in your Layers palette by double-clicking on it, giving it a name when the dialogue box appears, then clicking **OK**. In Photoshop Elements 9, however, it automatically unlocks the Background Layer once you try to use the Transform commands.

To access the commands in Photoshop CS4, click **Edit>Transform** for the drop-down menu to appear. Once you've selected your tool, a bounding box appears around the image. If you're using Elements 9, you can access the commands via **Image>Transform**. Both packages offer Free Transform, which we'll cover later, and is the most powerful command comprising all of the Transform commands (except Warp), but it's also the trickiest to use. To get started, you may find it easier to use one of the specialised commands detailed here so that you do not have to worry about inadvertently adjusting the picture in the wrong direction.

## WHERE DO I FIND THE COMMANDS AND WHAT DO THEY DO?

**1) Again** (**Ctrl, Shift, T**) Once you've applied a transform command, click Again to repeat the command. It's useful if you need to make the same, precise adjustments to several images.

**2) Scale** Resize the image by clicking on the corner anchor points of the bounding box, holding **Shift** to constrain the proportions.

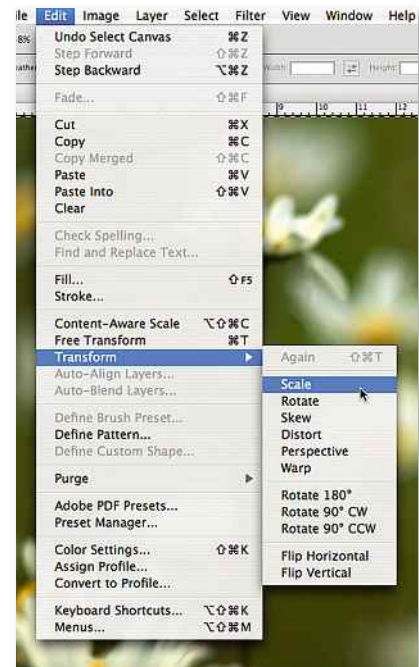
**3) Rotate** This enables you to manually turn an image or selection, as opposed to using the preset 90° increments found later down the Transform menu. Place the cursor outside the bounding box and rotate the image left or right. You can hold down **Shift** to constrain the rotation to 15° increments.

**4) Skew** This can be used to correct or apply slants in an image. For instance, if an image has a building that looks like it's leaning, you can use this command to straighten it.

**5) Distort** Use the command to stretch the image in any direction you pull it in. Hold down the **Ctrl** key while adjusting the bounding box to distort the layer or hold down **Alt** if you want to make the distortion symmetrical.

**6) Perspective** You can either make objects look like they're further away from you or closer to you by stretching or compressing the image. Drag the corner anchor points to adjust the perspective of the image.

**7) Warp** Manipulate up to nine sectors of an image by pushing and pulling the pixels in any direction using the Warp command. It will curve and bend the edges of an image or selection. Photoshop Elements 9 doesn't have this command, but you can use the Liquify Filter for similar effects.



**8) Rotate & Flip** The bottom two sections of the menu hold some common preset commands for quick adjustments. They include rotating layers in 90° increments and flipping them vertically or horizontally.

### TRANSFORM TIP 1: WARP

USE: CHANGE A SUBJECT'S SHAPE



The Warp transform is suited to changing the shape of large parts of a picture, compared to the Liquify Filter that is better for applying intricate distortions. Warp is famously used to make subjects look slimmer in portraits.

You can access it via **Edit>Transform** or, if you're already using the Transform tools, by clicking the **Switch Between Free Transform and Warp** button in the top toolbar. By using this button, it means you can make Free Transform adjustments and Warp adjustments in one transformation, reducing the degradation of the image.

The toolbar also offers a selection of preset warp options for you to use. When in Warp mode, you can control the shape of the image by moving the Bezier handles at each corner of the bounding box, which comprises nine sections that you can adjust.

### TRANSFORM TIP 2: PERSPECTIVE

USE: CORRECT LENS DISTORTION CAUSED BY CAMERA TILT

When using a wide-angle lens for landscapes, at its widest focal length you may find your image suffers from either barrel distortion (when the image looks like it's been mapped around a sphere, ie curves extend outwards) or keystone (when the subject looks narrower at the top than the bottom). To correct this type of distortion, open your image and activate the rulers (**View>Rulers**). Pull a guide from the ruler to match up with a subject in the image that should be straight, such as a wall or a tree. Now click **Edit>Transform>Perspective** to activate the bounding box and drag the corner anchor points inwards or outwards to adjust the image's perspective. Use the guide as a marker to tell when the distorted image has been straightened correctly.



### HOT TIP

#### Adjust the Opacity

When transforming a selection, and trying to align it with the layer beneath, try adjusting the layer's opacity using the Opacity slider at the top of the Layers palette. It will make the layer semi-transparent so you can see the image beneath it.

### HOT KEY

#### Ctrl+O

Often if you're transforming an image, the bounding box will become larger than the canvas making it difficult to get to the anchor points. If you press **Cmd+O** (**Ctrl+O** for PC), you will quickly zoom out of your image far enough to reveal the transform bounding box.

# Free Transform

PC QUICK SELECT KEYS =

MAC QUICK SELECT KEYS =

Take complete control over reshaping your image using the Free Transform command

Free Transform is the most versatile command, but also the toughest to use, allowing you to scale, distort, rotate, skew and adjust perspective using a combination of modifier key combinations (see below) in conjunction with moving different anchor points. You can access this via **Edit>Free Transform** or clicking on the **Move Tool** and checking the **Show Transform Controls** box in the top toolbar.

You can also apply transforms to individual selections, using the Transform Selection command. This tool works exactly the same way as Free Transform and you are able to use the same modifier key combinations listed below. Make your selection using a selection tool such as the Magnetic Lasso, and click **Select>Transform Selection**. Before you are able to make any transform adjustments, you'll need to commit to the selection by pressing **Enter**.

You then have a number of options, depending on what you want to achieve:

- **Change the height and width:** Click an anchor point on any side of the bounding box and drag to adjust the height or width separately.
- **Scale:** Click a corner anchor point if you want to adjust the height and width simultaneously and hold down the **Shift** key if at the same if you want to lock the proportions to avoid distorting the image. Alternatively, hold down the **Alt** key while dragging a corner anchor point to scale the selection around the crosshair in the centre of the bounding box, which you can move anywhere in the selection to change the point of transformation. Hold down **Shift** and **Alt** to constrain the proportions of the scale.
- **Rotate:** Click outside the bounding box by one of the anchor points and a curved arrow will appear, click and rotate left or right.
- **Skew:** Hold down the **Cmd** (Mac) or **Ctrl** (PC) key and drag a side anchor point in, out, up and down.
- **Distort:** Hold down the **Cmd** (Mac) or **Ctrl** (PC) key and drag a corner anchor point in any direction.
- **Perspective:** Hold down the **Cmd** (Mac) or **Ctrl** key (PC) and drag bounding boxes four corner anchor points inwards or out to adjust perspective.



**1** To use Free Transform, select from the edit menu or use **Ctrl + T** with the image selected.



**2** Hold outside one of the anchor points and move cursor to rotate.



**3** Hold the **Cmd** key and drag a anchor point to distort the image.



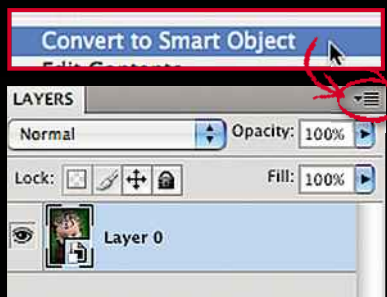
**4** Drag any corner or side tab to adjust image height and width.



## Secrets unlocked

### USING SMART OBJECTS

By converting your layers in to a Smart Object before you use the Transform commands, any transformation is applied to the Smart Object and not the original pixels. It also means you can go back and edit the adjustment after you've committed to it. Do this by selecting the layers in the Layers palette that you want to transform, then click on the layers panel options and choose **Convert to Smart Object**.



### FREE TRANSFORM TIP: CTRL + CLICK

USE: MULTIPLE COMMANDS TO PRESERVE QUALITY

As the Transform commands directly affect the pixels of your image, every time you apply a transformation, you degrade the image quality. You can minimise the destruction by applying all your transformations before committing to the adjustments, for instance change the perspective, scale and rotation before pressing **Enter**. When in Free Transform, you can switch to the more constrained transform commands such as Skew and Scale, by holding **Ctrl** and clicking on the image.



### HOT KEY

Undo last command

You can undo your last adjustment using a transform command by clicking **Ctrl+Z** (PC) or **Cmd+Z** (Mac). You can also use it to revert back to the original image once the transform command has been applied. Any loss of quality caused by a transform command will also be restored.



# Clone Stamp Tool

PC & MAC QUICK SELECT KEY = **S**  
FOR PHOTOSHOP CS & ELEMENTS

Find out the hidden secrets of the Clone Stamp Tool that will make replacing pixels that much easier

The Clone Stamp Tool is one of the most powerful retouching tools in Photoshop's arsenal. And while it can get rid of distracting elements in a photograph, it can also add parts to an image to make it more interesting. The Clone Stamp Tool works by sampling pixels from a source layer and applying them to a target layer (the target layer can be the same layer or a different layer). To make a source

sample, click **Alt** and click on the area you want to replace. It's a powerful tool that, rather than masking the area like other retouching tools, copies and replaces pixels. Before you start any retouching, create a new layer (**Layer>New**) and select **Sample: All Layers** in the top toolbar. By cloning to a new layer, you protect the original image pixels so you can reverse any changes you make.



**Tool preset picker:**  
Click the arrow to show a list of preloaded Clone Tool presets.

**Brush preset picker:** Here you can select brush presets and control its size and hardness.

**Adjustments:** Alter the way the cloning sample interacts with the target layer.

**Clone sample mode:**  
Select what layer is used to take your cloning sample from.



**1** Create a new layer (**Layer>New**) and select the **Clone Stamp Tool** and **All Layers** from the **Sample** menu in the Options toolbar. Zoom into the area to clone out and set the **Opacity** to 100%.



**2** Take a source sample of pixels from near the target area by holding **Alt** and brush over the target area using small stroking motions to avoid leaving signs of clicking the mouse.



**3** The edges of cloning can look quite harsh, so reduce the brush's **Hardness** to 20%, leaving the **Opacity** at 100%. Also try adjusting the **Flow** for more subtle control over the cloning.



**4** Cloning in a different area can create a repeat pattern if the sample is too close to the target. If this happens, undo your changes and then clone from an area further away from the target but on the same plane of focus.

**HOTKEY**

**Brackets**  
Brushes are accessed via the top toolbar or via **Window>Brushes**. While you're working on an image, if you need to alter the size of your brush, press the right or the left brackets (next to the letter P).

**Secrets unlocked**

**WORKFLOW ASSISTANCE**

**1) Create a 'shadow' window**  
Click **Window>Arrange>New Window for [filename]** to create a shadow image. Now you can zoom into the working image and have the shadow image open to see the overall effect, saving you from zooming in and out.

**2) Create a preview overlay**  
Activate the **Show Overlay** and the **Clipped** checkbox in the Clone Source panel (**Window>Clone Source** or **Shift+Alt**) to see an overlay of the image as you clone it.

**CLONETIP: CLONE FROM ANOTHER IMAGE**

**USE:** ADD ELEMENTS TO AN IMAGE  
Open the source image and the target image in Photoshop and then align the documents side by side, by dragging one off the other. Now select the **Clone Stamp Tool** and tick the **Aligned** box in the top toolbar. Select a soft brush and take a selection from the sample picture, in this case the clouds, and then paint the source where you want it on the target image. You may find adjusting the **Opacity** helps improve the results.





# Healing Brush Tool

PC & MAC QUICK SELECT KEY = J

Learn how to use the Healing Brush Tool and its various sub-tools to improve your retouching techniques

Images often have unwanted marks, while portraits have imperfections like spots or wrinkles, that all need minimising. The Healing Brush Tool is the main device for doing this kind of retouching, but there are several sub-tools such as the Patch Tool and Spot Healing Brush Tool that do the same thing: hiding unwanted elements, but working in different ways and having different effects.

The Healing Brush Tool works by matching the texture, luminosity and colour of the sample with the target area, so it blends with the pixels around it. As the Healing Brush spreads, it's useful to use a hard-edged brush. The tool also struggles on edges or areas of high contrast as it does not know how to blend tones, and it doesn't have the Opacity setting found on the Clone Stamp Tool.



### Tool preset picker:

Click the arrow to show a list of preloaded Healing Brush presets.

### Brush preset picker:

Here you can select brush presets and control its size and hardness.

### Set source:

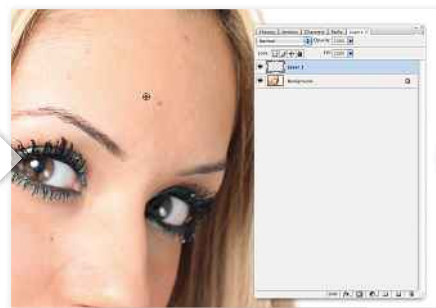
When doing retouching, make sure Sampled is selected as the source.

### Clone sample mode:

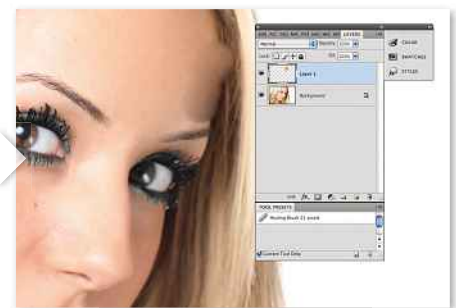
Select what layer is used to take your cloning sample from.



**1** Create a new layer (**Layer>New**), select the **Healing Brush Tool** and a hard-edged brush, and click **All Layers** from the **Sample** menu in the top toolbar. Zoom into the areas you want to clean up.



**2** Take a sample from close to the area that you want to clear up by clicking **Alt/Option**. Brush over the areas with the blemishes and alter the size and hardness of the brush as you go along.



**3** As the Healing Brush Tool brushes over an area of contrast, it can smudge as it struggles to match the varying tonality. It's best to take samples close to the target area.



**4** Be careful not to overdo the Healing Brush Tool's effect: you don't want to eliminate all imperfections as your subject will look like a porcelain doll. To avoid this, vary the opacity by clicking **Edit>Fade Healing Brush**.

### HOT TIP

#### Aligned

When this option is ticked in the top toolbar, the sample points are aligned with the tool as it moves. This means every time you release the mouse you need to take a new sample. When **Aligned** is deselected, the original selection is locked in and used for every new stroke.



## Secrets unlocked

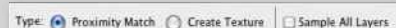
### CS5's CONTENT AWARE FILL

If you want easy, clean removal of unwanted photo elements, then you need to try CS5's Content-Aware Fill option, which automatically removes objects by filling the area with the pixels around it, matching the lighting, tone and noise of the surrounding area. It can be achieved by either using the Spot Healing Brush Tool and ticking the **Content-Aware Fill** option in the top toolbar, or by making a selection using a tool such as the Lasso Tool, then clicking **Edit>Fill>Content-Aware Fill**.

### SUB TOOL: SPOT HEALING BRUSH

**USE:** CLEAN UP DUST SPECKS

This tool works best on areas of low detail as it lacks the user control of the other retouching tools. Instead of being able to take a sample, you click on the area you want to hide and this tool will automatically take a sample of the pixels around it to match the target area. It's ideal for cleaning up dust specks.



### SUB TOOL: PATCH TOOL

**USE:** BE MORE SELECTIVE

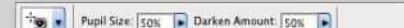
One of the more intelligent tools, the Patch Tool uses a selection instead of a brush. There are two ways you can apply this tool: draw a selection of a good area and drag it on top of a damaged area and select **Destination** in the top toolbar; or select a bad area and drag it on to a good area and select **Source** in the toolbar.



### SUB TOOL: RED-EYE TOOL

**USE:** CORRECT RED-EYE

When a subject looks directly into a camera's on-camera flash it often causes them to get red-eye (where the pupils are rendered red). To correct this and return the subject's eye colour back to normal, select the Red-Eye Tool, zoom in to the subject's eye and click on the red pupil once to see the colour disappear.



# Layers & Layer Masks

Working with Layers is not essential for basic image editing, but for those photographers who want to take their images to the next level, they are a fundamental part of your editing workflow

Layers are the building blocks of non-destructive image editing, giving you the opportunity to construct an image in stages and the flexibility to make any edits at any time. With this in mind, hopefully by the end of this feature you'll have a better understanding of how to get the most from Layers so your editing can become more selective and sophisticated whether using Elements or CS.

When you open an image in Photoshop, your image automatically becomes the Background Layer in the Layers palette (accessible via **Windows>Layers**), which is located via the **Tools** menu. You cannot edit the Background Layer as it's locked, but you can make it editable by double-clicking on the padlock symbol. Most of the time it's advisable to keep this Background Layer locked and, instead, create a duplicate layer (**Layer>Duplicate Layer**) to work on. By doing this, it means at least one layer of your image still retains the unedited, original pixels, so if you make a mistake and want to start again, all you need to do is delete the extra layers and you're back where you started.

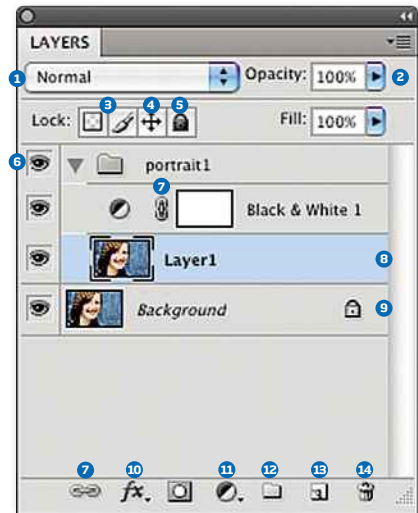
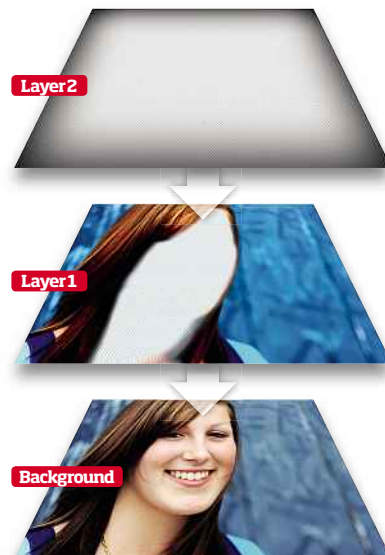
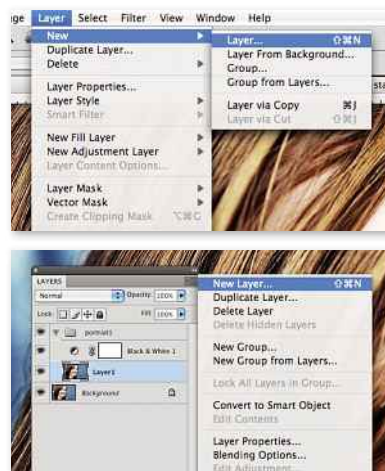
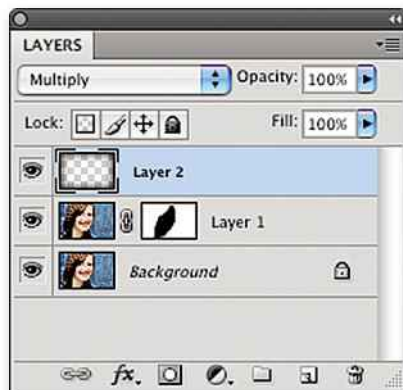
It's best to think of layers as clear sheets of acetate stacked on top of each other, each featuring a part of your image (object or effect) that, when merged together, create your final picture. The three types of layers we'll be covering here are transparent layers (layers without any pixels) that you can add pixels to, image layers that contain duplicate pixels from the original image or parts of a different photo, and Adjustment Layers, which we'll cover in depth later on. Layers allow you to combine parts of different photos, but for basic photography editing, this usually doesn't stretch further than replacing a sky in a dull landscape, adding a few extra people to a street scene or switching frowning faces in a group shot for smiles. However, there are some photographers and digital artists that take it to a higher level, using multiple layers and objects from different images to literally construct their picture from scratch. We'll only cover the basics here, but the internet and Adobe's website is bursting with more advanced techniques if you wish to delve in to this realm called compositing.

## HOW TO CREATE A NEW LAYER

If you want a transparent layer, either click the **Create New Layer** icon at the bottom of the Layers palette or go to **Layer>New>Layer**. If you want a layer with the same pixels as your original image, you can duplicate the Background Layer by dragging it down to the **Create New Layer** button or by clicking **Layer>Duplicate Layer**. To copy parts of one image on to another, you first need to make your selection from the source image and then press **Ctrl/Cmd+C** to copy it. Revert back to your destination image and press **Ctrl/Cmd+V** to paste it on the image. Or using the **Move Tool**, click and drag the selection from the source image to the destination image (press **Ctrl/Cmd+A** to move the whole picture). The new image will immediately create a new layer above the destination image. Then use the **Move Tool** to reposition your selection.

## HOW LAYER ORDER WORKS

Every new layer that's created automatically sits on top of the layer before it in the Layers palette and its effect or pixels will affect every layer that's underneath it. Use the **Move Tool** to re-order the layers.



## THE LAYERS PALETTE

**1) Blend Mode** This accesses the drop-down menu of layer blending modes that control how the layers interact with one another.

**2) Opacity** Use this slider to adjust the transparency of the layer, controlling how much of the layer beneath it shows through.

**3) Lock transparent pixels/image pixels** These two buttons enable you to lock an individual layer so only image or transparent pixels can be edited, respectively.

**4) Lock position** Use this to prevent your image from moving rank in the Layers palette. Click once to lock and again to unlock.

**5) Lock all** Apply this lock to any layer you want to protect from editing. To unlock a layer, highlight it and press the lock button again.

**6) Layer visibility** Click the eye icon to make the adjacent layer invisible. Click it again to make the layer visible.

**7) Link** Use this to link multiple layers together.

**8) Select layers** You can tell which layer you've got selected by whether it's highlighted blue. Select multiple layers by holding down **Cmd** and clicking on each to select them.

**9) Background Layer** This is your original image. Keep it locked so it cannot be edited.

**10) Add Layer Style** Access a variety of styles from blend modes to drop shadows and outer glows. They're special effects that work well with objects and text.

**11) New Adjustment Layer** Click here to access a list of all the Adjustment Layers.

**12) Create New Group** Use this to group layers together into a folder to contain your editing to a few selected layers.

**13) Create New Layer** Click to apply an empty, transparent layer. Or click and drag an image layer down on to the icon to duplicate it.

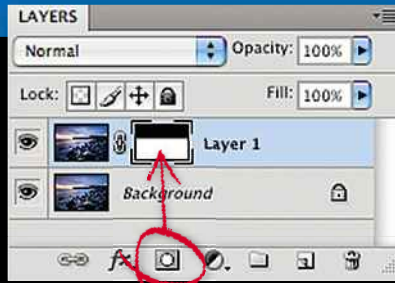
**14) Trash Can** Highlight the layer, or layer mask, and click the bin to delete it or click and drag them on to the Trash Can.



## Workflow tools

### ✓ LAYER MASKS

Layer Masks are extremely powerful editing tools as they enable you to localise your edits to specific parts of an image. You can apply them to any layer – Adjustment Layers have one already attached (see next page for more details) – and use the Brush Tool to ‘paint’ areas in or out of the layer that you want to make visible in your final image. Layer Masks are a new feature to Elements 9 and are accessible in the same way as CS via the **Add Layer Mask** icon at the bottom of the Layers palette or **Layer > Layer Mask > Reveal All** or **Hide All**. When added, a Layer Mask appears next to the layer it’s linked to in the Layers palette. As its default, or when set to **Reveal All**, a Layer Mask appears white and doesn’t affect any pixel until you paint on it. When set to **Hide All**, a Layer Mask is filled with black and will hide all the pixels in the image layer



until you use white paint on the mask to reveal the pixels. It’s a forgiving process for editing your layers, although it does take practice and requires you to adjust the size and softness of your brush to get a smooth, accurate finish. Another way is to select and refine the area you want to keep visible, then apply the layer mask. You can do this by clicking **Layer > Layer Mask > Reveal Selection** or **Hide Selection**, if it’s the area you want invisible.



## Secrets unlocked

### ✓ LAYER MASK HOTKEYS

**SHIFT** To temporarily disable a mask, hold **Shift** and click on the **Layer Mask thumbnail** so a red cross appears through it. Click the thumbnail again to restore it.

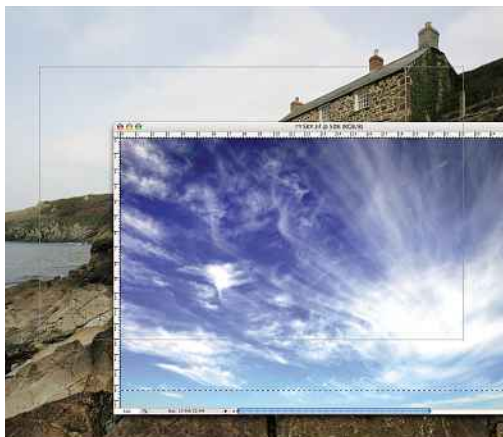
**ALT** The Layer Mask thumbnail gives a small indication of what you’re painting on the mask. To see an image-sized version, hold down **Alt** and click on the thumbnail.

**COMMAND** Once you’ve painted the areas you want to adjust on the layer mask, hold **Cmd** and click on the mask to convert the area into a selection.



## Editing images using Layers and Layer Masks

Learn to improve your photos post-capture by replacing unwanted parts with something more appealing



**1** Here, we have a landscape image with a dull sky but an impressive foreground. By exchanging the sky for one with more interest, it should dramatically improve the image. Open both images in Photoshop and, using the **Move Tool**, drag the landscape image on top of the sky picture.

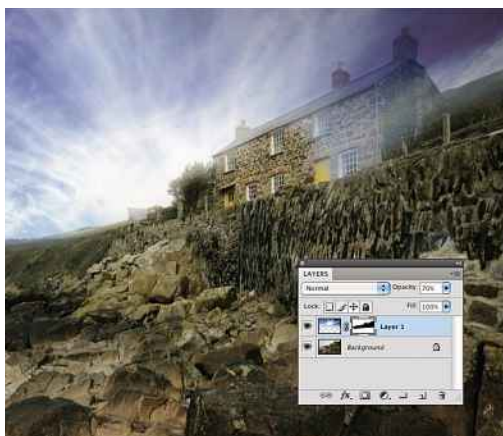
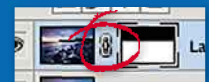


**2** The sky image now features two layers in its Layers palette, with the landscape picture on top. With that layer selected, apply a Layer Mask by clicking on the **Add Layer Mask** icon at the bottom of the Layers palette. Reduce the opacity of the top layer so the sky image shows through.

### HOW DO I

#### Delete a Layer Mask?

Click on the link (looks like a paperclip icon) in between the image and Layer Mask thumbnail. This will unlink the two so you can click and drag the Layer Mask in to the trash at the bottom of the Layers palette. Or hold **Ctrl** and click the Layer Mask to access a menu that has Delete Layer Mask.



**3** Move the image so the new sky covers the old one entirely. Now select the **Brush Tool** and reduce the **Hardness** to below 10% to give it a soft edge, and select black as your foreground colour. With the Layer Mask selected, paint on the image to hide the old sky and reveal the new one.



**4** Once you’ve finished and roughly gone around the objects on the horizon, increase the layer’s **Opacity** back to 100%. Now zoom in to the horizon and, using a smaller brush, go around the areas of the landscape you might have missed. Use white paint to restore any foreground.

### HOT KEY

To decrease or increase the size of your brush, click [ or ] respectively. To toggle between black and white paint, to hide or reveal detail, simply press **X**.



### HOT TIP

By default, the Layer Mask button in the Layers palette creates a Reveal All mask. If you want to add a Hide All Layer Mask, hold down **Alt** while clicking the same button.



# Adjustment Layers

For non-destructive editing, you cannot beat Adjustment Layers for ease of use and flexibility. Here, we explain the basics to using these invaluable layers and give you some pointers on how to practically use them for when you want to be more selective with your editing

Before Adjustment Layers were introduced, photographers would have to duplicate the Background Layer to avoid editing or damaging the original image. While you can still do this, Adjustment Layers allow you to apply adjustments like Curves, Levels or Hue/Saturation, as a separate layer that you can refine, change or delete at any time during your editing process.

The alternative would be to apply an adjustment command via **Image>Adjustments** directly to a duplicated image layer, but this won't give you the flexibility of editing the effect after you've committed to it. Plus, if you want to get rid of the adjustment's effect, you'll have to delete the whole image layer, which can be frustrating if you've applied different adjustments to the image layer you need to delete. Most of the usual adjustment commands are available as an Adjustment Layer, making it a much more favourable way to edit pictures, but it's still worth checking out the **Adjustments** menu for those commands you can't access as a separate layer.

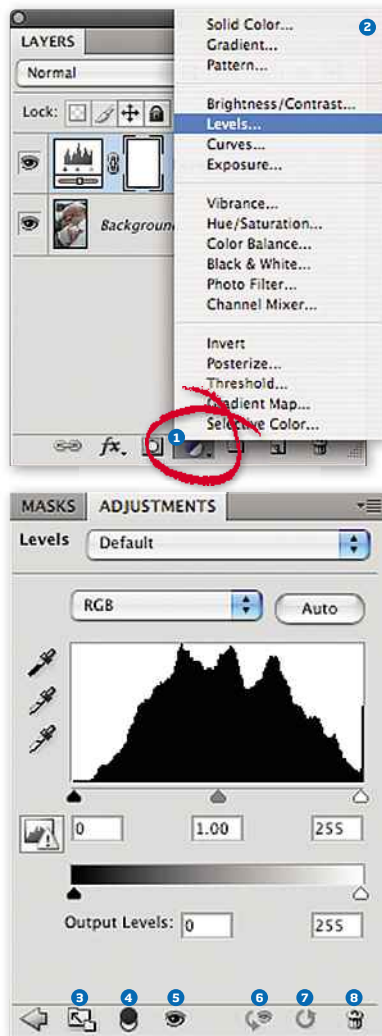
Being able to control how an adjustment affects your image post-application means you're not committed to any adjustment command you use, making the process a lot more forgiving and fluid. Not only can you reverse or delete an adjustment, you can temporarily hide them the same way you would an image layer, you can apply a blending mode or fine-tune the effect by changing the opacity and you can restrict the effect using layer masks.

You can create an Adjustment Layer in one of three ways: by clicking **Layer>New Adjustment Layer** and selecting your required adjustment; clicking on the **Adjustment** icon (half black/half white circle) at the bottom of the Layers palette to access the same list of options; or by opening the **Adjustments** panel via the **Windows** menu. Any of those work, but some are quicker than others and offer you more options: you just need to find the one you work with the most efficiently.

## ADJUSTMENT LAYERS PANEL

By opening the Adjustments panel, you get immediate access to all adjustment presets and the 15 core Adjustment Layers at a click of a button. When you select an Adjustment Layer from the panel, the Adjustments panel converts in to a control panel for the command with the tools to refine the effect. Click back on to the Layers palette to close and convert the control panel back to the Adjustments panel. Have a go to see what we mean...

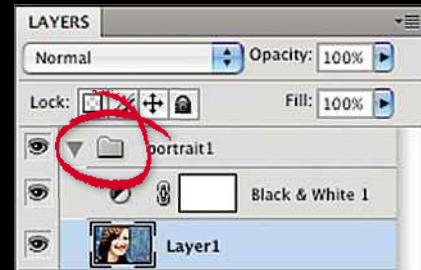
- 1) Add an adjustment:** Click on the half white/half black icon at the bottom of the Layers palette to access Adjustment Layers. Click on the adjustment you want to apply.
- 2) Presets:** Click the drop-down menus of each of the Adjustment Layers to access their loaded presets, normally located at the top of the specific Adjustment Layer's control panel.
- 3) Expand View:** Click here to enlarge the Adjustment panel. It can be useful if you're working with Curves or Levels and need a larger area to view the adjustment graphs.
- 4) Clip the Adjustment Layer:** Click here to clip an Adjustment Layer to the layer directly below it in the Layers palette so it's the only one that's affected by the adjustment.
- 5) Layer visibility:** Click on the eye to temporarily switch off the Adjustment Layer. It's useful to toggle between visible and invisible to see the effect of the Adjustment Layer on the original image.
- 6) Review:** If you re-edit an Adjustment Layer, click and hold this button to revert back to the Adjustment Layer's original state to see whether your re-editing has improved or worsened the overall effect.
- 7) Reset:** Click here to reset the Adjustment Layer back to its default settings.
- 8) Delete:** Click the trash can to delete the current Adjustment Layer.



## Secrets unlocked

### GROUPING LAYERS

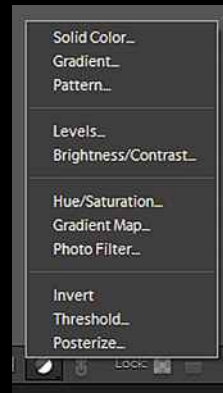
If you want your Adjustment Layer to affect, say, two of the layers in your image, you can group them by clicking the **Create a New Group** button at the bottom of the Layers palette so it contains them in a folder. Click and drag the layers you want to group in to that folder, add your Adjustment Layer to the folder, too, and change the Blend Mode from **Pass Through to Normal**. The adjustment will only be applied to that group.



## Software highlights

### ELEMENTS 9

Elements features Adjustment Layers and they're accessible the same way as they are in CS via the Layers palette. However, you only have access to a small proportion of the adjustments found in CS4. You have the basic Levels, Brightness/Contrast, Hue/Saturation and Solid Color along with seven others, but you lack the versatility of Exposure, Selective Color, Black & White, Curves and many others. Elements 9 is fine for basic adjustments, but if you want to get in to more complex and sophisticated editing, then you may want to upgrade to the full Photoshop.



## HOW TO... SAVE LAYERED IMAGES

When you apply multiple layers to your image, be it image layers or Adjustment Layers, the size of your file will increase accordingly. To compress the image for printing or web use, once you're happy with the final edited image go to **Layer>Flatten Image** to merge all the layers back in to the Background Layer. Then save the image as a JPEG or TIFF. It's a good idea to always keep a Photoshop version of your image (.PSD), which retains the various layers in your image, so that you have the option of re-editing the picture differently later if you need to.

Save As: IMG\_8867.psd



## Using an Adjustment Layer with a Layer Mask

Learn how to selectively control the effects of an Adjustment Layer by 'painting' on a Layer Mask



**1** Open your image in Photoshop and then duplicate the Background Layer so you're working on a copy (Layer > Duplicate Layer). Now apply an Adjustment Layer of choice. Here we've chosen Hue/Saturation.



**2** Make your necessary adjustments. We've boosted the colour in this portrait but, as you can see, it also make the skin tones very unnatural. We need to neutralise the colour on the face while retaining the saturation elsewhere.



**3** Attached to the Adjustment Layer in the Layers palette is a Layer Mask, which looks like an empty white box. Click on it to make it active. Then select your Brush Tool from the toolbar, with a soft-edge medium-sized brush set to black.



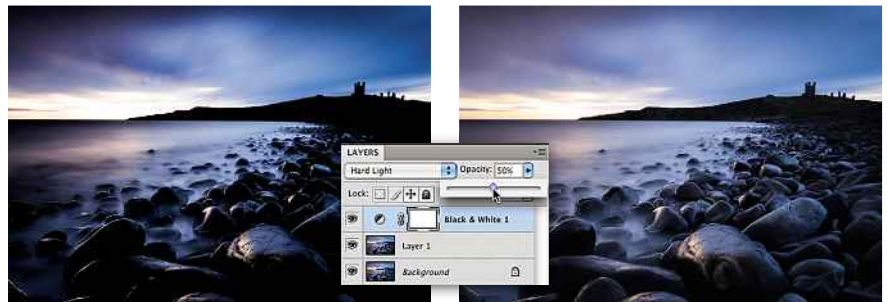
**4** Using the Brush Tool, 'paint' over the areas of the image you want to revert back to their original state, varying the opacity to control by how much. The Layer Mask turns black where you're painting. Use white paint to reverse the effect.

## Three more ways for you to use an Adjustment Layer

For more precision editing, master these three techniques for improved results and added flexibility

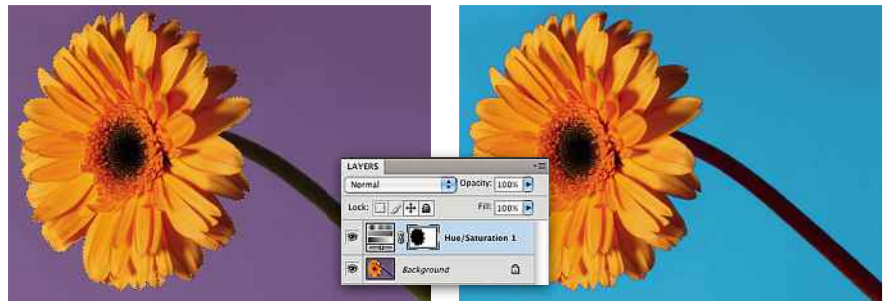
### 1 REDUCE THE ADJUSTMENT CONTROL THE EFFECT'S STRENGTH

However you apply an Adjustment Layer, you'll notice the full extent of its effect on your image instantly. Sometimes, though, this effect is too strong for the finish you want. An easy way to control the strength of the effect on the image is to reduce the opacity of the Adjustment Layer. Once you've made your adjustments, select the Adjustment Layer so it's highlighted blue and drag the **Opacity** slider at the top of the Layers palette gradually down from 100% until you reach the desired strength.



### 2 BESELECTIVE MAKE LOCALISED ADJUSTMENTS

For a slightly more advanced, but precise, way to selectively apply an adjustment to an area of an image using an Adjustment Layer, simply create the selection and refine the edge (see pages 38-45 for more details on how to do this). Here, we've used the Quick Selection Tool. Then apply the Adjustment Layer of choice. This instantly fills the attached Layer Mask with black, blocking any adjustments you then might make in areas other than what you have selected.



### 3 CLIP LAYERS TOGETHER APPLY TO ONLY CERTAIN LAYERS

Clipping an Adjustment Layer means that it affects only the layer directly beneath it in the Layers palette. It's handy if you have an image made up of multiple layers with separate components, but you want to apply an Adjustment Layer to only one of them. You can clip the layers together by either pressing the **Clip** button at the bottom of the Adjustments panel or by holding down **Alt** while you click on the line that separates the two layers in the Layers palette.



# Layer Blend Modes

Along with Layers and Adjustment Layers, Blend Modes are essential parts of Photoshop's editing arsenal. Knowing how and when to use them can open a world of creative possibilities, especially when combined with Layer Masks

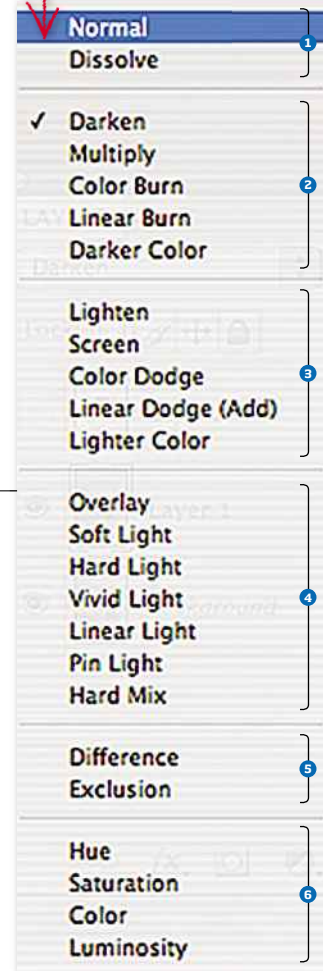
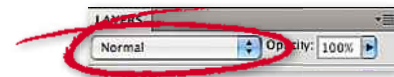
Now you've got to grips with the principles of Layers and Adjustment Layers, it's a good place to introduce Blend Modes, which allow you to control how the content of a layer blends with the layer or layers directly below it. When you add a new layer to the Layers palette, as default, the blending mode is set to Normal, which hides the lower layer with the content in the layer above it.

Without using a blending mode, the only way to merge layers together is to reduce the Opacity or Fill of any layer so the layer underneath shows through, but this alone doesn't yield very effective results.

There are 25 blending modes, which are all accessible from a drop-down menu at the top of the Layers palette, each affecting the way pixels interact. They're divided into six groups: Normal and Dissolve; Darken; Lighten;

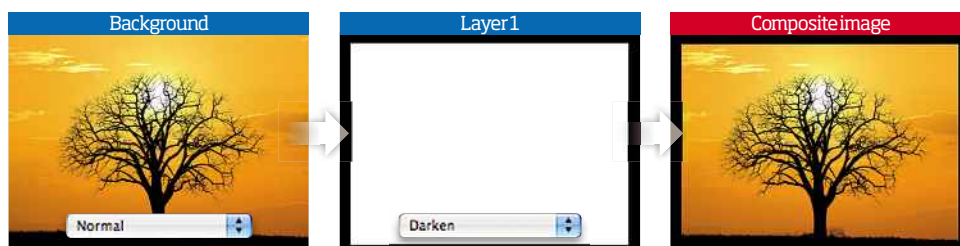
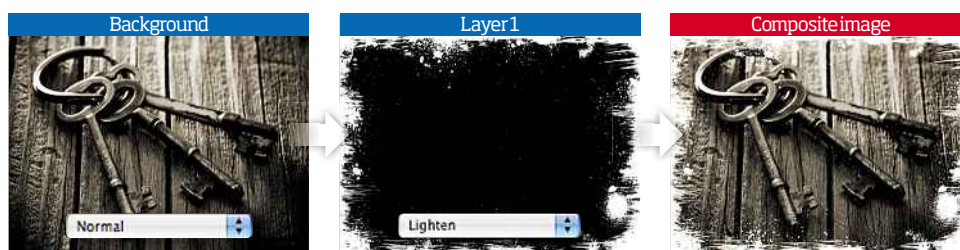
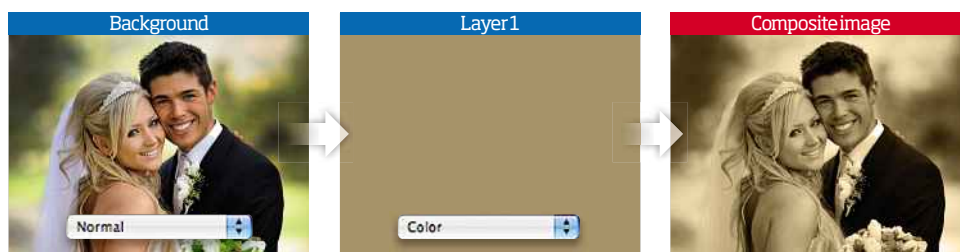
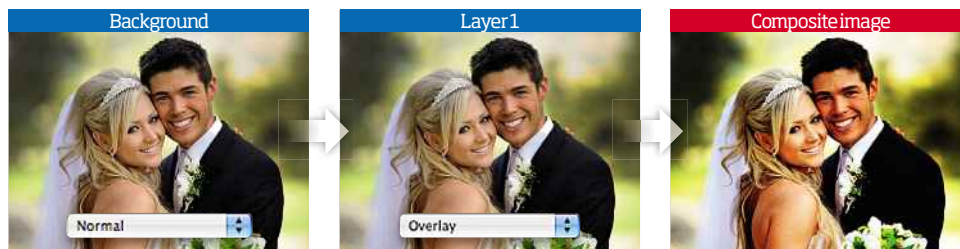
Contrast; Comparative; and HSL. While we advise you play about with all the modes to get a feel for their effects, in real editing terms, there are only a dozen blending modes that a photographer might use on a regular basis for image editing. These are Darken, Multiply, Lighten, Screen, Overlay, Soft Light, Difference, Luminosity and Color.

You can apply blending modes to any layer or Adjustment Layer. For instance, you could use Luminosity with an Adjustment Layer so it doesn't affect the colour components of the image. As a quick way to preview the effects of the various modes on your image, make sure the Brush Tool isn't selected, then hold down **Shift** and press the **+** key to scroll down the list of blending modes and the **-** key to scroll up it.



## FOUR BASIC WAYS TO USE BLEND MODES

To help you understand how blending modes work, here are four commonly used modes and ways to apply them to your images. Overlay superimposes the top layer on the base layer, while preserving the highlights and shadows of the bottom layer; Color replaces the hue and saturation of the base layer with the top layer; Darken replaces lighter pixels from the base layer with darker ones from the top layer; and Lighten is the opposite.



**1) Normal and Dissolve:** In Normal mode, the top layer is not affected by the layer beneath unless Opacity is less than 100%. The Dissolve mode turns some pixels of the top layer transparent.

**2) Darken modes:** Darken, Multiply, Color Burn, Linear Burn, Darker Color. These modes give prominence to dark-coloured pixels at varying degrees.

**3) Lighten modes:** Lighten, Screen, Color Dodge, Linear Dodge (Add), Lighter Color. These modes give prominence to light-coloured pixels for different effects.

**4) Contrast modes:** Overlay, Soft Light, Hard Light, Vivid Light, Linear Light, Pin Light, Hard Mix. These modes vary in strength when it comes to boosting contrast.

**5) Comparative modes:** Difference and Exclusion. These modes create colours based on the difference between the top and base layer.

**6) HSL modes:** Hue, Saturation, Color, Luminosity. These modes replace the base layer pixels with the top layer pixels, depending on which mode is chosen.

# Three ways Blend Modes can enhance your images

Here are a few ways of working with some of the most popular blending modes during photo editing

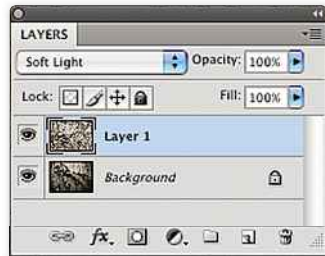
## 1 HIGH CONTRAST USE IT TO DESATURATE

By blending a black & white image with a colour version using Hard Light, grey will be added to the resulting colour causing the image to become slightly desaturated. This mode also blends the colour from the base layer with the monochrome layer, darkening and lightening the shadows and highlights to boost the contrast.



## 2 APPLY TEXTURE USE IT TO ADD INTEREST

Soft Light works in the same way as Hard Light and Overlay, but delivers much gentler results. By blending this image of wood over the top of the still-life image, the texture shows through subtly by darkening the blending pixels that are more than 50% grey and lightening those that are less than 50% grey.



## 3 MERGING IMAGES USE IT TO REPLACE A SKY

Multiply works by multiplying the base colour with the top colour to get the resulting colour. Every pixel gets darker, except for white, which remains unchanged. It's great for darkening overexposed areas and building up detail. Here, the white pixels are discarded and replaced with darker pixels, filling in the sky.



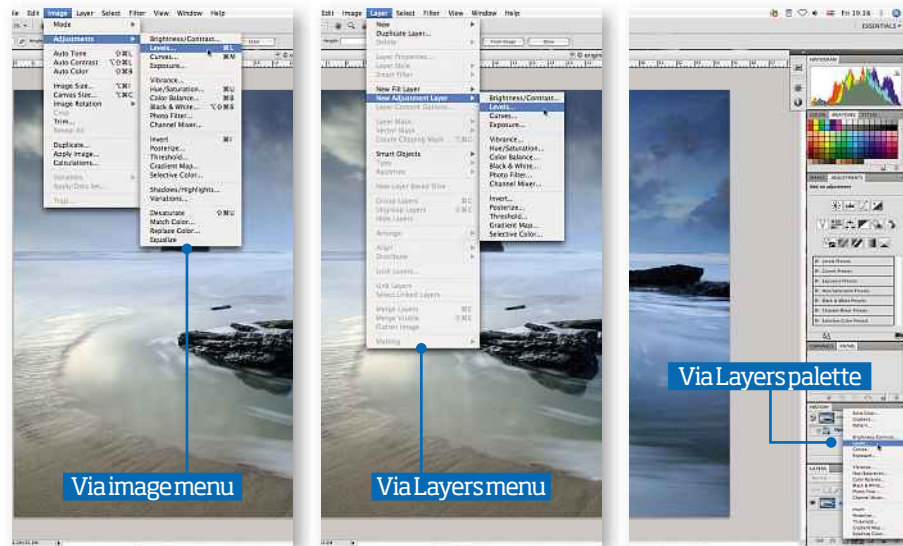
# Levels

PC QUICK SELECT KEY FOR PHOTOSHOP CS & ELEMENTS = **ctrl** **L**

MAC QUICK SELECT KEY FOR PHOTOSHOP CS & ELEMENTS = **⌘** **L**

Boost the contrast and correct the colour of your images using one of the most popular adjustments in the Photoshop arsenal: Levels

Levels controls the histogram, which holds all the exposure and colour detail in an image. Its primary role is to adjust the luminosity of a picture; its brightness, darkness, contrast and colour. It's a subset of Curves and a step up from Brightness/Contrast, allowing for more precision in your adjustments. Levels is available as an image adjustment that directly affects an image's pixels (**Image>Adjustments**) or as an Adjustment Layer, which gives you the same experience, but is a veneer over the image. It's advisable to use the latter option whenever you can, as it's non-destructive and gives you the flexibility to edit and revisit changes or to delete them at a later date; giving you a lot more creative control. You can select an Adjustment Layer from the Layers palette or by clicking **Layer>New Adjustment Layer**.



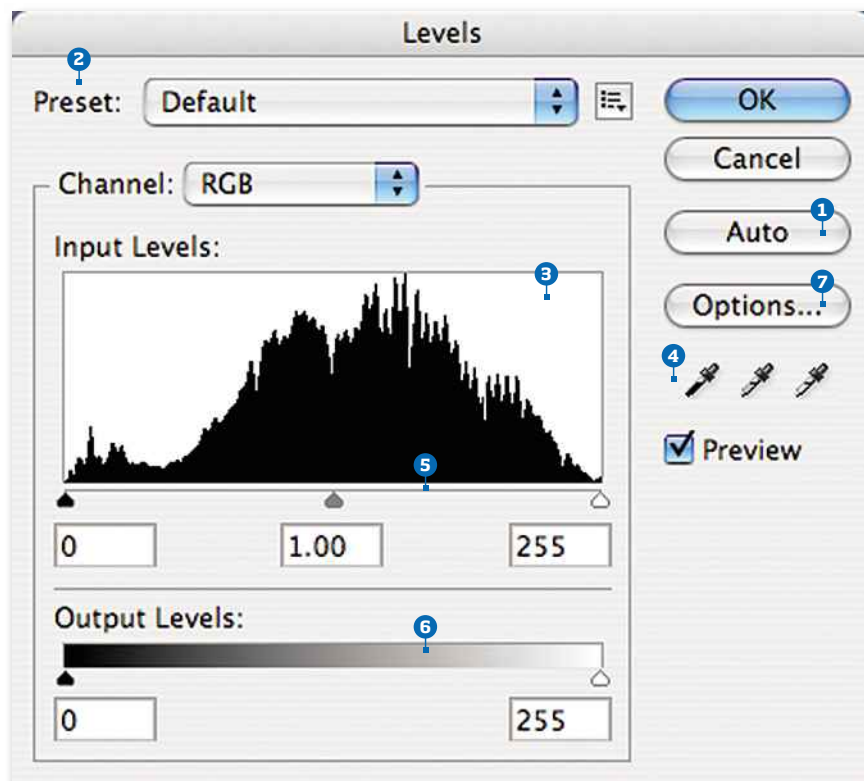
Via image menu

Via Layers menu

Via Layers palette

## THE LEVELS DIALOGUE BOX

- 1) Auto** The Auto function takes a look at the image and maps points from black to white to try to give the best tonal range.
- 2) Presets** These functions are there to get you started quickly and easily, but while they work, they're not perfect. It's advisable to manually adjust the histogram using the sliders instead.
- 3) Histogram** This black bumpy mound reflects the distribution of tones in your photograph. It shows the brightness range from dark to light and the peaks and troughs reflect how many pixels have that particular level of brightness. A well exposed image should have an even spread of peaks and troughs.
- 4) The eyedroppers** The real power of Levels is in the three eyedroppers – they can set the black, mid-tone and the white point in the histogram, by clicking them on the darkest and lightest part of the image. The grey eyedropper also has the power to alter colour balance.
- 5) Input slider** By far the most popular method of adjusting the histogram. Moving the three little triangles allows you to manually adjust the shadows, mid-tones and highlights to get a very balanced exposure.
- 6) Output levels** Adjusts the output shadows and highlights. Leave this alone unless you deliberately want to adjust the output contrast, such as when working with a grayscale image.
- 7) Options** Click to open the Auto Color Corrections Options dialogue box. It gives you different options for adjusting the colour in a less precise manner than the grey eyedropper, but it will go some way to correcting a colour cast.



## LEVELS TIP: WHITE POINT

USE: PERFECT PRODUCT SHOTS

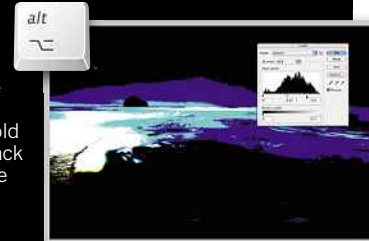
Product shots look great on a white backdrop, but more often than not – even if the image is correctly exposed – the backdrop can render as off-white or grey. Levels has a quick and easy way to correct this: using the white eyedropper, click on the greyest part of the background. This will turn it white, leaving the product relatively unaffected. Carefully adjust the midpoint and black sliders to bring any lost detail back in to the product. Great for eBay!



## Secrets unlocked

### HIGHLIGHT WARNING

As you adjust the sliders, it can be easy to lose detail in either the highlights or shadows, known as clipping. To check for clipping, hold down **Alt** while clicking on the black or white slider triangle. The image will change to show a threshold view with hotspots that indicate where detail has been lost.



## Three ways to use Levels

As you gain Photoshop experience and want to have more control over colour correction and contrast, different ways of applying the adjustments are available to suit your ability level and need for control

### 1 USE THE AUTO OPTION ONE-CLICK AUTOMATIC RESULT

Once you open Levels, you'll be presented with a histogram. Pressing the **Auto** button is a good place to start as it takes a look at the image and maps points from black to white to get the best tonal range. A lot of the time, if you have an under or overexposed image, Auto will make it look a lot better. If you hold **Alt**, while clicking on **Auto**, the Auto Color Corrections Options dialogue box will appear, giving you options to adjust the colour balance.



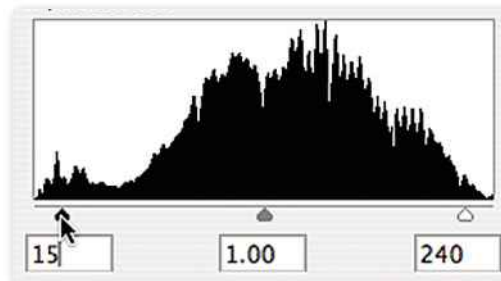
### 2 EYEDROPPER AUTOMATED WITH USER INVOLVEMENT

These can set a picture's tonal range by clicking on the image directly. To set black, click on the darkest area of the image with the black eyedropper. If it's lighter than any other part, you'll find the whole image will darken to compensate. The reverse happens with the white eyedropper if you do not select the lightest part of the image. The grey eyedropper selects the midpoint, but can also correct colour casts, depending on what neutral area you click on.



### 3 SLIDERS FULL CONTROL FOR THE EXPERIENCED USER

On the Input Levels slider, you have three triangles: black for shadows; grey for Gamma, which controls the relative image brightness between the shadows and highlights; and white for the highlights. The idea is to move these triangles to expand the contrast without losing any detail in either the shadows or highlights (known as 'clipping'). The first thing to do is bring the black and white triangles in to align with the edges of the histogram – this will automatically move the Gamma slider, too. To intensify the highlights or shadows, move the **Gamma** slider and then use the grey eyedropper to correct any colour cast.



#### HOT KEY

alt

#### Alt to reset

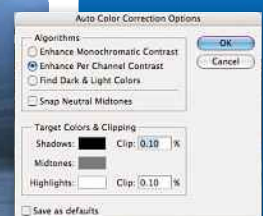
If you hold down **Alt**, the Cancel button in the dialogue box will change to Reset so you can revert back to the original image and start again. This will work for most of the dialogue boxes you use.

Reset

#### OPTIONS

##### Controlling colour

To access the Auto Color Correction Options in an Adjustment Layer, you need to click **Auto** while holding down **Alt**. To adjust the colour, click **Snap Neutral Midtones** and then experiment with the algorithms to find what works best.





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# Curves



If you want more control over contrast, then get familiar with Curves and your images are sure to improve

Curves is probably the most powerful adjustment feature in Photoshop and also one of the most advanced, but once you've got to grips with it you'll find yourself using it time and time again. Just like Levels, Curves can be applied as an Adjustment or an Adjustment Layer (**Layer > Adjustment Layer > Curves**) and affects the tonal range of your image. Unlike Levels, you have far more control and many more features and methods of use – all of which could fill a book of their own – so we'll just be covering the basics here.

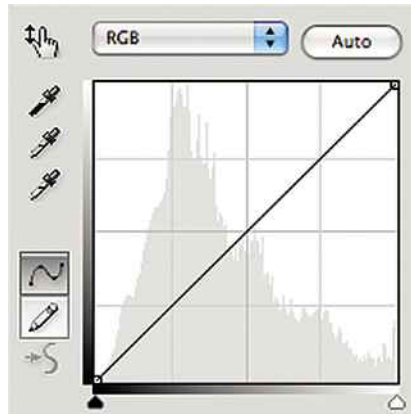
When you open the Curves adjustment panel, you'll be presented with a similar set-up to Levels but this time there's a diagonal line across the histogram: it's this line you'll need to move to adjust tonality. There are two adjustment points at either end of the line, which are the equivalent

to Level's Shadow and Highlight sliders. The additional control Curves offers comes from being able to click anywhere along this line to create as many adjustment points as you want to target specific areas of the histogram/tonal range. The whole idea behind using a curve is that tones are altered gradually, avoiding problems such as posterisation.

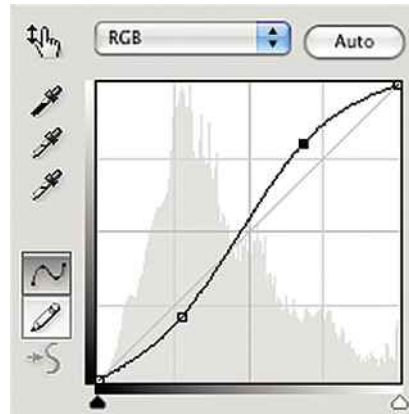
By moving the end points at the top and bottom, you also gain control of the darkest and lightest points of your image, which effectively does the same as the white and black Input and Output sliders in Levels. Pretty much everything you can do in Levels, you can do in Curves (although the reverse isn't true) so it's down to personal preference as to which you use for specific tasks but Curves is definitely an upgrade in control.

## How to create an 'S' curve?

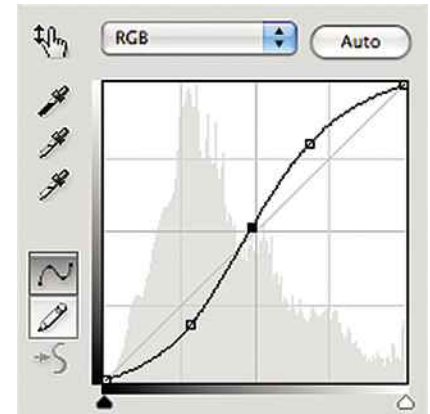
Using Curves can get complicated but here's an useful technique that's highly effective and easy to do



**1** First of all, select **Show Clipping for Black/White Points** from the panel menu in the top right corner. Then set the black and white points to the edges of the histogram like you would in Levels. Or hold down **Alt** as you drag the black or white **Input** sliders to preview the clipping.



**2** Click about a quarter of the way down the diagonal line and drag the point up slightly to brighten highlights. Click about a quarter of the way up the line from the bottom and drag the point down to darken the shadows. The steeper the curve is, the stronger the contrast will be.



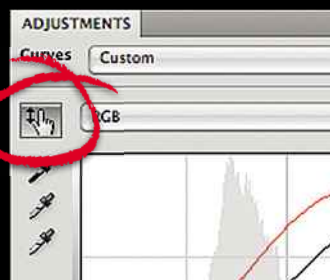
**3** To target the mid-tones, place a point in the centre of the line and then drag the line up or down depending on whether you want to brighten or darken the mid-tones. You can change the colour of an image too using Curves, see **Secrets unlocked** below for more details



### Secrets unlocked

#### ✓ TARGET MODE

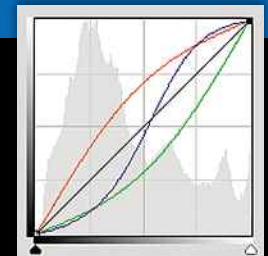
Instead of manually adjusting the line in the curves chart, click on the hand icon in the top left of the control panel. You can now click on an area of the image you want to adjust and click and drag the cursor up (to brighten) or down (to darken) for more intricate control.



### Secrets unlocked

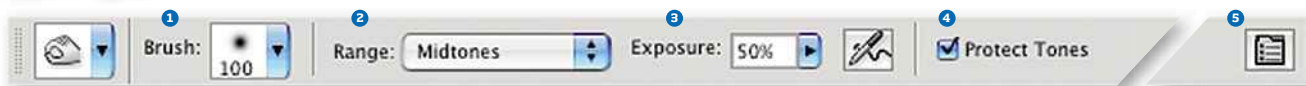
#### ✓ ADJUST THE CHANNELS

Curves is capable of adding colour casts by moving the individual colour channels, located in the drop-down menu at the top of the panel. You could add a blue cast to shadows (or remove one for that matter) and a red cast to highlights, for example, simply by moving the Curves line as you would to adjust the global contrast. One of the best ways to do this is to set a middle point on the curve and to drag it slightly up or down to add or reduce the colour channel in the image, respectively.



# Dodge & Burn Tools

PC & MAC QUICK SELECT KEY = 



Sometimes global tonal adjustments like Levels or Curves aren't enough and you need to get a little more selective with your lightening and darkening. Find out how the Dodge and Burn Tools can give you the control that you need to get the most out of your picture

Most exposure adjustments target an image globally at first, but the Dodge and Burn Tools have the power to locally extend an image's tonal range, allowing you to be much more precise in the areas that you want to darken or lighten. They work particularly well on black & white images, but since CS4, there have been major improvements in the way the tools handle colour, too. It used to be that these tools caused a colour shift, but with the new Protect Tones command, this is kept to a minimum.

To get the best seamless adjustment with these tools, photographers should use them on small areas of an image, using a soft-edged brush, a low **Exposure** of below 10% and multiple strokes. Not doing these things means the exposure adjustment will look too harsh compared to the surrounding pixels, causing an outline around your adjusted area. If you want to make broader tonal adjustments over larger areas, we'd recommend using an Adjustment Layer and masking it off, which we'll explain how to do later. This has essentially the same effect as the Dodge and Burn Tools, but it's non-destructive. Unfortunately, any dodging or burning you do with the tools permanently alters the original pixels, so before you do any work with these tools, make sure you duplicate the image you're to work on first (**Layer > Duplicate Layer**).

- 1 **Brush:** Select the size and softness of your brush. It's always best to work with a very soft brush, so set the **Hardness** to 0-10%.
- 2 **Range:** Select the tonal range you want to target. Generally it's best to keep this set to **Midtones** when you dodge or burn.
- 3 **Exposure:** Set the strength of the effect. It's best to start with a very low **Exposure** of 15% and build the effect up.
- 4 **Airbrush:** Build the effect up based on how long you press your mouse or pen down for, not by how many strokes you take. Leave this off when dodging and burning.
- 5 **Protect Tones:** Protects colour, highlights and shadows detail. Always have this activated.
- 6 **Brush Palette:** A shortcut to accessing the complex brush panel. You don't need to worry about this too much, everything you need to start with is in Brush.

## Dodge & Burn for landscapes

Master manipulating shadows and highlights in your landscapes

A classic darkroom technique that photographers have used for years, dodging and burning methods have never been as precise or controllable as they are in Photoshop. Before digital, you literally had to work in the dark, dodging and burning a sheet of photographic paper by blocking areas you wanted to over or underexpose. You'd never know what it looked like until you developed the print. With Photoshop, the principles are the same, but you can be much more specific in where you darken or lighten, and even correct any mistakes you may make.



**1 Create layer** Pick your image. Here, the sky is a lot brighter than the foreground, both of which need attention to bring back detail. Open the image and create an editable 50% Gray layer (see box, right).



**2 Set Range** Target the midtones for best results. So, for the Dodge and Burn Tools, set the **Range** to **Midtone** and use a medium-sized brush with a **Hardness** of 0% and a low **Exposure** of between 5-20%.



**3 Use Burn Tool** First, bring some of the cloud detail into the sky using the **Burn Tool**, lowering the **Exposure** if the whites turn grey. With the detail back, change the **Range** to **Shadow** to darken details if needed.



**4 Use Dodge Tool** Switch to the **Dodge Tool** and brush over grey areas of the foreground to enhance the highlights or to brighten dark areas that have lost definition. Done right, this will increase contrast.



## Secrets unlocked

### NON-DESTRUCTIVE WORKFLOW

As you have to work with the Dodge and Burn Tool directly on the image pixels, to make the adjustments non-destructive create a new layer (**Layer > New**) and fill it with 50% Gray (**Edit > Fill > Content > 50% Gray**). Then set the layer's Blend Mode to **Overlay**, so that the grey pixels are no longer visible. Now, with the grey layer selected, dodge and burn as you see fit. You'll find that the effects show on the original image, without affecting the original pixels. If you make a mistake and want to start again, simply delete the grey layer and no harm is done.



## Software highlights

### CS5: TABLET PRESSURE

Selecting this will override any pressure sensitivity that you've set in the Brush Panel so you can control the size of the Dodge or Burn Tool via the pressure of your tablet's pen. You can find the function in the Options toolbar next to the Protect Tones feature.





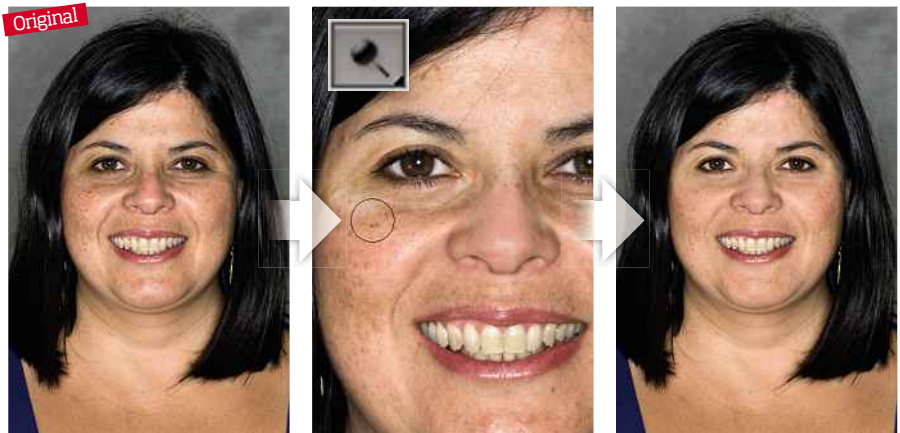
# Use the Dodge & Burn Tools for retouching portraits

These tools can be used to improve any picture. Here are three techniques to enhance your portraits

## 1 SKIN RETOUCHING

USE IT TO REDUCE WRINKLES

Professional photographers can't risk getting sloppy when retouching skin, especially if their images get blown up to the size of a billboard. Any hair, clogged pore or wrinkle can be seen at that scale, so there's no room for error. Instead of replacing pixels like the other retouching tools, the Dodge Tool retains the original skin texture, so you're reducing blemishes rather than getting rid of them, retaining the character of the face. Set the **Dodge Tool** to a low **Exposure** and brush over the areas you want to minimise. If it produces a colour shift, use the **Brush Tool** and sample a colour close to the area that's been retouched by pressing **Alt** (Mac) or **Cmd** (PC). Then brush over the area with the brush set to **Color Mode** to restore the correct tone.

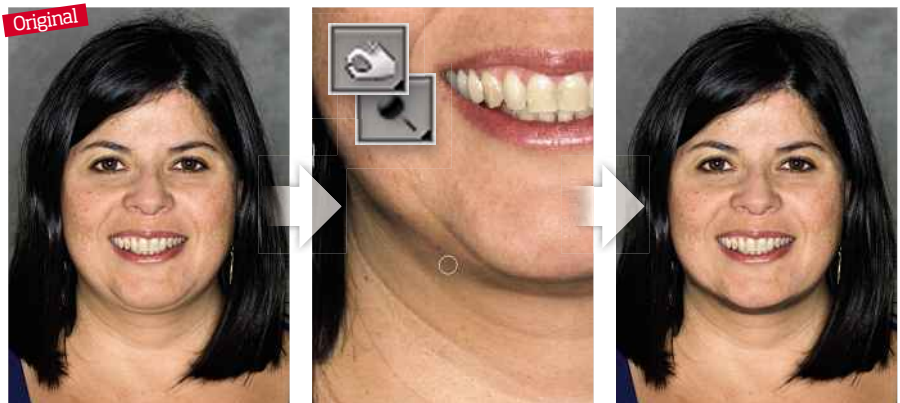


## 2 HIDING A DOUBLE CHIN

USE IT TO MINIMISE SHADOWS

You're always better to reduce rather than eliminate elements in Photoshop to ensure a natural look. The Dodge and Burn Tools are great for this and can be particularly useful for reducing the appearance of a double chin by making it look like it's in shadow. It only works, though, if the portrait is taken front on.

- Use the **Burn Tool** with a low **Exposure** of around 10%, 0% **Hardness** and **Range** set to **Midtones**, then brush over the excess flesh to darken it gradually. Watch for any colour shift.
- Switch to the **Dodge Tool** to reduce the appearance of any creases around the second chin to refine the jawline. You may need to increase the **Exposure** and use a smaller brush.

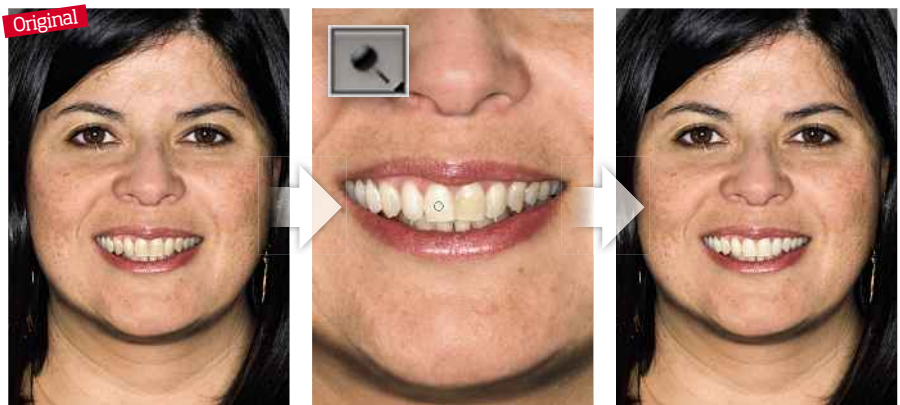


## 3 WHITENING TEETH

USE IT FOR INSTANT BRIGHTENING

A bright smile can do wonders for enhancing your portraits, but there's a fine line between making coffee-stained teeth look natural white and glow in the dark, so be careful.

- To whiten a person's teeth, set the **Dodge Tool** to an **Exposure** of about 20% and the **Range** to **Midtone**, then paint over each tooth to brighten them, being careful not to overdo it. For the back teeth, which naturally won't be as bright as the front, switch the **Range** to **Shadows** and brush over them to make them slightly lighter.
- Use a brush that's a little smaller than the area you want to work on and, for the best results, brush from the inside of the area and work your way out to the edges so it blends well.



### SUB TOOL: SPONGE TOOL

USE: SELECTIVE SATURATION

The Sponge Tool, found underneath the Dodge and Burn Tools in the toolbar, can be used to locally decrease or increase colour saturation. Like a brush, you can adjust the size and softness of the sponge; normally the softer it is, the smoother the results. You can change the strength by altering the **Flow** and switch from **Saturate** to **Desaturate** via the **Mode** option.



### Secrets unlocked

#### NEW WINDOW

Click **Window > Arrange > New Window for [filename]** to create a shadow image. Now you can zoom into the working image and have the shadow image open to see the overall effect, saving you from zooming in and out, and making your editing easier.



### HOT TIP

The default Exposure setting for the Dodge and Burn Tool is normally 50% and this is way too strong. Reduce this to no more than 20% for most of your work and gradually build up the exposure.

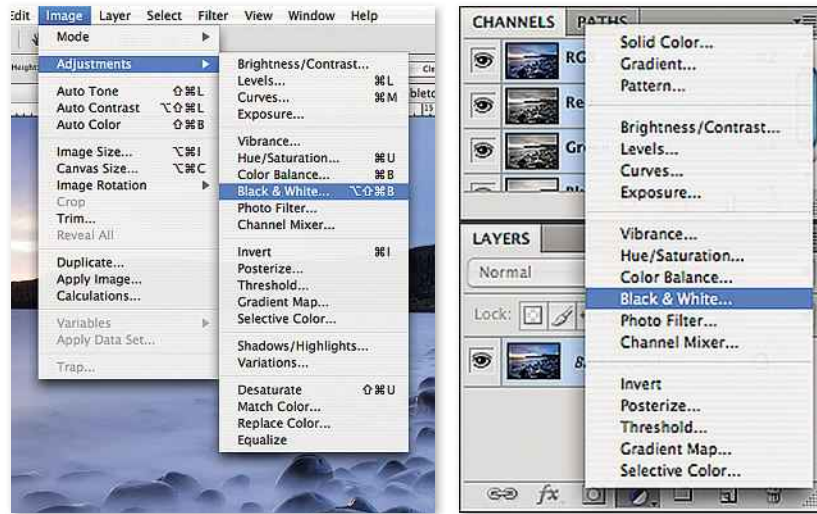


# Black & White...

Learn how to take control over your black & white conversions to maximise detail, tonal range and creative effect

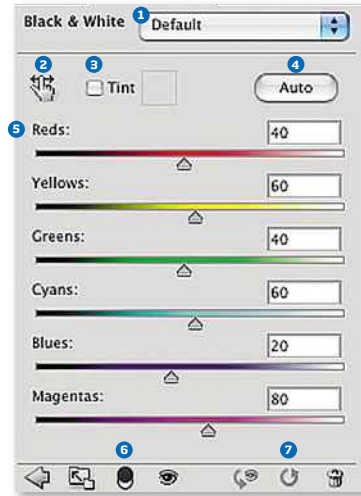
Colour can be beautiful, but black & white is often classic, elegant and can be very powerful. It's a favourite with most photographers, whether of the film or digital age, as we can all appreciate its compelling charisma. So, how can you craft a tonally rich black & white image post-capture?

When working with film, photographers used to rely on colour filters to modify a scene's tonal range: for modest adjustments, they'd use the yellow or orange filter; and for a dramatic difference, a red filter. A red filter lightens every red tone in the scene and darkens everything else. It was very popular with portrait photographers, as it lightened skin tones, and with landscape photographers, as it made blue skies darker and more dramatic. In essence, this is how a Black & White adjustment layer works. Once you apply the adjustment layer (**Layer > New Adjustment Layer > Black & White...**) the image will instantly be converted to mono. You'll be faced with a dialogue box that allows you to adjust the various colours in the image to improve and control the tonal range, the same way you would when applying a colour filter to your camera. The fact it's an Adjustment Layer means any alterations you make are non-destructive, you can delete or edit the layer at any time, and it gives you precise control over the colour channels. Above all, though, it's one of the easiest, most versatile and quickest routes to turning a colour image into a punchy black & white masterpiece.



## NAVIGATING THE MENU

- 1) Preset:** Select a predefined grayscale mix or a previously saved grayscale mix.
- 2) Target mode:** Use this optional tool with an adjustment layer to make changes directly on an image (see box, left). It's an automatic facility with **Image > Adjustments**.
- 3) Tint:** Check this box and select a colour to add a duotone tint to your picture.
- 4) Auto:** Sets a grayscale mix based on the image's colour values. Use it as a starting point, then tweak the tone using the colour sliders.
- 5) Colour channels:** These sliders affect the grayscale tone of each colour in the picture.
- 6) Clip:** Use this to link the adjustment layer to the layer/s beneath it to limit its effect. It's useful if you're working with multiple layers but don't want to affect them all.
- 7) Reset:** Click this icon to revert all the sliders back to their default position.



### Secrets unlocked

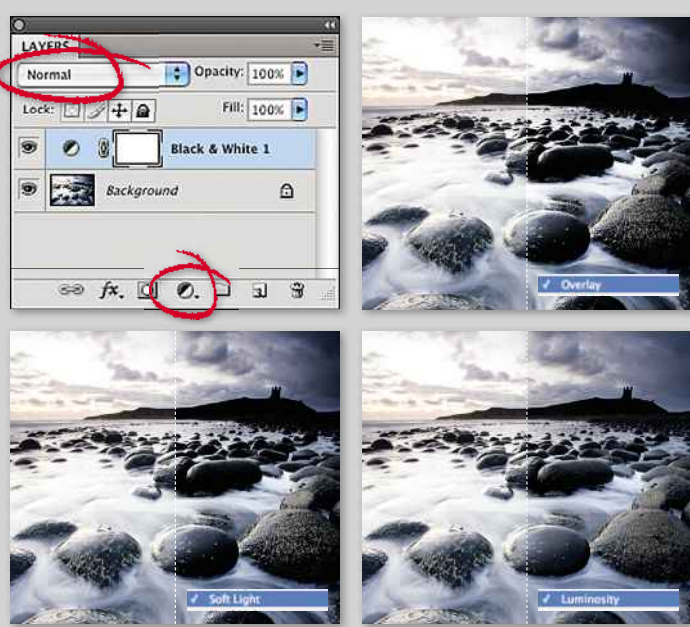
**TARGET MODE**

Rather than use the sliders, if you click on the hand tool in the top of the dialogue box, you can click on any area of the image to target a specific colour that you want to modify. Then, when the hand cursor appears, click and drag it left or right to decrease or increase its strength.

### TRY USING... BLEND MODES WITH A BLACK & WHITE ADJUSTMENT LAYER

Change the tone and contrast of your colour image using Blend Modes. By applying a Black & White adjustment layer and then using a Blend Mode to control how the layer interacts with the colours of the original image beneath, you can get some interesting and appealing results. The three key Blend Modes worth looking at are Soft Light and Overlay for contrast, and Luminosity for colour. If the effect is too strong, you can simply reduce the Opacity of the Black & White adjustment layer. The beauty of doing this is that you can adjust the brightness of the image's individual colours by moving the adjustment layer's colour sliders.

- Overlay:** Boosts the contrast of a colour image by darkening and lightening tones.
- Soft Light:** Has a gentler but similar effect to Overlay blend mode.
- Luminosity:** This mode allows you to adjust the luminance and brightness of each colour without altering the saturation.



### HOT TIP

**Black & White in Elements 9**  
Duplicate the original layer and go to **Enhance > Convert to Black & White** and pick the conversion preset you want to use. You can then adjust the intensity of the tones using the Red, Green, Blue and Contrast colour sliders.

### HOT KEY

**Hide layer**  
To temporarily view your image before your previous change in the Adjustment Layer, hold down the **\** key. It's a useful way to see how your latest adjustment affected your image.

# Three ways to use Black & White on your images

The Black & White adjustment layer can be used for more than just a simple monochrome conversion. Read on to find out how to selectively colour and tint your image with the help of a Layer Mask

## 1 TURN AN IMAGE BLACK & WHITE

CONTROL THE TONALITY OF YOUR MONO CONVERSION

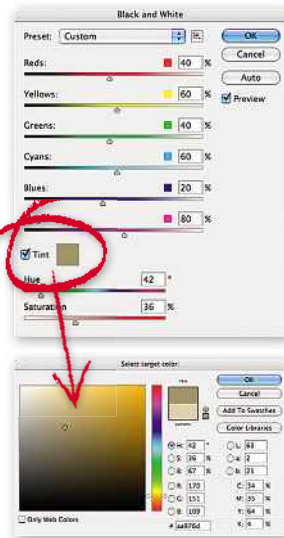
To convert a colour image to black & white, first go to **Layer > New Adjustment Layer > Black & White...** or access the Adjustment shortcut from the b&w circle icon at the bottom of the Layers palette. Your image will instantly turn black & white. Now click **Auto**; this will create a fairly accurate tonal conversion that you can then refine to your liking later. Alternatively, select one of the filters or effects from the **Preset** drop-down menu. Either way, once you have a basic conversion, use the colour sliders to target individual grayscale tones. At this point, it may help to flick back to your original image to judge the colours you want to refine by clicking the eye icon, next to the Adjustment Layer in the Layers palette.



## 2 TINT AN IMAGE USING BLACK & WHITE

CREATE A DUOTONE PHOTOGRAPH

Before you tint your picture, use a Black & White adjustment layer to get the contrast you want. Then create a new Black & White adjustment layer and clip it to the Adjustment Layer beneath it, so you've created one Adjustment Layer for your b&w conversion and another for tinting, which comes in useful later. Check the **Tint** box and double-click on the coloured box next to it to open the colour picker. Once you've selected the coloured tint you want by using the gradient or colour library, you may find that the colour is too strong for your picture and you want to reduce the cast. As you're working on a new Adjustment Layer, you can reduce the layer's **Opacity** by moving the slider in the Layers palette to tone down the effect without revealing the original image underneath, as you would do normally.



## 3 SELECTIVE COLOURING USING BLACK & WHITE

ADD IMPACT TO YOUR MONO PICTURES

Convert your image to black & white. Then add a Layer Mask to the Adjustment Layer by clicking **Layer > Layer Mask**. At this point, decide if you want most of your image colour with a touch of black & white or a black & white picture with a touch of colour, and then pick **Hide All** or **Reveal All**, respectively. Here, Reveal All was used as the majority will be black & white. Now select the **Brush Tool** and set the paint colour to black. With the Layer Mask selected, paint over the area you want to turn to colour using a soft brush that's smaller than the area you're painting. If you make a mistake, switch the paint colour to white and zoom in to the image for more precision and paint the areas you want to return to b&w. To delete the Layer Mask, click the grey link on the Adjustment Layer and drag the Layer Mask in to the trash at the bottom of the Layers palette.



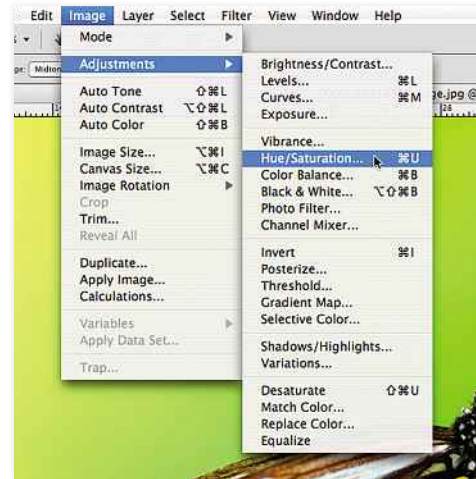
# Hue/Saturation

Avoid lacklustre or overcooked colours by learning how to improve vibrancy, change hues and control the saturation of specific channels

Photoshop has dozens of ways to alter colour, but one of the most powerful methods, and also one that's often overlooked, is Hue/Saturation. It's rarely exploited to its fullest, yet it enables you to eliminate colour casts, make colours appear richer and more vibrant and improve the overall tonality of an image. You can also make adjustments globally or selectively by targeting a narrow range of colours. Turn an image black & white by dragging the **Saturation** slider to the left, or tint your image using the **Colorize** option.

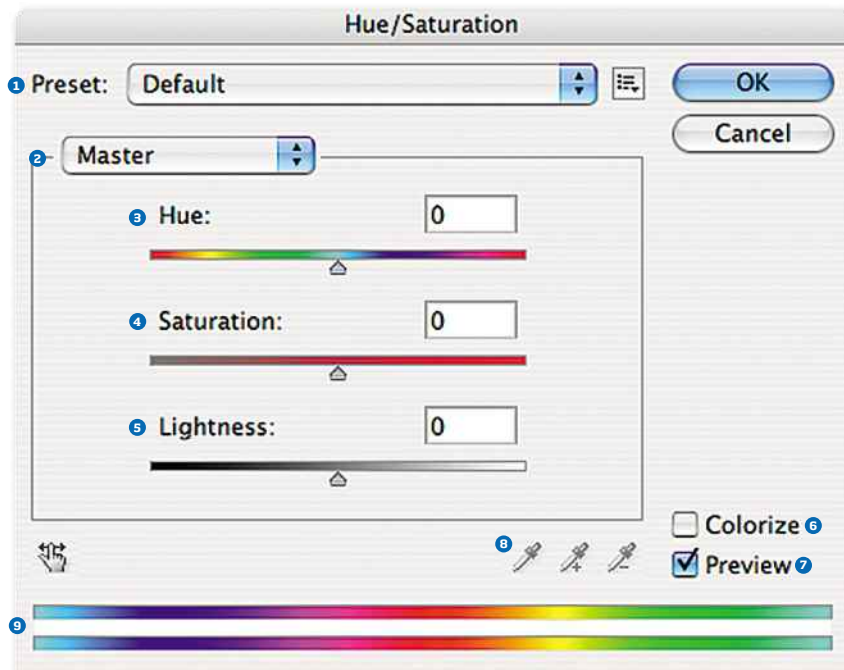
Like most adjustments, Hue/Saturation can be accessed via the **Image>Adjustments** menu, but we'd always advise using an adjustment layer (**Layer>New Adjustment Layer>Hue/Saturation**) for more flexibility. While you have the same controls in both, the former option applies colour changes directly to an image's pixels so, for one, it can be destructive to an image, and two, if you make a mistake you may have to start all over again by deleting the image layer if you can't step far enough back in the History panel; undoing any other adjustments you've made to the image. The beauty of an adjustment layer is that you can make the same changes without directly affecting the original image. Instead, when you make a mistake, you can simply delete the adjustment layer – and, best of all, it is fully editable so you can undo or make further changes at any point during the editing process.

You can adjust the hue and saturation in Adobe Camera Raw, found under the HSL/Grayscale tab, as well as the luminance of eight different colour ranges independently, but you'll need to convert it to a Smart Object by holding down **Shift** and pressing **OK** to make it non-destructive and editable later.



## NAVIGATING THE MENU

- 1) **Preset:** With one click, you can boost the overall saturation of specific colours and tint your image sepia or cyanotype.
- 2) **Master:** Access specific colours so you can make targeted adjustments.
- 3) **Hue:** Drag this slider to the left or right to change the colours (hue) of your image. The bar of rainbow colours will tell you the colour range you're applying. Black, white and grey remain unchanged.
- 4) **Saturation:** Use this slider to control the intensity of the colours. Drag it to the left to drain the image of all colour and to the right to increase its impact to unnatural proportions.
- 5) **Lightness:** Control the brightness of your image. Drag the slider to the left to make it darker and to the right to make it lighter.
- 6) **Colorize:** With this option selected, you can use the Hue slider to apply a global tint to your image. It works well if you desaturate your image first by dragging the **Saturation** slider to the far left.
- 7) **Preview:** View how changes affect the image.
- 8) **Eyedroppers:** Use to select a specific colour to target or to add or subtract from the colour range.
- 9) **Colour range:** This bar denotes what colours are in the range that you are targeting. To narrow or expand the range, adjust the half triangles.



## ⚠ WARNING: KEEP IT REAL!

When adjusting the hue, try to keep to the colours either side of your source colour. If you make the change too dramatic it won't look natural, and you could get an unsightly halo and artifacts. It's the same with the saturation: be watchful that the colours don't become too vibrant, as they'll look overprocessed and you may find you lose detail as the colour tones merge together.



## ✓ ALSO TRY... AUTO CORRECTIONS

The Auto Color command, found under the Image menu, is the most sophisticated Auto command and the easiest way to get rid of a colour cast. Normally it's advisable to avoid these commands as they offer no control, but if your image only needs minor tweaks, it can be a one-click wonder. It works by taking an average reading of the dark and light pixels to determine what should be white and black, and then adjusts the colours appropriately. If you do try it, be sure to duplicate the image layer first (**Layer>Duplicate Layer**) so you're not working on the original image. This way if it doesn't work, you can simply delete the layer and no harm's done.

Auto Color ⌘ ⌘ B

## ✓ ALSO TRY... VIBRANCE ADJUSTMENTS

The Vibrance command (**Layer>New Adjustment Layer>Vibrance**) is more relative than Saturation. When you boost an image's saturation you may find that shades of a colour all start to look the same. Vibrance will try to keep the relationship between the shades and therefore retain more detail. However, you can't make selective adjustments with Vibrance; it affects the image globally. The command does work in a slightly different way, though, by only targeting the pixels that are the least saturated, and it protects skin tones so you can avoid giving your subjects an orange tan like you would with Saturation.

Vibrance...

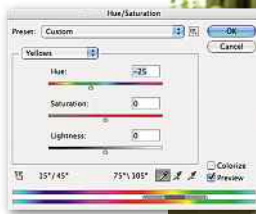
# Uses for Hue/Saturation

Learn how to be specific with your colour adjustments with these two basic techniques for improving the impact of your pictures

## 1 HOW TO REMOVE A COLOUR CAST

USE HUE TO CORRECT WHITE BALANCE IN AN IMAGE

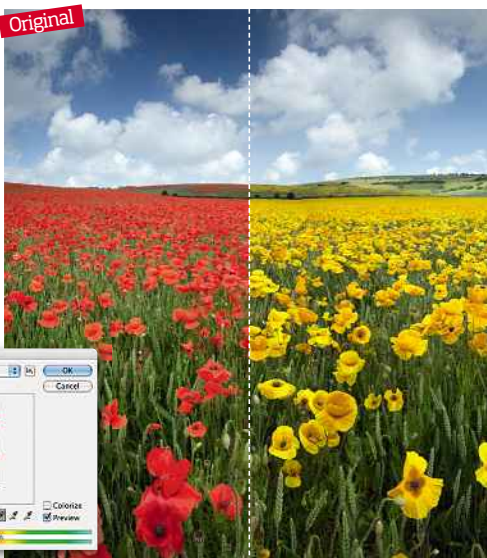
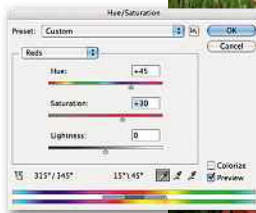
You can get a colour cast by setting the wrong White Balance for the lighting, like Daylight WB in a room full of fluorescent lights, or if your subject stands near a coloured surface that's reflecting light. While there are several ways to remove it in Photoshop, this is one of the easiest. Open the image and apply a **Hue/Saturation** adjustment layer, then select the colour of the tint that you want to get rid of from the drop-down menu at the top of the dialogue box. Slowly adjust the **Hue** slider to neutralise the cast and move the **Saturation** slider to the left to dull down the cast.



## 2 SELECTIVE COLOUR ADJUSTMENTS

TARGET A SPECIFIC COLOUR

Choose the colour you want to target from the drop-down menu at the top of the dialogue box. You'll find it selects every part of the image that contains part of that colour. If this hasn't selected every tone you want to target, or it's selected more than you wanted to adjust, you can use the eyedroppers in the top of the dialogue box to add or subtract from the colour range by clicking on the areas of the image you want to add or subtract. Finally, make your changes by altering the **Hue** or **Saturation** sliders, but be careful that you don't change the colours to the point that they look unnatural.



### Secrets unlocked

#### TARGET MODE

If you'd rather make adjustments on the image, rather than use the sliders, switch to **Target** mode. Click on the hand tool in the top of the dialogue box, then on the colour area of the image you wish to modify. Then drag the hand left or right to reduce or boost the saturation respectively. You can also use the **Hue** and **Lightness** sliders to further modify the image.

### Secrets unlocked

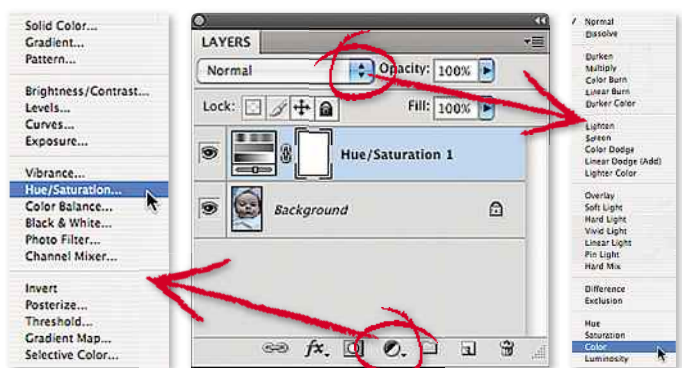
#### 'FEATHER' ADJUSTMENTS?

Use the **Color Range** slider at the bottom of the dialogue box to manually select a very narrow colour range. The dark area represents the selected colour range and the grey area acts a bit like a feather, denoting how far the adjustment blends with the surrounding area. By dragging the grey triangles inwards, you can control the 'feather' of the colour adjustment.

# Working with a Hue/Saturation adjustment layer

Get more control over how an adjustment layer interacts with an image layer by using Blend Modes

One of the added benefits of working with an adjustment layer, like Hue/Saturation, is that you can control how that adjustment blends with the image layer beneath it. First, add the adjustment layer by clicking on the b&w symbol at the bottom of the Layers palette to switch the Blend Mode from **Normal** (default) to 24 different options for different effects - have a play to see the different results. **Color** mode is the most suitable for the Hue/Saturation adjustment layer. It preserves the luminance of the image but replaces the hue and saturation of the adjustment layer. Often when you make colour adjustments the brightness is also affected, but using this Blend Mode avoids this happening.



### HOT TIP

#### Clipping Mask

If you only want an adjustment layer to affect a single layer, you can go to **Layer > Create Clipping Mask** and that will limit the effect of the Hue/Saturation layer to only the layer beneath it.

# Using Selection tools

The various selection tools available in Photoshop vary in difficulty and control, but are generally used for the same purpose: to copy sections of an image and for making localised adjustments to colour and contrast

**MAKING A SELECTION IS FAIRLY EASY:** some tools require you to draw around an area while others are 'smarter', deciding how much of an area is selected based on its tonal range and colour. The tricky part comes from making a clean selection, so that the edges of the selection blend with the rest of the image. When the edges of a selection are not manipulated correctly, it can ruin an image and make it look amateurish. Every photographer wants to achieve a seamless finish, whereby the viewer cannot tell what parts of an image have been tweaked or added and what parts are original. Increasingly, photographers are 'compositing' images together, which can range from copying a few extra people into a scene to bulk out a crowd or swapping a dull sky for a dramatic one, to creating a whole image from dozens of different pictures, which can become very advanced and complex. The key to making images like this look realistic

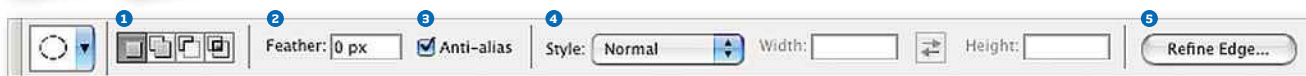
and straight off-camera is seamless selections. We recommend when doing any Photoshop work, especially when making selections, to invest in a pen tablet like Wacom's Bamboo or Intuos 4, as, with practice, it will become a lot easier and more precise than using a mouse.

The main selection tools available in Photoshop CS4 and Elements 9 are the Marquee, Lasso, Magic Wand and Quick Selection tools, but you can also use a brush in conjunction with CS4's Quick Mask Mode or Element's Selection Brush. Whatever tool you use, once you make a selection you'll end up with a flashing dotted line that's often referred to as 'marching ants' to denote your selection. You'll then be able to control and refine your selection by using features under the Select menu or in the Options toolbar, which allows you to adjust the smoothness of your edges, among other things.



## Marquee tools

PC & MAC QUICK SELECT KEY = 



Find out how to make and combine shape-based selections and create accent features like borders and vignettes using the Marquee tools

The most basic set of selection tools to use, but not the most precise or controllable, are the Marquee tools. They comprise the Rectangular, Elliptical, Single Row and Single Column Marquee Tool, which work by creating rectangular and oval shapes. While they may seem only applicable to standard-shaped selections, you can use the tools for more advanced selections by making and combining more than one shape. For instance, if you want to select a slither of a moon, you could create one circle and, holding down **Alt** to subtract from the selection, create another circle within it for a half-moon shape. You can also use these tools to create borders or, when combined with a large feather and Levels adjustment, a vignette.

- 1 **Selection mode:** New selection, Add to selection, Subtract from selection and Intersect with selection (left to right).
- 2 **Feather:** Softens the edges of selections.
- 3 **Anti-alias:** Allows for a smooth edge transition. You should keep this switched on.
- 4 **Style:** Sets how the tool draws.
- 5 **Refine Edge:** This becomes active once you've made an initial selection.



1 Select the Marquee Tool that you want to use from the toolbar. Here, we used the Rectangular Marquee Tool as it's the best suited to select the inside of the window frame.



2 To make the selection, click and drag the cursor into the shape you need. If you're not happy with the selection's position, click on its centre and drag it to where you want it.



3 To make multiple selections, like we've done here, hold down **Shift** while creating another selection. Try combining selections or pressing **Alt** to subtract from a selection.

### HOT TIP

While dragging a Marquee Tool, hold down the spacebar (do not release the mouse) to move the undefined selection. Release the spacebar and continue dragging.



### HOTKEY

#### Caps Lock

To help with your selections, click **Caps Lock** to display the tool's cursor in precise mode.

### HOTKEY

#### Escape

If you make a selection and then click in the wrong place or on the canvas so your selection disappears, press the **Esc** key to make your selection reappear.

## Secrets unlocked

### TRANSFORM SELECTIONS

Once you've made your selection using any of the selection tools, you can adjust its shape, size and rotation. If it's a little too big or a little too small, you can resize the selection marquee by going to **Select > Transform Selection**. See page 18 for more details on Transform commands.





# Lasso tools

PC & MAC QUICK SELECT KEY = **L**  
FOR PHOTOSHOP CS & ELEMENTS



Find out how to get the most from the versatile and precise Lasso tools and what you should consider when picking the right tool for the job

For more control over your selection and freeform shapes, the Lasso tools enable you to draw around an area to create a selection. It requires some eye-to-hand coordination to use these tools and they're better suited to smaller subjects. Many people who use these tools start selecting an area, mess it up, give up and start again, instead of continuing with the selection and refining it afterwards. Once you've completed your selection, you can hold the **Shift** key and draw in extra areas to add to the selection or, with the **Alt** key pressed, subtract from it. If you want to apply a feather to your selection, you must do this before you make a selection, or otherwise wait until after and make adjustments using the Refine Edge function.

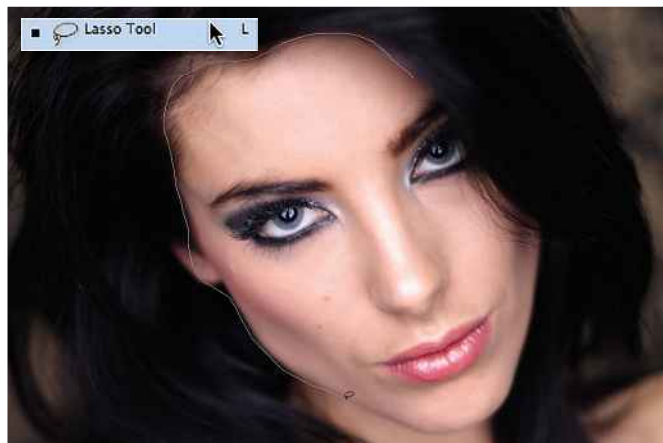
- 1 to 5 See *Marquee tools' description*.
- 6 **Width, Contrast & Frequency:** (*Magnetic Lasso Tool only*) Set the distance you need to be from the edge to select it, the level of edge contrast and the frequency of anchor points added as you draw the path.
- 7 **Use tablet pressure:** Click this button to be able to control the width of the tablet's pen.



## LASSO TOOL

IDEAL FOR: AREAS WHERE PRECISION IS LESS IMPORTANT

A freeform tool that gives you complete control over your selection, the Lasso Tool is not ideal for objects with straight edges as it requires an extremely steady hand. To make a selection, click on a starting point and draw around the area you want to select, without releasing the mouse, until you finish at the point you started at. If you release the mouse too early, Photoshop will finish the selection for you by drawing a straight line back to the starting point. You can create a straight line by holding down the spacebar.




## MAGNETIC LASSO TOOL

IDEAL FOR: OBJECTS OF A DIFFERENT COLOUR TO THE BACKDROP

The most versatile tool of the set as it's designed to recognise areas of different tonal contrast and can follow the contours of a complicated shape. The tool attempts to detect the outline of an object and places anchor points along its edge: for complicated shapes, increase the **Frequency** value in the Option toolbar. If you find it goes a little astray, press the delete button to get rid of the last anchor point and start the section again, creating more anchor points this time to control the selection.




## POLYGONAL LASSO TOOL

IDEAL FOR: STRAIGHT EDGES AND ULTIMATE CONTROL

The Polygonal Lasso Tool enables you to draw poker-straight lines around a subject. Each time you want to change the line's direction, you need to click the mouse. Photoshop won't finish the selection for you, so you have to make as many straight lines as needed to return to the point you started at. You can make complicated selections by making several small lines.




## Tools of the trade

### USING A GRAPHICS TABLET

Making selections can be made much easier with a pressure-sensitive graphics tablet such as Wacom's Bamboo or Intuos 4 (the latter is for the advanced users in need of more control over their editing). With practice, they're easier and more versatile than a mouse as they're ergonomically better for drawing. You can also assign shortcuts to different pressure points on the pen such as brush size and feather. For details, visit: [www.wacom.eu](http://www.wacom.eu)



## HOW DO I

### Deselect a crop?

To undo your selection, click outside the marching ants using a different selection tool or by clicking **Select > Deselect** (**Cmd & D** for Mac or **Ctrl & D** for PC).

## HOT TIP

### Switching between tools

If you hold down the shortcut key for a tool and press **Shift** you can flick through the subtools. Press **W** for Magic Wand, **M** for Marquee and **L** for Lasso first, and use **Shift** to access the Quick Selection or Magnetic Lasso Tool, for example.



# Brush Tool

PC & MAC QUICK SELECT KEY = **B**  
FOR PHOTOSHOP CS & ELEMENTS



Access the hidden secrets of the Brush Tool and find out how it can help you retouch and selectively adjust your image's colour, exposure and contrast

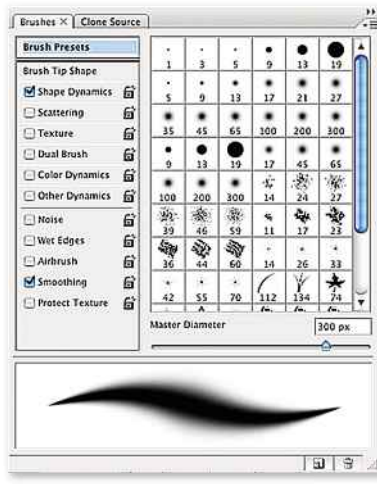
The Brush Tool has some of the most diverse and useful applications for post-processing images. Designed to replicate the effect of a paint brush, the tool's primary purpose is to apply colour to an image specified via clicking on the colour palette at the bottom on the toolbar. But it has many more sophisticated uses than just 'painting' colour on a canvas; for example, you can use it to edit the tonality of pictures by using it in conjunction with a Layer Mask, to retouch pictures and skin tones and to make selections (see page 22 for more details).

The Brush Tool's options are overwhelming, especially in CS5. While you can alter the shape, size and style of your brush in CS4, as well as the Flow and Opacity of the paint, in CS5 you also have more bristle tip types to choose from to improve your control, accuracy and creative potential. You can select various types of flat and round brushes as well as setting parameters like how thick and long each bristle is, depending on the type of brush stroke you want to replicate, and the wetness and paint load. As a photographer who is really only interested in editing their pictures, on a day-to-day basis you'll probably only graze the surface of the Brush Tool's potential and have little need to even access the crammed Brush Panel (see below) for the advanced parameters. The options, however, are well worth exploring in case you fancy getting into digital art or want to apply a creative design to one of your pictures.

- 1 **Brush palette:** Selects the size, shape, texture and hardness of your brush to suit your adjustment.
- 2 **Mode:** Determines how pixels in the image are affected by the Brush Tool and its paint.
- 3 **Opacity:** Controls the density of the paint and its level of coverage.
- 4 **Flow:** Controls the liquidity of the paint and the speed it's applied.
- 5 **Airbrush:** When switched on, you can build the paint up depending on how long you hold your mouse or pen down for, not by how many strokes you take.

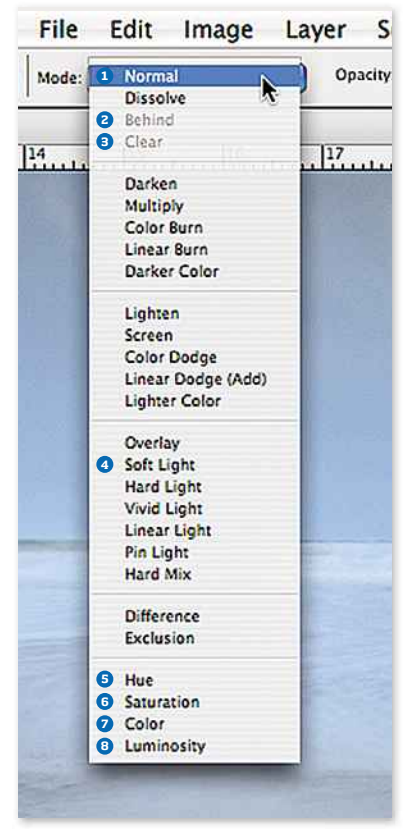
## THE BRUSH PANEL

While shortcuts and the Options panel will usually quickly provide you with the brush you need, if you want to explore your control over the Brush Tool, look towards the Brush Panel. To open it, go to **Window>Brushes** or right-click **Ctrl** and click on the image, and you'll be able to change the tip's style, as well as other more detailed settings such as preset shapes and textures. Rarely would a photographer need this much power – it's intended more for digital artists – but if you get into creative painting and digital illustrations, it's worth checking out.



## BRUSH TOOL BLEND MODES

- 1) **Normal:** This is the default mode. It paints/edits each pixel to turn the base colour (the layer you're applying it to) in to the blend colour (the colour loaded on the brush).
- 2) **Behind:** Paints/edits only on transparent areas of an image. It only works on layers that have Lock Transparency deselected.
- 3) **Clear:** Paints/edits pixels to make them transparent, similar to an eraser. It only works on layers that have Lock Transparency deselected.
- 4) **Soft Light:** Darkens or lightens the base colour, depending on what blend colour is used. The effect is similar to shining a diffused light on the image. If the brush's colour is lighter than 50% grey, the image is lightened as if it were dodged. If the brush's colour is darker than 50% grey, the image is darkened as if it were burned in. Painting with pure black or white produces a distinctly darker or lighter area, but does not result in pure black or white, and other colours leave a light tint on the image.
- 5) **Hue:** Creates a resulting colour from the luminance and saturation of the base colour combined with the hue of the blend colour.
- 6) **Saturation:** Creates a resulting colour from the luminance and hue of the base colour combined with the saturation of the blend colour.
- 7) **Color:** Creates a result colour with the luminance of the base colour and the hue and saturation of the blend colour. This is useful if you want to turn part of an image black & white or you're tinting an image.
- 8) **Luminosity:** Creates a result colour with the hue and saturation of the base colour and the luminance of the blend colour. This mode creates the inverse effect of Color mode.



## HOTKEY

### Brackets

Brushes can be accessed via the options bar or via **Window>Brushes**. However, if you're working on an image, and want to alter the brush's size, press the right or the left brackets (next to the letter P).

## Secrets unlocked

### HISTORY & ART HISTORY BRUSH

The History Brush Tool can be used to partially undo any adjustment, filter or tool. With the tool selected, click on the History Panel (**Window>History**) and click in the box next to the step you want to revert back to. This will select it as your source state. Now you can go back to the image and paint selectively to take the area back to the reverted state. You can go back as far as the History Panel allows: the default is 20 states but you can extend this via the **Preferences>General panel**. The Art History Brush works in a similar way but has the power to add an Impressionist look to your picture, similar to CS5's Mixer Brush and Element's Impressionist Brush. The biggest mistake people make with this tool is using too large a brush so the edges blur and diminish detail.

## HOTKEY

### Number keys

To alter the paint's opacity, press **4** for 40%, **7** for 70% etc, unless you're working with the airbrush, in which case this affects the Flow. Hold **Shift** and press a number to affect the opacity of the airbrush.



## Uses for the Brush Tool

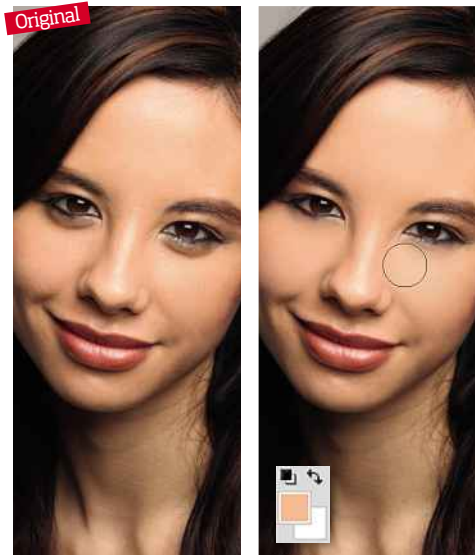
Learn how to correct skin tones and reduce blemishes in portraits. Plus we show you an easy way to correct problems with exposure

### 1 SKIN RETOUCHING

USE IT TO EVEN OUT SKIN TONE

An easy way to get rid of dark bags, or to reduce wrinkles and blemishes, is to take a sample of skin tone and paint it over the area with a low opacity brush. It's always better to gradually build the colour up to the tone you want with multiple brush strokes.

- Zoom in to the image so you have a close-up view of the area you want to retouch. Select a medium-sized brush (no bigger than the area you're planning to retouch), with a **Hardness** of around 0-10%, and the **Opacity** set to around 10%.
- Hold down the **Alt** key (Mac) or **Cmd** (PC) so the brush cursor turns into an eyedropper, then click on an area of colour near the area you want to retouch. This loads the colour on the brush. Now brush over the area to even out the skin tone. Take a new colour sample from next to each area you retouch to ensure the colours are similar in tone.



### 2 TONAL ADJUSTMENTS

USE IT TO CORRECT EXPOSURES

If parts of an image are under or overexposed, there's an easy, non-destructive way to selectively correct ill-exposed areas with the help of the Brush Tool and layer masks. This technique can be applied to contrast or colour changes by simply using a different adjustment layer.

- Add an Exposure Adjustment Layer (**Layer > New Adjustment Layer > Exposure**) and adjust the sliders until the area you want to amend is correctly exposed.
- Each adjustment layer has a Layer Mask attached. Select the mask, then set the **Foreground Colour** to black and pick a soft, round brush with an **Opacity** of 100%. Paint over the area that's now poorly exposed to bring back the detail from the original image.
- If you make a mistake, switch the foreground colour to white and brush the area back in on the Layer Mask.



## Software highlights

### ✓ SPECIALITY BRUSHES

While the Elements 9 Brush Tool works in the same way as in CS4, it also offers speciality brushes that paint shapes like stars, flowers and butterflies. Elements 9 also features the Impressionist Brush that blurs and blends the edges of the objects in your image to resemble an Impressionist painting. It's tricky to get a handle on, but it can yield interesting results. Try using it on a duplicate layer and then reduce the layer's opacity to see what happens.

### ✓ SMART BRUSH TOOL

While this brush can be used to make selections in Elements 9, like the Quick Selection Tool, it also edits your image. Found underneath the Paint Brush Tool, you can use it to make selective adjustments by brushing over an area to change the colour, adjust the exposure, apply special effects or convert it to black & white among other Smart Paint options.

### ✓ MIXER BRUSH IN CS5

This ingenious tool is designed to work like an actual paint brush, with a variety of bristle tips, the ability to adjust the amount of paint loaded on the brush and its wetness – the same way you'd work if you were applying paint to a real canvas. The real show-stopper is the Mixer Brush, which enables you to literally mix the colours in your photograph by controlling its Mix value and Wetness. It takes practice, so don't be discouraged if your picture looks like a five-year-old's finger painting rather than a Rembrandt masterpiece at first.



## Tools of the trade

### ✓ USING A GRAPHICS TABLET

A Wacom tablet is really handy when using the Brush Tool as brush movements are much more natural. You can also adjust the opacity and the size of the brush based on your pressure points. If your tablet's pen has barrel rotation, you can also change the angle of your brush intuitively rather than have to specify the angle in the brush palette.

## The Brush Tool and Layer Masks

Find out how painting on Layer Masks can be used to hide or reveal image information

By adding a Layer Mask to a layer (**Layer > Layer Mask > Reveal All/Hide All**), be it an image layer or an adjustment layer, you can use the Brush Tool to mask off areas of an image so it's not affected by an adjustment. For example, set the brush's colour to black, and select the Layer Mask, then brush over the adjusted areas you want to hide. White paint does the reverse and grey partially does both, leaning towards one or the other depending on how dark or light the tone is. The process is non-destructive; delete the Layer Mask to undo any edits.



### HOT TIP

You can download a variety of brushes from [www.adobe.com](http://www.adobe.com), or from the web for free. Then add them to your Brush Panel by clicking on the small arrow in the top right corner to access a drop-down menu, then clicking **Load Brushes** to save them to your palette. Under the same menu you'll also find different pre-loaded brush types that you can add to your palette.



# Magic Wand Tool

PC & MAC QUICK SELECT KEY = W FOR PHOTOSHOP CS & ELEMENTS



- 1 **Selection mode:** New selection, Add to selection, Subtract from selection and Intersect with selection (left to right).
- 2 **Tolerance:** Set range of colours.
- 3 **Anti-alias:** Allows for a smooth edge transition. You should keep this switched on.
- 4 **Contiguous:** Only select connected pixels.
- 5 **Sample All Layers:** Sample colours from composite image.
- 6 **Refine Edge...** This becomes active once you've made an initial selection.

Got an area of a specific tone you want to select? Find out how the Magic Wand Tool can help you do this easily with seamless results

The Magic Wand Tool selects pixels of a similar colour to the area you click with the tool. The area of similarity can be expanded or contracted by making the Tolerance level (located in the Options toolbar) bigger or smaller respectively. You can expand your chosen area by also making multiple selections, holding down the **Shift** key and clicking on the areas you want to select, while altering the **Tolerance**. If you select **Contiguous** in the Options toolbar, you'll also only target pixels of the same colour that are connected to the area you click. You may find you get better results switching between the Magic Wand Tool and the Quick Selection Tool.



1 The default setting of the Tolerance level is set to 32. If this only picks up a small area, as it did in this picture, increase the Tolerance to 50 for a better selection.



2 Increasing the Tolerance further may select parts of the image you don't want it to (in this case, the statue): to get around this, hold down **Shift** and click again to add to the selection.

### HOT KEYS

#### Hide selection

To temporarily hide your selection and to see what adjustments you've made without deselecting your area, click **Cmd+H** (Mac) or **Ctrl+H** (PC). Press the key combination again to reveal the selection.

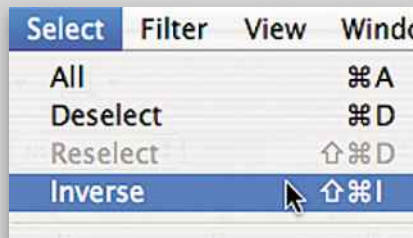
### HOT TIP

#### Move selection

Once you've made your selection using one of the Lasso tools, click on the **Move Tool** to cut it from the image. At this point you may want to click and drag it on to another image to copy the pixels over.

### SELECTION TIP: INVERTING SELECTIONS

Sometimes it helps to select what you don't want in a picture. For instance, if the background is one colour it can be easier to select it and then invert the selection (**Select>Inverse**) to isolate the foreground subject. The Magic Wand Tool is ideal for this type of selection, as, with one click, you can select a white background. Below, we used a mask to show the areas that are not selected.



#### Background selected



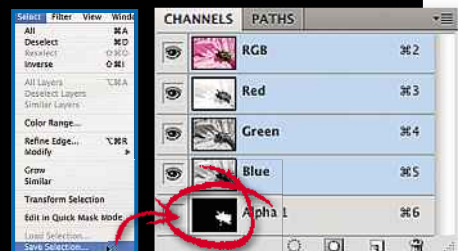
#### Selection inverted



## Secrets unlocked

### SAVE SELECTION

If you spend a while preparing a selection you might want to save it in case you want to use it again later. To do this, go to **Select>Save Selection**, give it a name in the dialogue box and click **OK**. The selection will be saved as a new channel, which can be accessed via **Window>Channel**. To load a saved selection, choose **Load Selection** from the Select menu or click the **Load Channel** as a Selection button at the bottom of the Channels palette.





# Quick Selection Tool

PC & MAC QUICK SELECT KEY = W  
FOR PHOTOSHOP CS & ELEMENTS



Learn how to make fast and accurate colour-based selections using one of the smartest selection tools in Photoshop's extensive arsenal

Introduced in CS3, the Quick Selection Tool is a cross between a brush and the Magic Wand Tool, and actually learns as you use it. It's similar to the Magic Wand Tool in that it makes a selection based on colour, but you can also control the selection by the brush size. Also, if you drag the tool over your subject and it selects too much, hold down **Alt** to subtract from the selection and when you come to add to your selection again, you'll find the tool has remembered the areas you want to avoid. Smart, huh? The more information you give it about the regions you want and the regions you don't want, the smarter it becomes about your selection.



**1** To change the colour of an object in your picture, set a medium brush (143px) and click on it once or twice in the centre of the object.

**3** Next go to *Image > Adjustments > Replace Colour* and drag the *Fuzziness* slider to 200. Then select the eyedropper with the + sign and click on areas of the object that aren't white. Now adjust the *Hue* slider to change the colour.

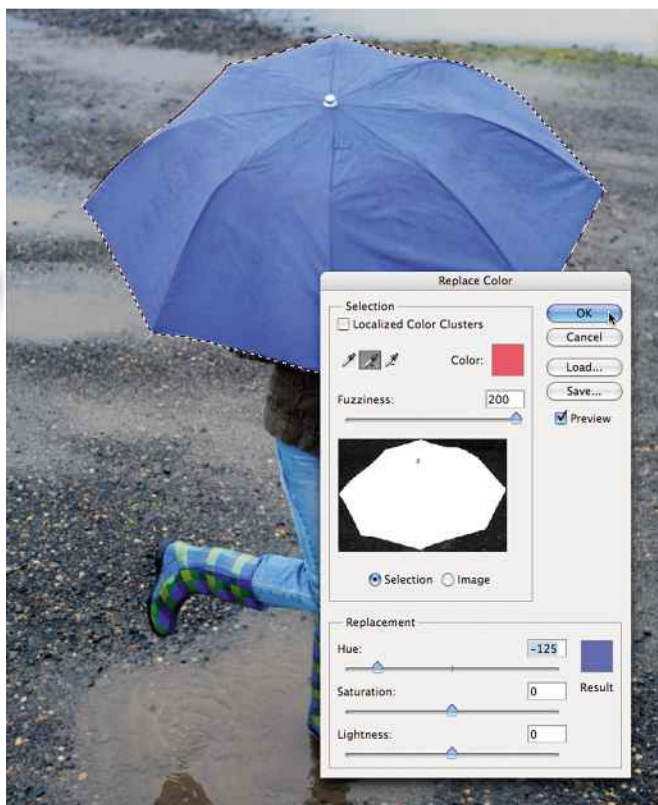
## HOW DO I

### Change brushes?

As you need to 'paint' your selection in, brushes are integral to the Quick Selection Tool. For the best results, make your brush smaller the closer you get to the edges. Adjust the brush size by clicking the brackets [ and ].



**2** Next, click on *Refine Edge* and slightly adjust the *Radius*, *Smooth* and *Feather* sliders to make the selection's transition more gradual.



- 1 Selection mode:** New selection, Add to selection, Subtract from selection.
- 2 Brush:** Adjust the brush size and hardness.
- 3 Sample All Layers:** Sample colours from a composite image that has multiple layers.
- 4 Auto Enhance:** Analyses the edges for a better selection. Always keep this ticked.
- 5 Refine Edge:** This becomes active once you've made an initial selection.



## Software highlights

### CS5: SMART RADIUS

If you're selecting an object with areas that merge with the background, for instance strands of hair that you want to include, use the *Quick Selection Tool* to select only the main subject, avoiding these transitional areas and the background. Then access *Refine Edge*, one of the most advanced tools, and select *Smart Radius* and drag the *Radius* slider. You'll find the hair strands are picked out from the background without selecting the background, as it differentiates the edges.

### ELEMENTS 9: MAGIC EXTRACTOR

If you want to pluck a subject out from a background, Elements 9 has a nifty tool called *Magic Extractor*. It works like the *Quick Selection Tool* in that you only need to guide Elements and its intuitive functions will do the rest. Go to *Image > Magic Extractor*. Click on the *Foreground Brush* and roughly draw within the area of the image you want to keep, then switch to the *Background Brush* and add marks to the area you want to get rid of. Add a feather and defringe, then click *OK*.



## Secrets unlocked

### PIXEL MASKS

To make non-destructive adjustments to your selection, you can convert your selection into a mask, which means any changes you make to the colour, contrast and refinement of the selection do not affect the original image pixels. You can also revert to your selection at any time to edit your adjustments. To do this, create your selection and then click *Window > Masks* to bring up the *Masks* panel. Click on the *Add Pixel Mask* button at the top. Now you can add a feather, access *Refine Edge* via the *Mask Edge* button, *Color Range*, *Invert* and copy the selection to another image, all without affecting the original pixels.

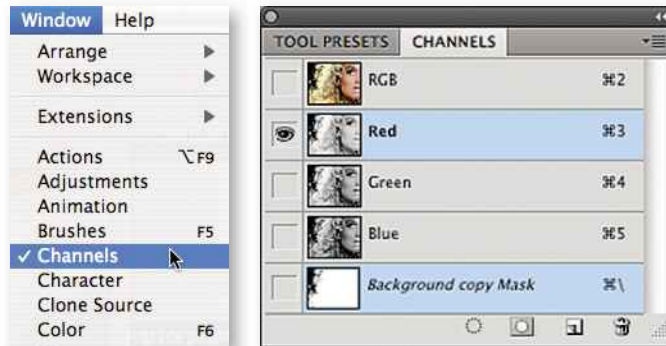


## Using channel masking for complicated selections

Trying to select flyaway hair or fine-edged details, without including background pixels, can be an arduous task. Find out how the channel masks can make getting clean selections a whole lot easier

A quick and effective method to select areas, especially those that have soft, detailed edges like fine strands of hair, is to use channel masking. Most selection methods struggle to select the fine details along the edges of a subject without being contaminated by the background pixels, often resulting in a jagged and unsightly selection, but if done properly, channel masking can give you a very precise, background-free finish.

If you don't have to worry too much about making a clean selection, blending the transitional areas, or you're just making subtle colour and contrast changes to your selections, we'd advise you to use one of the other selection methods discussed in this feature as channel masking can become complex. But if you have to make a clean extraction from an image and have tricky areas to include, using channels is really your best way in CS4. The process works by picking the colour channel (Red, Green or Blue) that creates the most contrast and then using it as a mask to extract your foreground interest. Find out how below...



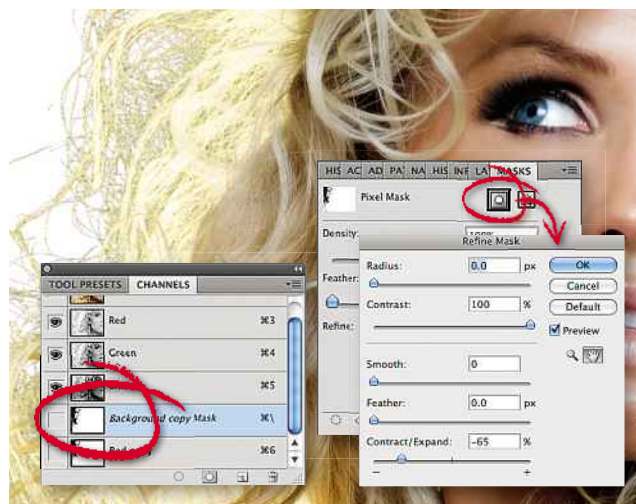
**1** First of all, duplicate the image layer you want to make a selection from by clicking on *Layer>Duplicate Layer* so you're not affecting the original file. This way you can delete it if you go wrong. Now go to *Channels (Window>Channels)* to access the Red, Green and Blue channels. Click through the channels to see which one has the biggest contrast between the background and the subject. For this image, it's the Red channel.



**2** If you have multiple areas you need to select, but they aren't affected by the same channel, you will need to select each area separately using the best channel and combine the different channel masks later. Next, make a copy of your chosen channel by dragging it down to the *Create New Layer* icon at the bottom of the Channels palette. Make sure only the copy channel is selected (it should be highlighted in blue and have the eye icon next to it).



**3** Now click *Image>Adjustments>Levels* and move the white and black triangles slowly together to boost the channel's contrast even more. When you're adjusting the Levels, you're looking to extract the edges from the background, so the foreground turns white and the background black. To finish the channel mask, select the *Brush Tool* and carefully fill in the remaining background with black and the foreground with white.



**4** Click on the channel copy while pressing *Cmd* so the cursor changes to a hand with a square attached; this means you've loaded the selection and you'll see marching ants. Next, click on the *Layers* palette, select the duplicate image layer and access the *Masks* panel via the *Windows* menu. Now click the *Add a pixel mask* button and then *Mask Edge* to be able to refine your selection. Now you have a selection ready to copy or modify.

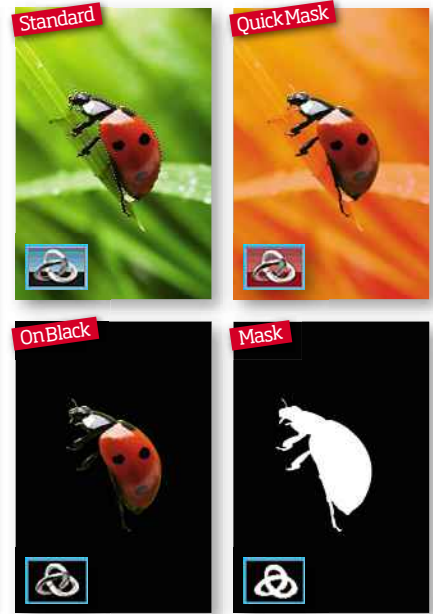
## Improving selection with Refine Edge

It's relatively easy to loosely select an area in an image that you wish to remove, move or manipulate. Where many photographers struggle is refining their selection to make transitions seamless. Here's how...

Refine Edge is one of the most advanced features in the selection arsenal as it allows you to fine-tune and control your selection for a seamless finish, regardless of what tool you use to make the selection. You can access the same features bundled in the Refine Edge function individually by clicking **Select>Modify**, but it doesn't give you the advantage of previewing your changes like Refine Edge does.

- **Radius:** Use this to soften the edges of the selection, to improve the smoothness of the transition between the selection and background, and to target soft edges such as fur.
- **Contrast:** Use the slider to make the edges sharper and remove artifacts.
- **Smooth:** Soften the edges without rounding the corners, then use **Radius** to restore some of the detail afterwards.
- **Feather:** For more dramatic smoothing and blending with the surrounding area, it's an integral part of the selection process. How much feather you add depends on the resolution of your file and how soft an edge you want.
- **Contract/Expand:** Shrink or enlarge the selection until it fits the subject perfectly.
- **Preview options:** As a default, you can view your selection on a white background, but you can also view it on black or as a Layer Mask, for instance.

For the best results, use **Contract/Expand** and **Radius** to adjust the selection, followed by **Feather** and **Contrast** to refine the edges.



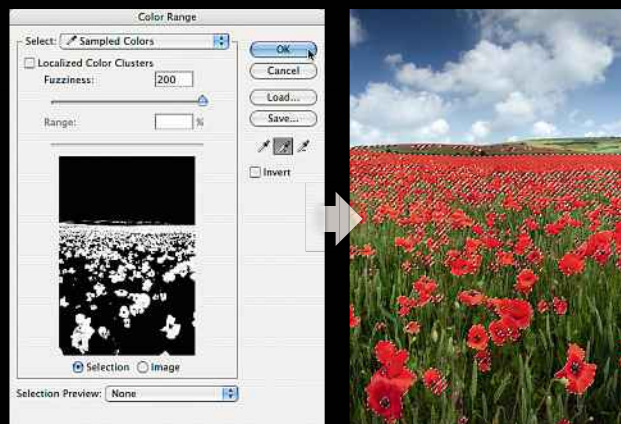
- ✓ **REFINE EDGE IN CSS:** Adobe should be given a round of applause for the upgrade they've given to this function. Refine Edge has acquired more control and intelligence. While using Channels in CS4 is really the only way you can get a clean selection of a subject with fine details around the edges, you can now select Smart Radius, which differentiates between hard and soft edges for more precise, detailed selections. Other new features include Shift Edge: an improved version of Contract/Expand and Output, which is really where this function shines. Under the drop-down menu Output To, you can opt for your selection to be converted into a Layer Mask or New Layer so you're not affecting the original image pixels.



### Secrets unlocked

#### ✓ COLOR RANGE

Accessible via the Select menu, the Color Range command is one of the quickest ways to select areas of specific colour or tone. It's also the only place you can alter the colour of the highlights, mid-tones and shadows independently as well as any other colours out of gamut. To make a selection, go to **Select>Color Range** and from the drop-down menu titled **Select**, pick the colour or tone you want to target. You'll see the related area highlighted in the preview window. You can also use the eyedropper to sample a colour that you want to select. To target one area of an image, like a person, draw a loose selection around it before accessing the Color Range command.

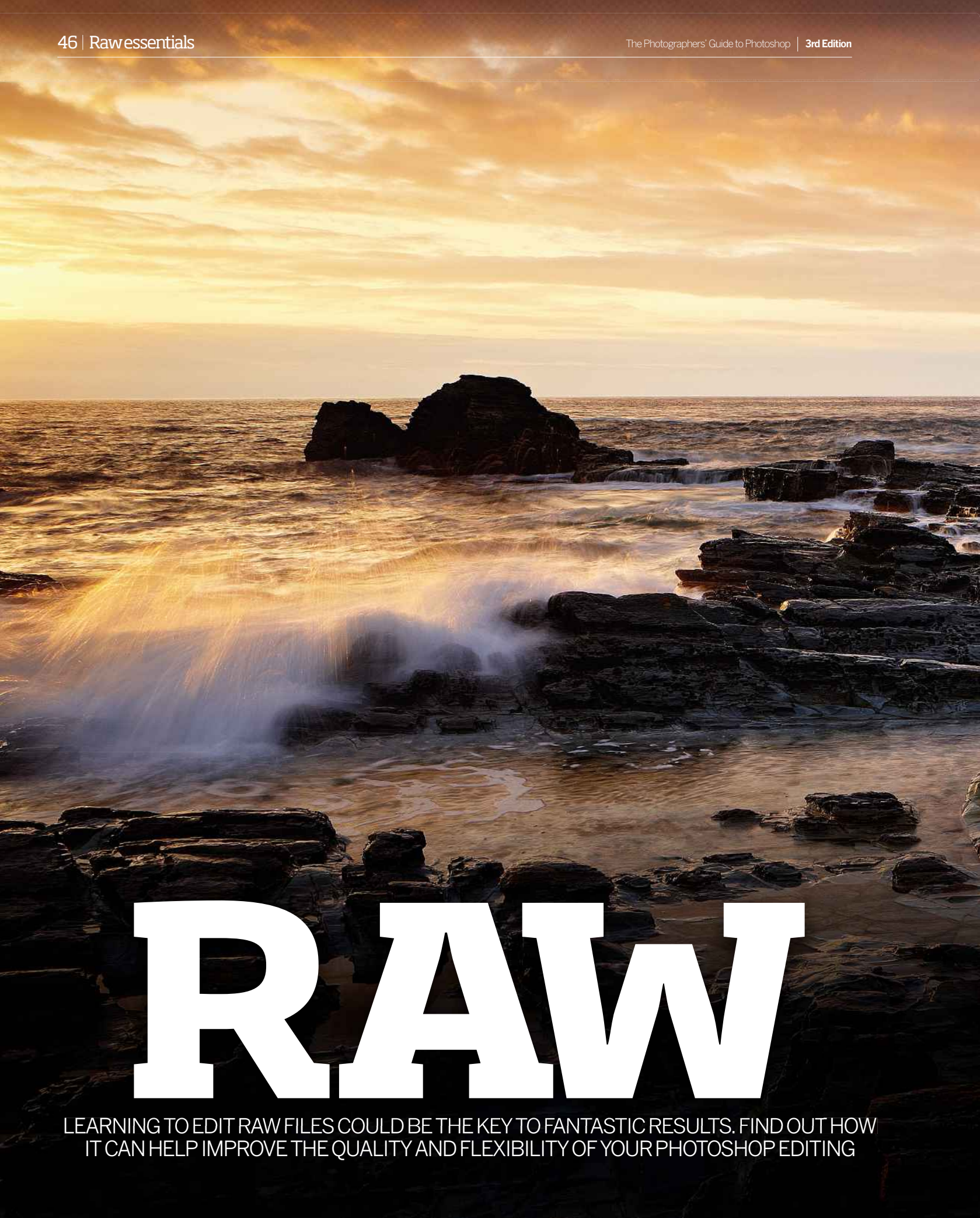


### Secrets unlocked

#### ✓ QUICK MASK MODE

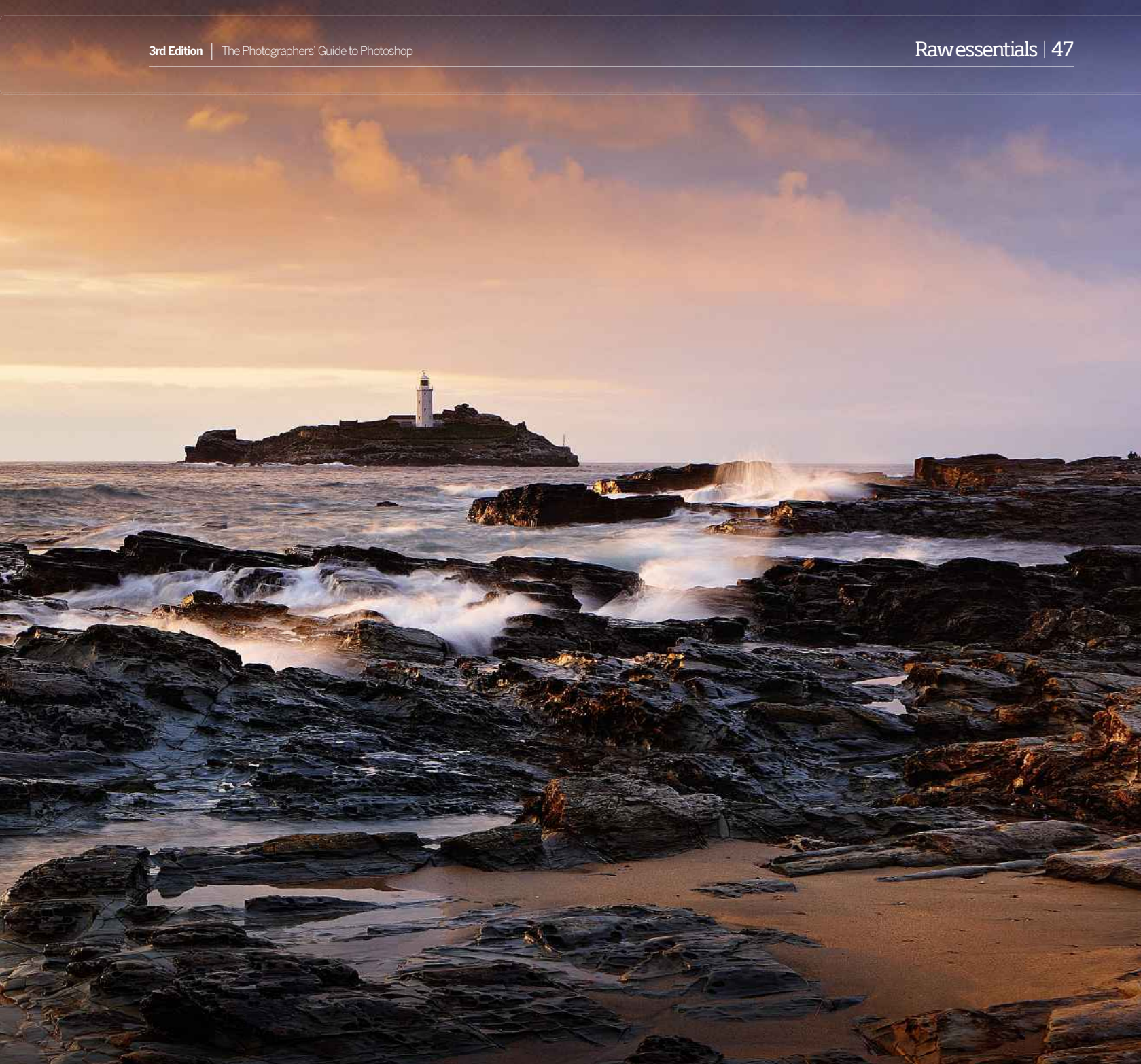
You can preview your selection and edit it using Quick Mask Mode, which is represented as a semi-transparent coloured overlay. You can apply this mask by either clicking on the **Edit in Quick Mask Mode** button at the bottom of the toolbar or clicking **Select>Edit in Quick Mask Mode**. You can also use the keyboard shortcut **Q** to switch back and forth between the selection and Quick Mask Mode. To edit the selection in Quick Mask Mode, use the **Brush Tool** to expand or fill in the selection. Set the foreground paint to white to erase the mask and expand the selection and the foreground paint to black to subtract from the selection.





# RAW

LEARNING TO EDIT RAW FILES COULD BE THE KEY TO FANTASTIC RESULTS. FIND OUT HOW IT CAN HELP IMPROVE THE QUALITY AND FLEXIBILITY OF YOUR PHOTOSHOP EDITING



AS ALL EXPERIENCED photographers are aware, the very best images are a combination of great in-camera technique followed by top Photoshop skills. And, arguably, the most essential step starts by shooting in Raw format, rather than JPEG, to capture the most amount of information. To use a film analogy, the Raw file is like a negative that you can interpret in the darkroom how you wish. By letting the camera do the developing to produce a JPEG image, you've effectively let the camera produce the print while you throw away the negative!

There's no such thing as a .RAW file in the same way that there's .JPEG and .TIFF. Instead, Raw is a catch-all term used to describe the data captured directly from a camera's sensor, which comes in a variety of flavours, depending on the brand of camera. Examples include .CR2 for Canon and .NEF for Nikon. Data in this form is greyscale and not a lot of use to the camera user on its own. There

are two methods of converting Raw files into usable image data. The first happens automatically in-camera whenever you select the JPEG setting. The second method is to shoot in Raw mode and convert your Raw files post-capture using a PC or Mac and a Raw converter such as Adobe Camera Raw. The latter is the best option for maximum quality as it provides access to the full 16-bit range of information, giving you more room to make adjustments and correct problems like under- and overexposure.

While there are many advantages to Raw files, the main one being that editing is non-destructive, the principle disadvantage of shooting Raw is the extra time involved. JPEGs are ready to roll straight out of camera. Raw files on the other hand require the extra step of opening in Camera Raw, making the necessary changes and then processing. It's not difficult though, read on to find out how to do it...

# The Adobe Camera Raw interface

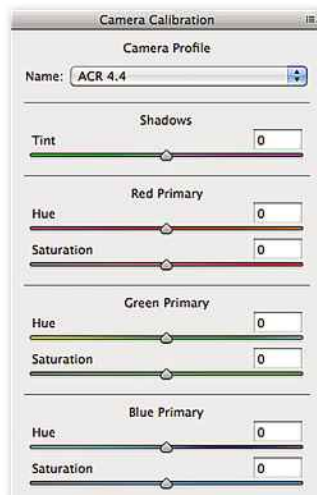
Faced with a plethora of editing tools and don't know where to start? Find out more about the functions featured on Photoshop CS4's interface

RAW CONVERSION SOFTWARE has an abundance of editing tools that can rescue an image or unleash its creative potential. The margins for adjustment are much wider with a Raw file than for JPEG, due to the sheer mass of information packed in, so the opportunity to experiment without damaging image quality is vast. Here, using Adobe Camera Raw's (ACR) interface, we hope to help you to understand more of the features at your disposal and open your eyes to the power of Raw photography.

While some photographers may do the bare essentials in ACR, and continue processing in Photoshop's main body, you could do most – if not all – of your post-production in Raw if you wanted to. Tools such as Exposure, Contrast, Clarity and Curves are workhorse sliders that you will most likely use every time you open a new image, and therefore we'll address these in our step-by-steps in the next few pages. Instead, here are ten of the lesser known adjustment tools that are well worth learning about...



**Window of opportunity!** While you experiment with the features, you can judge their effect on your image by viewing it in the large preview window on the left.



**Color Rendering:** By selecting the Camera Calibration tab, you can pick from a selection of your in-camera profiles to apply to your image. Locate the different profiles such as Neutral, Vivid, Landscape and Portrait by clicking the drop-down menu labeled Name.

## Top tools to try for Photoshop Raw conversion...



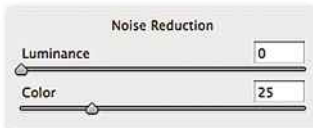
**White Balance:** Shooting in Raw means you can control the White Balance in post-production, rather than have to select the right White Balance preset in-camera. Under the Basic tab you have all the in-camera WB presets available in a drop-down menu to pick from (e.g. Auto, Daylight, Cloudy etc). You can also use the Temperature and Tint sliders to create your own Custom WB. Alternatively, you could use the White Balance Tool (found in the toolbar) to click on a pure white part of the image, which will then set a benchmark for the White Balance accordingly.



**Recovery:** This is an image saver for anyone who has slightly overexposed their highlights. This nifty tool should obviously not be relied upon but is definitely one of the most invaluable features in ACR. It can recover mid-tone detail from blown highlights.



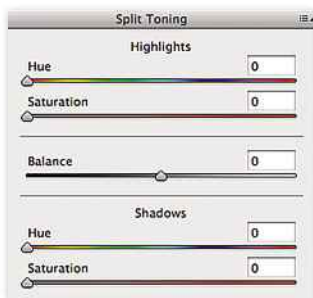
**Fill Light:** Fill Light can be found under the Basic tab and attempts to recover details from shadows, without brightening any blacks. Similar to if you were to use fill-in flash, this tool will cast some light into your foreground – use it with the Blacks slider to add more punch.



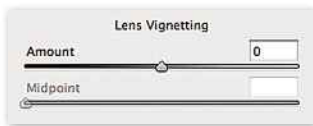
**Noise Reduction:** Under the Detail tab is a section dedicated to Noise Reduction. It is divided into two features: Luminance, (grayscale noise that tends to make an image look grainy); and Color that copes with Chroma noise. To see the effects, enlarge your image to at least 100%.



**Vibrance and Saturation:** This tool is an alternative to the Saturation slider, which adjusts all the colours in an image equally. The Vibrance Tool on the other hand affects colours that need boosting, having less effect on the colours already high in saturation.



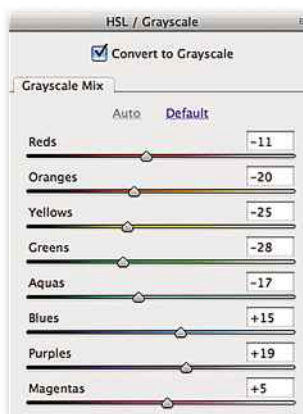
**Split Toning:** Give your shot a completely different look using this traditional darkroom treatment of tinting the highlights and shadows. You can do this simply by selecting the Split Toning tab and then moving the applicable Hue slider to change the colour and the Saturation slider to set the intensity. Don't neglect the Balance slider either as this will allow you to put more emphasis on the intensity of the shadows' tint or the highlights' tint, depending on which direction you move it.



**Lens Vignetting:** Found under the Lens Correction tab, this is a corrective and creative tool that allows you to darken or lighten the edges of an image. As light fall off is a lens defect that causes the corners of an image to darken, some photographers prefer to correct it. But others like to enhance the effect, making it stronger. You can control the midpoint, feather and roundness of the vignette with this tool.



**HSL:** (Hue, Saturation and Luminance). The controls on the HSL/Grayscale tab allow you to target specific colours in a similar fashion to Photoshop's Selective Color. Use the Hue Tool to change a colour, the Saturation to alter its purity and Luminance for brightness. It's a good idea to increase a colour's saturation and decrease its luminance, rather than just pump up the saturation.



**Grayscale Mix:** Under the HSL/Grayscale tab you have the option of checking the Convert to Grayscale box, which brings up a new set of tools labelled Grayscale Mix. As well as an Auto option, you can take control over the tonal range of your b&w conversion by adjusting the level of each colour's tone in your original image.



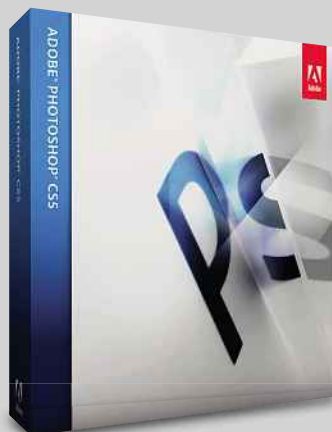


### ✓ Camera compatibility

You may find your new camera doesn't work with Adobe Camera Raw and that's because camera manufacturers keep changing Raw file formats as they launch new cameras. Adobe release regular upgrades for ACR. Go to [www.adobe.com](http://www.adobe.com) for the latest upgrades

## Raw interface

- CS4 Features all the tools of CS3 with the addition of an Adjustment Brush and Graduated Filter, found on the toolbar. The Adjustment Brush is the niftier of the two, allowing you to make very specific adjustments to selected areas of the image depending on the size and radius of the brush you decide to set.
- CS5 As well as a few new fine-tuning sliders to Noise Reduction and the addition of an Effects tab, which allows you to add grain to your image, the toolbar now has a Targeted Adjustment control for photographers who find working directly on an image more intuitive. Users can control the adjustments directly on the image by dragging their cursor up or down to increase or decrease the effect, respectively.



## Camera Raw interface

Open a Raw file in Photoshop and you're presented with the following interface. Here we explain the main commands that are displayed:

**1) TOOLBAR** Contains all selectable tools such as Zoom Tool, White Balance Tool, Hand Tool and Crop Tool. Users of the latest version of Photoshop also have access to the Adjustment Brush and Graduated Filter. Like the main Photoshop program, all the tools have single letter keyboard shortcuts that are worth getting to know. Check the back page for more details on what these are.

**2) HISTOGRAM** The histogram tells you exactly what is happening to your Raw information in real time as you alter the dialogue controls. It takes the form of a graph, representing colour in numbers from 0 to 255, going from left to right, darkest to lightest. The white shade represents the combined red, green and blue channels and gives you the foremost indication of exposure.

**3) INFO PALETTE** Shows the pixel readings for Red, Green and Blue channels from 0 to 255 when the cursor is placed in the main window, and also contains image metadata information such as aperture in f/stops, shutter speed in seconds, ISO rating and focal length used.

**4) IMAGE WINDOW** The main preview window for the open image. You can zoom in using the Zoom Tool or the plus and minus buttons or drop-down menu underneath. You can also move around the image using the Hand Tool or by holding down the Spacebar and dragging. Check the **Preview** box to see your image with and without current edits.

**5) CONTROL TABS** You can negotiate between the different control tabs by clicking on each of them. The first tab is labelled Basic and contains the controls that you will use most often, such as the Exposure, Recovery and Blacks sliders. Other tabs are Tone Curve (like Curves), Detail for sharpening, HSL/Greyscale for colour, Split Toning, Lens Corrections, Camera Calibration and Presets. Elements users have only Basic, Camera Calibration and Presets.

**6) CONTROL WINDOW** This is the main dialogue window that contains the controls for each of the specific control tabs. They're all slider based, other than the Point Curve section of the Tone Curve tab (which allows you to plot points on a curve) and the Preset tab, which involves simply selecting listed Presets.

**7) OUTPUT BUTTONS** Along the bottom you'll find all the buttons for doing what you choose once you have finished your edits. You can Save, Save As, Open, Open a Copy or use Done to store your edits without actually processing the Raw file. Holding down Alt/Option gives you access to the extra options.

# How to process a Raw file

THE BEST THING about shooting in Raw is how you can process the file to give a far better result than if you had captured the scene as a JPEG. The preview of a Raw file on your camera's LCD monitor may look identical to a JPEG as all the additional information is hidden within the file, and it's impossible to display on your camera's screen. It's only when you open the Raw file on your computer that you'll be really able to see the wonders retained in this purest of image file formats.

Our step-by-step guide shows how processing Raw files in Photoshop's Adobe Camera Raw allows you to extract an amazing amount of information from a Raw file that leads to a far superior result than if the image had originally been captured in JPEG.



**1 Open the file** The first thing we do when we open our Raw file is to see how the histogram looks with the default Camera Raw settings. We can see here that contrast is fairly low with the bulk of the information for this image sitting in the middle. The image looks quite muted and would benefit from extra contrast to add colour and detail.



**2 Assess the highlights** First check if there's any highlight detail that might be clipped by clicking on the triangle on the top right of the histogram to turn on the highlight clipping display. When active, any clipped areas flash red. The whites of the distant lighthouse here are clipped, which means we might potentially lose some highlight detail.



**3 Rescue the highlights** You can recover this highlight information using the **Recovery** slider, but this would be at the expense of highlights elsewhere, which would effectively reduce contrast. The small amount of clipped information isn't that important, so we decide to leave things be. Exposure looks spot on so we don't need to adjust this slider either.



**4 Boost the blacks** The image probably looks a little flat straight from the camera, like this one does. Adjust the **Blacks** slider until the histogram spreads towards the far left side by holding down **Alt/Option** and moving the **Blacks** slider until areas show up black on the white background. You've now created the pure blacks in your image, but be careful not to overdo it.



**5 Watch for clipping** You'd normally look to avoid clipping any highlights or shadows, but sometimes it's necessary in order to strengthen the dark tones and improve contrast. For instance, here we wouldn't expect to see detail in the rock face cracks. We also set **Contrast** to +60 to boost contrast further without clipping too much more shadow detail.



**6 Boost the colour** Now use adjust the **Vibrance** slider (here we set it to 30), or the **Saturation** slider if your software doesn't feature Vibrance, to pump up the colour a little. Press **I** to access the White Balance Tool and check that you have got the correct White Balance by clicking on a neutral white or grey area – the lighthouse is good here.

Edited

### Final image

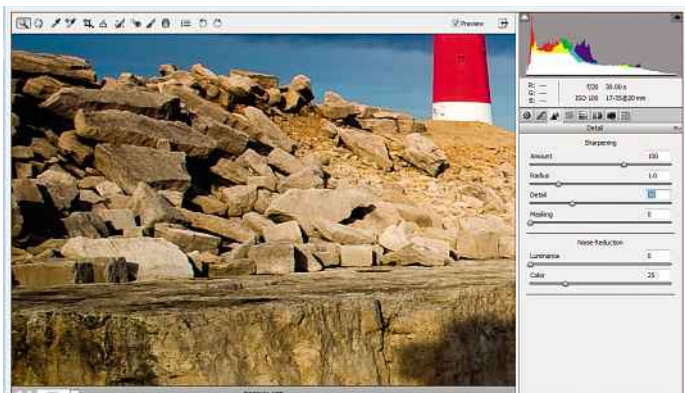
It's clear to see the benefits of shooting your images in Raw, as it's possible to extract far more detail than if you had taken the shot as a JPEG.



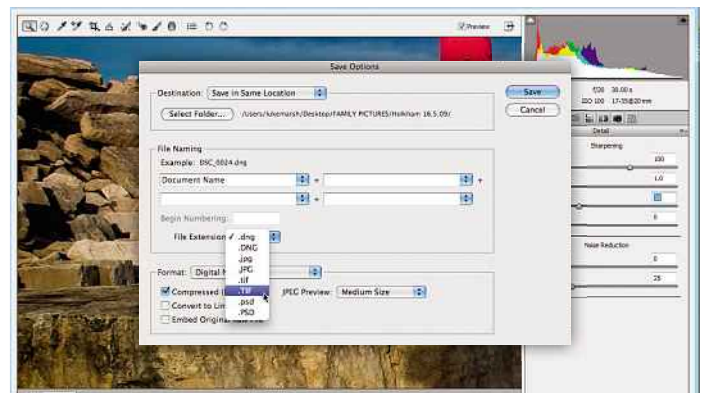
**7 Adjust the White Balance** If you're not happy with the image's colour tone (White Balance), adjust the **Temperature** slider a little. You can strengthen contrast a little further if you feel it's necessary by clicking from the **Basic** tab to the **Tone Curve** tab. Select **Point** rather than **Parametric** and change the drop-down menu from **Medium** to **Strong Contrast**.



**8 Add impact** For this image, we want to emphasise the sky and sea a little more with a selective Saturation and Luminance increase. We chose the **HSL/Grayscale** tab and selected the **Saturation** sub-tab and set **Blues** to **+40**. We then chose the **Luminance** sub-tab and set **Blues** to **+40** here too. As you can see, these tweaks all result in the image delivering far more impact.



**9 Sharpen the image** Next it's time to negotiate the Detail tab and use the Zoom buttons to zoom in to 100%. Work with the **Sharpness** slider to get the image looking crisp on screen. We settle on **Amount** 100, **Radius** 1.0 and **Detail** 30. Sharpening too excessively can cause artefacts and noise to appear, which is why it's important to take picture at the lowest ISO rating possible.



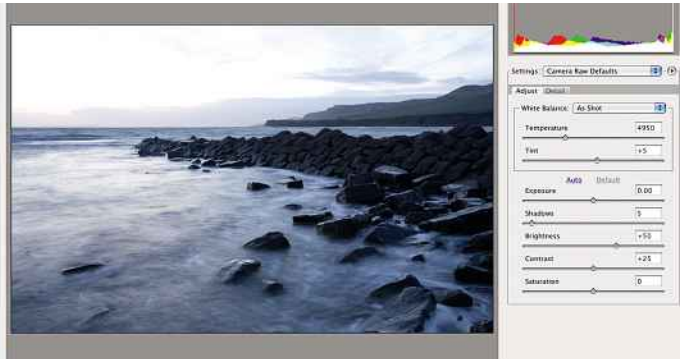
**10 Save and open** Once you're finished, you can either open the image to continue enhancements in Photoshop or save it for later. By saving the image as a .TIFF or .PSD format you will leave yourself with a 16-bit file as opposed to compressing the image to an 8-bit JPEG, which reduces the amount of information and thus flexibility when editing in the future.

# Combining Raw files

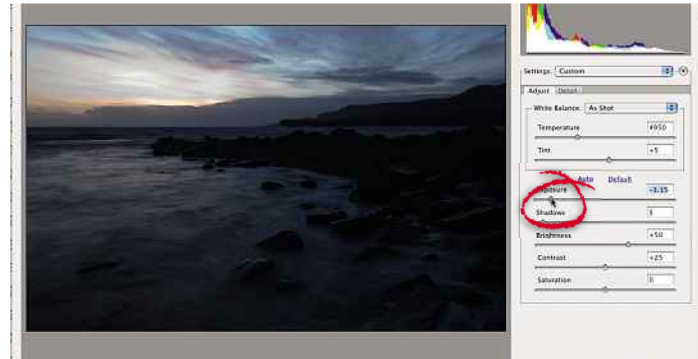
SETTING YOUR CAMERA to shoot in Raw means that you're able to recover hidden detail from areas of a scene that are over- or underexposed. The Raw converter in Photoshop Elements, used here, works in much the same way as CS. You need to create two separate images of different exposures from the same Raw file – one for the sky and the other for the foreground – then combine them for the perfect result.

Not only in this step-by-step will you learn how to adjust exposure post capture, you'll also find out how to use the High Pass filter for sharpening and how to make colour adjustments. This technique is especially efficient as you are only working with image data captured in a single exposure, so you can revisit any of your old Raw files to try it.

Raw file



**1 Open the file** When you open a Raw file in Elements the image appears in the Raw control window (above). As the foreground in the original Raw file is well exposed, little work is needed at this stage on the image. Simply click **Open**, leaving the settings as they are, then go **File>Save As** and create a Photoshop file (.PSD) as we are going to be working with layers.



**2 Repeat** Reopen the original Raw file, and again the Raw control window appears with the image. This time use the **Exposure** control (circled) and move the slider left to underexpose the image, pulling back the hidden detail from the original Raw file's overexposed sky. When you're happy with the results, click **Open** to take the image into Elements.



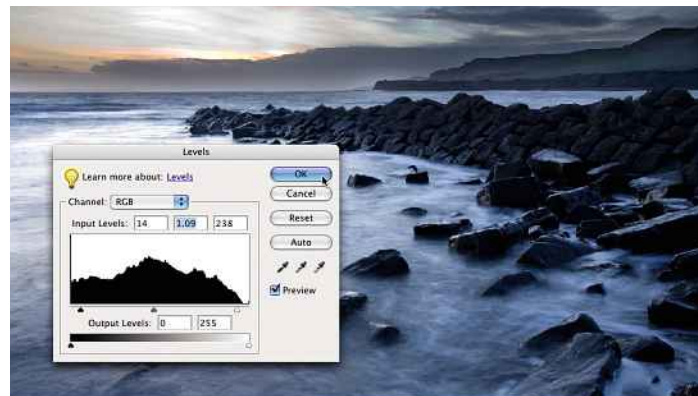
**3 Copy & paste** You now have two files open. One contains the original exposure and the other is the new underexposed image. With the underexposed file active, click **Select>All** then **Edit>Copy**, placing the image into the pasteboard memory. Now you can close this file and use **Edit>Paste** to place this image into a new layer on the original file.



**4 Remove foreground** With the two exposures in place, we now want to combine the correctly-exposed foreground with the newly-exposed sky. With the sky layer active and using the **Rectangular Marquee Tool**, select a large area of foreground, just short of the horizon. Next, click **Edit>Delete** to remove the area, noting the effect in the Layer palette preview (inset).



**5 Clean up** Now it's time to tidy up the horizon, so with the **Eraser Tool** set to a medium-sized, soft-edged brush and the **Opacity** set to around 55%, gradually erase areas of the newly-exposed layer along the horizon, revealing the original foreground image. The slight feathering between the two layers creates a misty effect that enhances the image's mood.



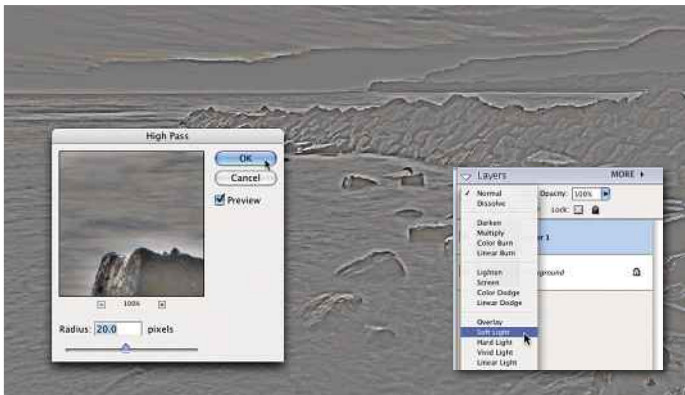
**6 Enhance** The initial layer work is complete, so to save your work so far, go to **Layer>Flatten Image** then **File>Save As** to create a new file. With both layers merged, it's time for some overall enhancement, so click on **Enhance>Adjust Lighting>Levels** to lighten up the image and improve the definition. Click **OK** to apply the changes.

Edited



### Final image

Stormy skies overhead! It's clear to see the benefits of shooting your images in Raw, as it's possible to rescue more detail than if you'd captured the scene as a JPEG.



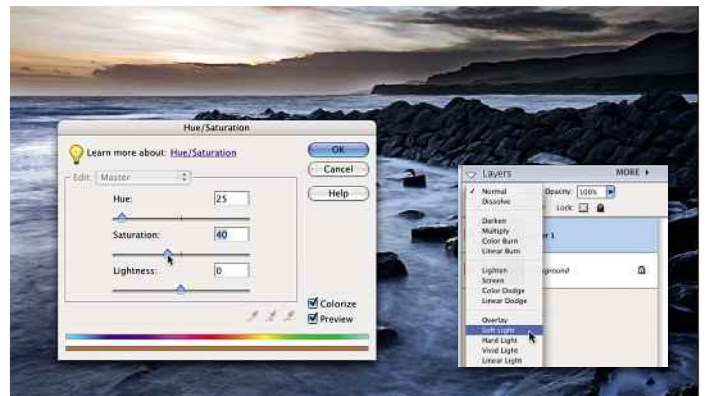
**7 High pass** The High Pass filter is a far more forgiving way to enhance detail than sharpening. To use it, first go to **Layer>Duplicate Layer** to preserve the original image. Then go to **Filter>Other>High Pass**, adjusting the **Radius** to around 20 pixels before clicking **OK**. Now you need to change the Blend Mode in the Layer palette to **Soft Light**.



**8 Darken areas** Use **Layer>Flatten Image** again, saving a copy if required. Now, using the **Burn Tool** (inset) with a large soft-edged brush and the **Opacity** set to approximately 25%, darken the exposure of specific areas, which helps to improve the depth of the image. Focus on the edges of the frame and gradually build the effect up.



**9 Selectsky** The image is predominately blue in hue and we'd quite like to inject a different tone to the sky area. Using the **Rectangular Marquee Tool**, select the area above the horizon and **Select>Feather**, entering an amount of 50 pixels to soften the selection, before clicking **Edit>Copy** then **Edit>Paste**, placing the selection into a new layer.



**10 Adjust colour** Change the Blend Mode of the new layer to **Soft Light**, and then go to **Enhance>Adjust Colour>Adjust Hue/Saturation**. In the window, start by clicking the **Colorize** box and immediately see the effect in the preview. Finally, adjust the **Hue** and **Saturation** sliders until you are happy with the colour, and then click **OK**.

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Step-by-step tutorials

# BASIC TECHNIQUES

Our favourite Photoshop skills help you make a major difference with minimum effort



# Breathe life into flat photos

Want to create a HDR effect but don't have Raw files or a set of bracketed exposures? Don't despair! Shadows & Highlights could be just the tonic!

WE ALL HAVE images that didn't quite render the scene how you remember it. Maybe the sky's not as moody, or the ground is too dark, or maybe the overall appearance of the image lacks contrast or is badly exposed. Well, Shadows & Highlights can resurrect these images. This nifty adjustment is a fantastic photographic tool, which is often overlooked by users since dedicated HDR software like Photomatrix and Photoshop actions became available from third-party companies. In the simplest terms, the adjustments allows you to recover detail from over or underexposed areas by adjusting the Highlights or Shadows controls respectively, or you can improve the overall tonal range using the Midtone Contrast slider. It's really very simple. The key to success with Shadows & Highlights is subtlety. As with any process that plays with tonal range, HDR included, shadows and highlights can produce photographic Frankensteins if used too eagerly. So, why not give it a go – the controls may seem daunting at first, but after a little experimentation and with a better understanding of what can be achieved, you may find you'll be using this feature regularly.

## HOTKEY

**Alt to reset**  
When working in the Shadows & Highlights, hold down **Alt** to change the Cancel button to a Reset button in case you want to take the filter back to its default settings. You can also uncheck **Preview** to toggle between the blurred and original image.

Reset



**1 Duplicate original** Our chosen image is a bit lifeless, yet clearly has potential texture in the sky and detail in the foreground that could be pulled out using Shadows & Highlights. First, create a duplicate layer from the original by going to **Layer>Duplicate Layer...**, naming the layer accordingly for reference later.



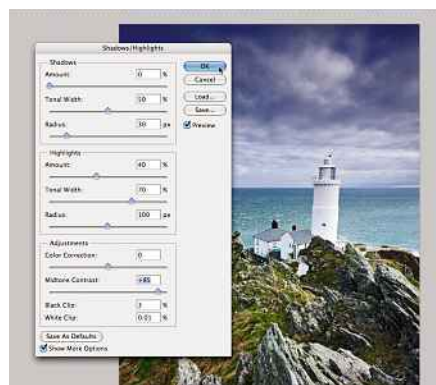
**2 Shadows & Highlights** On the duplicate layer go to **Image>Adjustments>Shadows & Highlights...** As the image is generally flat, concentrate on the **Shadows** and **Midtone Contrast**, with only minor adjustments to the **Highlight** field. At this stage you want to be focusing more on getting the foreground right.



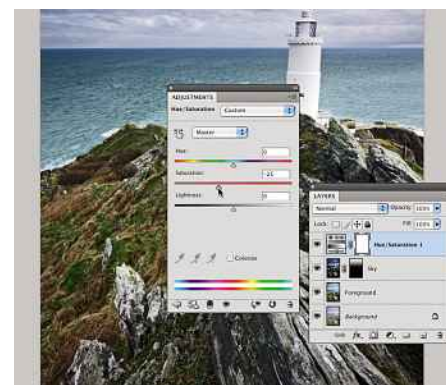
**3 Duplicate adjusted layer** Now duplicate this edited layer with **Layer>Duplicate Layer...** Then add a Layer Mask by going to **Layer>Layer Mask>Reveal All** or by clicking on the **Add Layer Mask** icon at the bottom of the Layers palettes (circled). The purpose of the layer mask is so that the next edit only effects the sky area of this layer.



**4 Add a gradient** Click on the **Layer Mask thumbnail** and select the **Gradient Tool**, ensuring the foreground and background colours are set to the default black and white. With the **Shift** key held down to ensure a straight line, click near the horizon and drag, letting go at the top of the image. This adds a gradient to the mask.



**5 Create a stormy sky** With the mask in place, any work done will only affect the sky area. Open **Shadows & Highlights** as instructed in step two, but this time we want to work mainly on the **Highlights** and **Midtones Contrast** to pull all the detail back into the sky. You may want to increase the **Black Clip** to improve the overall contrast.



**6 Reduce the saturation** One final tweak is to remove some of the colour to enhance the storm-like appearance of the image. With the top layer still active, go to **Layer>New Adjustment Layer>Hue/Saturation...** and reduce the **Saturation** slider by around 20%, then click **OK**. Now save as a Photoshop file (.PSD), to preserve all the layers.



Edited



**A storm is brewing!**  
From flat to fantastic: Shadows & Highlights has pulled out lots of detail that lay hidden in the JPEG.

# Add a digital graduated filter effect

USING PHOTOSHOP TO recreate the effect of a graduated filter allows a variety of effects to be created within minutes. This tutorial will show you how to create stunning graduated effects using Adjustment Layers, so the effects can be repeated and edited until the combination of the layers and original image is perfect.

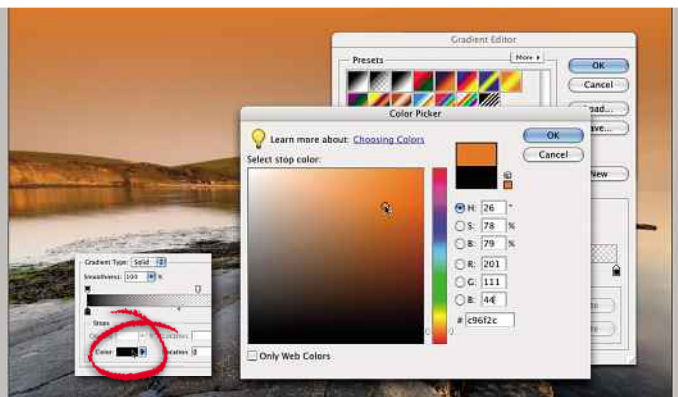
We'll introduce you to Adjustment Layers, Gradient Fill, Gradient Editor, Color Picker, blending modes and Photo Filter for mood. Photoshop isn't an alternative to optical filters, it's a complementary skill. Use it to produce images that are not possible on location or when you've forgotten your grad filter. Photoshop Elements was used here, but a similar technique can be achieved in Photoshop CS software, too.



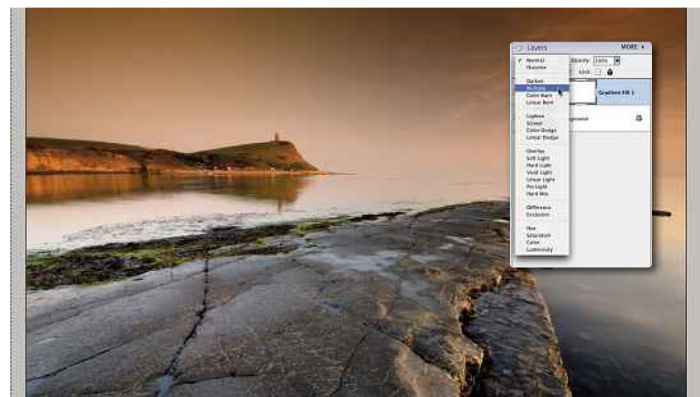
**1 Apply a Gradient adjustment layer** The aim is to create a similar effect to a conventional grad filter, but using a series of digitally graduated layers instead. Create the first gradient by clicking the **Create Adjustment Layer** icon (⊕), situated at the top of the Layers palette, and scrolling to Gradient, which opens the Gradient Fill window.



**2 Edit the gradient** In the Gradient Fill window, tick **Reverse** so the gradient runs top to bottom, then click anywhere within the Gradient field (situated top) to open the Gradient Editor sub-window. The sliders at the top of the visible gradient control the opacity, and moving the White slider will increase the transparent ratio of the gradient.



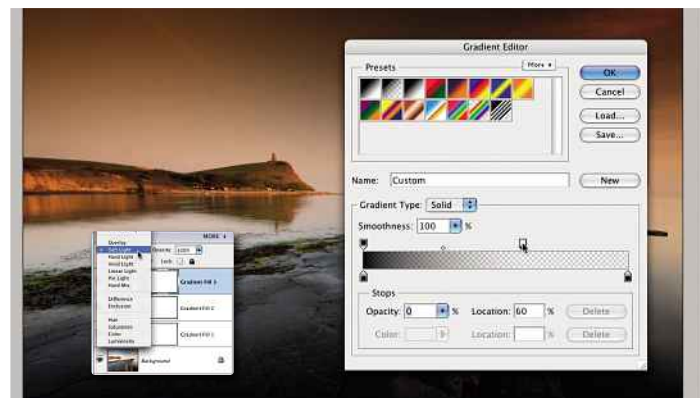
**3 Select your sunset** The sliders at the bottom of the gradient control colour, the left representing black. Click the black slider and note that the colour now appears in the field below: clicking here opens the Color Picker sub-window. Use the vertical spectrum and the main window to select the desired colour. Click **OK**.



**4 Merge the sunset** Now, back in the Layers palette, choose **Multiply** from the Blend Mode menu situated at the top to make the merging of the gradient with the original image appear more natural. This Adjustment Layer gradient can be tweaked at any time by double-clicking on it in the Layers palette.



**5 Repeat steps** It's quite often necessary to create more than one gradient layer to build up the filter effect. Here, duplicate steps one and two to create a gradient that is black to transparent. Then choose **Soft Light** in the Blend Mode menu and reduce the layer's **Opacity** to create a natural darkening effect that can easily be adjusted.



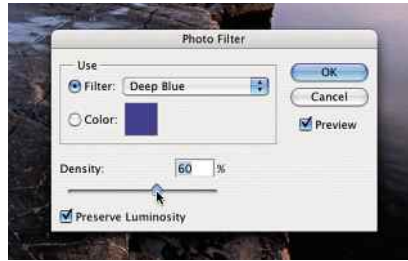
**6 Apply another gradient** The final gradient layer is going to add a subtle fall-off to the rocks, leading out of the image to the bottom of the frame. Again, repeat steps one and two, this time leaving the **Reverse** box unchecked so the gradient runs from bottom to top. Once again, set the Blend Mode to **Soft Light** and reduce the **Opacity**.

Edited

**Final image**  
After a few minutes in Photoshop, the sky has been given extra interest while retaining foreground detail.



**7 Add the final touch** Photoshop Elements and CS have mood filters that can be used to change the overall tone of your image, much like using a coloured gel or filter on your digital SLR's lens. This handy action, found in the top menu under **Filter>Adjustments>Photo Filter**, has several preset filters including Warming, Cooling and Sepia, or you can choose to manually select a filter using the Color Picker. The intensity of the selected tone can then be adjusted with the Density slider to allow for some very subtle effects, giving far greater control than with optical lens filters. When you've finished adding a grad effect to an image, it's well worth taking the time to try some of these to see if the image can be improved further.



ABOVE: Choose from a range of preset filters available in the Photo Filter function or use the Color Picker to customise.

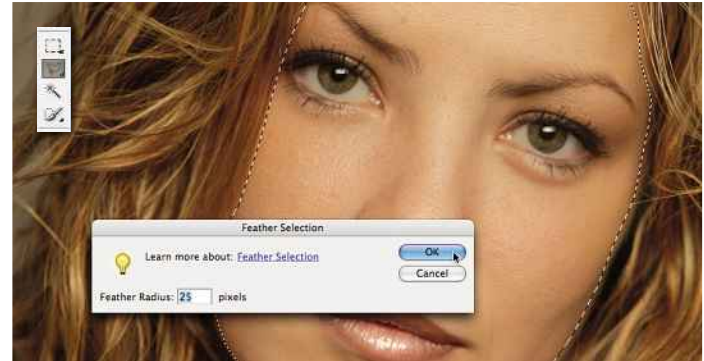
RIGHT: FINAL COLOUR SELECTION Although happy with the results of the grad filter effect, the image could be improved further by using the Photo Filter action. After a little experimenting, the Deep Blue proved to be the most appropriate preset filter at about 60% Density, making the overall mood of the image slightly cooler, which works better with the coastal subject and the rock formation.

## Give your subject a digital makeover

EVER WONDERED how those celebrities and models look so good in the glossy mags and fashion adverts? Well, the secret is, they don't. In fact, we are confident you won't find a single non-retouched picture in the magazine press these days. 'Virtual make-up' treatments are absolutely the norm in the 21st Century fashion and glamour world. However, you can learn a trick or two from these industries that can help in your own portraiture. Everyone has an off day, so it's good to be able to assure your subject that you'll be able to shoot a great picture of them even if they have just developed a spot or blemish overnight. Be aware though: it's often said that digital imaging is only as good as the amount of time spent on it and this is never more true than with skin retouching.



**1 Heal blemishes** To remove skin blemishes, moles and pimples, try using the **Spot Healing Brush Tool** with a soft brush. This tool works by looking at pixels surrounding your selection and using these to calculate new pixels to 'heal' those inside. To use, either click once over the desired area or, for larger areas, click, drag and release.



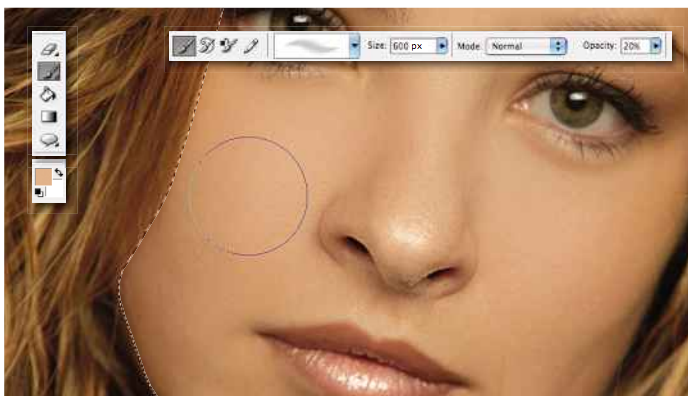
**2 Smooth the skin** Next, it's time to prepare the face for skin 'smoothing', which is a standard technique used throughout the fashion and glamour industry to retouch images. To isolate the face so as not to affect the surrounding areas, use the **Polygonal Lasso Tool** to make a rough selection, then **Select>Feather** this selection by around 10px.



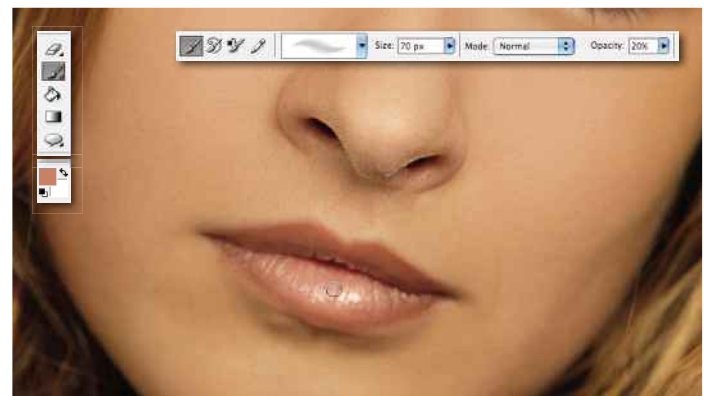
**3 Pick skin tone** To start 'smoothing' any pores, wrinkles and scars, select the **Eyedropper Tool** and use it to select a colour by clicking on an area of skin. The chosen colour shows up as the active colour in the swatch at the bottom of the toolbar. For 'smoothing', always choose a close tonal match to the area you'll be working on.



**4 Reduce the bags** The art of 'smoothing' quickly is to switch between the Eyedropper and the Brush Tool. Once both have been used, switch between them by pressing the **Alt** key. Starting with the dark circles under the eyes: choose a medium brush size and set the **Opacity** to 20% to allow the original skin texture to show through the paint.



**5 Build up the effect** Setting the Opacity low also allows for a controlled and gradual build-up of coverage, so you can see clearly when the skin loses texture and become porcelain-looking. Brush over the face, switching to the **Eyedropper Tool** to update tonal selections, then back to the **Brush Tool**, adjusting the size to accommodate the area.



**6 Revise any errors** **Edit>Undo (Ctrl+Z)** and **Window>Undo History** are essential for controlling the 'smoothing' process, as there is a large margin for error due to the amount of manual brush strokes involved. To soften burned-out highlights, such as the tip of the nose or the bottom lip, use exactly the same method with the Eyedropper and Brush Tools.

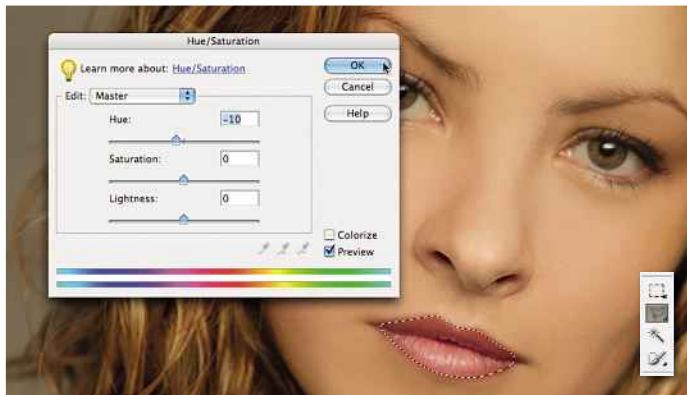
Edited

**Final image**

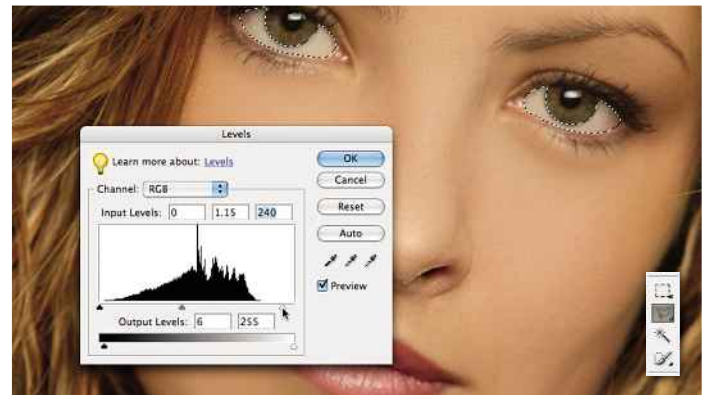
A healthy complexion, bright eyes and full sumptuous lips: you can hardly tell our model had been up partying until 3am the night before!

**✓ Get dolled up!**

Once you've mastered skin 'smoothing', apply the same technique to create colourful eyeshadow or cheek blusher, this time using the **Color Picker** rather than the **Eyedropper** as reference



**7 Add colour to the lips** Next, add a hint of colour to the lips by selecting them with the **Polygonal Lasso Tool**, then add a small feather to the selection with **Select>Feather** to avoid any harsh colour effects. Use **Enhance>Adjust Colour>Adjust Hue/Saturation** to raise the hue slightly, but not too much, to create a subtle 'lipstick' effect.



**8 Edit the eyes** Now it's time to work on the eyes by first making a rough selection of the eye whites with the **Polygonal Lasso Tool** and then feather the selection as previously shown. Go to **Enhance>Adjust Lighting>Levels** and move the mid-tone (grey) and highlights (white) sliders of the **Input Levels** until you're happy with the results.



**9 Adjust the eye colour** Turning to the inner eye, we make a selection with the **Polygonal Lasso Tool**, this time of the pupil area and, as before, feather the selection. Go to **Filter>Sharpen>Unsharp Mask** and set the **Amount** to 100% and **Radius** to 5 pixels to sharpen, then apply a **Hue/Saturation** adjustment, as in step seven, to add a subtle hint of colour.



**10 Add blur** With all the facial processes complete, soften the outlining areas of the image by making a rough selection with the **Polygonal Lasso Tool** around the face. Then go to **Select>Inverse**, apply a large **Feather** (150 pixels), and then finally apply a small amount of **Filter>Gaussian Blur**.

Original print




## Restore old photos to their former glory

PEOPLE OFTEN SAY that digital photos don't provide the same lasting memory as traditional prints, but in reality, the opposite is true. Your digital files, if properly backed up, will look as good in 20 or 30 years as the day they were taken, while your prints will have faded, turned yellow and may be creased. Thanks to the digital imaging process, though, and with a little patience and creativity, we can now rescue these images, repairing the damage that years of oxidation and careless storage have caused.

Firstly, you need to get the print onto your computer, so you'll need a flatbed scanner. Scan it at a higher resolution than you need to get maximum detail; we'd suggest around 600dpi for an A4 print. This will create a huge file, but you can then resize it. You can use most editing software, although any version of Photoshop or Photoshop Elements is ideal. Unless you are a highly talented illustrator, you're never going to make the photo look modern, so leave in the border or rough edge, if it has one. Work in layers when possible and keep checking back against the original picture as it's very easy to go over the top and ruin your restoration. If your photo is in quite a state, like this one, the process can take a long time, so do it in stages, returning to it at different times. Where detail is lost completely you may need to be slightly inventive, darkening down an area to black, or brightening it up to white. It's very rewarding work and a very handy technique to learn. Be warned, though: doing too good a job could land you with requests from friends and family to restore their old pictures, too!

### TOP TOOL!

#### Healing Brush



This is an extremely powerful editing tool that is ideal for portraits. It works by blending the pixels from a selected sample point to the chosen area and will match the colour and luminosity values to make the join look seamless. It's very handy for removing spots and blemishes, or even dust particles, and can work with scratches, too.



**1 Use the Healing Brush Tool** Make a copy of the image by creating a duplicate layer (**Ctrl+J**). Then look for the most obvious problems, such as scratches and stains. The Healing Brush Tool is perfect for fixing these as it will blend in the area you're healing. Select a plain area as your source by holding down the **Alt** key and clicking and then carefully brush over the area you want to heal.

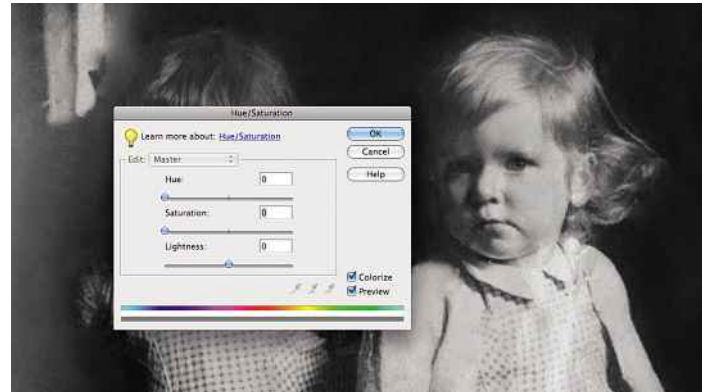


**2 Use the Clone Stamp Tool** For the more difficult areas, such as patterns or edges, switch to the **Clone Stamp Tool**. This will allow you to replace areas by copying exact sections of the image, without the blur that caused by the Healing Brush Tool. Select your source point, as you did in step one (by **Alt**-clicking), and use a small brush. For realistic results, you'll need to keep changing the source point.

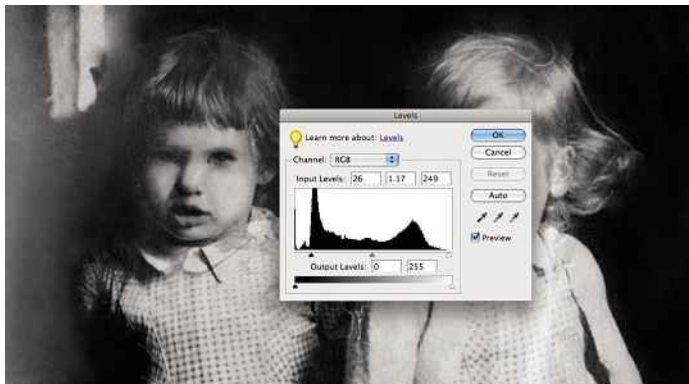
Final restoration



**3 Use the Brush Tool** Once you're finished with those two tools, you can use the Brush Tool to smooth over areas with unwanted paper texture. When using this tool, hold **Alt** and click to select the brush colour from the image. Pick the colour in the place you are painting, select a large brush set to a low opacity (around 20%), so as not to over-paint a section.



**4 Desaturate the image** To remove any unnatural colouration that has resulted from the ageing process, hit **Ctrl+U** to bring up the Hue/Saturation palette and drag the **Saturation** slider back to zero, converting the image to black & white. If your software allows, use an adjustment layer by going to **Layer>New Adjustment Layer>Hue/Saturation**.



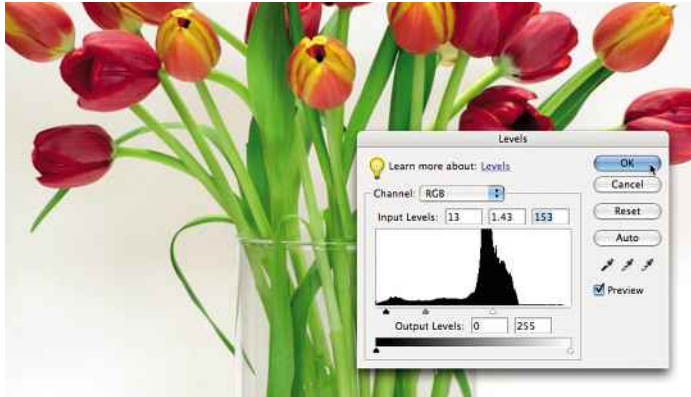
**5 Boost the contrast** The chances are that your picture will look a little 'flat' by modern standards, so hit **Ctrl+L** on the keyboard, to bring up the Levels palette. Then drag the far left marker (triangle under the histogram) slightly to the right to boost the blacks; drag the far right marker slightly to the left to boost the whites, and move the centre slider slightly to adjust the contrast.



**6 Tone your image** This final step isn't essential, but as you're not trying to hide the fact that the picture is old, it can help add a little authenticity. Open the Photo Filter menu by going to **Filter>Adjustments>Photo Filter**, and select Warming Filter (81), then adjust the **Density** slider below to give a slight sepia tone to your image. Now print out your photo, frame it and give it to someone special.

# Create a studio-quality still-life image

YOU COULD BE FORGIVEN for thinking that professional-looking still-life pictures require an extensive studio lighting kit and background equipment, but if you have Adobe Photoshop or Elements at your fingertips, you'll be fine with your dining table and a white wall. We've shot a vase of flowers using this kind of set-up, lit with light from a nearby window, and taken the result on to a computer for some post-shoot editing to give it an edge. As well as brightening up the colours of the tulips and cleaning up the background, we've added a reflection that makes the vase look as if it's sitting on a glass surface. We've also introduced some careful mood lighting to draw the eye into the middle of the frame. Each of these effects sit in their own layer, and all of the layers build up to give the final result. Don't be put off if you haven't used layers before because this is an ideal time to give it a go. It's not as complicated as you might think as we show you here in Elements.



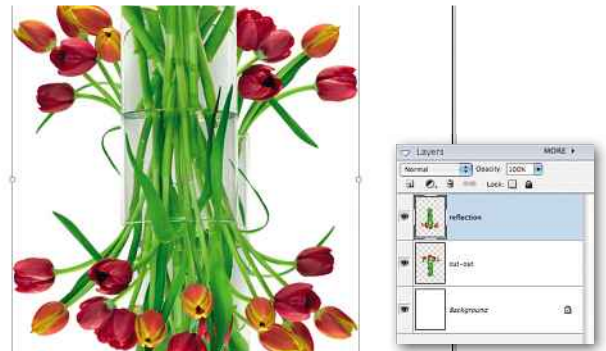
**1 Clean up the image** This still-life is dull and uninspiring, so first we need to liven up the tulips' colour and whiten the background to aid in making a clean selection for cutting out. You can do this in one action by using **Enhance>Adjust Lighting>Levels**, moving the white slider in the **Input Levels** field to the left, which brightens up all areas.



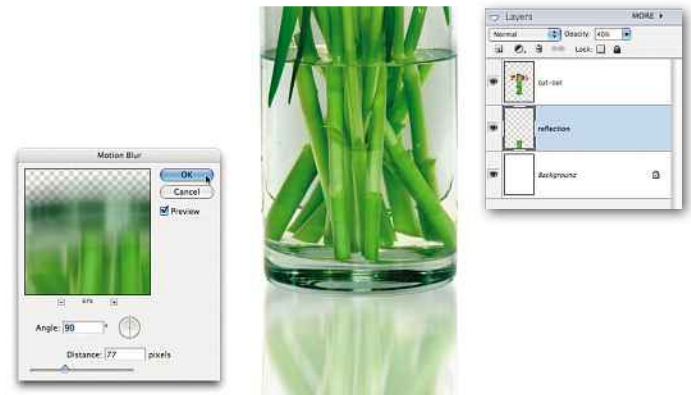
**2 Select the subject** Now make a selection around the tulips and the vase to isolate them from the Background Layer. To do this, use the **Magic Wand Tool** and click the white background. Tidy any stray areas up with the **Polygonal Lasso Tool**, holding **Shift** to add to and **Alt** to remove from the selection, then go to **Select>Invert**.



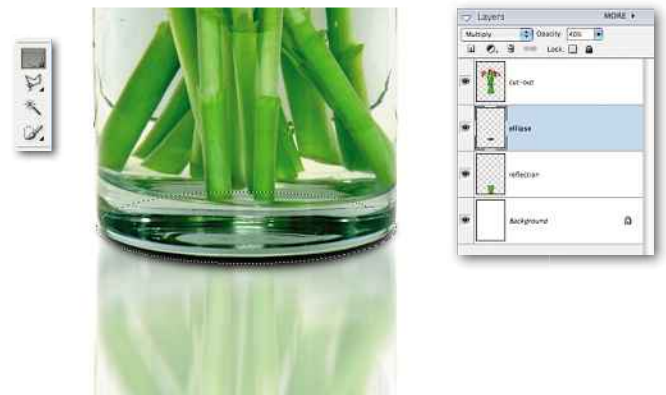
**3 Cut out the subject** Go to **Select>Feather** and enter 1 pixel to soften the selection's edge, then go to **Edit>Cut** followed by **Edit>Paste** to place the tulips in a new layer above the background, which we name 'cut-out'. Tidy the Background Layer by clicking it in the Layers palette, then go to **Select>All** and **Edit>Delete**, which effectively deletes all content.



**4 Create a reflection** To add dimension, try creating a reflection. Ensuring the 'cut-out' layer is active, select **Layer>Duplicate Layer** and name the new layer 'reflection'. Then go to **Image>Transform>Rotate>Flip Horizontal**, then repeat, this time choosing the **Flip Vertical** option to create a mirror image of the tulips and vase.



**5 Reposition layers** To move the 'reflection' layer to the base of the vase, hold **Option** and drag. Now in the Layers palette, drag the 'reflection' layer so it sits underneath 'cut-out'. Reduce the **Opacity**, situated at the top of the Layers palette, to about 40%, then use **Filter>Blur>Motion Blur** at 90° to distort the reflection slightly.



**6 Add a shadow** A subtle shadow will make the vase seem as though it's sitting on a solid surface. Create another layer, (**Layer>New Layer**), and using the **Elliptical Marquee Tool**, draw a selection at the base of the vase. Now set the **Feather** to 10 pixels to create a soft edge, then go to **Edit>Fill**, choose black and finish by setting the **Opacity** to 25%.



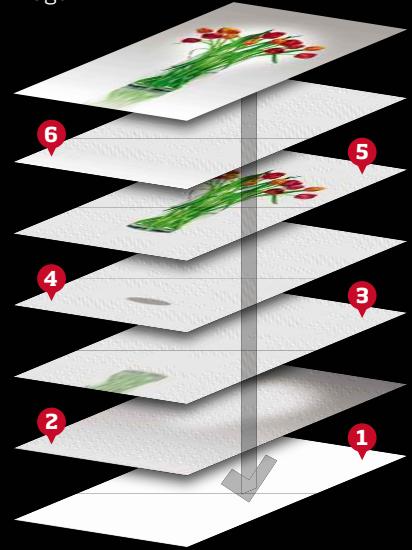
Edited



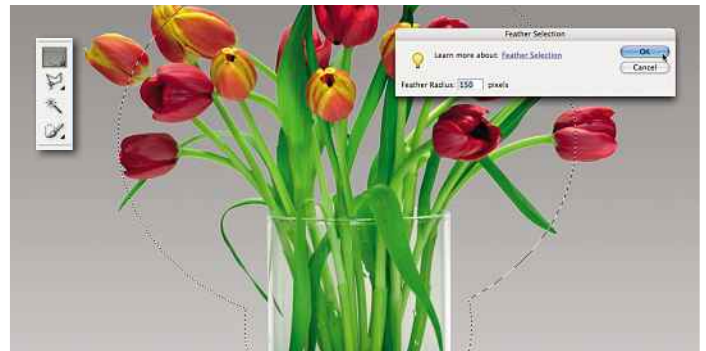
## The importance of layers

When producing a digital workflow of this kind, layers have huge importance. When creating multiple cut-outs, replacing backgrounds and foregrounds, or adding fills and gradients, layers become crucial. They add a flexibility that allows you to experiment and make mistakes with the knowledge that the integrity of the original or other layers are not affected. The added benefit of Fill & Adjustment Layers is that they can be altered at any stage. Here's an example of how layers interact in this image.

- 6) FADE**  
Fill Layer>Gradient within a marquee. Set to 100% opacity
- 5) CUT-OUT**  
Original shot, colour adjusted & cut out from background
- 4) ELLIPSE**  
Feathered Ellipse with black fill. Set to 25% opacity
- 3) REFLECTION**  
Duplicate layer of 'cut-out'. Altered & set to 40% opacity
- 2) SHADOW**  
Fill Layer>Gradient with area deleted. Set to 45% opacity
- 1) BACKGROUND**  
The locked default layer when creating a new document



**7 Add a gradient** The background now needs some depth and for this we need to use **Layer>New Fill Layer>Gradient**. Simply tick **Reverse** to flip the gradient so it runs from top to bottom and click **OK**, creating a new layer with a gradient fill that we call 'shadow'. Move the layer in the Layers palette so it sits just above the Background Layer.



**8 Create a spotlight effect** Now change the 'shadow' layer's **Opacity** to 45% so the gradient is less harsh. It's now ready for a false spotlight to be added, using the **Elliptical Marquee Tool**. Make a large selection around the tulips, then holding **Shift**, add another selection at the neck of the vase. Next, you need to add a large **Feather** amount of 150 pixels.



**9 Reveal the spotlight** It's time to delete the selected area of the gradient and reveal the white of the Background Layer to create a spotlight effect. Go to **Edit>Delete** and note how this action affects the gradient and the layer by viewing the preview in the Layers palette (inset), the black being the affected area.



**10 Graduate the reflection** Use the **Rectangular Marquee Tool** to select the base of the vase. Then go to **New Fill Layer>Gradient** to access the Gradient swatches. Selecting the bottom sliders on either side, change the colour from black to white. The result is a gradient that goes from white to transparent within the marquee area.

# Replace the sky

A GREAT THING about digital photography is that you can take parts of one picture and insert them into another. For the landscape photographer, this is a great way of ensuring that both sky and foreground are correctly exposed. Shoot one frame for the sky and another for the foreground, then splice them together in Elements. It's simple to do; here's a method that only takes five minutes to master.



**1 Create two layers** Start by opening the image with the foreground you require. Select the entire image using **Select>All** then **Edit>Copy**, which will copy the image to the clipboard. Next, open the image with the sky you want to use. Use **Edit>Paste** and the foreground image will be placed on a layer above, which you should label 'foreground' for ease.



**2 Select the sky** Firstly, you want to work on the foreground layer, which is active by default, so you can remove the overexposed sky. Using either the **Lasso** or **Magic Wand Tool**, select the sky, ensuring all areas required to be removed are clearly selected. You can add to your initial selection by holding **Shift**, noting the + symbol that appears over the icon.



**3 Soften the selection** To refine the selection further, you can expand the selection accurately using **Select>Modify>Expand**, entering a small amount as required – in this case 1 pixel was used. Next you need to feather the selection to avoid harsh edges when you come to delete the selection. Go to **Select>Feather** and enter 1 or 2 pixels.



**4 Delete the sky** With our selection perfected, it's time to remove the unwanted bleached sky. Go to **Edit>Delete**, noting that the sky on the layer below becomes visible. Refer to the Layers palette to see how the layers interact. To proceed, you need to ensure the sky marquee selection is removed – use **Select>Deselect** to achieve this.

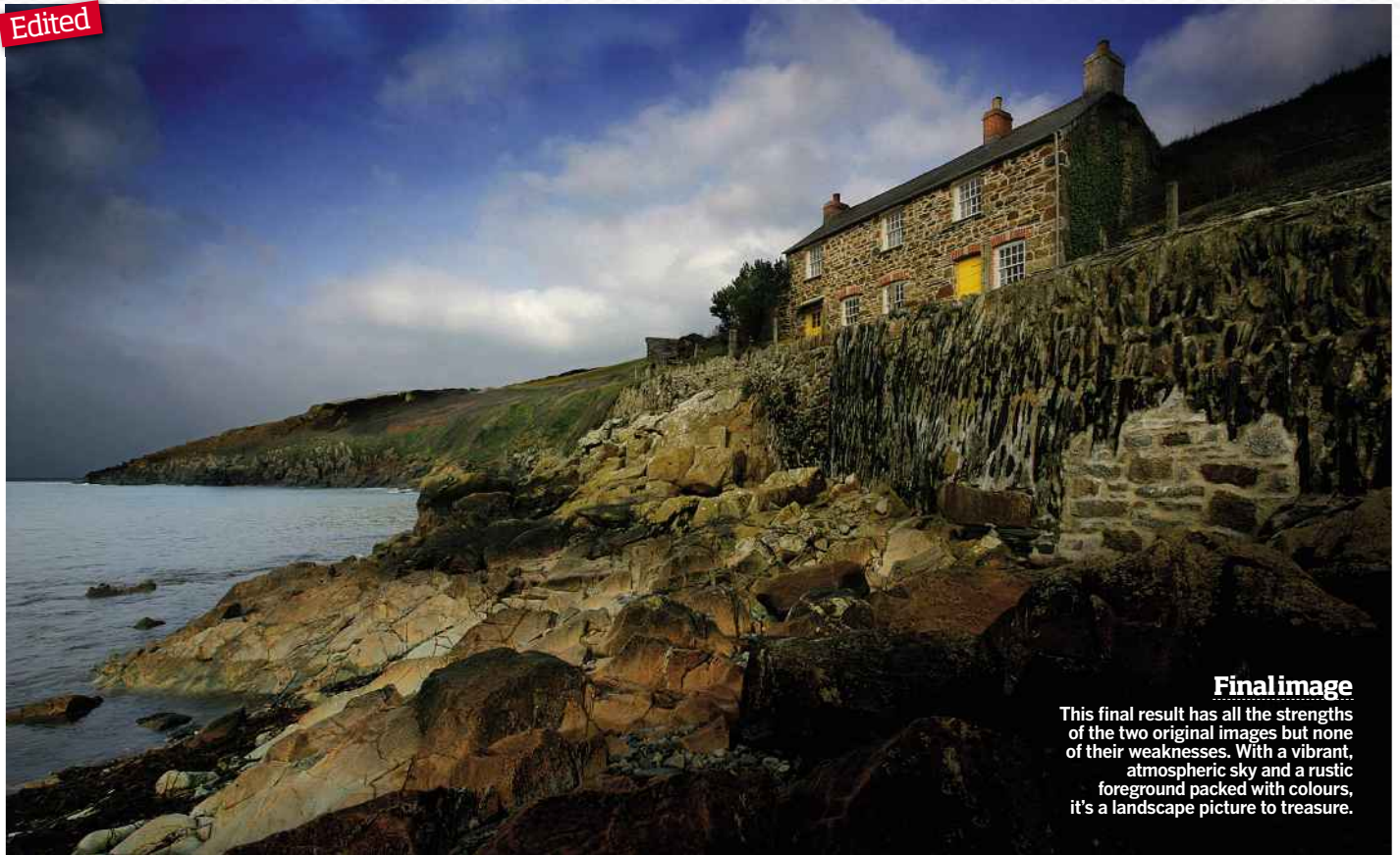


**5 Boost contrast** To work with the sky, ensure the Background Layer is selected in the Layers palette. The sky should be greatly improved, but can be improved further. Go to **Enhance>Adjust Lighting>Brightness/Contrast**, adding contrast (+) and removing a little brightness (-) to add a bit of depth to the sky and clouds.



**6 Add a gradient** You can also graduate the sky to introduce some mood. Using the **Marquee Tool** to select the top half of the sky, go to **Select>Feather**. This effect needs to be very gradual so enter a large pixel amount: for this image, 150 pixel has been used. As before, in **Brightness/Contrast**, reduce brightness and increase contrast.

Edited



### Final image

This final result has all the strengths of the two original images but none of their weaknesses. With a vibrant, atmospheric sky and a rustic foreground packed with colours, it's a landscape picture to treasure.



**7 Target the foreground** It's time to start improving the foreground layer in a few areas, so ensure it's selected in the Layers palette. Start by knocking back the foreground rocks a little. Using the **Lasso Tool**, draw a diagonal selection and add a **Feather** to around 100 pixels for a gradual effect. Go to **Brightness/Contrast**, darken and remove some contrast.



**8 Add some colour** Go to **Enhance > Adjust Color > Hue/Saturation** and move the **Saturation** slider to the right (+) until you're happy with the result: but be careful not to overdo things! If required, you could isolate individual areas of colour, such as the doors, by using a selection tool, or in this case choosing **Yellows** from the drop-down menu, and repeat the step.



**9 Fine tune the edges** With close inspection, you may note a halo appears on the deleted edge of the foreground layer, which can be easily removed. Select the **Eraser Tool** with a soft brush of around 130 pixels, setting the brush **Opacity** to around 30%, and begin to erase the halo. Note the reduced opacity lowers the harshness of removed areas.



**10 Save the image** Once you're happy with the result, it's time to flatten the image so we can perform any task we want to affect the entire image, such as sharpening or colour tweaks. First, it's always a good idea to save a copy with layers intact (.PSD) should you want to access them later, then go to **Layers > Flatten**, saving the final flattened image (JPEG).

# Cross-processing in Photoshop

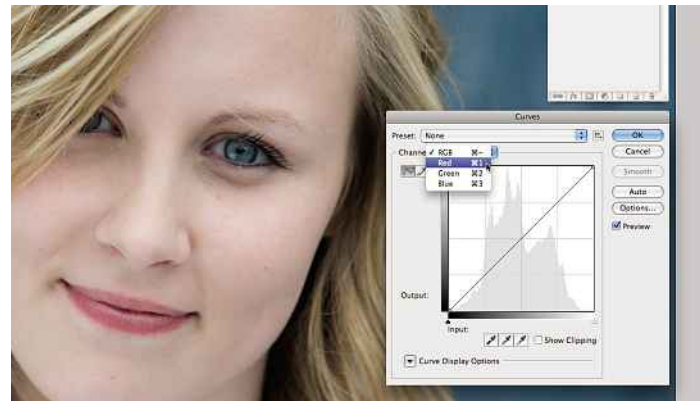
PHOTOSHOP HAS ALLOWED us to create all sorts of wonderful effects, but many photographers who grew up in the film age still hanker for some of the old favourites. The portrait enthusiasts among you may remember cross-processing, which involved developing a film in the 'wrong' chemistry, (i.e. running a slide film through chemicals meant for negatives, or developing print films in slide film chemistry). This would lead to some adventurous and very unusual results, such as particularly punchy colours or pale and tinted skin tones in your image.

This technique was popular with fashion and lifestyle photographers in the '90s and many digital photographers now successfully mimic the effect. Cross-processing was unpredictable and results varied according to film brands and film type – slide films gave very different results to cross-processed print films.

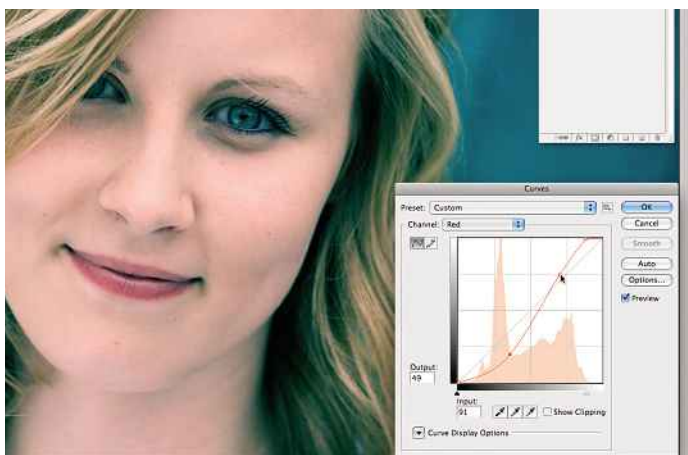
Outlined here is a simple, yet effective, technique for recreating the cross-processed look digitally in Photoshop. It makes use of the Curves adjustment, which means you'll need the full version of Photoshop, or a Curves plug-in for Adobe Elements.



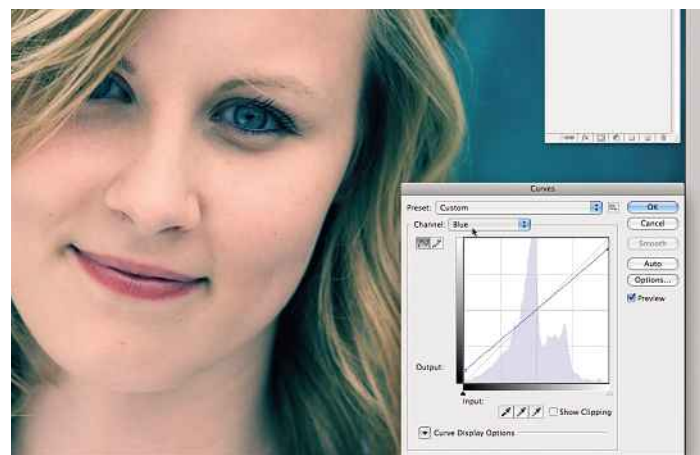
**1 Apply an Adjustment Layer** Choose a portrait image you feel would benefit from more visual impact. Select **Window > Layers** to reveal the Layers palette. Select the half white/half black icon that allows you to create a new Adjustment Layer and choose **Curves** from the drop-down menu. Note a new layer called Curves 1 appears above the Background Layer (original image).



**2 Colour channels** The Curves dialogue box appears, which displays a histogram of the image, with a straight diagonal line running from bottom left (pure black) to top right (pure highlight). Above the histogram is an option tab called Channel that will currently read RGB. You'll use the Channel tab to select the individual channels in the following order: Red, Blue, then Green.



**3 Target Red** Select **Red** and drag the top right of the curve a little to the left. Then click two points around a third of the way from the top and bottom and drag them to create a gentle 'S' curve (ie drag the top point slightly to the left and the bottom point to the right). This gives deeper shadows and brighter highlights in the Red channel – check the **Preview** button to see the effect.



**4 Target Blue** Once you've adjusted the Red channel, click on the **Channel** drop-down menu and select the **Blue** channel. Pull the top right end of the curve downwards to remove some blue from the highlights. When you've done this, pull up the bottom of the curve by no more than half a square to make the shadows in the Blue channel more solid. The line should remain straight.

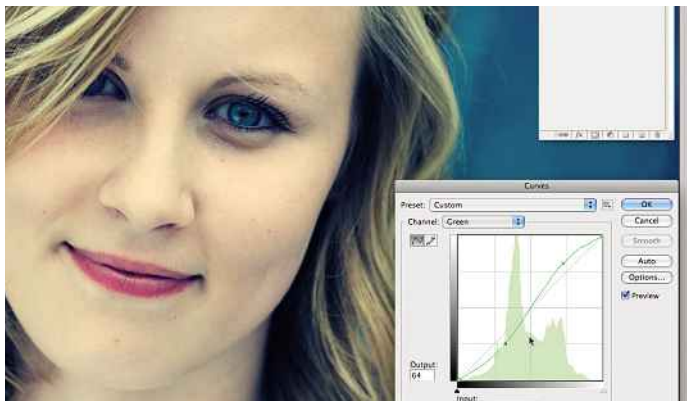
Edited



**Colour experiments**  
 Cross-processing films often gave very unpredictable results, so when you're working on the colour channels, don't be afraid to experiment with your channel tweaks to see what effects occur

**Final image**

Compare this picture to the original and the effect speaks for itself: an image that holds far more visual impact thanks to the extra colour and contrast.



**5 Target Green** You can now click on the **Channel** tab and select **Green**. With the Green channel, you need to select two points as you did with the Red channel, and drag them to create another gentle S curve. However, there is no need to drag the top end of the curve. You can then fine-tune the adjustments to your satisfaction. Once you are happy with the resulting image, click **OK**.



**6 Boost the colour more** You should now have an effect that's reminiscent of cross-processed film, with more solid, bold colours and skin tones taking on a yellow/green tinge. You can also create other Adjustment Layers to further enhance your image – in particular the Hue/Saturation or Brightness/Contrast, which can be selected to complete the effect to your liking.



**Alternative cross-processing technique**

While our main step-by-step mimics the effects of cross-processing print film in slide chemistry, many film photographers favoured experimenting with processing slide film in print (C-41) chemistry. This produced extremely high contrast images, with near-bleached white skin tones, bright red lips and very strong colours. It's a relatively easy effect to mimic by making adjustments to the Hue/Saturation and Brightness/Contrast controls in Photoshop.

1) Open the image and select **Window>Layers** to reveal the **Hue/Saturation** adjustment layer from the drop-down menu at the bottom of the Layers palette. Boost the saturation and adjust the hue to your liking (but make sure that you don't overdo the effect!).



2) Now select a **Brightness/Contrast** adjustment layer and increase the contrast (and brightness if you so wish). You'll find that you start to lose detail in the highlights and shadows and the colours become far more punchy. Again, don't overdo it.



# Compositeshots

YOU'VE SPENT the day taking pictures only to get home and find that no single image from the session stands out. Well, there's no need to panic! More often than not, there will be attributes from various images that, if combined, would solve your problem. In a portrait, for instance, you might have one shot where your subject has just the right body position and another where their expression is absolutely perfect. Why not combine the two?



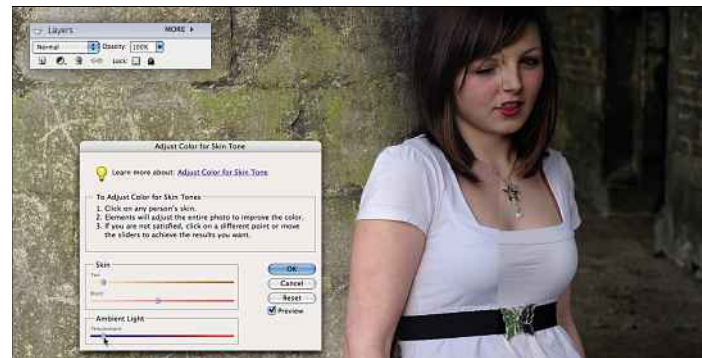
**1 Select an area to replace** Start by opening your images in Adobe Elements. Using a selection tool, select an area you want to add to the main image. Here we used the **Rectangular Marquee Tool** to select the shoulder from the right 'body' image that doesn't feature the coat. Then go to **Edit>Copy** to add your selection to the clipboard.



**2 Add the new element** Close the image and select the background shot, then click **Edit>Paste** to place the section from the clipboard into a new layer on top of this image. Now change the layer's Blend Mode to **Difference** in the Layers palette (inset), creating a temporary effect that will aid in aligning the two layers accurately.



**3 Align the selection** Zoom out a bit using the magnification field at the bottom left corner of the workspace (inset) to get full access to the scaling widgets. Click on **Image>Transform>Free Transform**. Now use the corner widgets to align the layers, holding **Shift** to maintain the proportions, and double-clicking to apply the changes.



**4 Adapt the colour** Next, change the layer Blend Mode back to **Normal** (inset), as you now need to match the colour of the layers. For this, use **Enhance>Adjust Color>Adjust Color for Skin Tone**. Click the Eyedropper on the model's skin and adjust the three sliders that appear on-screen to get the skin tones in both layers to match as closely as possible. Then click **OK**.



**5 Erase unnecessary elements** With the layers aligned and matched, erase areas of the top layer that you don't want in the final image and that don't merge. Use the **Erase Tool** set to a medium brush, to delete in this case the face. Alterations to alignment can still be made and you can use **Edit>Undo** (**Ctrl+Z**) or the Undo History panel to go back in your workflow if required.



**6 Change the face** Now open the file that has the best facial expression and, using the **Elliptical Marquee Tool**, make an oval selection around the head. Select **Edit>Copy**, then **Edit>Paste** this selection onto the background file, creating a new layer. Next, repeat the actions from steps two to four to match the new head with the scale and tone of the background.

Edited



**Final image**

Although it's always best to set out to achieve the results in-camera, this technique shows that if you take enough pictures, you can always salvage something from a session that hasn't gone as well as planned.



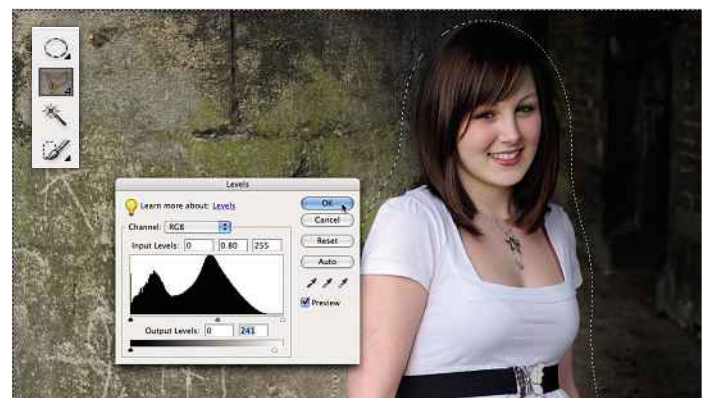
**7 Refine the face** Now repeat the process in step five. Selecting the **Erase Tool** (this time with a smaller brush), and setting the **Opacity** to 85% for greater control, begin to gradually erase from the outside of the hairline until the layers begin to merge convincingly. Once again, use **Edit>Undo (Ctrl+Z)** to go back a stage or two if you think it's necessary.



**8 Look for details** Take a close look at your composite to make sure it looks realistic and get rid of any errors. In this image, there's a wisp of hair across her face. Using the **Clone Tool** set to a small brush and **Opacity** at 65% to allow a gradual build-up, we removed the hair by holding the **Alt** key to select the source points from the face, lips and teeth.



**9 Save the image** Before moving on, save a copy of your work as a Photoshop file (.PSD) to preserve all layer work. Then go to **Layer>Flatten Image** to allow for some overall alterations. Now go to **Noise>Add Noise** to help reduce the visibility of any cloning. We suggest never going beyond 3 pixels and always ensure you have **Monochromatic** ticked.



**10 Final adjustments** Use the **Polygonal Lasso Tool** to select your subject and set a **Feather** to 250 pixels for a gradual effect. Then go to **Enhance>Adjust Lighting>Levels**, using the sliders to boost the model, and click **OK**. Finally, flip the selection with **Select>Inverse** to select the background and use **Levels** again to darken and reduce contrast. Save the file.

# How to create a digital panoramic

THE THEORY is simple enough: shoot a load of overlapping pictures, then join them together on your computer afterwards. In the past this would have needed specialist software costing quite a few quid, though nowadays Photoshop and Elements can do this themselves, with great results.

Shooting the individual frames that you'll be splicing together is something that's important to get right too. You'll need a tripod (if you are shooting a distant landscape this doesn't have to be a specialist panoramic model), and a spirit level will help to get things straight. Set an average exposure that is good for the whole scene and lock this in using manual exposure mode, so that the brightness between frames doesn't change unnaturally.

When you're back at base, it's then a case of taking those individual shots into Photoshop and using the Photomerge command to kick off the merging step. It's an intuitive process that will produce an image that you can fine tune further using Photoshop's normal editing tools. Let's see how it's done.



**1 Setting up** Mount your camera on a tripod in vertical format and make sure the tripod base is level, so that when you rotate the camera between shots it remains level. Do a quick practice scan across the scene to decide where your panorama will begin and end.



**2 Use manual mode** Take a test shot from an average part of the scene – not the lightest or the darkest – check the image and histogram, and if all looks OK, set that exposure with your camera in manual mode, so you use exactly the same exposure for each frame.



**3 Set the starting point** Swing the camera to the far left of the view you want to capture, focus manually and take a shot of your left hand with your fingers pointing to the right. This denotes where the sequence begins so you don't get confused later on.



**4 Get the shots** Take the first shot of the sequence, move the camera slightly to the right and make your second exposure. Repeat this until you reach the other end of the scene, making sure you overlap each image by 30-40% to enable easy stitching later.



**5 Take the closing shot** Take a shot of your right hand with your fingers pointing to the left to denote the end of the sequence. When you download the files to your computer you'll know that all the images between the two hand shots are in the same sequence.





**Final image**

The result is a stunning panorama created from eight individual images, stitched in Photoshop CS3. The finished 16-bit, 280MB TIFF file is good for prints up to 90cm long, at 300dpi, and that's without any interpolation!

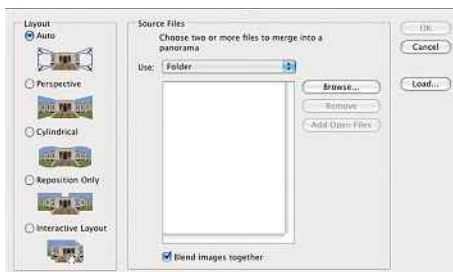
### Which Photoshop?

**PHOTOSHOP CS4/CS5**  
**£600 / PC & Mac**

This may seem rather an expensive option, purely to do photo stitching – even at the cheaper upgrade price – but the Photomerge tool in CS4 and CS5 is unbelievably good, even with the most complex of stitches. Obviously, you will get much more out of it than just stitching, but if you are starting to take your photography seriously, you will not be disappointed at the potential of either version. Alternatively, you may be able to pick up a cheaper version of CS3 that still has an impressive stitcher, too!

**ELEMENTS 9**  
**£75 / PC & Mac**

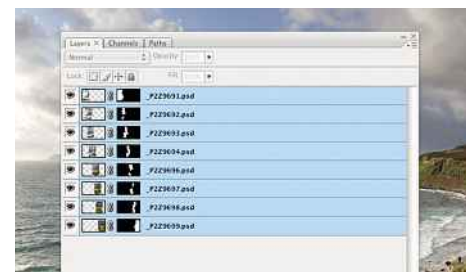
If your budget won't stretch to CS4, don't worry. The latest versions of Elements are also equipped with all the tools you need for an impressive and hassle-free stitch. Elements 6 onwards include the Photomerge command (found under *File>New>Photomerge Panorama*) and appear to do an equally good job at blending and adjusting images for a panorama – at least to the same standard as CS3. However, it doesn't have some of the improved functionality of CS4/5's Photomerge.



**6 Batch process the files** Download the images to a computer. If you shoot in Raw, batch process the Raw files from the sequences so they all receive the same adjustments and corrections, otherwise inconsistencies will creep in. Place those images in a folder.



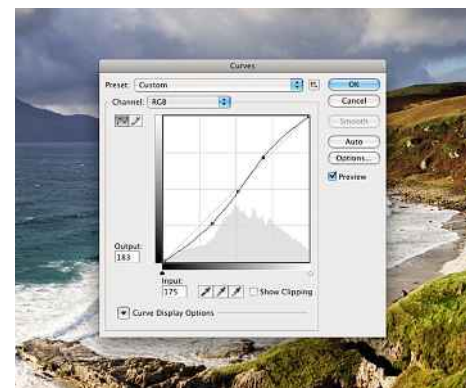
**7 Access Photomerge** Open Photoshop and go to *File>Automate>Photomerge*. Select the layout style you desire. **Auto** usually works fine. You may like to also try **Cylindrical** and **Perspective**. Click on the **Use** tab, select **Folders** then click on **Browse**.



**8 Merge the files** Click on the folder containing the images you want to stitch and they will appear in the Photomerge dialogue box. Click **OK** and let Photomerge perform its magic. This can take a few minutes, so put the kettle on and make yourself a cuppa!



**9 Crop to complete** Once your stitch is complete, you may need to use the **Crop Tool** to tidy up the edges. This is common if you don't use a Nodal Point bracket to eliminate parallax error (see panel), but it's nothing to worry about. Only a few more tweaks and you're finished!



**10 Merge the files** After saving the stitch and flattening the layers (*Layer>Flatten Image*), make any further adjustments until you're happy with the overall look of the image and remove any distracting elements with the **Clone Stamp Tool**. Job done!

# Producing a photosphere

ONCE YOU'VE SHOT your component frames the same way you would a panorama, only 360°, it's time to get cracking on the post-production. This is broken down into two stages: making a rectangular panoramic picture, then wrapping this around on itself to form the finished sphere.

Producing the long, thin panoramic picture from the component images can be done in specialist software or in Photoshop, although it's only CS4's new and improved Photomerge engine that can handle 360° images. Rendering such a picture may take a while because of the extra work required to process a complete circle. You'll get there eventually – you might just have to go and make a cup of tea while you wait for your PC to crunch the files.

With the basic panorama complete, the next job is to fold this around on itself to create a sphere. You can do this with Photoshop's Polar Coordinates feature (**Filters>Distort>Polar Coordinates**), which wraps the image upwards to give the impression that you are looking upwards towards the sky. To get the impression of looking down, simply rotate the image by 180° before applying the Polar Coordinates filter.



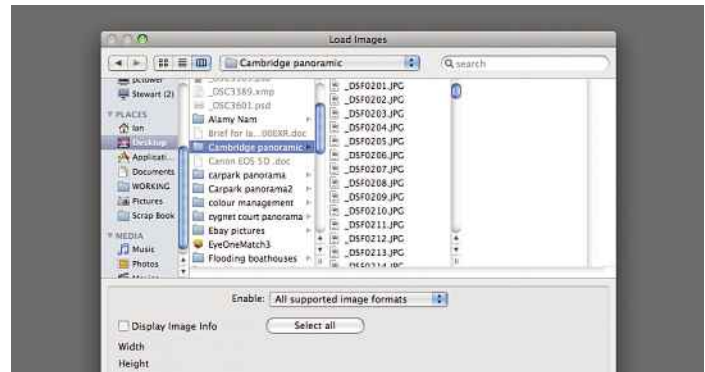
**2 Specify your optic** Stitcher works in different ways, depending on the lens used and how much distortion is present. We've used a full-frame fish-eye lens, which we specify in the Stitcher's **Properties** dialogue. Circular fish-eye lenses and rectilinear optics are also supported.



**4 Eliminate details** When the initial stitching process is complete, use Stitcher's stenciling features to exclude your feet if they've been caught on camera. Using the **Polygon Tool**, draw around areas that you want ignored. The application uses detail from other shots instead.



**6 Control output** When rendering the final image at 100%, Stitcher can take up to an hour to deliver the goods, even on a fast computer. You'll want to output as a spherical projection in this case, which will distort wildly any straight lines in the pictures.



**1 Import to stitching software** After you have got yourself organised and your images are safely transferred to your PC or Mac, it's time to import them to your stitching software. We're using Autodesk's Stitcher software ([www.autodesk.co.uk](http://www.autodesk.co.uk)).



**3 Use Autostitch** When it comes to fish-eye images, Stitcher only gives you one option: automatic stitching, and this works very well almost all of the time. Because of the extent of the distortion, the process is pretty involved and can take a few minutes to complete.



**5 Check the result** Rendering the final panorama can be time-consuming, so use the **Preview** function to check that the final result is what you're expecting; that all the frames have joined up OK, and that there is no ghosting or double-overlap.



**7 Open in Photoshop** Once you've got the final result, take this into Photoshop and squash up the image into a square, using the **Free Transform** command. Also rotate it through 180° so the foreground is in the centre of the sphere for a bird's-eye view effect.

**✓ Perspective stretching**  
 Make objects at the edge of the sphere more prominent, by selecting the upper part of the panorama and stretching it with Free Transform before rotating and applying the Polar Coordinates filter.

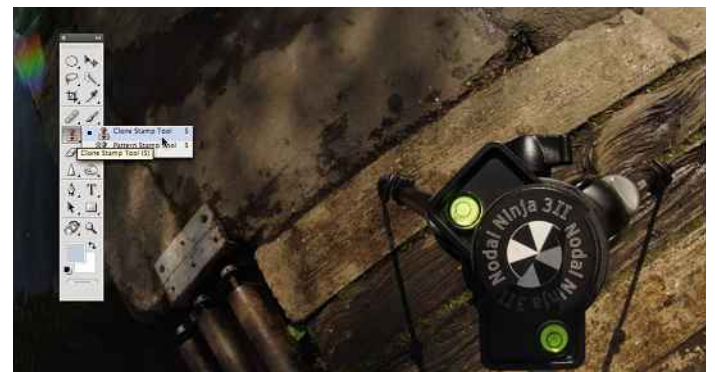


### The Mill Pond, Cambridge

Look for interesting detail around you, such as this junction between two rivers and the rollers that let boats move between them.

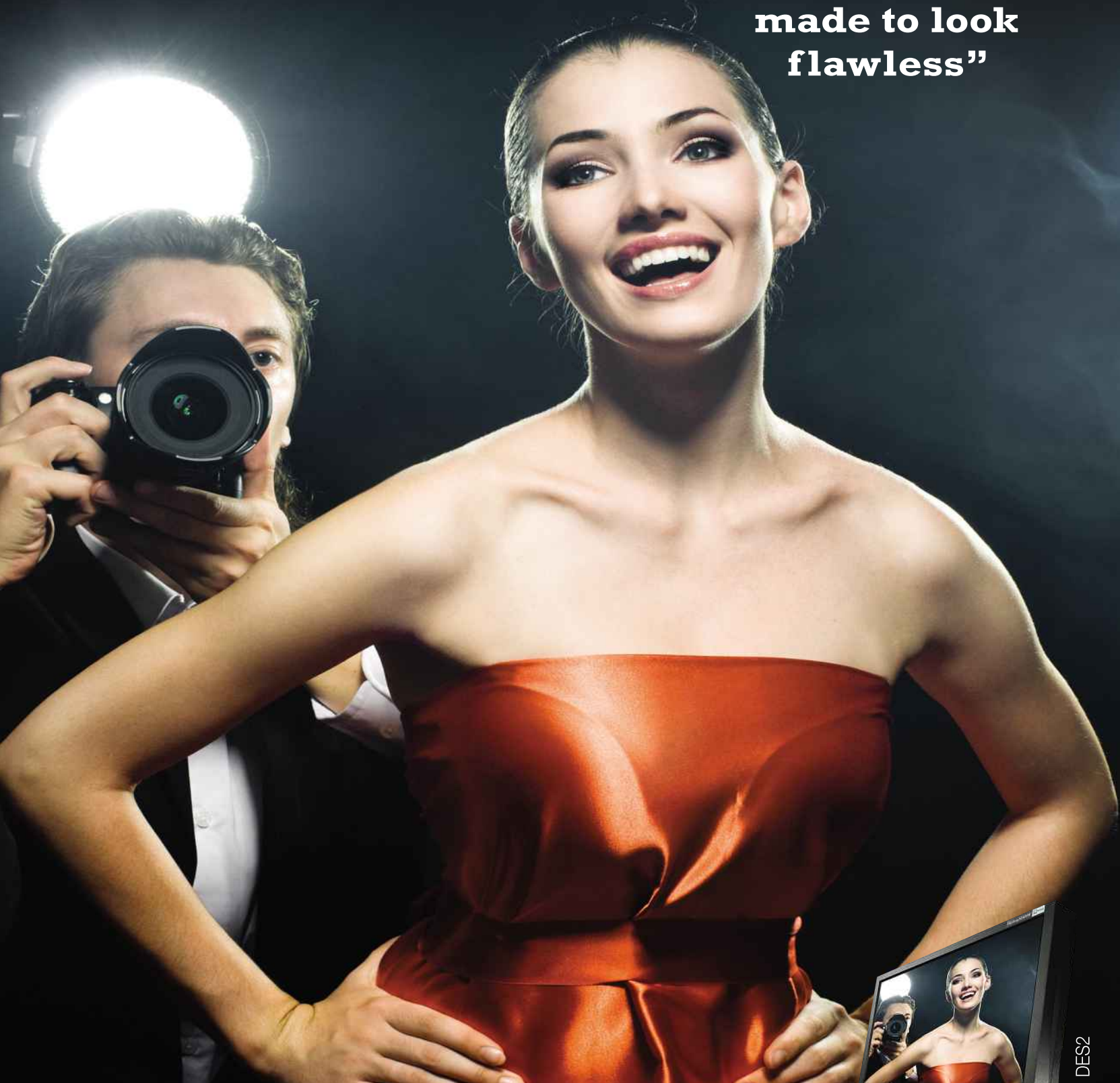


**8 Apply a filter** Create the photosphere effect using the **Polar Coordinates** filter, which you'll find at **Filters>Distort>Polar Coordinates**. Ensure the **Rectangular to Circular** option is checked. The preview panel will give you an idea of what to expect when you click **OK**.



**9 Final retouches** You'll need to use the usual Photoshop tools to fix any glitches – the tripod head and legs need removing with the **Clone Stamp Tool**, for instance. This is why standing on even-textured ground helps; it gives you more pixels to sample from while cloning.

**“I know I will be  
made to look  
flawless”**



DES2



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Step-by-step tutorials

# DIGITAL FILTERS

Get a grounding in Photoshop's Filters menu with our top pick tutorials and advice



# Blur filters

What are all these filters for and can they really be used to improve your pictures? The answer is yes they can: here, we show you how and reveal some of the hidden secrets set to change the way you edit

The Blur filters are used to add a degree of softness to photographs. There are 11 different filters to choose from in Photoshop CS4 and CS5, and eight in Elements 9, each offering varying levels of control and effects. The most basic filters are Blur and Blur More – the rest offer some degree of control over style and strength via their individual control panels. Whichever program you use, the filters can be accessed the same way, which is via **Filter>Blur** in the top toolbar, but before you apply any of the filters, you should duplicate the image layer you want to blur (**Layer>Duplicate Layer**) so you're working on a copy rather than irrevocably affecting the original pixels. In CS you can also go one step further by converting the image to a

Smart Filter (see Secrets Unlocked panel) so you can return to edit or delete the filter at any point, without having to delete the actual image layer.

When you apply a filter, blur will be applied to the entire image unless you make a selection first to isolate a part of the photo from changes. Alternatively, you could use a Layer Mask to edit the effect after application (see page 22 for more details on how to use a Layer Mask). Later in this section, we'll show you how to apply and refine the Lens Blur and Motion Blur filters using these techniques, but in the meantime, here are a number of ways that you can use all the other blur filters in Photoshop's arsenal.

## BLUR FILTERS EXPLAINED

### 1) Average

**Good for:** Removing a colour cast. Applying this filter creates a solid colour layer made up of the average colour values in the image. One use for this is to get rid of a colour cast. Duplicate the Background Layer and apply the Average blur filter, then click on **Layer>New Adjustment Layer>Levels**. Select the grey eyedropper from the Levels dialog box and click on the solid colour image to turn it grey, then delete this layer in the Layers palette to correct the image's colour cast.

### 2) Blur & Blur More

**Good for:** Eliminating noise. These two basic filters offer limited control but can eliminate noise where dramatic colour transitions occur, by averaging the pixels next to hard edges and smoothing the transition in the process. Blur More is about four times stronger than Blur. Click on the filter once to apply the effect and repeatedly select the filter to increase the level of blur. However, overuse can cause artifacts and lines to appear in your image. It's best to avoid using these filters and instead use the Smart Blur filter.

### 3) Box Blur (CS4 only)

**Good for:** Special effects. By using an average colour value, the filter creates a vertical and horizontal blur that looks like squares. It's most noticeable in highlights. For greater blurring, use a larger radius.

### 4) Gaussian Blur

**Good for:** Soft focus effects. Use this filter to apply a smooth blur across the image, adjusting the strength of the blur using the **Radius** slider. Use it set to a low radius between 0.1 and 1.5 pixels to give your image an even haze.

### 5) Lens Blur (CS4 only)

**Good for:** Minaturisation. The Lens Blur filter is primarily used to recreate the effect you get from a shallow depth-of-field by keeping the focal point in focus and causing a gradual change in

sharpness throughout the rest of the image. A more creative use is to mimic the minaturisation effect of a tilt & shift lens by using a graduated Layer Mask to block off the area you want to keep in focus. See page 82 for a step-by-step on how to achieve this technique.

### 6) Motion Blur

**Good for:** Adding movement. You can specify the direction of this blur (-360° to +360°) to create an image that makes the subject appear to be in motion. Apply it to the entire image to give the illusion of camera movement or make a selection before applying the filter in order to make the subject look like it's moving.

### 7) Radial Blur

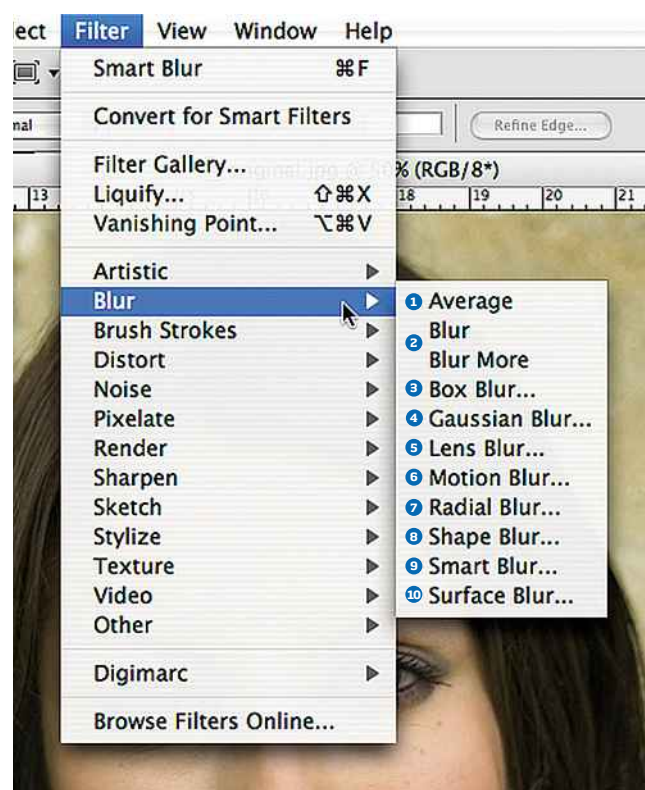
**Good for:** Creating a zoom burst. Simulate the blur from zooming a lens or rotating a camera during an exposure. You can apply a circular blur (**Spin** mode) or radial lines (**Zoom** mode) from a point in your image that you want to keep in focus by dragging the centre point in the dialogue box's Blur Center over where you want to blur. As there's no preview screen, getting the level of blur to suit your image takes a bit of trial and error. Use the **Amount** slider to increase the strength of the blur.

### 8) Shape Blur (CS4 only)

**Good for:** Give your blur shape. Pick a shape from the filter's shape presets in its control panel and use the **Radius** slider to adjust the level and pattern of the blur. You can load different shapes into the filter by clicking on the triangle at the top of the panel and choosing from the list.

### 9) Smart Blur

**Good for:** Controlling noise. This filter recognises edges and applies blur within the lines of those pixels. To control the strength of the effect, use the **Radius** slider (move the slider gradually as you may find that the increments between 0 and 2 pixels drastically affect the level of detail you retain). Then use the



**Threshold** slider to affect the spread of blur. Use the filter in Normal mode to eliminate fine details in the whole image and the Edge Only or Overlay Edge mode to trace edges where there's a colour transition.

### 10) Surface Blur

**Good for:** Smoothing skin tone. Surface Blur preserves edge detail and can be used to remove noise or grain from an image. Use the **Radius** slider to determine the level of blur and the **Threshold** slider to control the spread of the effect to exclude areas from being blurred. Apply it to a portrait in conjunction with a layer mask to smooth out the skin and hide blemishes, while still retaining the texture of the skin and keeping features like the eyes sharp.

**Tooled up!**

**BLUR TOOL**

Located in the CS4 toolbar, the Blur tool is tucked away with the other focus tools, Smudge and Sharpen, and allows you to selectively blur areas of an image. Users have to adjust the size of the brush to match the area they want to adjust and the strength of the effect using the controls in the Options bar: it's good practice to start with a low strength of below 10 and build the effect up. Try this tool for smoothing out skin tone and hiding small blemishes.

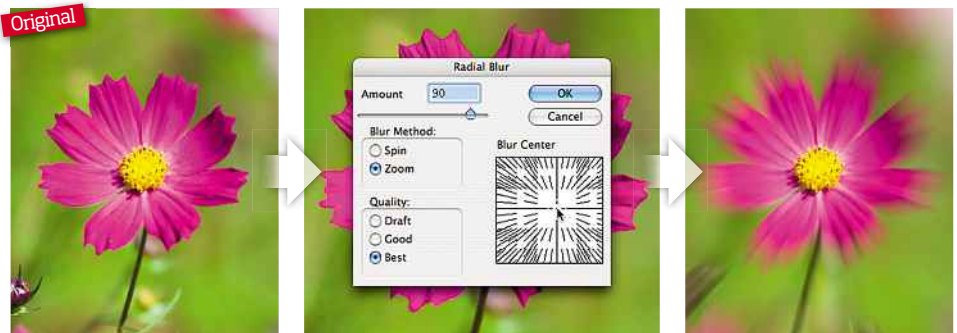


## Three ways to improve your images with Blur filters

Whether it's creative effects or hard-core practical image editing you want, Photoshop's Blur filters have almost every base covered. Here, we offer you three useful and artistic techniques to get you started

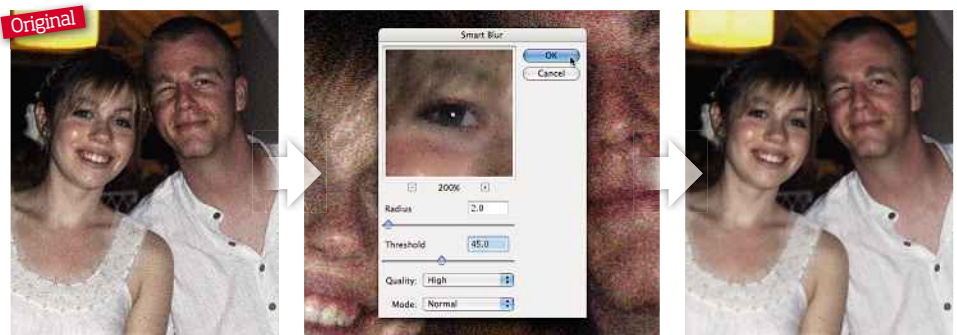
### 1 RADIAL BLUR ZOOM BURST EFFECTS

First, duplicate the Background Layer in order to keep the original image detail intact (**Layer>Duplicate Layer**). Then go to **Filter>Blur>Radial Blur**. Select **Zoom** and set **Quality** to **Best**, then, if required, move the Blur Center. Finally, add a large blur amount and click **OK**. For a pin-sharp focal point, select the **Eraser Tool**, set to a large brush with a soft edge, and click once at the desired focal point to reveal the original detail from the layer beneath.



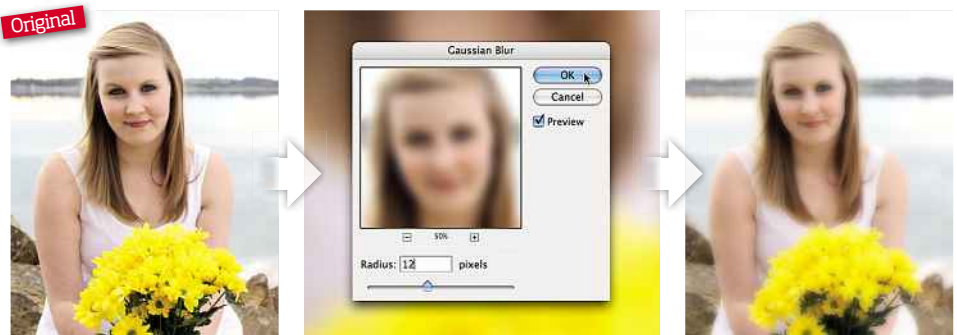
### 2 SMART BLUR REDUCING NOISE

To improve the appearance of noise, simply use **Filter>Blur>Smart Blur**. The knack is to reduce the noise without drastically affecting the quality of your image. In the Smart Blur window, set the **Quality** to **High** and keep the **Radius** setting low, between 1 and 5, depending on the level of noise present on your image. Finally, increase the **Threshold** setting until happy with the noise reduction, using the preview window as your guide.



### 3 GAUSSIAN BLUR SOFT FOCUS EFFECTS

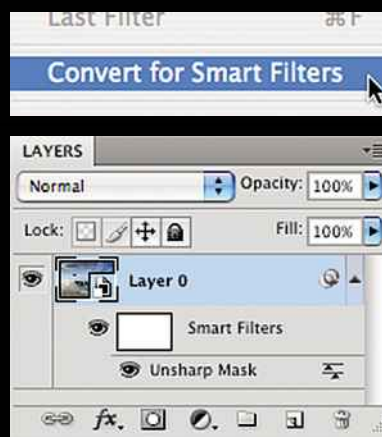
A Gaussian Blur soft focus effect works best when a layer of blur is blended with the image layer. To do this, go to **Layer>Duplicate Layer**, producing a copy of the original image on another layer above. Now go to **Filter>Blur>Gaussian Blur**, and add a blur amount of between 10 and 15 pixels, depending on the image, and click **OK**. Now reduce the **Opacity** of the blurred layer to between 50 and 70 pixels to create a nice soft focus effect.



## Secrets unlocked

### ✓ THE 'SMART' WAY TO FILTER

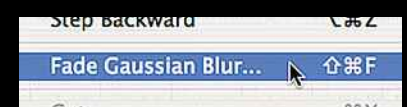
Whenever you use a filter, it's a good idea to convert your image to a Smart Filter first by clicking **Filter>Convert to Smart Filter**. Like an Adjustment Layer, a Smart Filter allows you to make alterations without affecting the original pixels of the image and allows you to revert back to editing the filter later, no matter how far you've gone into the editing process. Once you convert your image layer to a Smart Filter, you can pick your chosen filter, in this case **Filter>Sharpen**, and make your adjustments. When you click **OK** and the dialogue box closes, you'll find your Layers palette has an extra layer called Smart Filters and, below that, the name of the filter you've applied, ie Unsharp Mask. If you ever need to make further adjustments, double-click on the part labelled Unsharp Mask. You can also adjust the opacity of the filter by clicking on the symbol to its right.



## Secrets unlocked

### ✓ THE FADE COMMAND

If you want to modify any adjustment, not just a filter, after you've committed to it, go to **Edit>Fade** and you can adjust the Opacity and Blend Mode. Remember, you can only do it directly after you've applied the filter or adjustment. If you're working with a Smart Filter, which we recommend you do, you can't use this command, but you can adjust the filter afterwards by choosing **Layer>Smart Objects>Rasterize**, or by double-clicking on the Smart Filter to rasterize it, so the filter becomes editable.



# Create shallow depth-of-field

While we do not advocate you substituting photographic technique for Photoshop, there are a few filters that can help save your portraits from the depths of your hard drive, and Lens Blur is one of them. Find out how to replicate a shallow depth-of-field using this very effective filter

IT'S EASY TO SNAP away and forget to change the aperture on your camera, then later find the image would have been greatly improved if you'd only applied a shallow depth-of-field. The Lens Blur filter gives you the tools to replicate the gradual change in sharpness your lens produces if used with a wide aperture (small f/stop). It's probably one of the most useful filters, but also the most complex to use, which is the reason it's the only blur filter that cannot be converted into a Smart Filter.

It helps to have a certain level of understanding about how depth-of-field works to ensure you control the filter correctly to yield realistic results. The mechanics of the filter can look quite overwhelming as you're able to control the look of the blur depending on what lens you want to mimic. But as long as you're aware that everything on the same focal plane needs to be in focus and the blur should gradually strengthen the further it goes back, it's enough to get started with.

As shallow depth-of-field works well with portraits, especially to mask cluttered backgrounds or to draw the viewer's attention towards the subject's eyes, we've chosen to use a portrait with too much depth-of-field to show you how this filter can improve your pictures.

**HOT KEY** 

**Alt to reset**  
When working in the Lens Blur control panel, hold down **Alt** to change the Cancel button to a Reset button in case you want to take the filter back to its default settings. You can also uncheck **Preview** to toggle between the blurred and original image.

**Reset** 



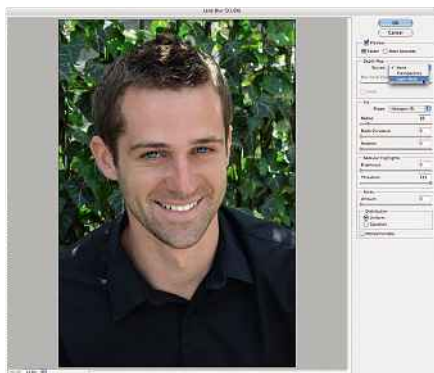
**1 Create a layer mask** In order to add the effect of shallow depth-of-field, first go to **Layer > Duplicate Layer** to copy the original image on to a new layer. Add a **Layer Mask** on the new layer by clicking the icon in the Layers palette (circled above). This will enable selective editing of the image without permanently altering any pixels.



**2 Make a selection** Using the **Polygonal Lasso Tool**, make a rough selection around the subject's face – this is the area that remain in focus. Add or subtract from the selection by holding either the **Shift** or **Alt** keys while drawing with the tool. However, the addition of a layer mask means it doesn't need to be overly accurate at this stage.



**3 Feather the selection** For the effect to appear as a gradual transition between blurred and focused areas, apply a large feather (200 pixels) to the selection (**Select > Modify > Feather**). Then go to **Edit > Fill** and in **Contents** change **Use to Black** and click **OK**. Now remove the selection by going to **Select > Deselect**.



**4 Open Lens Blur** Now to apply the blur. First, click on the image thumbnail (next to the Layer Mask thumbnail) on the duplicate layer. Then go to **Blur > Lens Blur** opening the Lens Blur preview window. Under **Depth Map**, change the **Source** to **Layer Mask** to ensure the layer mask is used to calculate where the blurred areas are to be.



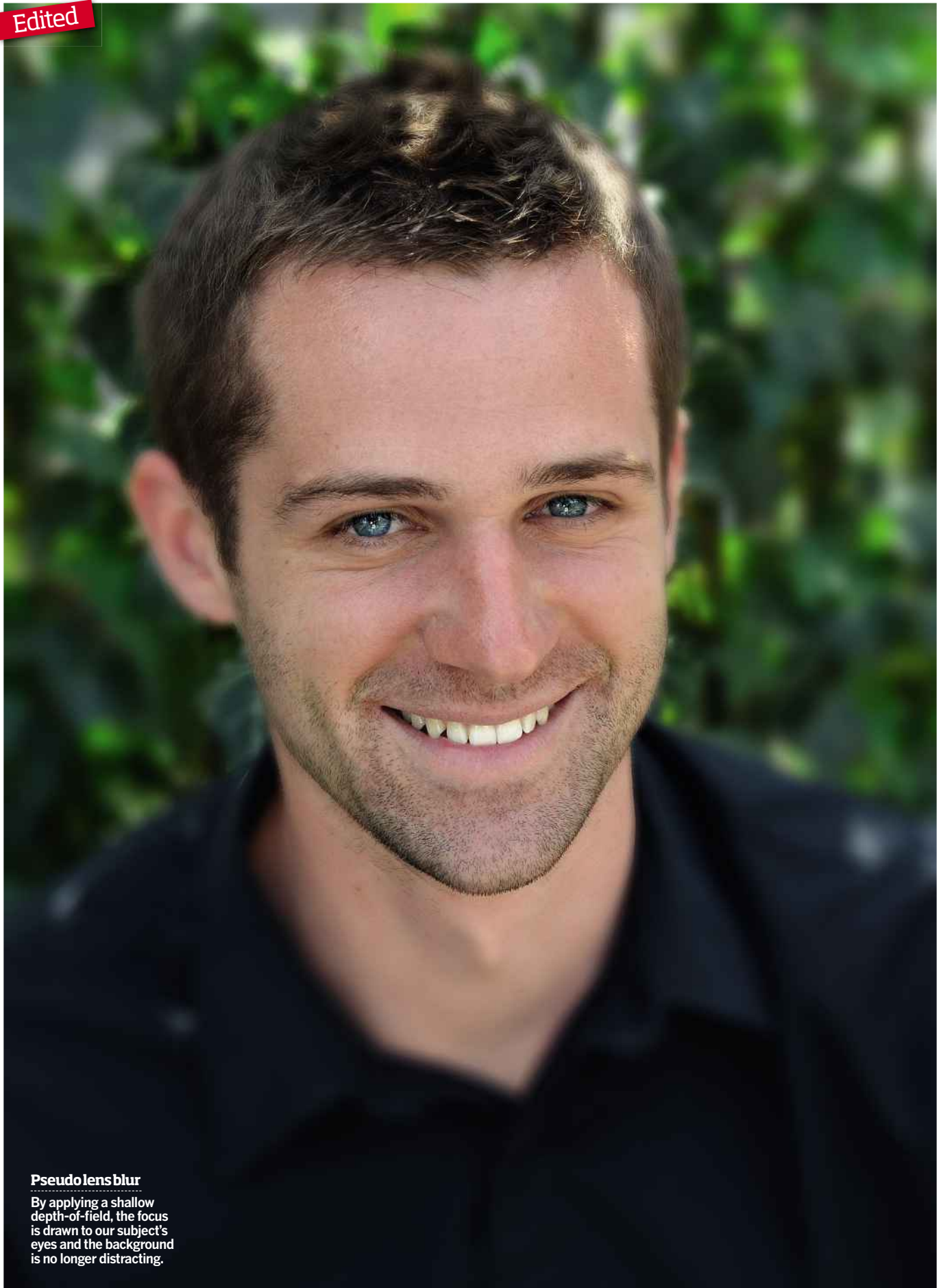
**5 Apply the Lens Blur** To set the Blur Focal Distance (the point of focus), simply click on the image preview where you want the desired focal point – here we've chosen the left eye of the subject. Now adjust the **Radius** slider to increase the blur effect: the higher the radius amount, the stronger the blur, and the depth-of-field effect, becomes.



**6 Edit the layer mask** Applying the effect may take a while, depending on the file size. Once completed, the image can be fine-tuned by working on the layer mask. Select the **Brush Tool** and with a large soft-edged brush, extend the blurred areas by painting on the layer mask with black, or reduce them by painting with white.



Edited



**Pseudo lens blur**

By applying a shallow depth-of-field, the focus is drawn to our subject's eyes and the background is no longer distracting.

# Create a miniature scene

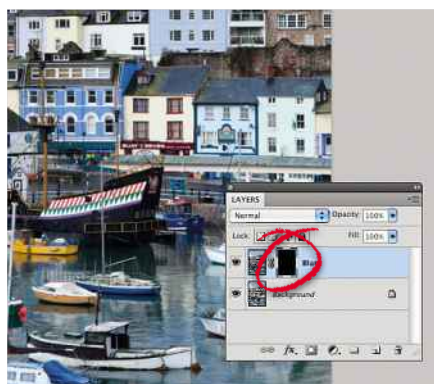
Sometimes you just want to have a bit of fun with your pictures and you'll soon have your friends scratching their heads with this fun photo illusion

THE INTRODUCTION of the Lensbaby optic gave miniaturisation – once the preserve of pros with big budgets – a well-earned comeback in recent years. And where there's a popular in-camera technique, it's never long before we try to replicate it in Photoshop. This digital technique is a simple combination of Photoshop's Lens Blur filter and a Layer Mask applied to a portion of the image. The best images to use are those our brains process as normal scale in terms of large and small subjects next to one another, such as people next to buildings, a house dwarfed by mountains, or in this case boats moored in a harbour. So how does it work? Well, it's all to do with how we perceive depth-of-field. When we see scenes from a distance our eyes keep the entire scene in focus. However, if we try to focus on a subject a very short distance in front of us, it's impossible to keep the scene behind it sharp. What the blur is doing is mimicking this phenomenon and by doing so is fooling the brain into thinking that the boats are very close, but because we can also see all the boats, the brain's assumption is that they must be very small, like a toy set. Confused? I know I am!

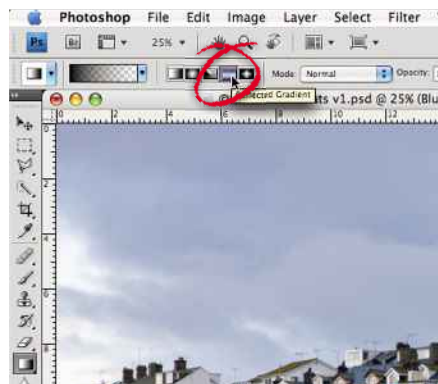
## HOTKEY

### Q = Quick Mask

Quick Mask mode is activated by pressing **Q**. It allows you to highlight areas of an image that will then become marquee selections once you exit the mode by pressing **Q** again. The Brush is the suggested tool for this mode, as by using varying sizes and hardness you can achieve very accurate selections.



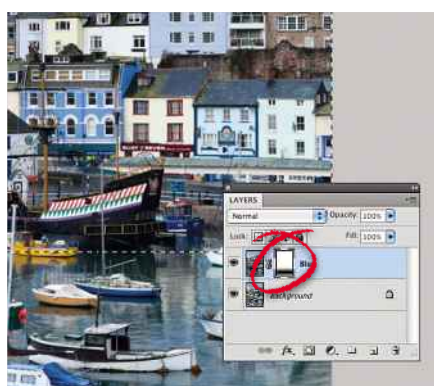
**1 Create a duplicate layer** With the file open go to **Layer>Duplicate Layer...** to create a copy of the original. Add a Layer Mask by going to **Layer>Layer Mask...>Hide All**. The layer mask icon in the Layers palette (circled) should appear black. Once edited this allows for blurring of the top layer while viewing a portion of the original beneath.



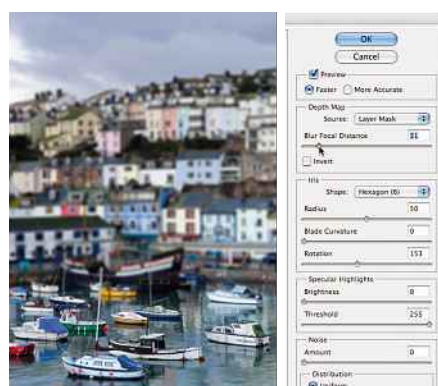
**2 Make a Reflected Gradient** Select the **Gradient Tool** and change the gradient type to **Reflected** by clicking on the fourth icon along in the options bar (circled). Now press the **Q** key (see panel) to change to Quick Mask mode. When active, the words 'Quick Mask' appear at the end of the image file name at the top of the window.



**3 Create a quick mask** While holding the **Shift** key to ensure a straight line, draw a gradient at the bottom of the image by dragging up or down, and letting go once finished. It may take a few attempts to highlight the desired area, so you may need to go **Edit>Undo (Cmd Z)** to undo the masked area and then try again.



**4 Edit the layer mask** With the quick mask created, press **Q** again to leave this mode – you will now have a marquee selection. To add this selection to the layer mask, make sure the layer mask thumbnail is selected (circled). Then go to **Edit>Fill...**, select **White** and click **OK**. To remove the marquee selection go to **Edit>Deselect**.



**5 Lens Blur** Click back on to the image thumbnail and go to **Filter>Blur>Lens Blur...** In the window that opens first, ensure that the **Depth Map Source** is set to **Layer Mask** then change the **Blur Focal Distance** to around 30. When using a picture where the focal point is positioned differently, you will need to adjust this figure.

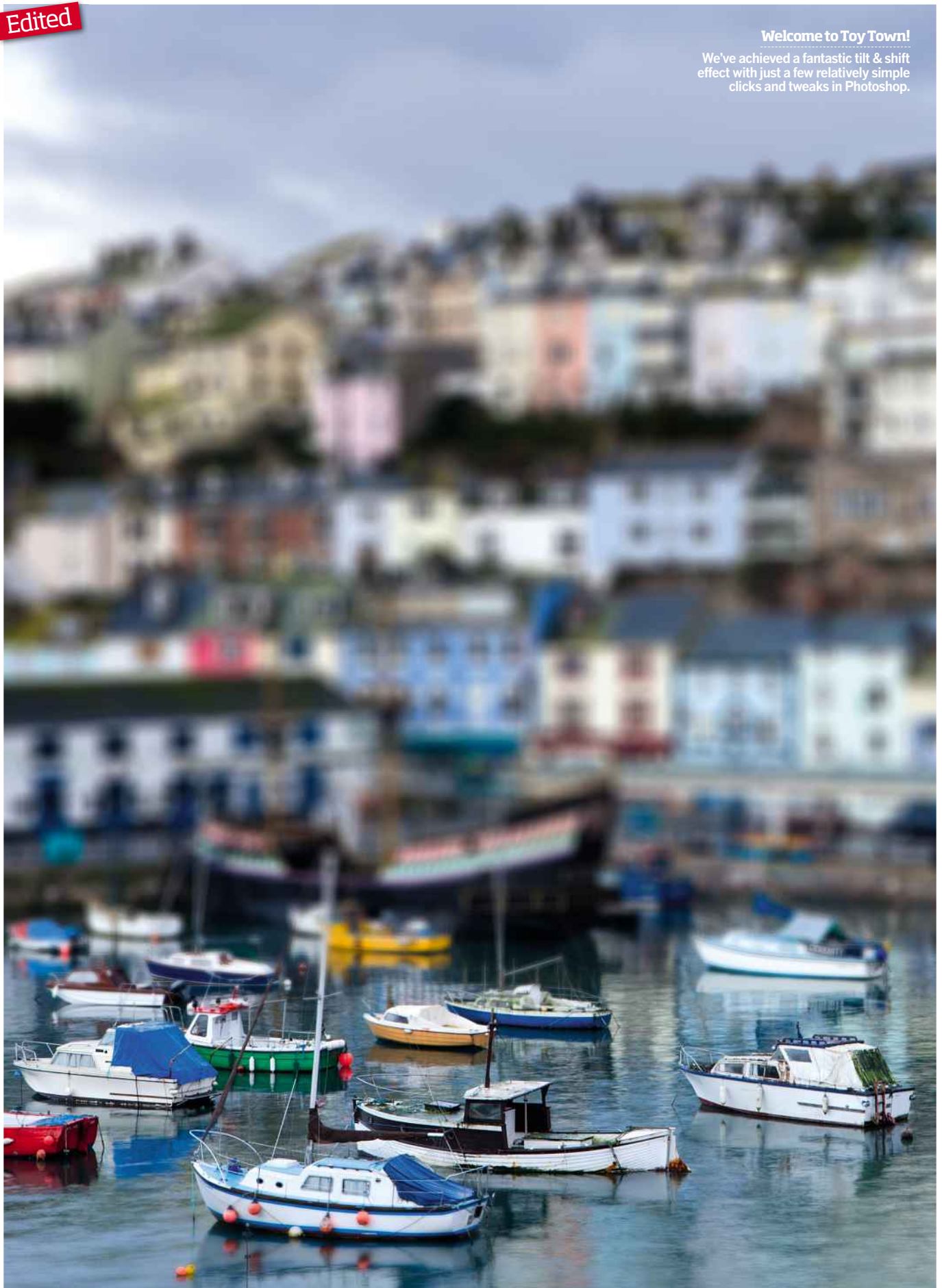


**6 Increase the blur** Finally, to improve the miniature effect, increase the blur amount by adjusting the **Radius**. You'll need to use quite a lot of blur – no less than 60 – but the trick is to use the optimum amount for your specific image without overdoing the effect. It might take a bit of trial and error to get it right.

Edited

**Welcome to Toy Town!**

We've achieved a fantastic tilt & shift effect with just a few relatively simple clicks and tweaks in Photoshop.



# Creating movement

Having trouble panning moving subjects? Want a quick-fire way to add movement to your pictures? Then learn how to use the Motion Blur filter

The Motion Blur filter can be used to add the illusion of movement to a static subject by simulating a linear blur in any direction. It's a basic filter to use, but highly effective, and can be used for various effects. Once you select the filter, it opens up a control panel with a preview screen and features that enable you to specify the Angle of the blur to match the direction of the 'moving' subject. The Distance slider varies the strength of the blur to simulate speed. When the subject is moving towards the camera, Radial Blur's Zoom mode works better than the Motion blur filter, but for this technique, you'll also need to use Radial Blur's Spin mode to add movement to the wheels. It's tricky, but effective, so give it a go.



**1 Make a selection** Using the *Polygonal Lasso Tool*, take time to make a careful selection around the edge of the car. Now use *Select>Inverse* to flip the selection, selecting the background of the image rather than the subject.



**2 Isolate the background** To copy this selection to a new layer go to *Layer>New>Layer via Copy*. This layer now contains the background that will be blurred to add the illusion of movement, while the car remains sharp.



**3 Lock transparent pixels** Before adding blur, click the *Lock transparent pixels* icon (circled). This will ensure that any blur effect will run to the edge of the transparent areas, seen on the preview as a white and grey checkered pattern.



**4 Apply Motion Blur** Open *Filter>Blur>Motion Blur*. In the window, move the *Angle* control to match the direction of the subject – try to find the most realistic angle of motion. Then increase *Distance* until satisfied with the effect.

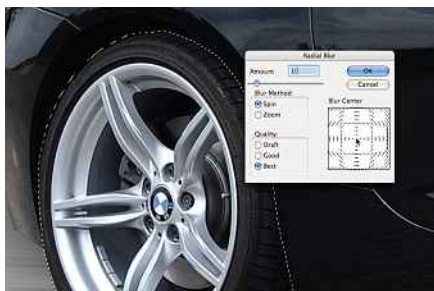
Edited



**5 Select the rear wheel** Click on the *Background Layer* in the Layers palette. Now make a selection around the rear wheel and feather the selection by a small amount (*Select>Modify>Feather*) to soften the edge.

**Simulate speed**

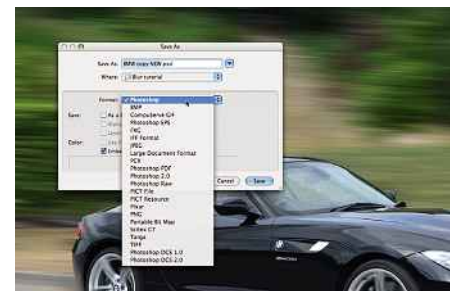
It takes patience and practise, but the effect is effective when done well.



**6 Apply Radial Blur** For the appearance of spinning wheels, use Radial Blur (**Filter>Blur>Radial Blur**). Set the **Quality** to **Best** and set an **Amount** of no more than 15-20 pixels. **Blur Center** should be moved to match the centre of the wheel.



**7 Blur the front wheel** Repeat this process for the front wheel. Make a feathered selection, then apply **Radial Blur** as before. The only thing that may change here is the position of the **Blur Center**, which will most likely be different.



**8 Save the layers** A file containing multiple layers can not be saved as a JPEG, therefore it's always advisable to use **File>Save as** to save a copy as a Photoshop file (.PSD). This will preserve the layers, allowing for editing later on.

## Zoom in on street art

WALKING AROUND a city, especially one as diverse as London, usually results in encountering some sort of style of street art. The vibrant colours and often graphic drawings can make for interesting pictures but also effective subjects for a dramatic zoom burst technique. Zoom bursts are usually thought of as an in-camera technique, produced by turning the zoom ring on your lens during a long exposure. By doing this, it creates a motion trail radiating from your point of focus. It's quite a tricky technique to get right, unless you have a lot of time to spare as it can be hit or miss. An easier way is to take a straight shot and then add a zoom burst in Photoshop where you can control the effects easier. It's not just a technique that works well on graffiti either, try it on stain glass windows, a portrait or still-life – it works on practically anything you want to add energy too.



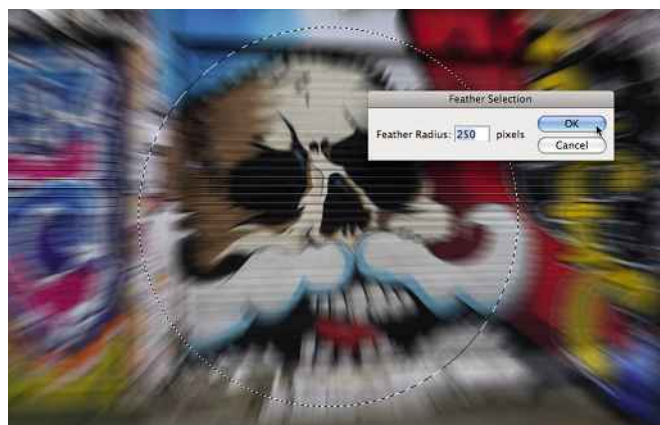
**1 Take the shot** Rather than go for a tight crop, include an area of space around the main focal point (in this case the skull) to allow for the zoom burst effect to be applied later. Open the image in Photoshop, then duplicate the image by clicking **Layer > Duplicate Layer** (or use the shortcut keys: **Ctrl+J**).



**2 Apply Radial Blur** To add the zoom burst effect, go to **Filter > Blur > Radial Blur** and in the dialogue box select **Zoom** and under **Quality**, **Best**. There's no need to move the Blur Center as the focal point is already centred within the frame. Vary the **Amount** to affect the strength of the effect, here we selected 25, click **OK**.



**3 Reveal the original image** To remove the blur from the focal point by revealing the image beneath the blur, start by adding a Layer Mask. Click **Layer > Layer Mask > Reveal All** or simply click the corresponding icon at the bottom of the Layers palette (inset).



**4 Select the focal point** Using the **Elliptical Marquee Tool** create a circular selection around the focal point, while holding **Shift**. Once the selection is made, you can re-position it using the mouse or arrow keys. To soften the edges, click **Select > Modify > Feather and** enter **250px**.

### Filter focus

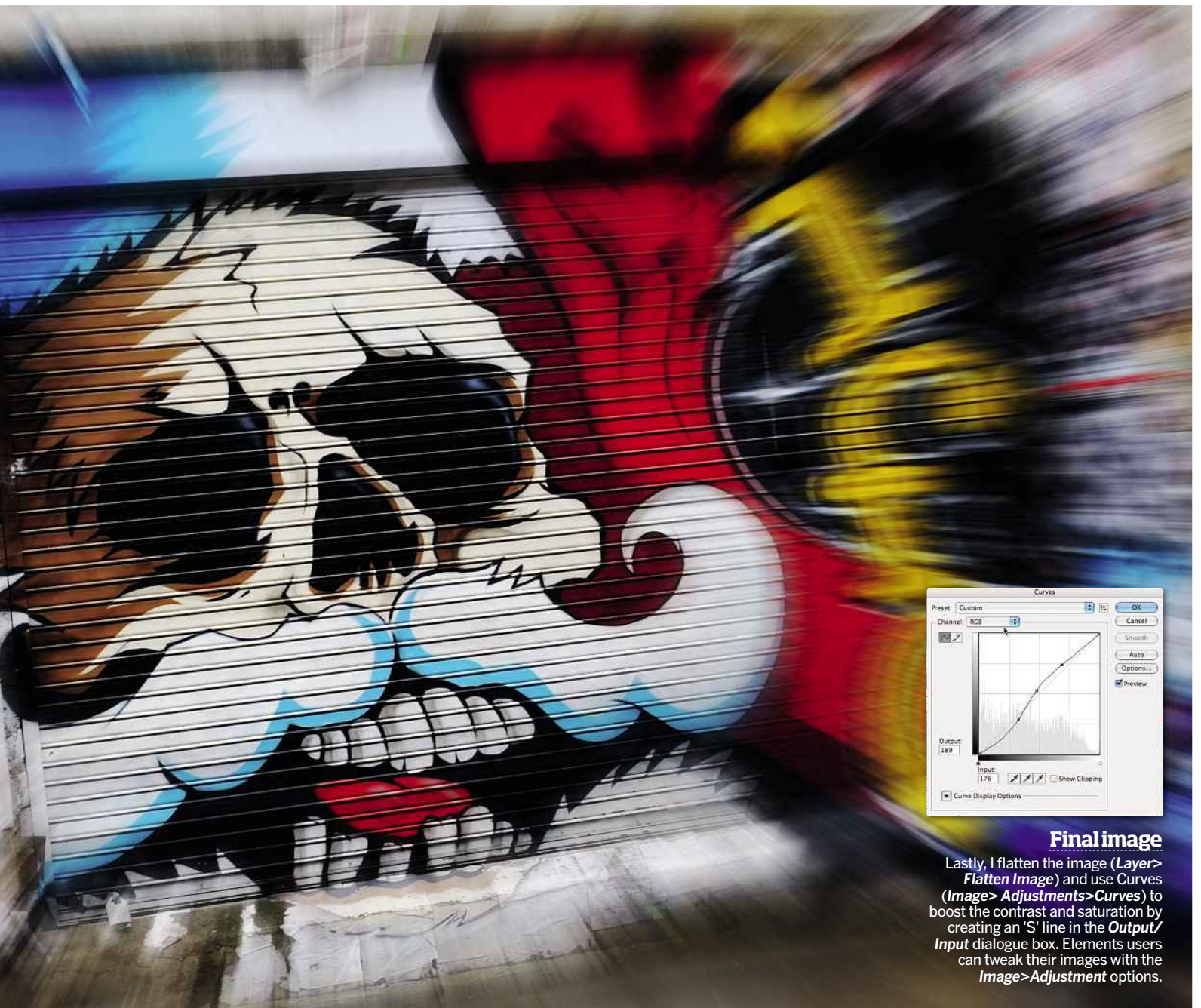
#### ✓ RADIAL BLUR

Photoshop's Radial Blur filter (accessible via **Filter > Blur > Radial Blur**) can deliver highly creative effects by adding movement to the blur: it offers the option of either spinning or zooming the blur. The Blur Center allows you to place a centre point for the blur.

You can set the Blur Amount to as little as one pixel, or to as much as 100 pixels, to achieve 'warp speed' results. Finally, you can adjust the Quality of the blur to suit your image's output, although it's always advised to select Best on work intended for print.

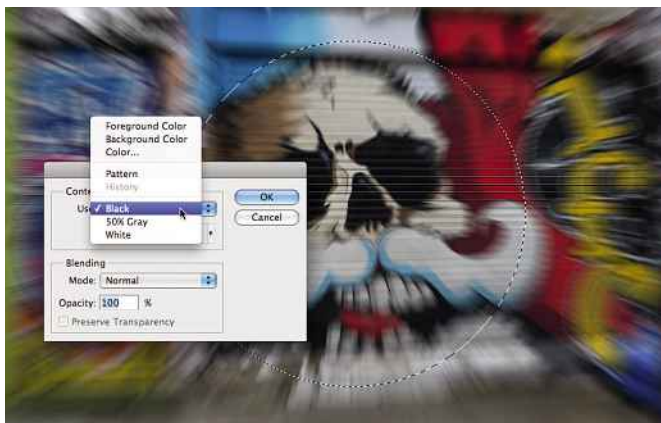
One negative to the Radial Blur filter is the lack of a real-time preview, which means, unless you're well versed in this filter, or extremely fortunate, you're unlikely to get the desired results first time. Keep trying though, as it's a great effect.





### Final image

Lastly, I flatten the image (**Layer > Flatten Image**) and use Curves (**Image > Adjustments > Curves**) to boost the contrast and saturation by creating an 'S' line in the **Output/Input** dialogue box. Elements users can tweak their images with the **Image > Adjustment** options.



**5 Hide the blur** The beauty of a layer mask is you can paint on it with black paint to hide pixels and white paint to reveal them. To hide the blur, go to **Edit > Fill** and then select **Black** from the drop-down menu before pressing **OK**. This will fill the selection with black, masking off the blur.



**6 Finishing touches** Finally, refine the image by cropping out any distracting elements using the **Crop Tool**. You can also skew the image to make it look more dynamic. To do this, hold the cursor outside any of the marquee's corner points. When the icon changes, move to rotate.

# Create a ten-stop ND effect

Neutral Density filters are brilliant, but require a level of dedication to get consistently great results. Here's a quick technique for those of you who want to trial the effect or don't have the time to attempt the real thing

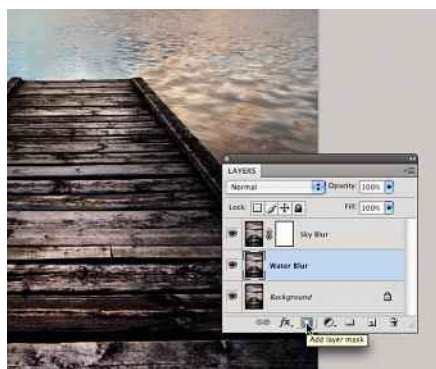
FOR ANY OF YOU who aren't already aware, the ten-stop ND filter is amazing! By significantly lengthening a camera's exposure, the filter allows the camera to capture motion so clouds are rendered as streaks and water becomes a fine mist – it's truly magnificent, but it takes skill and patience to perfect. As great as this in-camera technique is, often the key to its success is the location, and with exposure times often more than an hour long, it demands extreme dedication and time – two things we can't always spare in our hectic schedules.

There is, however, a shortcut to getting a very similar effect using Photoshop's Blur filters, and while it may not be one for the photo-purist, it can produce a very convincing comparison when combined with the right kind of image. Feel free to experiment on any image, but it's usually coastal scenes that produce the most dramatic results. For further inspiration of what images might work, it's worth looking at contributor Lee Frost's motion studies project ([www.leefrost.co.uk](http://www.leefrost.co.uk)), taken with an actual ten-stop ND filter.

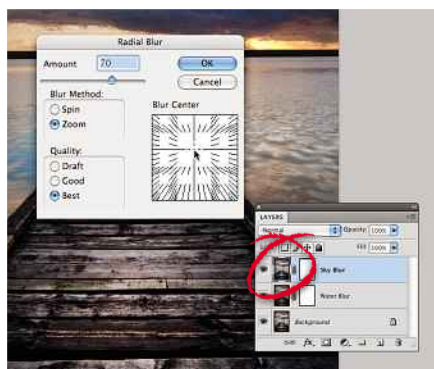
## HOWTOUSE...

### Layer Masks

A Layer Mask allows you to hide detail from the layer it's applied to, revealing the image beneath, without erasing it. When the Layer Mask is selected, simply add the colour black to the mask to hide image detail and change to the colour white to restore the detail. Use the **X** key to quickly switch between the colours.



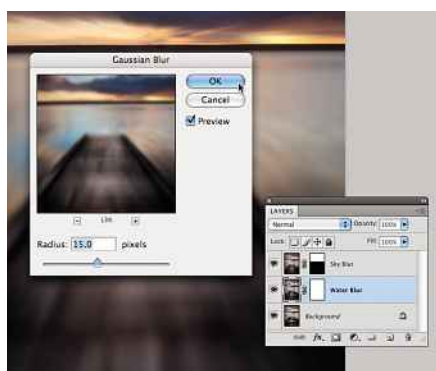
**1 Create duplicate layers** First, create a duplicate layer from the Background Layer by going to **Layer>Duplicate Layer...**, naming the layer accordingly – here, it's called 'Water Blur'. Then click on the **Add Layer Mask** icon at the bottom of the Layers palette to add a Layer Mask. Repeat this process to create an additional duplicate layer – this one was named 'Sky Blur'.



**2 Apply Radial Blur** On the sky layer, ensure the image thumbnail is selected (circled), then go to **Filter>Blur>Radial Blur...** In the Radial Blur window, make sure that the **Blur Method** is **Zoom** and **Quality** is set to **Best**. Next, enter a large **Amount** – no less than 50 – and move the **Blur Center** to an area where the horizon would roughly be positioned on the image, and click **OK**.



**3 Hide foreground blur** The radial blur should only affect the sky portion of this layer, so click on the **Layer Mask thumbnail** in the Layers palette (circled) and, with the **Brush Tool** set to a large soft-edged brush and black colour, paint across the foreground area to hide the blur across the water and jetty. Switch to a smaller brush when working near the horizon.



**4 Blur the water** Switch to the water layer by clicking on it. Add a Radial zoom blur, with all the settings as in the previous step, but reducing the **Amount** down by half to 35, just to make the cloud reflections more realistic. Then go to **Filter>Blur>Gaussian Blur...**, setting the amount to no more than 15 pixels. This adds a hazy sheen to water, common with many long-exposure images.



**5 Reveal the jetty** Now edit the Layer Mask to reveal the jetty. First, click on **Layer Mask thumbnail** (circled), then select the **Polygonal Lasso Tool** and draw a selection around the edge of the jetty. Once complete, go to **Select>Modify>Feather...** and add a value of 1 pixel to avoid a harsh edge to the selection. Now take the **Brush Tool**, still set to black, and paint over the selection.



**6 Convert to mono** To make the image, go to **Image>Adjustments>Black & White...** and click **OK** to use the default settings. Conversions from colour to mono often leave an image looking a little flat, so use **Image>Adjustments>Levels...** to add contrast. Use the Black point and White point sliders (circled) to boost the blacks and whites respectively, taking care not to burn out any detail.



**Edited**

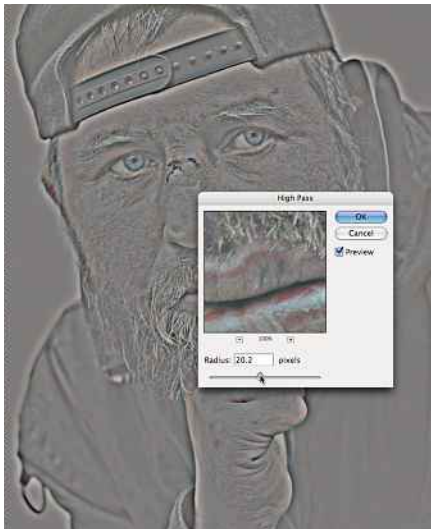
**Final image**

With just a few steps, you could add this beautiful atmospheric effect to your landscape images.

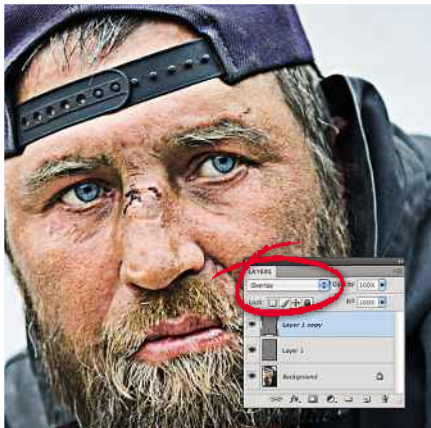


# Add mood to portraits

THE HIGH PASS FILTER is a highly effective sharpening tool, drawing out the tiniest of details for hyper-real results. Few subjects show the benefits of this filter as well as a portrait, and while it's far from forgiving – enhancing every line, wrinkle and pore – it's fantastic for faces full of character. Gritty environmental portraits, like a fisherman, the elderly, or in this case a homeless person, suits the technique well due to the lines on their faces and already rough appearance. A black & white conversion ensure the face's character becomes the prime focus.



**1 Use High Pass** Go to **Layer > Duplicate Layer** to duplicate the image on to a new layer, then go to **Filter > Other > High Pass...** to open the High Pass window. As you increase the **Radius** amount a halo will begin to appear around the edges within your image. When this halo gets too large, much of the small detail within the layer will become lost, so it's best not to overdo it.



**2 Add a blend mode** Change the layer's Blend Mode to **Overlay** via the drop-down menu at the top left of the Layers palette (circled). This allows the two layers to blend together and reveals the detail, maximising the effect of the High Pass filter. If the amount of detail still isn't sufficient go to **Layer > New > Layer via Copy** to double the effect, creating 'hyper-real' results.

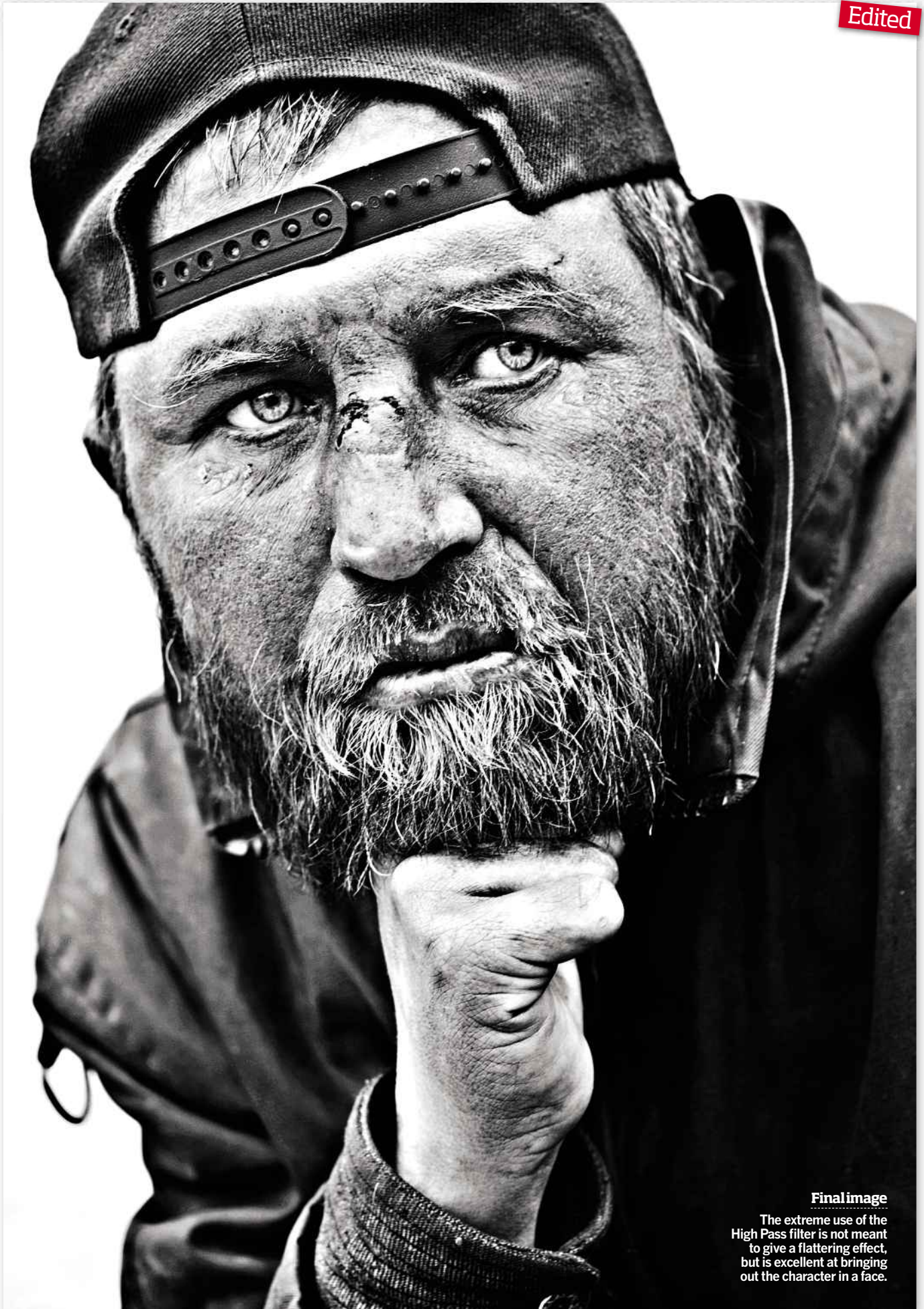


**3 Convert to black & white** Create a **Black & White** adjustment layer by clicking the icon at the bottom of the Layers palette (circled), then use the colour sliders to improve the result. The main colours to work on for portraits are Red and Yellow to target the skin tones. The Blue slider is also handy for this particular image to adjust the subject's piercing blue eyes.



**4 Use Levels to boost contrast** Now create a **Levels** adjustment layer from the drop-down menu at the bottom of the Layers palette. Use the Black point and White point sliders (circled) to make improvements to the overall contrast of the image. Be quite excessive with the Levels adjustments to really add to the dark and moody look of the image.

Edited



**Final image**

The extreme use of the High Pass filter is not meant to give a flattering effect, but is excellent at bringing out the character in a face.

# The Liquify filter

True, the Liquify filter is used for advanced photo editing, but you don't have to be a Photoshop wizard to master it. We explain the interface and show you how to use the filter for fun and creative effect

WHETHER IT'S FOR RETOUCHING or artistic effects, the Liquify filter is a powerful Photoshop asset for transforming your pictures, yet for most novice Photoshopers it's a function to shy away from as it can appear to do more damage than good. Don't be mistaken though, learning how to use this filter can improve the quality of your pictures, and despite its dramatic distortions you can easily undo an alteration. When you open your image in Liquify (**Filter>Liquify**), the filter projects the picture onto a mesh, allowing you to distort pixels without impinging on quality. You can push, pull, rotate, twirl, bloat, pucker and reflect pixels by using the tools like brushes to move the pixels around. You can also limit the area of the image you want to distort by applying a Freeze Area Mask – very similar to painting on a layer mask to isolate the areas you want to affect by your adjustments.

One reason photographers are intimidated by this filter is its sophisticated interface. Most Photoshop-savvy photographers are familiar with its power but lack the confidence and know-how to control its effects. However, once you know how to navigate it you'll be surprised how easy the filter is to use. For those of you who have Photoshop Elements 9, you'll be glad to know that this filter functions and appears the same in your software as it does for the full Photoshop version.

When you open the filter, you're confronted with a large preview to view your picture, a toolbar to the left to pick the type of distortion and an options panel on the right, which controls the strength and look of the changes. The key to using the filter successfully is to use small brush movements to build up the effect. We suggest setting the Brush Pressure very low and a Brush Size to match the width of the area you want to distort. Now you know the basics, have a play and try following our step-by-steps to giving your family a fun makeover, try some pixel surgery on a portrait or create a Daliesque masterpiece.



## Toolbar & Options

### 1) Forward Warp Tool:

Pushes pixels in the direction that you drag the cursor

### 2) Reconstruct Tool:

Where you apply this tool, it will restore your pictures back to their original state

### 3) Twirl Clockwise Tool:

Rotates pixels in a clockwise direction. Click **Alt** to twirl in an anti-clockwise direction

### 4) Pucker Tool:

Pinches pixels towards the centre of the brush for a 'puckered' effect

### 5) Bloat Tool:

Balloons the pixels from the centre of the brush towards the outside edge

### 6) Push Left Tool:

Moves pixels to the left, or to the right if you're holding down **Alt**

### 7) Mirror Tool:

Reflect pixels in the direction of the stroke

### 8) Turbulence Tool:

Create clouds, fire or waves by smoothly scrambling pixels

### 9) Freeze Mask Tool:

Adds a

mask to protect areas from liquify changes

### 10) Thaw Mask Tool:

Erases the mask you create using the Freeze Mask Tool

### 11) Hand:

Use this to navigate around the preview screen by dragging the image

### 12) Zoom:

Use this to enlarge a specific area of the preview image. Hold down **Alt** (Windows) or **Option** (Mac) key to zoom back out

### 13) Brush Size:

Sets the width of the brush you'll use to distort the image

### 14) Brush Density:

Controls how a brush feathers at the edge. An effect is strongest in the centre of the brush and lighter at the edge

### 15) Brush Pressure:

Sets the speed at which distortions are made when you drag a tool in the preview image. Using a low brush pressure makes changes occur more slowly, so it's easier to stop them at



exactly the right moment

**16) Brush Rate:** Sets the speed at which distortions are applied when you keep a tool (such as the Twirl Tool) stationary in the preview image. The higher the setting, the greater the speed the distortions are applied

**17) Turbulent Jitter:** Controls how tightly the Turbulence Tool scrambles the pixels

**18) Reconstruct Mode:** Used with the Reconstruct Tool, the mode you choose determines how the tool reconstructs areas of the image

## Workflow tools

### USING SELECTIONS

If you are working with a large file, but it's only part of the image you want to affect, select the area before loading it in to Liquify so you can isolate it. If the whole image is loaded in to the filter, it can take a long time for the smallest adjustment to be processed as there's a lot of information for it to handle.

## Secrets unlocked

### HOW TO USE THE MESH

Making the mesh visible can help you keep track of your distortions. You can select the colour and size of the mesh under **View Options** in the Options panel. You can also save the mesh so you can apply it later to another image by using the **Save Mesh** and **Load Mesh** functions at the top of the panel.

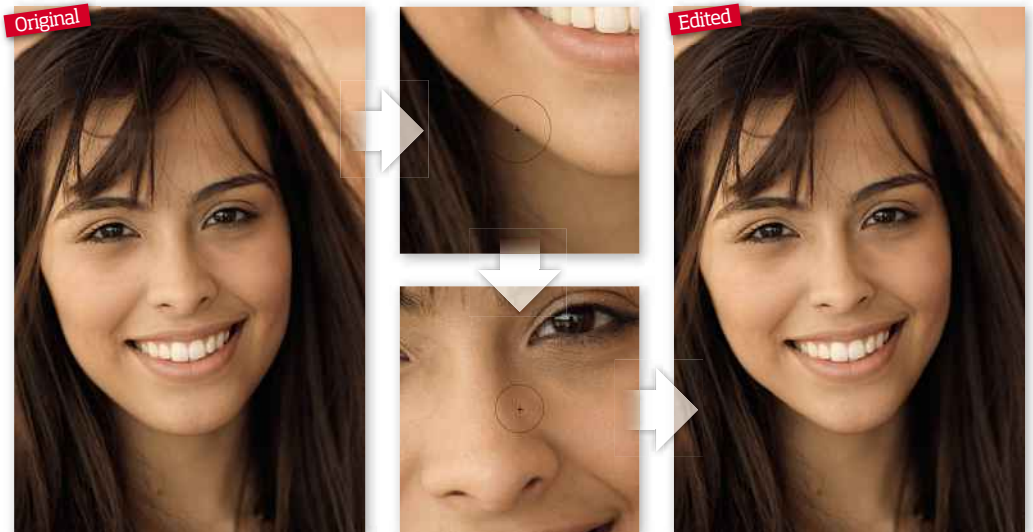


## Three ways to use the Liquify filter to retouch portraits

If pixel surgery is not an ethical dilemma for you or your subject, the Liquify filter features tools that can help you refine features and fix flaws that you and your model think could be improved for better results

### 1 DIGITAL FACE-LIFT

Zoom in to the face so it fills the preview screen to make adjustments easier. Select the **Forward Warp Tool** and set a low **Density** and **Pressure** (no greater than 30) and a **Brush Size** similar to the area you want to adjust. We used 100. Click on the bottom edge of the chin and slowly click and drag the cursor upwards to push the pixels in that direction. Instead of making one long movement with the cursor, try lots of little pushes and clicks of the cursor for better control. Do the same with the nose with a smaller brush. Subtlety is key for natural results.



### 2 TRIM A FIGURE

The **Forward Warp Tool** and the **Push Left Tool** are the most effective tools for shedding pounds. The **Push Left Tool** moves pixels to the left when you click and move the mouse up straight, or to the right if you move the mouse downwards. If you want to reduce the size of the subject's waist, set the **Brush Size** to about 100, or larger depending on how much you want to trim off, the **Density** to 50 and **Pressure** to 100 to ease control. Now drag the **Push Left Tool** down the left side of the waist and up the right side, and then use the **Forward Warp Tool** to pinch in the waist.



### 3 TWEAK EXPRESSIONS

Select the **Forward Warp Tool** and pick a **Brush Size** similar to the size of the subject's lip. To help make the imposed smile look more natural you may need to puff up the lips slightly by clicking and dragging from the centre of the lips upwards and downwards to make them fuller. Next position the cursor near where the mouth turns up at the corner and click and drag the cursor to extend the length of the mouth, giving more of an impression of a smile. Keep the **Brush Pressure** low (here we used 30) to gradually build up the effect to make it look natural.



# Create a caricature

You don't always have to be reserved with your retouching – have a bit of fun and use the Liquify filter to exaggerate features for comic effect

SOMETIMES USING the Liquify filter to create bigger eyes, lips or muscles can flatter a subject, but if taken to the extreme this filter can distort a person beyond recognition. Normally we'd advocate making many small adjustments to avoid this and to ensure natural and subtle results by slowly building up the effect – but where's the fun in that?

For this tutorial, enlarge that **Brush Size**, increase its **Rate** and boost that **Pressure** for some uninhibited fun and to distort a portrait into a caricature. Even though you'll be exaggerating your subject's key features, there should still be an easily identifiable visual likeness, so try to build on what's already there. For instance, if they have big eyes, make them bigger. If they have a large nose, exaggerate it even more. One of the distinguishing features of caricature is the distortion of perspective: making the head much bigger than the body or the forehead a lot wider than their tapered chin, or visa versa, for instance. Have a go with your family photos and why not send us your funniest faces?

## TOP TIP!

### Reconstruct

If you want to undo your distortions, you can click **Restore All** in the **Reconstruct Options** panel to revert the image back to its original state. If you wish to only reconstruct a part of your image, select the **Reconstruct Tool** located in the toolbar and click on the area you want to restore. However, if you do use this tool, make sure the **Reconstruct Mode** (in the Options panel) is set to **Revert** so the image goes back to its original state.



**1 Create a duplicate layer** Open the image in Photoshop and go to **Layer > Duplicate Layer**, so you're working on a copy. Now click **Filter > Liquify** to load the layer into the Liquify filter. The dialog opens with a preview image in the centre and the toolbar to the left with the options bar to the right. Zoom in to the picture so it fills the preview window to make adjustments easier.



**2 Inflate the eyes** A good place to start distorting is the eyes. Select the **Bloat Tool** and a **Brush Size** that's as big as the eye socket. Place the cursor in the centre of the pupil, then click and hold to see the eye inflate. If the effect is too fast or too heavy, reduce the **Brush Rate** or increase it if it's not fast enough. For the best effect, it's important to click in one area, then drag the tool.



**3 Bloat the forehead** To refine the shape of the eye, reduce the **Brush Size** and click around the edge of the eye to bloat that too. If the pupil changes shape, simply click in the centre again. Use the **Pucker Tool** to reduce the overall effect. While you've got the **Bloat Tool** selected, increase the **Brush Size** so it's proportional with the forehead and click to expand this area.



**4 Make a mask** Reduce the **Brush Size** again and puff out the cheeks a little with the **Bloat Tool**. To target the teeth, but not the lips, select the **Freeze Mask Tool** and click the **Show Mask** icon in the Options panel. Adjust the **Brush Size** and paint over the areas you don't want to be affected. If you do too much, switch to the **Thaw Mask Tool** and simply erase what you don't need.



**5 Enlarge the teeth** Now with the **Forward Warp Tool** set to a brush no bigger than the tooth, click and drag the bottom of the tooth down to enlarge it without affecting the lip. When you're done, use the **Thaw Mask Tool** to erase the mask. Now use the **Forward Warp Tool** to subtly extend the smile if you need to or switch to the **Bloat Tool** to puff up the lips, nose and ears.



**6 Reshape the face** Now use the **Forward Warp Tool** (set to a large brush of 300-600, with a medium **Pressure** of 50 and a **Rate** of 26), to distort the face. To narrow the chin, click on the jaw line and drag it in to narrow the face. To elongate the chin, click and drag downwards. You can also use the same technique to stretch the neck by pushing down the shoulders.

Edited



**Funny faces!**

This is an easy and enjoyable technique to try on your children's photographs or a family portrait. Give it a go!

# Create a reflection

The Liquify filter is a natural fit for editing portraits, but with the aid of two nifty tools, Turbulence and Twirl, it can add a different dimension to your landscape too!

ADDING REFLECTIONS to your images isn't a new idea and most of us have had a go at some stage or another. There are even tailored plug-ins for Photoshop such as Flaming Pear's Flood that automate the effect for you, but if you want to create a reflection that's tailored to your own specific requirements, then Liquify is ideal.

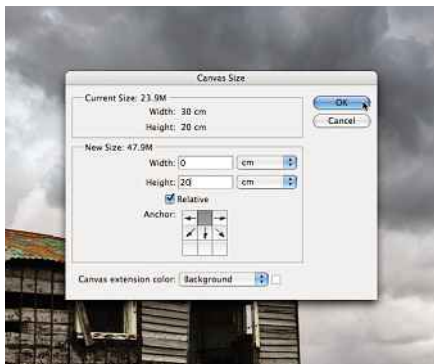
For this effect we'll look at two tools: Turbulence and Twirl. Both are applied by brush via the Liquify preview window. Here the user can also control the Brush Size, Density, Pressure and Rate amongst other things. The Turbulence Tool allows you to make directional strokes on an image, moving pixels across the canvas in the direction of the brush, while the Twirl Tool does exactly as it implies, twirling pixels in a circular motion either clockwise or anti-clockwise. It's the combination of both tools that can make really life-like reflections given a bit of practice. Below we guide you through the process but remember, the liquify effect is fairly picture-specific, so you may need to adapt the technique slightly to suit your own image.



**Secrets unlocked**

**SAVE YOUR MESH**

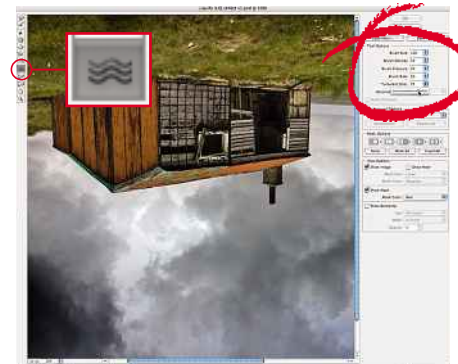
Once you're happy with the liquify effect, it's good practice to save the mesh so that it can be reapplied later without having to redo all the work. A saved mesh can be applied to other images and edited to suit.



**1 Increase the canvassize** The idea is to create a mirrored image, so the first thing to do is double the size of the canvas by going to **Image>Canvas Size...** In the window ensure **Relative** is ticked and that **Anchor** has the top centre box selected. Now enter the same amount shown in the **Current Size Height** in to the **New Size Height**, and click **OK**.



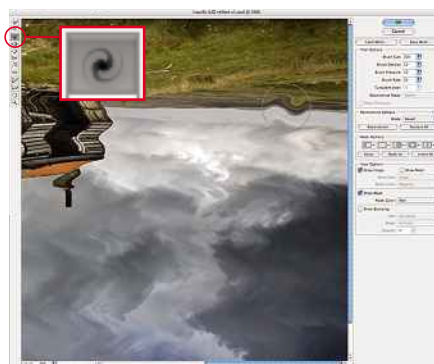
**2 Duplicate & flip** You'll now have a canvas that is half-image and half-white background. Using the **Rectangular Marquee Tool**, select the image area and go to **Layer>New>Layer Via Copy** to create a duplicate of the image on a new layer. To flip the layer into a mirrored image of the original, go to **Edit>Transform>Flip Vertical**, then select the **Move Tool** and reposition accordingly.



**3 Liquify with Turbulence** With the **Rectangular Marquee Tool**, make a selection around the mirrored image and go to **Filter>Liquify...** In the window, select the **Turbulence Tool** from the toolbar on the left, set a smallish **Brush Size** to start with (here we use 100), set **Density**, **Pressure** and **Rate** to 50, but increase **Turbulent Jitter** to 75 to ensure a good effect.



**4 Makesome ripples** Start by moving the brush from left to right across the top of the image. At the end of the stroke, work back across the image in the opposite direction, slightly below the previous stroke. Work your way down the image increasing the brush size incrementally to give the appearance of perspective – the nearer to the viewer the ripples are, the larger they appear.



**5 Addsome Twirl** If there are areas of canvas visible at the edges, you can push the image over them with the Turbulence Tool. Now switch to the Twirl Clockwise Tool and set the **Brush Size** to around 300. With only slight movements, begin to twirl areas of the image to break the horizontal nature of the distortions – you can hold down **Alt** to twirl anti-clockwise.



**6 Final touches** If you feel you've overdone the effect in certain areas of the image you can use the **Reconstruct Tool** to restore these areas to the original detail. Once happy with your work in the preview window, click **OK** to apply the effect. Finally, go to **Blur>Motion blur...** and add around 10 pixels at the default angle (0°) to add a hint of movement to the water.



Edited



**Reflect on this!**

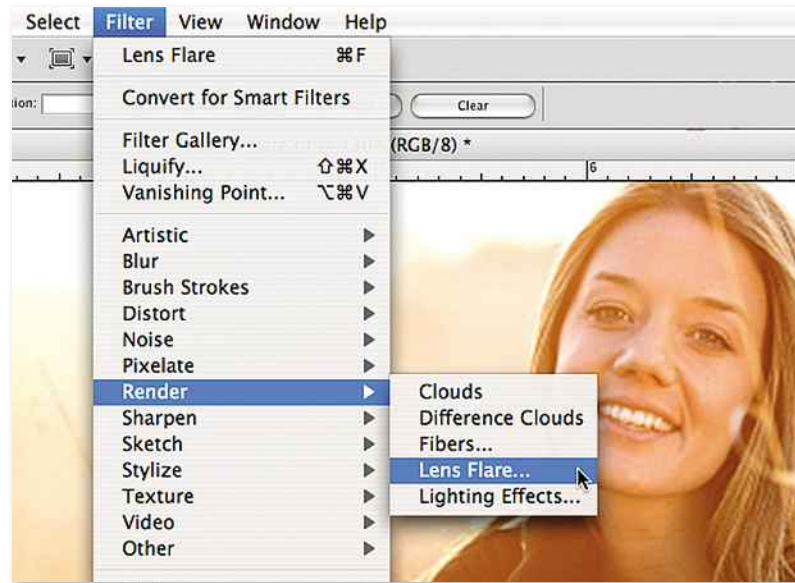
In just a few simple steps using Liquify we've created a whole new landscape with convincing reflections.

# Lens Flare

Learn how to apply a non-destructive Lens Flare filter to backlit images to give even the most basic portrait a bit of razzle-dazzle

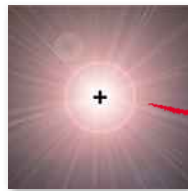
In basic terms, lens flare is when a bright light source passes through the camera lens, and then reflects and scatters off the internal elements of your lens. When the light source is within the frame, it can cause a series of round artifacts in the image. But if it's outside the frame, and shining towards the lens, it often causes a haze to spread over the image, making it look washed out as it injects light in to the shadows and highlights, reducing saturation and contrast. Usually, the more elements the lens has, the more pronounced the lens flare. Very different effects will also be created depending on whether a lens is a zoom or a prime.

Photographers generally try to avoid getting flare by using a lens hood or shooting in shade, but more and more portrait and fashion photographers are deliberately including lens flare to give their pictures a stylised look. Often it's just the artifacts they try to create to make a shot look more interesting; other times it's the haze for a romantic, sun-bleached look: sometimes both. But while it can be done in-camera by carefully positioning the subjects and shooting towards the sun, it can just as easily be added in post-production and the benefit is you don't risk ruining a perfectly good shot, and you get an image with no flare to use again later.



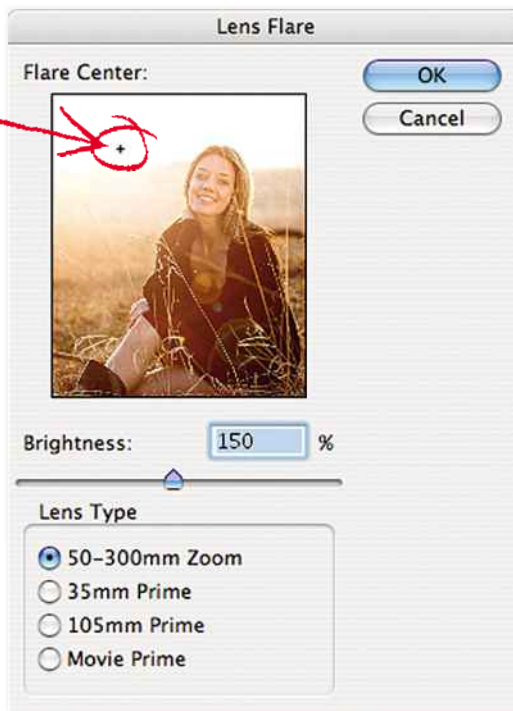
## THE FLARE CENTRE

**1) The crosshair:** Move the cross in the preview window to specify the location for the flare's centre by clicking and dragging on it. Position the crosshair where the light source would more than likely be in the frame, as this is where the flare would originate if captured in camera. When you move the crosshair, be careful that the artifacts don't fall across the subject's face.



**2) Brightness:** Adjust this slider to determine the brightness and spill of the flare. The brighter it is, the bigger the flare burst will be and the fewer artifacts that will show up. If you want a large flare burst, but you lose too much detail in the subject by doing this, you could add a Layer Mask (**Layer>Layer Mask>Reveal All**) later and paint out the flare using a low opacity, soft brush set to black.

**3) Lens type:** Each lens produces a very different style of lens flare, mimicking what it would be if created in-camera with that type of lens. For the best results, use the 50-300mm, 35mm or 105mm; which one you choose comes down to personal preference and the style you're trying to create. While you could convert a duplicate layer of your image into a Smart Filter so the filter becomes editable (see box, top right), this doesn't allow you to move the flare or make it bigger after you've committed to it. And, unfortunately, the Lens Flare filter has to be applied to pixels, so it can't be added to an empty layer. But there is a way of putting it on its own editable layer, you just have to be a bit clever about it (see step-by-step opposite).



## HOT TIP

**Smart Filter**  
Before you apply a filter, convert your image to a Smart Filter so that you can make alterations without affecting the image's original pixels and be able to edit the filter later. To do this, with the image layer selected, click **Filter>Convert to Smart Filter** then select the filter you wish to apply. For more information, refer back to the introduction to Blur filters on page 78.

## HOT KEY

**Alt to reset**  
Press **Alt** and the **OK** and **Cancel** buttons will turn into **Reset** so you can start your adjustment again without cancelling the filter completely.

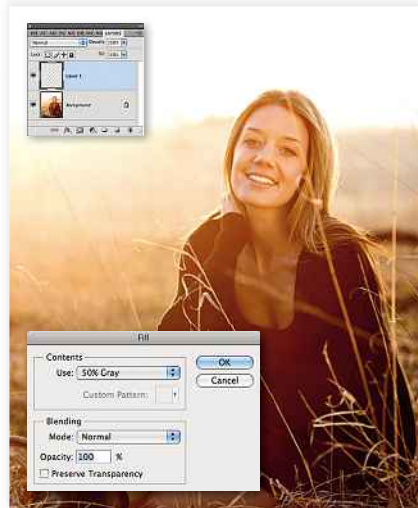


## HOT TIP

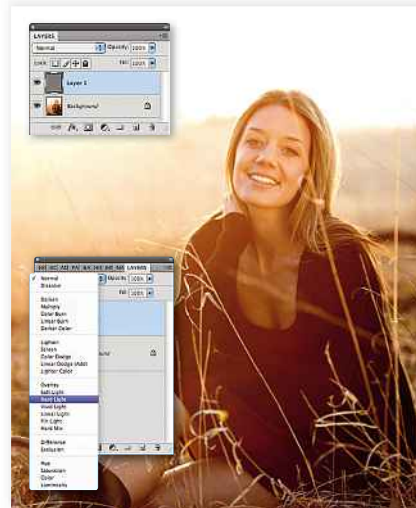
**Filters Online**  
If you like the creative freedom of CS4's filters, there are many more available that Adobe hasn't included in Photoshop. Go to **Filter>Browse Filters Online** to check out your options.

# How to apply Lens Flare to your image

While the Lens Flare filter adds style to your photographs, it can be highly destructive to pixels. Find out a little trick that makes this filter fully editable so it's able to add to the quality of an image, not diminish it



**1 Add a new layer** Go to **Layer>New** or click on the **Create New Layer** button at the bottom of the **Layers** palette (which looks like a square piece of paper with a curled edge). Fill the layer with 50% Gray by going to **Edit>Fill** and selecting this under the **Contents** drop-down menu to create a solid grey layer.



**2 Hide grey layer** Go to **Blend Mode** in the **Layers** palette and change it to **Hard Light**, or any of the modes between **Overlay** and **Hard Light** for different ways of hiding the 50% grey layer. Now you have an editable layer filled with pixels, so you can apply the **Lens Flare** filter without it affecting your original image.



**3 Apply flare** Before you apply the flare, convert the grey layer into a **Smart Filter**, so you can edit it after you've committed to the filter. Do this by clicking **Filter>Convert to Smart Filter** (see panel, opposite). Now access the **Lens Flare** filter by clicking **Filter>Render>Lens Flare** and apply your style of lens flare.



**4 Transform layer** The beauty of applying the filter this way is that you can transform the lens flare by scaling the grey layer up or down, or rotating it to fit the effect you want. Double-click on the grey layer to turn off the **Smart Filter** while you transform the layer (**Edit>Transform**). See page 18 for how to use **Transform**.



**5 Use Curves** If the lens flare encroaches on parts of the subject too much, as it has on the model's face, apply a **Layer Mask** to the grey layer and paint over areas of the lens flare with a black, low opacity brush to control its effects. To add more of a whitewashed look, brighten the image with a **Brightness/Contrast** adjustment layer.

## HOW DO I... Preview the Lens Flare while using this technique?

The downside of using a grey layer is that you cannot preview your lens flare on the actual image you're applying it to. You can either make an educated guess, which will become easier with experience, or you can revert back to the beginning and apply the filter to a duplicate layer of your image (**Layer>Duplicate Layer**). By doing this, it means you can get the right amount of lens flare to suit your picture. The filter will also save these settings, so once you delete the duplicate layer and go through Steps 1 to 3 again, it will apply exactly the same settings to the grey layer as you did for your duplicate layer.



### Secrets unlocked

#### THE FADE COMMAND

If you want to modify any adjustment, not just a filter, after you've committed to it, go to **Edit>Fade** and you can adjust the opacity and blending mode. Remember: you can only do it directly after you've applied the filter or adjustment. If you're working with a **Smart Filter**, which we recommend you do, you can't use this command, but you can adjust the filter afterwards by choosing **Layer>Smart Objects>Rasterize**, or by double-clicking on the **Smart Filter** to rasterize it, so the filter becomes editable.

# Diffuse Glow

Make your highlights luminous by learning how to control one of the most creative, yet practical, filters for photographers in Photoshop's arsenal – Diffuse Glow

There are dozens of digital filters designed to improve and correct a photograph, but there's even more to unleash your creativity. While filters, in the traditional sense, have always been a part of a photographer's toolkit to modify an image as it's recorded, the beauty of digital filters is that you've got the creative freedom to make artistic decisions post-capture.

Photoshop's (CS4 and Elements 9) filter gallery has an abundance of options from filters that sharpen, adjust noise and correct lens distortion, to artistic effects that turn an image into a sketch, impressionist painting or add texture. You may never find a need to use many of the filters for simple editing, but they're well worth experimenting with in case an opportunity arises.

For instance, one brilliant filter that's hidden in the Distort category (not a feature you'd naturally gravitate to when wanting to enhance a picture as it's known for reshaping an image) is Diffuse Glow. It renders an image as though it were viewed through a soft diffusion filter, adding transparent white noise and, in effect, it targets an image's light tones with a glow that fades from the centre of a selection. It's great for adding an ethereal look to images that are heavy on the highlights, like wedding dresses, snow scenes and milky waters of coastal landscapes. It can also be useful for enhancing lighting and a portrait's mood, especially high-key portraits, but the key is subtlety. The effect should support the image, not overpower it.

The filter makes global adjustments to the image, so there are two ways you can edit its effects selectively. Either select the area of the image you want to modify, refine the edge (see page 45), and then apply the filter, or add a Layer Mask, and paint the filter on or off the image, as shown later in this section. First things first, though, a filter has to be applied to pixels. So, before you begin, duplicate your image so you're not working on the original pixels, and then convert the layer you're working on to a Smart Filter to make the effect editable using (**Filter>Convert to Smart Filter**).



## HOT TIP

### Smart Filter

Before you apply a filter, convert your image to a Smart Filter so that you can make alterations without affecting the image's original pixels and be able to edit the filter later. To do this, with the image layer selected, click **Filter>Convert to Smart Filter** then select the filter you wish to apply. For more information, refer back to the Blur filter introduction on page 78.

## FREQUENTLY ASKED QUESTIONS

### Why is the filter taking an age to load?

A lot of filters target each pixel, so if your image is high-resolution, this can take a while. To be sure the filter is performing at its most efficient, try freeing some memory by clicking **Edit>Purge** before applying a filter. Then preferably apply the filter to a small area of the picture first, using a selection tool, to check it's what you want.



### Why is my image turning darker, not brighter?

You've got the foreground colour (located in the swatches at the bottom of your toolbar) set to white, not black. When you have the foreground colour set to white, you'll find the colour of the 'glow' will be black and your image will get darker the more you adjust the filter. Cancel the filter and switch the swatch to black, then try again.



## DIFFUSE GLOW CONTROL PANEL

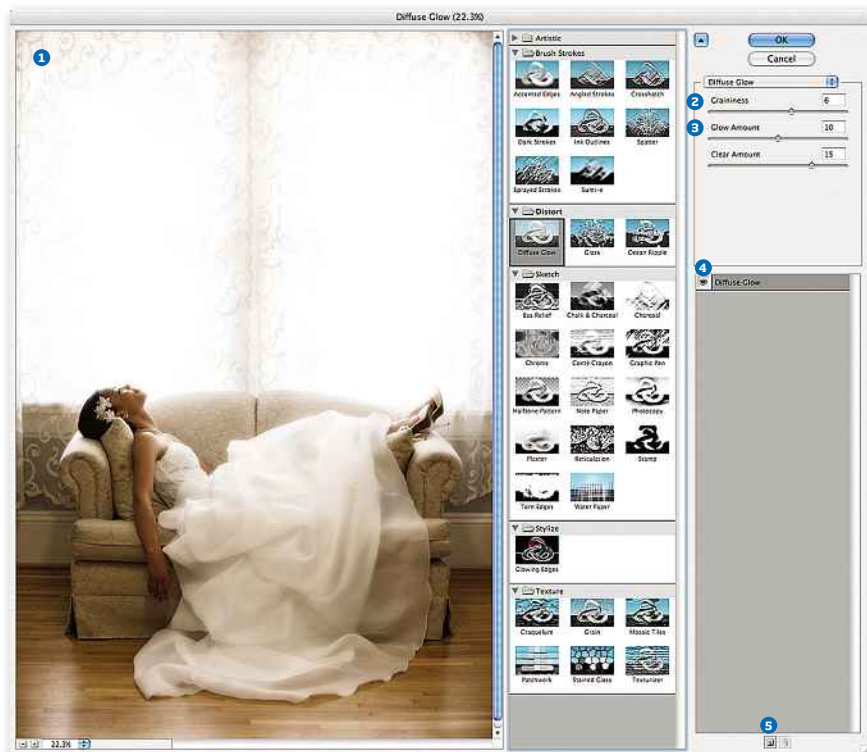
**1) Preview** To accurately judge the effect of the filter on your image, globally reduce the size of the shot visible in the preview screen by pressing the - button before you make any adjustments. This way, you can see the overall effect of the filter. To see the overall image much larger, click the drop-down menu and select **Fit to Screen**. Use the + button to zoom in to the affected areas 100% to make sure there are no halos around the edges; a sign that you've overdone the effect.

**2) Graininess** Move this slider to affect the level of white noise in the image. Do this once you've got the level of glow you want. If you want a smooth finish, leave it at 0.

**3) Glow Amount & Clear Amount** Use these two sliders in conjunction with one another. Start with **Glow Amount** at 0 and **Clear Amount** at 20, then gradually move the **Glow Amount** slider to establish the level of glow you want. You'll probably find, for most images, especially portraits, that 1 or 2 is enough, otherwise the skin tones start to look unnatural. Landscapes might need a little more. The Clear Amount slider enables you to refine the effect in smaller increments than Glow Amount, allowing you to fine-tune the level of glow.

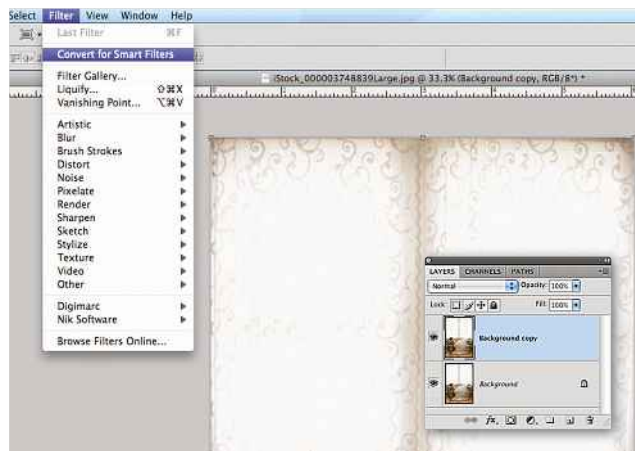
**4) Eye icon** Click the eye icon to turn the effect on and off, enabling you to preview the original image.

**5) New Effect Layer** Click this icon to activate a new layer, compounding the filter's effect.



## Using Diffuse Glow to enhance highlights

While Diffuse Glow is relatively straightforward to use, it's also easy to overdo causing a loss of crucial detail in the highlights. Read on to find out how to get the most out of the filter and your photograph



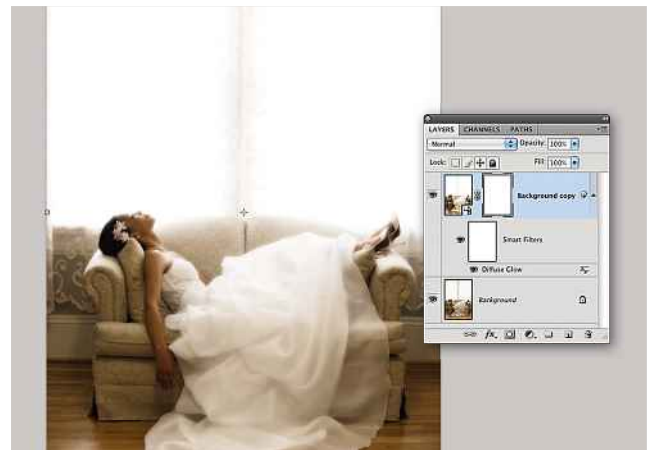
**1 Use Smart Filter** Before you apply the filter, duplicate the image layer so you're not working on the original (*Layer>Duplicate Layer*) and then select *Filter>Convert to Smart Filter* and click OK when the dialogue box appears. Now, to access the filter, go to *Filter>Distort>Diffuse Glow*...



**2 Adjust Glow Amount** Set the sliders so *Glow Amount* and *Graininess* are at 0 and *Clear Amount* is set to 20. Zoom in to 100% and move the *Glow Amount* slider until you start seeing the highlights bleed. Here, 1 isn't enough, but 2 is too much. The *Clear Amount* slider allows refinement.



**3 Tweak the glow** Adjust the *Clear Amount* to fine-tune the glow. Here, it's set to 10. Be careful not to bleach the highlights too much so you lose too much detail or you create halos. Don't worry if the glow bleeds in to the shadows or you lose definition, you can retrieve these in the next step.



**4 Add grain** Once you've got the level of glow you want, consider applying a little grain to your picture, but use it sparingly. Then click OK. Back at the Layers palette, add a Layer Mask to the filtered image by clicking on the *Add Layer Mask* button at the bottom of the Layers palette.



**5 Use the Brush Tool** With the layer mask selected and the Brush Tool set to its softest setting and loaded with black paint, brush on to the areas of your image you want to make darker. Vary the brush's opacity as you go to control the effect.

### Secrets unlocked

#### THE FADE COMMAND

If you want to modify any adjustment, not just a filter, after you've committed to it, go to *Edit>Fade* and you can adjust the opacity and Blend Mode. Remember: you can only do it directly after you've applied the filter or adjustment. If you're working with a Smart Filter, which we recommend you do, you can't use this command, but you can adjust the filter afterwards by choosing *Layer>Smart Objects>Rasterize*, or by double-clicking on the Smart Filter to rasterize it, so the filter becomes editable.

Fade Lens Flare... F

#### HOT KEY

**Alt to reset**  
Press **Alt** and the Cancel button will turn into Reset, so you can start your adjustment again without cancelling the filter completely.

#### HOT TIP

**Third-party plug-ins**  
Third-party filters by developers like Nik Software are available as plug-ins, which once installed appear at the bottom of the Filter menu below the filters provided by Adobe.

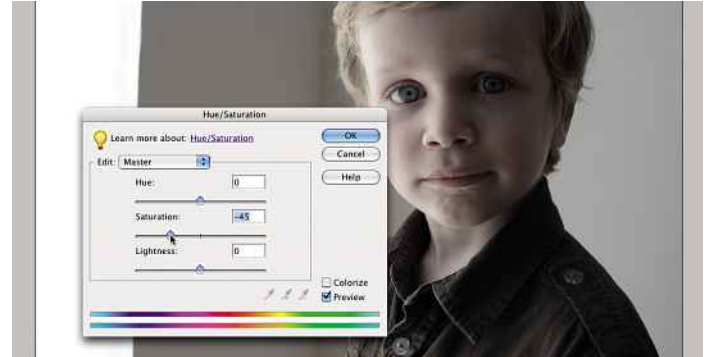
# Add drama to dull portraits

EVER WONDERED how portraits shot by professionals for magazines and books always look so polished and stylish? Well, the answer is often in the retouching: half an hour in Photoshop can transform a portrait, and this great technique is just one you can try.

The Lighting Effects filter in both Elements and Photoshop (**Filter>Render>Lighting Effects**) is a great tool for adding dynamic lighting to flat photos. Here we've used it to create a backlight as part of a new background but there's a lighting effect to suit nearly every photo from landscapes to still-lives, so it's well worth investigating. To refine the portrait further though, we'll also show you how to adjust the colour and apply blur to draw the focus to the face as you would if you shot with a shallow depth-of-field.



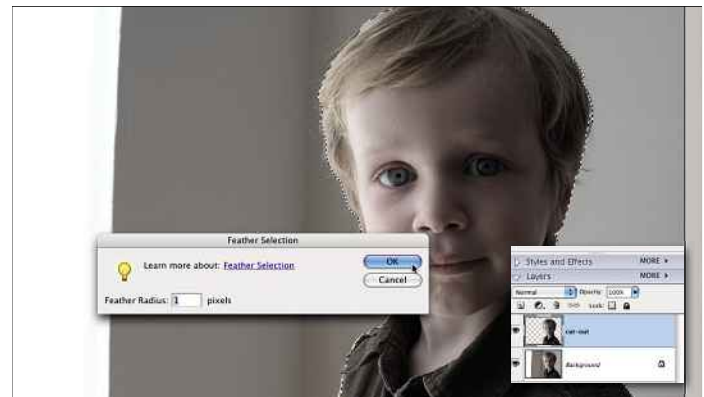
**1 Recompose the shot** The photographer had focused their attention on getting the lighting right on the child's face and had given less consideration to the composition. So, as is often the case when improving an image, the first thing to do is improve composition with the **Crop Tool**, by intentionally placing our subject to the right of the frame.



**2 Desaturate the colour** We add a slightly cool tone to match the child's direct stare to increase the drama, but you can also choose a tone that suits your picture. Go to **Enhance>Adjust Lighting>Adjust Hue/Saturation** and move the **Saturation** slider to the left (–) until you're happy that there is the correct balance of colour in the image, then click **OK**.



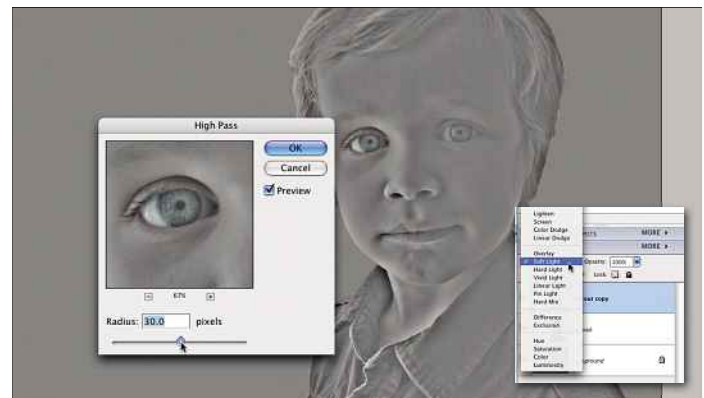
**3 Select the subject** The next step is to cut out the subject to place him on a new layer. To speed up the selection process, use the **Magnetic Lasso Tool**, which is best used when there is good contrast between subject and background. Move the tool's pointer along the edge of the subject and it automatically creates the selection.



**4 Feather the selection** Touch up the selection using the standard **Lasso Tool** if required, and with the selection complete, it's always a good plan to use **Select>Feather** and apply around 1 or 2 pixels to soften the selection a little. Now click **Edit>Copy** then **Edit>Paste**, and note that a new layer appears containing the 'cut-out' subject.



**5 Apply a colour cast** Make sure you click the **Background Layer** before continuing to activate it, then with the **Eyedropper Tool** selected, take a colour selection from the background and this appears in the Foreground Color swatch at the bottom of the toolbar. Now click **Edit>Fill Layer** to apply this colour to the entire background.

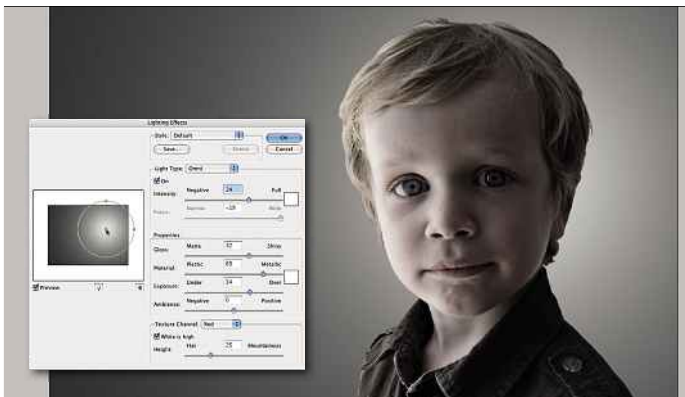


**6 Sharpen the face** To add depth and a surreal mood to the subject, use the High Pass filter. Go to **Layer>Duplicate Layer** to create a duplicate of the subject's cut-out and select **Filter>Other>High Pass**, enter a **Radius** of around 30 pixels and click **OK**. Select **Soft Light** in the Blend Mode menu (inset) to see the layers interact.

Edited

### Final image

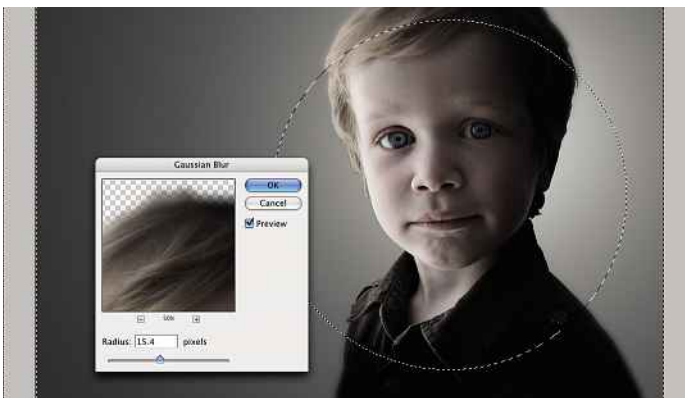
By seeing the promise in an ordinary portrait, you can create dramatic results with your Photoshop skills. The secret is not to go too far and remain true to the original.



**7 Apply Lighting Effects** Now it's time to light the backdrop. With the Background Layer active, go to **Filter>Render>Lighting Effects** and you're presented with a window packed with sliders and menus. Switch to **Omni** in the **Light Type** menu then, in the preview window, move the light position to where the head sits by dragging the white 'dot'.



**8 Retouch the lighting** With the background light altered, the subject's shadow now looks a little unnatural, so select the **Burn Tool** with a large brush (400 pixels) and set the **Exposure** to 25%, which will allow you to build up a gradual effect. Then 'hand paint' the shadow into the picture by moving the pointer down the left side of the face.



**9 Add some blur** To emphasise the stare further, throw the top of the hair and the shirt slightly out of focus to draw the viewer in centrally. Using the **Elliptical Marquee Tool**, make a large selection, with the areas that you want to affect on the outside. Click **Select>Inverse**, then choose **Filter>Blur>Gaussian Blur** and set it to about 15 pixels.



**10 Boost the eyes** The eyes lost some impact in the desaturation process and would benefit from a colour boost. Select them with the **Lasso Tool**, **Feather** to 1 pixel, then go to **Enhance>Adjust Lighting> Adjust Hue/Saturation**. Click the **Colorize** box, move the **Hue** slider into the Blue field, then adjust the **Saturation** so that the effect is realistic.

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- Add a slideshow, a guestbook, a calendar, a blog - even an events diary.
- Take enquiries through a 'Contact' form.
- Image watermarking service.
- Search engine friendly.
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- Top 5 star rating in Amateur Photographer magazine's prestigious 'Testbench'



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"I recommend Clikpic to any photographers thinking of building a website."  
Amateur Photographer magazine

"Building the website was uncomplicated and completely hassle-free." Digital Photo magazine

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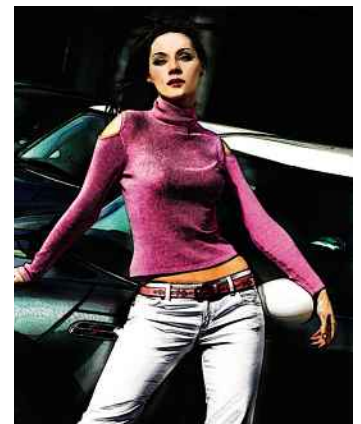
The latest Clikpic version launched in January 2011 provides countless options and features to style and structure just about all of your web pages, plus much more besides! Amazing flexibility! See the News section of [www.clikpic.com](http://www.clikpic.com) for details.





# SPECIAL EFFECTS

Our top choices for artistic effects that help add an extra dimension to your images



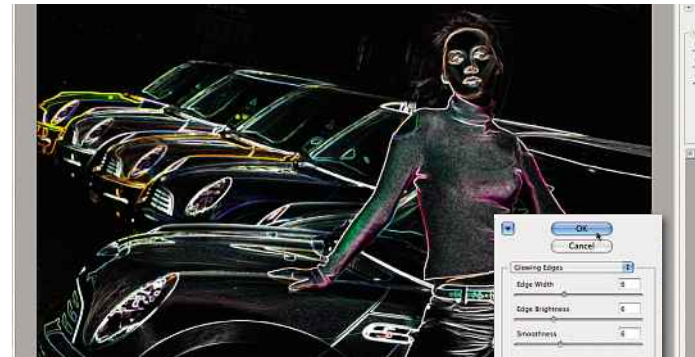
# Produce a graphic art effect

YOU MAY NOT REALISE THIS, but Photoshop isn't just about photography. There are all manner of creative professionals who use it to produce illustrations, textures, CGI effects and the like. If you are one of those people who cannot draw to save your life, don't worry – you can transform your photography into 'illustration' with this multi-layer technique, producing the kind of images you might see in the pages of a graphic novel.

We'll be duplicating the Background Layer a number of times and applying different Photoshop filters to them in Elements to emphasise the outlines and colours in the image. You'll also get the chance to learn how the blending modes of these layers control the way they interact with each other and affect the end result.



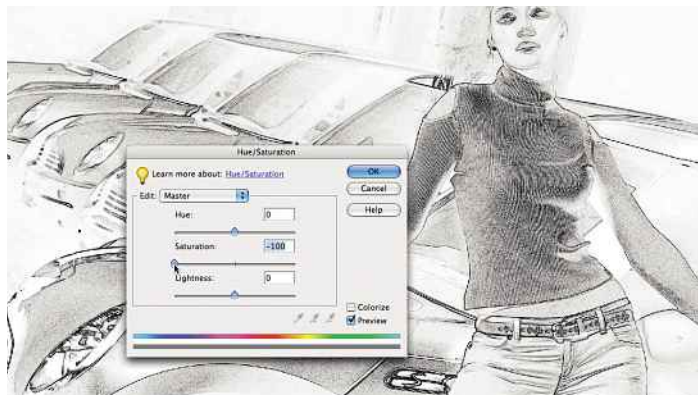
**1 Create a duplicate layer** With the image open, the plan is to build layers of outlines, much like pen or pencil strokes, to give the image a hand-drawn appearance. The first step is to create a duplicate layer of the original by clicking **Layer>Duplicate Layer**, which is then named 'glowing edges', an indication of the first effect to be applied.



**2 Apply filter effect** Click **Filter>Stylize>Glowing Edges**. The preview window shows the effect you can expect. Using the preview, randomly move the three sliders until the outlines within the image become really bold, then click **OK**. Go to **Filter>Adjustments>Invert** so that the white outlines become dark.



**3 Blend layers** The plan is to blend the two layers to allow this effect to interact with the original image. To do this, change the **Blend Mode** (situated at the top of the Layers palette) to **Overlay**. Now create a new duplicate layer of the original Background Layer (**Layer>Duplicate Layer**) and name it 'find edges', which is the next effect in this technique.



**4 Erase colour** Move the 'find edges' layer to the top in the Layers palette, then use **Filter>Stylize>Find Edges**, which creates an instant and uncontrolled effect on the image. Use **Enhance>Adjust Color>Adjust Hue/Saturation** and adjust the **Saturation** slider to erase all colour from the layer, leaving something much like a pencil sketch.



**5 Experiment with Blend Modes** Again, using the **Blend Mode** menu, experiment to see which mode provides the best interaction with the layers below (this image used **Color Burn**). Now the image is really starting to take shape, with the Background Layer providing the colour base and the two new layers producing professional hand-drawn effects.



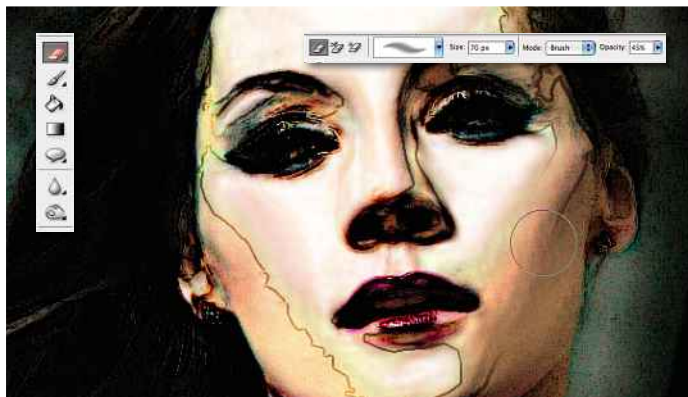
**6 Use Find Edges filter** Create another duplicate of the Background Layer to create some less uniform lines, and use **Filter>Artistic>Cut Out** to build a new level of tones for the Find Edges filter to 'find'. Once Find Edges is used, desaturate and use **Color Burn** mode, as in step five, and set the layer **Opacity** to 50% to make the lines a subtler.

Edited

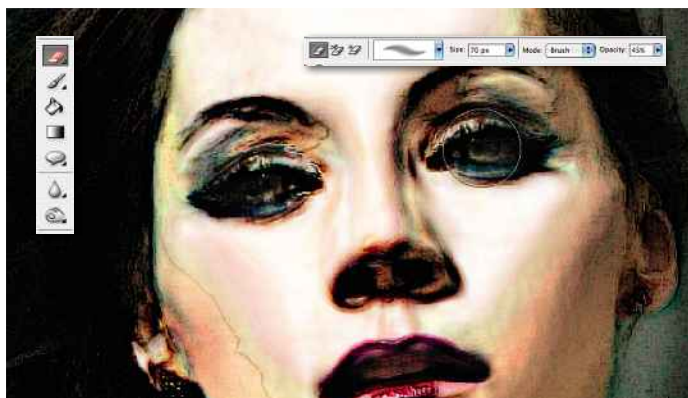


### Final image

This dramatic effect can be applied to almost any kind of image and, by giving it a go, you'll not only produce great results, but also begin to understand layers and blending modes in Photoshop much better.



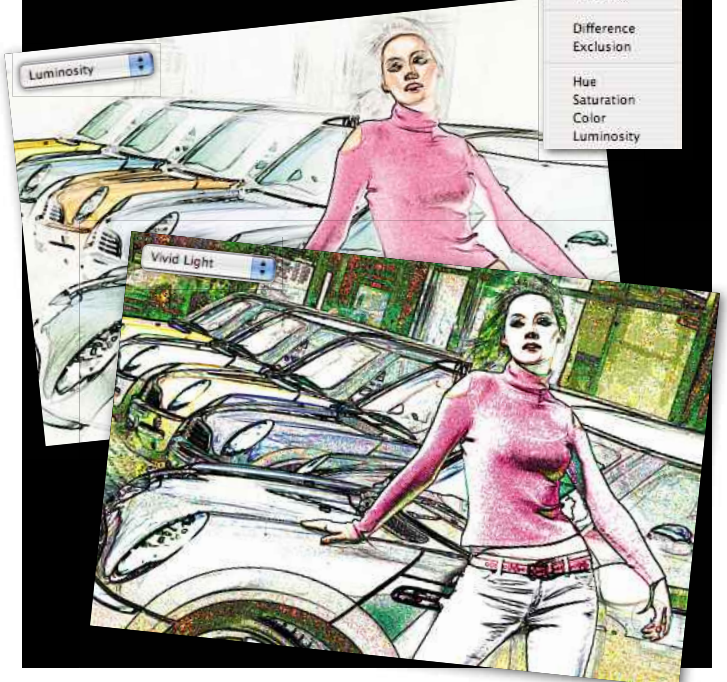
**7 Use Eraser Tool** That's it for the layers – the effect is just right with the image looking like a combination of pencil, pen and paint, just as in a modern graphic comic. However, some of the freeform lines on the 'find edges' layer are obstructing the face, so using the **Eraser Tool** with a feathered brush, set the **Opacity** to 45%, and you can begin to remove them.



**8 Lighten eyes** You may find the eyes become very dark, appearing almost hollow. With the **Eraser Tool** still active, remove detail from each of the newly created layers. Click on each, then erase the desired area until detail of the eye from the original Background Layer becomes visible, and brings the subject's eye contact back into play.

### Using Blend Mode

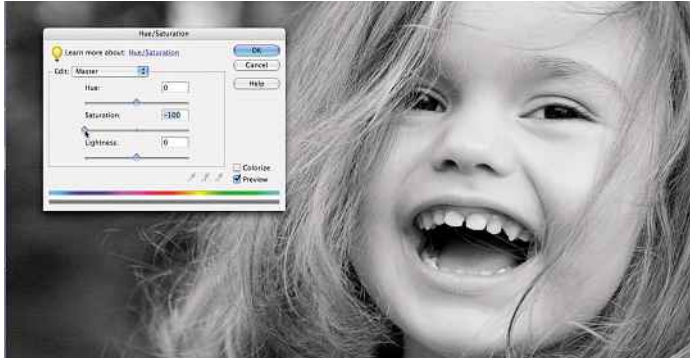
Each layer's Blend Mode only has an effect on the layer directly below it on the Layers palette. There are over 20 modes, with all new layers defaulting to Normal, which means no blending occurs. However, a duplicate layer will carry the mode of the layer it originated from. To give an exact explanation of the information each mode uses to calculate its blend is an article in itself, but rather than get bogged down by jargon, it helps to experiment with the modes to gain an appreciation of how each works. Below are a few of the more widely used effects created by using different modes on the 'glowing edges' layer.



# Turn your image into a sketch

THERE ARE PLENTY of photographers out there who, while being artistically talented with a camera, can't draw to save their life. Hence, Adobe Photoshop and Elements are popular imaging applications with their range of filters and plug-ins that can create authentic-looking sketches and paintings in a wide variety of styles.

The thing about all of these filters, mind you, is that they are never going to give their best when used on their own as a 'one-click' solution. It's when they are combined with other editing tools that the most effective results are produced. Let's see how an authentic pencil sketch effect can be applied using Elements' Graphic Pen filter, combined with the Find Edges and Cutout commands.



**1 Desaturate image** To achieve our sketch, we need to create duplicate layers of the original, each containing a different filter effect that will combine to give the end result. As the image will be presented in black & white, first desaturate it using **Enhance>Adjust Colour>Adjust Hue/Saturation**, taking the slider all the way left (-) to remove the colour.



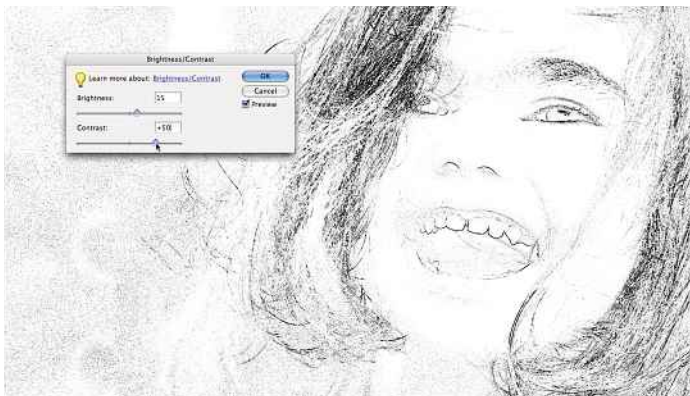
**2 Enhance contrast** As the filter effects work by manipulating the available detail, it doesn't hurt to give them a helping hand by boosting the contrast within your image, so use **Enhance>Adjust Lighting>Brightness/Contrast** and enhance the contrast by moving the slider to the right (+) until you are satisfied with the result.



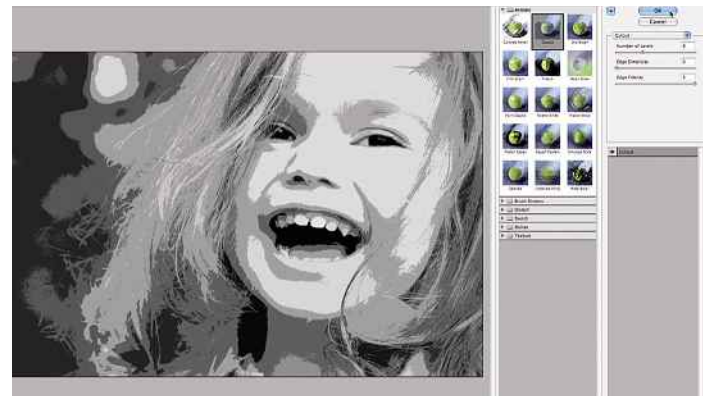
**3 Create new layers** Now it's time to create the new layers to combine the three effects you'll be creating. Go to **Layer>Duplicate Layer** and name the first layer 'tone', which will sit at the bottom. You can now hide the Background Layer by clicking the eye icon next to it, then create two more duplicate layers named 'outline' and 'texture' respectively.



**4 Apply Graphic Pen** Now for the first effect. Make the 'texture' layer active by clicking it in the Layers palette, then go to **Filter>Sketch>Graphic Pen**, and you get a simple preview window consisting of two sliders and a directional menu. Adjust these until you are happy, click **OK**, then hide this layer by clicking the eye icon.



**5 Use Find Edges** With the 'texture' layer hidden, click the 'outline' layer to make it active as we now want to create a pencil outline effect. To achieve this, use **Filter>Stylize>Find Edges**, which pretty much does what it says on the tin. Boost the outline further with the Brightness/Contrast to complete the effect and once again hide the layer.



**6 Add tonal shading** Now for the third and final effect, which will add a basic tonal shading to the image. Select **Filter>Artistic>Cutout**, and you're presented with three sliders, although you should concentrate on **Number of Levels**, as this is the most important for deciding the amount of tonal separation. Click **OK** to apply the effect.

Edited

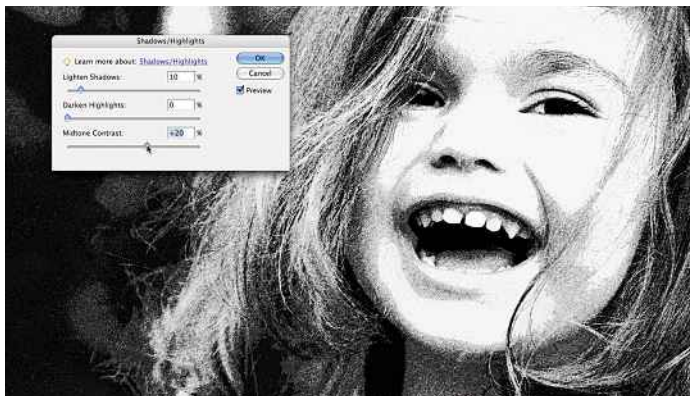


**Final image**

And there you have it – a sketched illustration that even Tony Hart would have been proud of, and not a pencil sharpener in sight.



**7 Blend layers** Now make all three layers visible by clicking on the empty eye icon box; however, only the top layer is viewable and the next stage is for the layers to interact. Set the **Opacity** on the 'texture' layer to 50%. This is so the 'outline' layer becomes visible, which you can then set to a blending mode of **Linear Burn**, allowing it to blend with the 'tone' layer.



**8 Flatten image** Save a copy as a Photoshop (.PSD) file to preserve the layers. Then flatten the image so you combined layers and can affect them all with the final step. Next to lift out the textures, enhancing the sketched appearance, select use **Enhance>Adjust Lighting>Shadows/Highlights** and move the **Midtone Contrast** slider right (+).

**Other subjects for the sketch effect**

As you can see from these further examples, a sketch effect looks great with a variety of subjects. Once you're confident using creative filters, you should try to experiment as there are endless ways to reach fantastic results. Why not try adding a hint of colour to the sketch or attempt to create the effect of pencil combined with watercolour?



# Give your image a 50's style appeal!

WHEN SOMEONE SAYS Andy Warhol, probably one of the first images to pop into their head is a colourful montage of Marilyn Monroe or a Campbell's soup can. Warhol is one of the most recognised artists of the 1950's pop art movement and we're still replicating his style 60 years on, with a lot more ease since the introduction of Photoshop.

When it comes to picking an image for a Photoshopped pop-art image, it's best to pick a shot with good contrast because you'll be, in effect, using the shadows as a black outline for your colours, and without good shadow detail to define the face, your subject may look like they're without a nose or mouth. If you're unsure, check the image by turning it black & white and then clicking **Image>Adjustment>Threshold** to play with the slider to judge when enough detail is retained. You should try to pick an image with a background that contrasts with the subject to make it easier to extract with the Magic Wand Tool. Some shots work better than others, but it's a case of trial and error. So what are you waiting for, give your shots a new lease of life with this graphic Photoshop technique.

## 1 Create the background

Open the image and click **Layer>Duplicate Layer**. Add a new layer by clicking **Layer>New Layer**, then go to **Edit>Fill** and pick a colour for your backdrop. Drag this layer between the two other layers in the Layers palette and click back on to what is now the top layer.



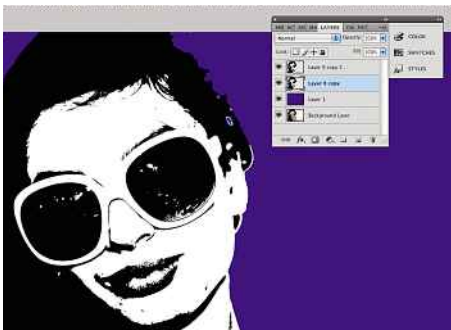
## 2 Draw out the detail

Use the **Magic Wand Tool** to select your image's background and press the **Delete** key to reveal the coloured background. Go to **Select>Deselect**, then **Image>Adjustments>Desaturate**. Now go to **Image>Adjustments>Threshold** and adjust the slider to retain the most facial detail.



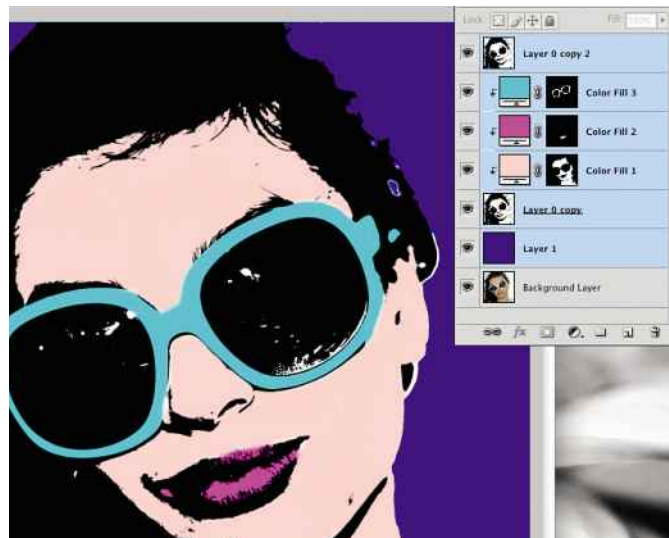
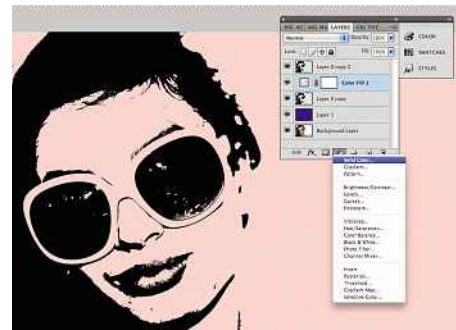
## 3 Add blur

Go to **Filter>Blur>Gaussian Blur** and set the slider to **1px**. Go to **Layer>Duplicate Layer**, then with the new image layer selected, use the **Paint Bucket Tool** and a white foreground colour to click on the face. (Press **X** to change the foreground colour from black to white).



## 4 New colour

With the top layer selected, change the **Blend Mode to Multiply**. Then click on the second layer and go to **Layer>New Adjustment Layer>Solid** and choose a colour for the skin. Then select the **Paint Bucket Tool** and fill the adjustment layer's layer mask with black to mask the colour.



**5 Repeat steps** Hold **Alt** and click between the second and third layer to clip them together. Click on the layer mask and use the **Brush Tool** with white paint to reveal the skin's colour. Repeat this step with a new, different coloured, **Solid** adjustment layer for each section of the image.

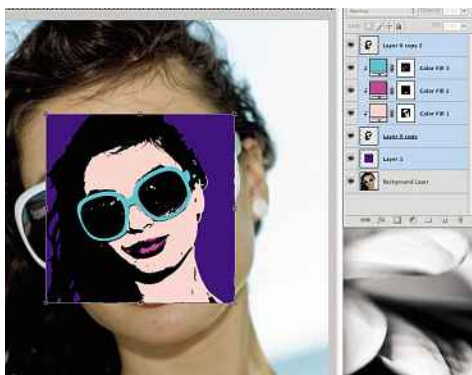
**6 Reshape the image** Crop the image in to a square using the **Crop Tool** and holding down **Shift** to constrain proportions. Double click to complete the crop. Select all the layers except the Background Layer by holding **Shift** and clicking on each layer.



## Tooled up!

### MAGIC WAND TOOL

If you struggle selecting the whole background, increase or decrease the **Tolerance** of your wand gradually and hold **Shift** to make multiple selections.



## 7 Duplicate four times

Press **Cmd+T** to access Free Transform. In the Options bar, set the **Width** and **Height** to 50%. Move the image to the top left of the picture. Select the **Move Tool** and drag the image into the corner. Then hold **Alt**, click and drag on the image to duplicate it.



## 8 Change the colours

Change the background colour of each image by selecting the correct layer in the Layers palette and filling it with a colour using the **Paint Bucket Tool**. To change the colour of other sections in the various images, repeat this step for the other layers.

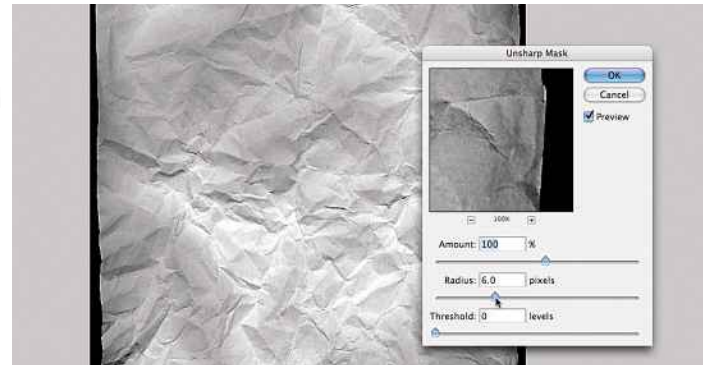
# Overlaying textures onto images

IN STILL-LIFE PHOTOGRAPHY, choosing the right background for an image is key to its success. It's important to think about textures – more specifically, matching textures between a background and the subject. Of course, you don't need to do this first time in-camera. One of the beauties of digital photography is that you can experiment with different types of background after the shoot, in post-production.

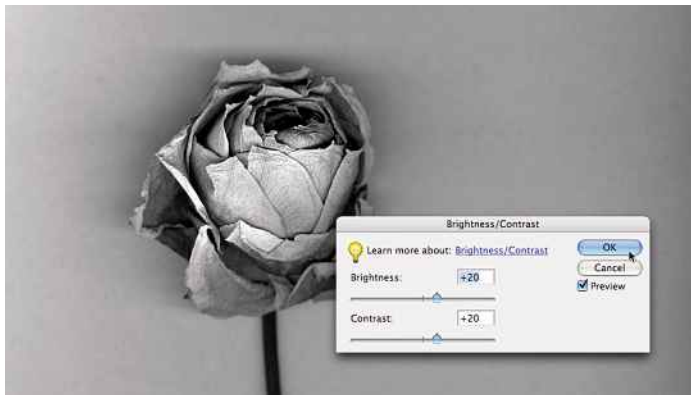
In this example, we'll see how it's possible to create a beautiful still-life of a rose by complementing the subject with a textured paper background and torn-paper border. Each of these items was scanned with a flatbed scanner and combined in Photoshop.



**1 Choose your textures** There is a small degree of preparation required here. First, choose your subject: here, a dried rose was used. Next, choose your background and border: the chosen background here was a scrunched-up sheet of paper and, for the border, a piece of paper with torn edges. Scan all the items or photograph them with your digital camera.



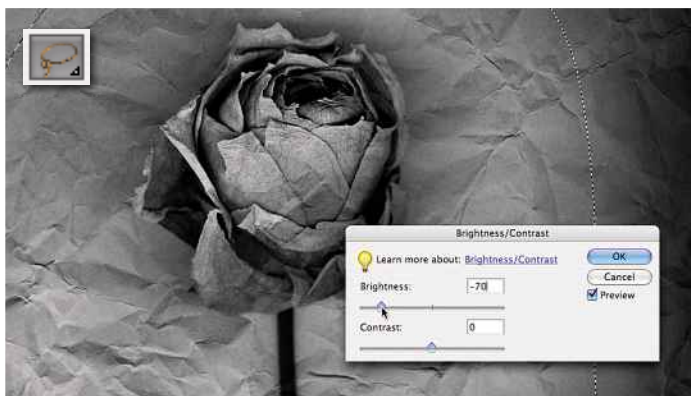
**2 Convert to Grayscale** Open the scrunched paper image and, as you won't be needing any of the colour information until later, go to **Image>Mode>Grayscale** to desaturate the file, then to accentuate the creases, add some sharpness with **Filter>Sharpen>Unsharp Mask**, keeping the **Amount** option at 100% and increasing the **Radius**.



**3 Boost definition** Open your subject file and, as in the previous step, convert to Grayscale. You'll want to boost the definition of the subject to make all the folds and edges really bold, so go to **Image>Adjustments>Brightness/Contrast** and move both sliders right (+). You need to now transfer this to your background image, so go to **Select>All** then **Edit>Copy**.



**4 Use Layers** With the subject file now stored in Photoshop's pasteboard, return to the background file and go to **Edit>Paste**, which pastes the subject into a new layer above the background. To get both layers to interact, change the Blend Mode at the top of the Layers palette to **Multiply** so the layer becomes transparent.



**5 Darken edges** Now add some creative darkening around the edges, which has the effect of throwing emphasis into the centre of the image. To achieve this, select the **Lasso Tool** and make a very rough selection around the rose, then **Invert** the selection. Set the **Feather** to a large pixel amount (eg 100) and use **Brightness/Contrast** to darken.



**6 Multiply Layers** Now open your border file and follow the Grayscale and Brightness/Contrast processes used previously to prepare the image. Then copy and paste, as in steps three and four. When the border is positioned in the window, choose the **Multiply** Blend Mode in the Layers palette, as before, to make the layer interact as previously shown.



Final image



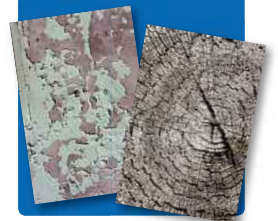
Alternative



**HOW DO I**

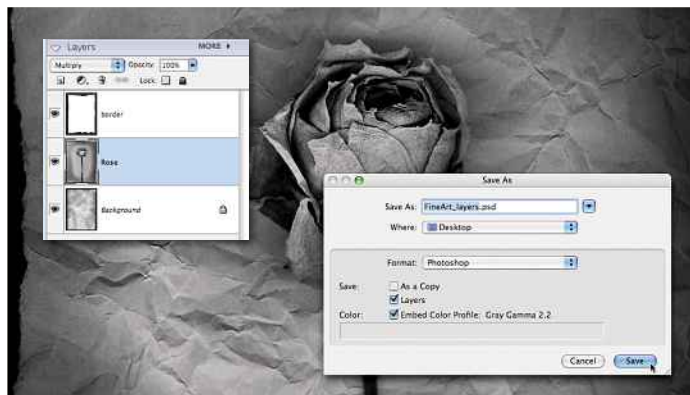
**Find textures?**

You may be surprised to discover what you can use as a texture for your images and the best way to find out is to grab your camera and go for a wander. Manhole covers, tree bark, a sand pit, peeling paint... you'll soon start seeing textures everywhere you turn

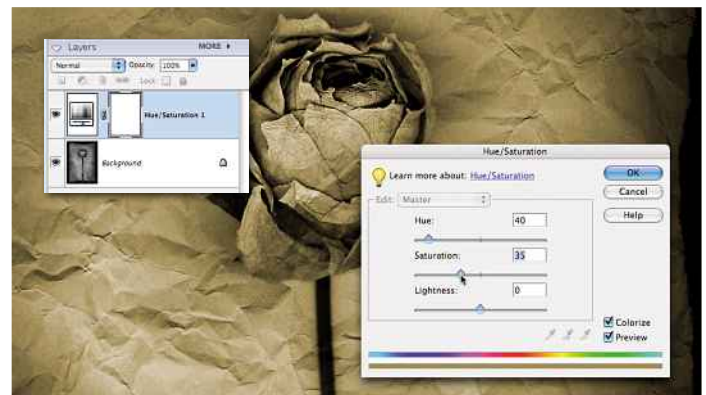


**FINAL IMAGE (FAR LEFT):** The distressed look of the rose and paper is enhanced by the brown sepia tone we've applied...

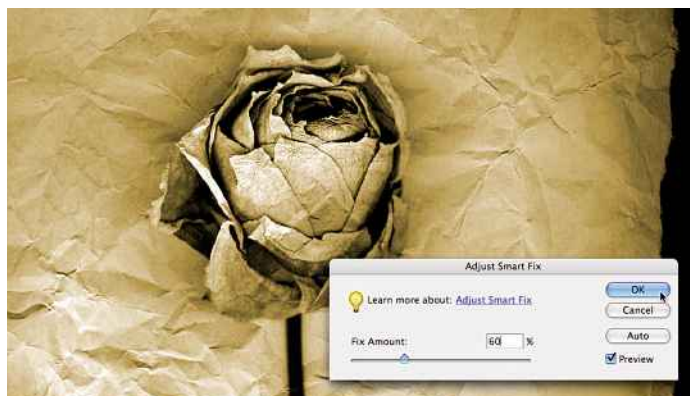
**ALTERNATIVE (LEFT):** ...but what works equally well is a blue tint (similar to the selenium toning used in traditional darkroom days).



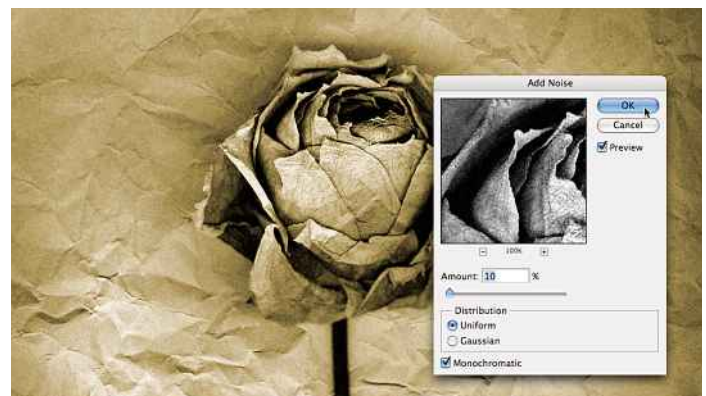
**7 Flatten image** Your work with the layers is now complete, so save a copy as a Photoshop file (.PSD) for back-up, then select **Layers>Flatten Image** to merge all the layers. Next, add a sepia-like tone to the image. As all layers were initially converted to Grayscale, you'll need to go to **Mode>RGB** to allow for colour correction.



**8 Adjust colour** Go to **Layers>New Adjustment Layer>Hue/Saturation**. This creates a new Hue/Saturation layer, giving you far more control, allowing for adjustments at any time without the need to go back in your workflow. In the window, ensure **Colorize** is checked, then play with the sliders to get the effect that suits your image.



**9 Use Smart Fix** You can see the composition still looks a little flat, so, with the Background Layer selected, choose **Enhance>Adjust>Smart Fix**. Smart Fix is one of Element's fantastic functions, which analyses the image and automatically applies enhancements dependent on the Amount you choose to 'fix', producing some really great results.



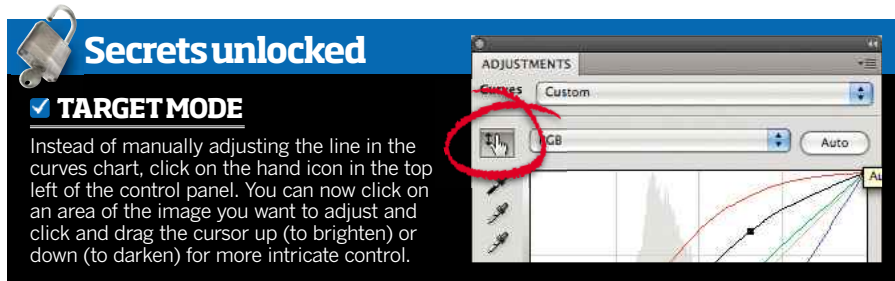
**10 Add noise** Finally, to complete the rustic feel, you want to add some false film grain in the form of noise. Go to **Filter>Noise>Add Noise** and, ensuring **Monochromatic** is checked, increase the noise **Amount** until satisfied. Your art print is complete. Now try experimenting with tones and borders for different and dramatic end results.

# Give your still-life some style

Vintage treatments are increasingly popular. Learn the basics of what it takes to create a retro effect and then adapt it for your own technique

IT SEEMS THAT the more advanced digital photography becomes, the more nostalgic photographers get. It doesn't matter what modern digital techniques emerge, we're still trying to find ways to replicate the classic character of analogue film and darkroom effects, whether it's mimicking the frame of a Polaroid picture, applying digital filters to copy darkroom effects or replicating the look of Holga, Lomo or Lo-fi photography. It goes to show that our love of film is far from dead.

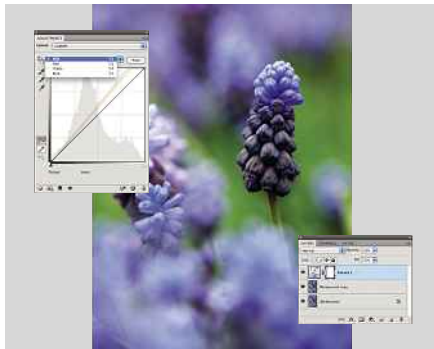
Back in the days of 'analogue' photography, imperfections were part of the photo: colour washes, warm tones, vignettes, blurs and light leaks were all common side-effects of developing film. In Photoshop, by altering the colour channels and applying a photo filter, you can help replicate these effects, and this step-by-step shows you the basic principles of how. Every image is different: you'll have to experiment with these steps to get your desired effect. You'll also find that you rarely get the same results twice, so you may want to record your technique's steps as an Action so you can apply the effect again and again.



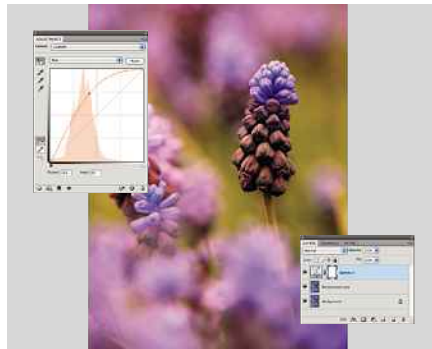
## Secrets unlocked

### TARGET MODE

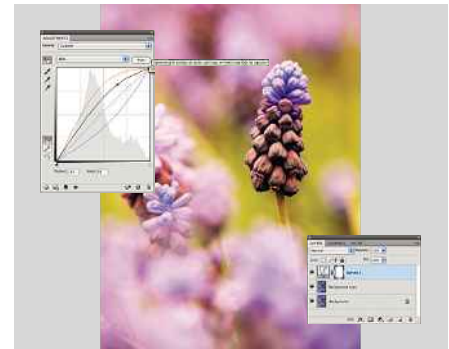
Instead of manually adjusting the line in the curves chart, click on the hand icon in the top left of the control panel. You can now click on an area of the image you want to adjust and click and drag the cursor up (to brighten) or down (to darken) for more intricate control.



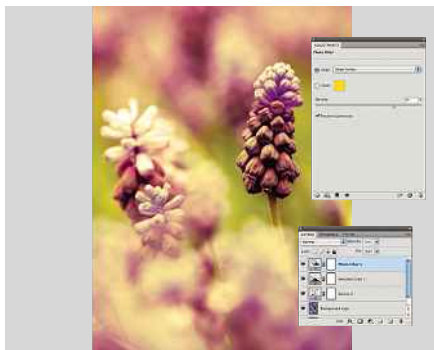
**1 Use Curves** Firstly, duplicate the original image (**Layer>Duplicate Layer**) and apply a Curves adjustment layer (**Layer>New Adjustment Layer>Curves**). For this effect, you need to adjust the individual colour channels. To do this, click on the **RGB** drop-down menu to find the Red, Green or Blue channels for you to edit individually.



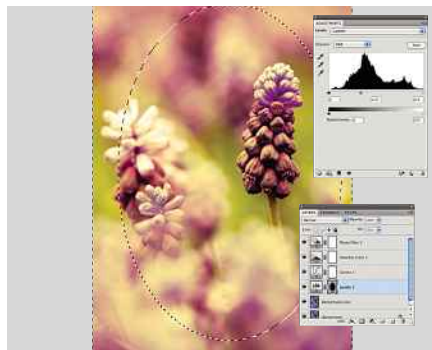
**2 Adjust colour** Your aim is to colour-wash the image by altering the picture's tones. When adjusting the channels, either try to create a large flowing bend or an S-shaped curve, depending on the colours of your image. Here, we pushed the Red channel quite far to make more of the pink tones and only slightly altered the Blue and Green.



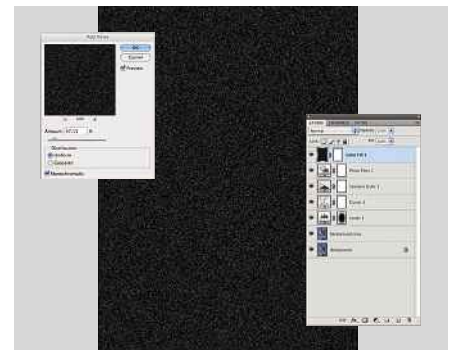
**3 Brighten whites** To fade the colours more, revert back to the **RGB** channel and adjust the contrast slightly to dull the blacks but increase the whites. We also applied a Selective Color adjustment layer (**Layer>New Adjustment Layer>Selective Color**) and tweaked the White channel to make it brighter.



**4 Apply a photo filter** Click on your duplicated image layer, and go to **Image>New Adjustment Layer>Photo Filter**. Flick through the various filters to see which one warms up your image the best. We chose Deep Yellow. Make sure **Preserve Luminosity** is ticked and adjust the **Density** slider to control the filter's strength.



**5 Add a vignette** Using the **Rectangular Marquee Tool**, draw a rectangle inside the image, leaving a border around the edge. Make sure you've also set the **Feather** to 100px. Now go to **Select>Inverse** and then **Image>New Adjustment Layer>Levels**. Slowly adjust the Levels to darken or lighten the edges of the picture: we lightened ours.



**6 Add noise** To finish, add a small amount of grain to the image to enhance its aged look. Add a **Solid Color** adjustment layer, filled with black, and go **Filter>Noise>Add Noise** and select **Monochromatic**. Click **OK**. Change the layer's Blend Mode to **Screen** and reduce the layer's **Opacity** until you're happy with the level of noise.

**Edited**

HELEN DIXON

**Finishing touches**

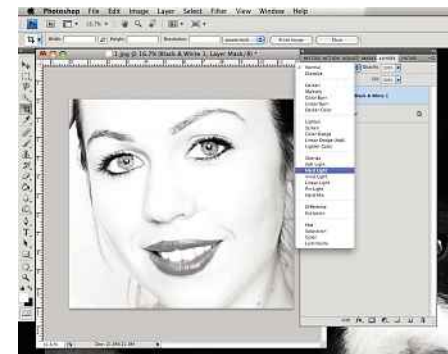
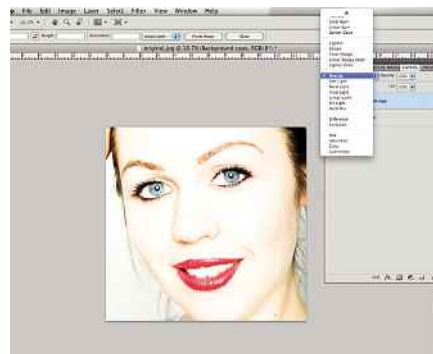
A sign of old-style analogue photography is light leakage where the film has been excessively exposed. Try recreating this by adding a new layer, putting dabs of red paint on the layer, then changing its Blend Mode to *Linear Dodge*.

# Magic makeover

THIS UNCONVENTIONAL high-key portrait is easy to achieve and would make a great montage comprising various facial expressions. The technique is fairly straightforward, but its success hinges on preparation. For the Photoshop effect to work, the eyes, eyebrows and lips need to be made a lot darker than the skin using make-up. Have your model pile on the lipstick and eyeliner and use a light-coloured powder to bleach the skin as this will help separate the tones later on. Although your model may look like a clown, the more make-up they apply, the better the final effect.



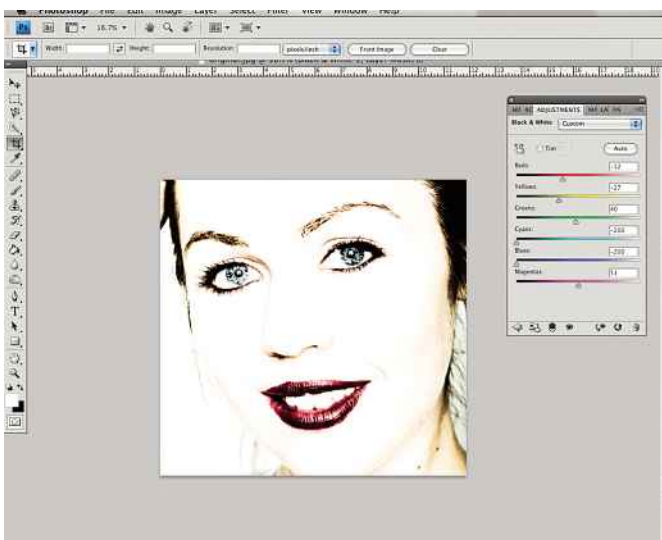
**SET-UP:** Position one softbox above and in front of your model, tilted down at a 45° angle. Start by setting the light to a mid-power with a view of increasing or decreasing the power to get a balance between overexposing the skin, but not the lips, eyes or eyebrows, as they will form the basis of the picture.



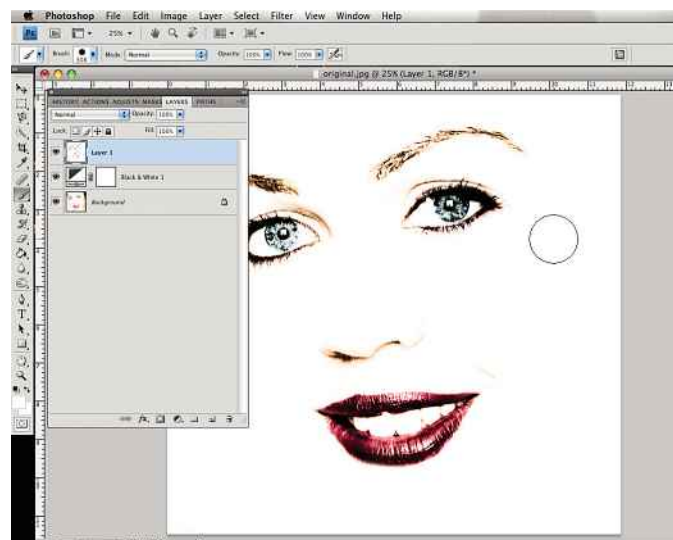
**1 Get the shots** Position your digital camera so it's level with your subject's face. Set it to manual mode, set the flash sync speed and f/5.6 for adequate depth-of-field. Ask your subject to pull back any hair obscuring the face and to pull as many faces as they can think of while you fire off the shots. Assess the pictures, adjust the light's power if needed and re-shoot.

**2 Open in Photoshop** Select an image and open it in Photoshop. As the only elements you'll need to form the picture are the facial features, select the **Crop Tool** and crop the image tight to get rid of any distractions. Now to boost the contrast, bleaching the skin further, duplicate the layer (**Layer>Duplicate Layer**) and change the Blend Mode to **Overlay**.

**3 Boost contrast** Adjust **Curves** to further bleach the face and darken the features (**Image> Adjustments>Curves**). Now flatten the image (**Layer>Flatten Image**). A clever way to boost contrast is to add a **Black & White Adjustment Layer** (**Layer>New Adjustment Layer>Black & White**). Click **OK**. Now change the layer's Blend Mode to **Hard Light**.



**4 Boost the colour** Now, to adjust the intensity of certain colours click on the **Black & White adjustment layer** in the Layers palette and tweak the colour sliders until the skin is nearly white and the features are at their strongest. Be careful not to turn the skin yellow. For this image the **Cyan** and **Blue** were set to -200 to enhance the eyes, **Yellow** to -27 to whiten the skin and **Red** to -12 to boost the lips.



**5 Clean up the face** To get rid of any hair and the face's outline, go to **Layer>New>Layer** and select the colour white, then using the **Brush Tool** set to a large soft brush get rid of the remaining outlines. Now if you want to make the canvas bigger to give more space around the features, use the **Crop Tool** to select the canvas, drag the squares to resize the canvas and then press **Enter** to extend it.



**Edited**

**Final image**

This quirky take on a portrait will have everyone asking how you did it.

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Step-by-step tutorials

# BLACK & WHITE

Master monochrome as we provide several techniques for converting colour to b&w



# How to convert to black & white

ONE OF THE wonderful things about digital is that it's easy to convert your colour images to monochrome. Photoshop allows for a number of ways to make these conversions, each varying in their level of control and difficulty. This is one reason why we'd always advise shooting in colour and then convert the images, rather than set your camera to its monochrome mode. The other reason is that it's impossible to convert a black & white picture to colour, so you're missing out on a photo opportunity. But, most importantly, a colour image holds far more information to help you get the best tonal range for your black & white.

Here, we cover the four most popular methods to convert colour to mono so you can see the difference between each method. We suggest you give each one a try before choosing your favourite. In no time at all, you'll be a mono master!

## Adjustable Layers

Use **Layer > New Adjustment Layer > Channel Mixer**. It creates a new adjustable layer that can be altered if you change your mind later. Use this technique for Curves and Levels, too



ROSS HODDINOTT

## 1) Desaturate

This is one of the quickest and easiest routes to convert a colour shot to black & white, and, you've guessed it, the least desirable! Use the shortcut **Ctrl+Shift+U** or **Image > Adjust > Desaturate** to remove colour. Alternatively, slide the **Desaturate** slider to 0 in the Hue/Saturation dialogue box via **Image > Adjustments > Hue/Saturation**. Looking at the Swatch colour chart, all tones are distinctly muddy – especially the yellows, which appear more mid-grey than light grey. It can be fine for occasional use, but spending a little more time and effort using one of the other methods – as seen on these pages – will yield a much better tonal range in your black & white images.



**DESATURATION:** The Desaturate method is very quick and easy, but, as you can see here, it produces a flat b&w image with muddy tones.

## 2) Grayscale

This is a good starting point for most general shots and we'd recommend using this method most of the time. It's a much better way to edit than Desaturate and quickly gives an interesting, high contrast black & white image that often needs little extra work doing to it. Go to **Image > Mode > Grayscale** to convert to black & white.

You can see that the image looks less muddy and that the blues are a little darker. The tonal separation has created an interesting image. From here, you can tweak the image using **Curves** or **Levels**, especially if you select areas like skies or backgrounds beforehand.



**GRAYSCALE:** Using Grayscale is easy and usually delivers very good results. Here, there is excellent tonal range and good contrast.

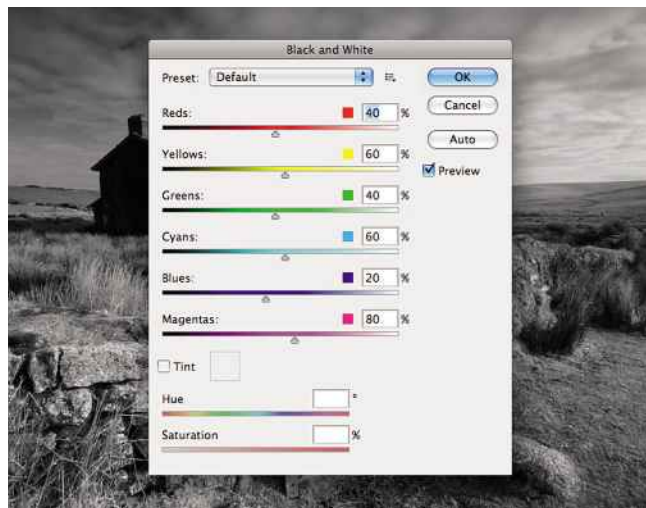


### 3) Black & White Adjustment Layer

This is one of the easiest to use and produces brilliant results. The Black & White adjustment offers users of varied abilities more comprehensive control over an image's tonal range.

Go to **Image>Adjustment Layer>Black & White...** to open the dialogue box and to instantly turn the image monochrome. As well as having a number of Presets for controlling contrast to pick from, you have six sliders – each targeting the strength of a specific colour in your image. A good place to start is the **Auto** button, as this alone can deliver attractive results for most images by setting a grayscale mix based on the colour value of the image. You can then use the sliders to tweak the grey values to suit the style of image you want.

It's an excellent tool if you want to darken a blue sky while keeping fluffy white clouds for more impact. Or if you have a scene of yellow flowers amongst green grass – both of which will render a similar shade of grey – and want to target each colour separately. The fine-tuning of your image can be time consuming, but well worth the effort. Be sure to play with all the sliders as you might be surprised at how much the Red slider alters yellows, the Yellow slider alters greens and the Cyan slider affects all blue tones in your scene.



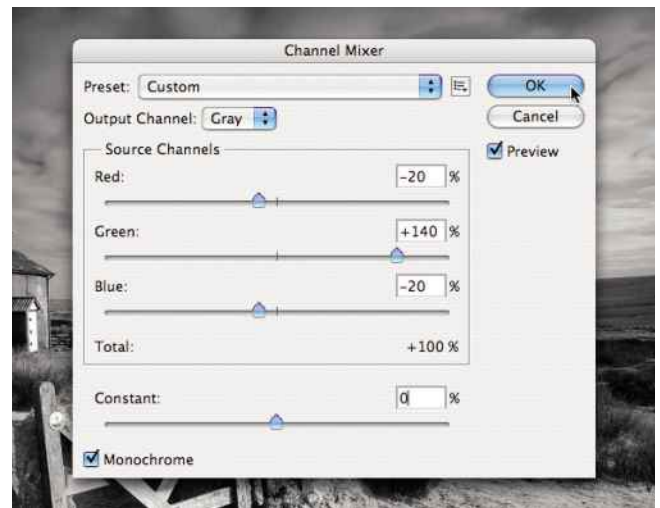
**BLACK & WHITE:** It's quite amazing to see how by adjusting the different colour channels you can alter the tonality of the image. Go on, have a play!

### 4) Channel Mixer Adjustment Layer

Channel Mixer is one of the most powerful ways to convert an image. It's available for Photoshop CS and Paint Shop Pro, with a less sophisticated version in Elements accessible via **Enhance>Convert to Black & White**.

The results are very similar to using a red, green or blue filter in front of your lens and you can mix the sliders to create an orange or yellow filter effect. Go to **Image>Adjustment Layer>Channel Mixer** to open the dialogue box. You will have a choice of Red, Green or Blue channels in the **Output Channel** menu. Now tick the **Monochrome** box to convert to mono. The Red channel is a good starting point, but check out each of them.

You can mix a bit of one channel with another to create new effects. When adjusting the sliders you should aim to keep the combined values of all three sliders to about 100%. For example, Red -20%, Green +140% and Blue -20% – some strange effects can be created by ignoring this! The Constant slider acts as a general brightness control. Try boosting colours beforehand by increasing saturation using **Hue/Saturation**, this will boost contrast significantly in the black & white version. You can even pick a single colour to boost from the **Edit** menu if you like, such as blue.



**CHANNEL MIXER:** The Channel Mixer is the most involved and time-consuming method but your efforts will be rewarded with the best results.

# Be dramatic with your black & white conversions

WHEN SHOOTING LANDSCAPES, most of us give little thought to how scenes may appear in black & white. This is understandable, as for most of us, the shots we take for the most part remain in colour. Now we're not suggesting that in future you imagine how every scene you shoot will look in mono, but we would suggest you consider it from time to time. Shooting images to convert to black & white is somewhat of a discipline and when you capture a scene with the intention of making it monochrome, there are a few factors that may affect the impact of your picture. To stop an image appearing lifeless without colour, you need to pay particular attention on the composition, tonal range, shapes and foreground interest.

First of all, it's worth avoiding areas with highly saturated colour, like sunsets, fields of bluebells, poppies and canola as a black & white image simply won't do them justice. Remember that every colour has its own shade of grey when converted to mono, so you're looking for scenes that show a range of lights and darks, otherwise you the image can look flat and lack tonal range. Form is a vital ingredient of mono landscapes, so look for scenes

with textures, strong lines and bold shapes that help create contrast, and foreground interest that leads the eye in to the scene. Rough weather can add drama: stormy skies are wonderful. You should avoid cloudless skies, as these give grey, lifeless results. If clouds are more wispy than substantial, you can use the Burn Tool to selectively adjust their exposure; darkening them to add drama.

While directional light provides good contrast, we can't always rely on the perfect photo conditions. For this reason, we'll show you how you can selectively adjust exposure using the Dodge and Burn tools to transform your mellow mid-tones in to highlights and shadows for extra impact.

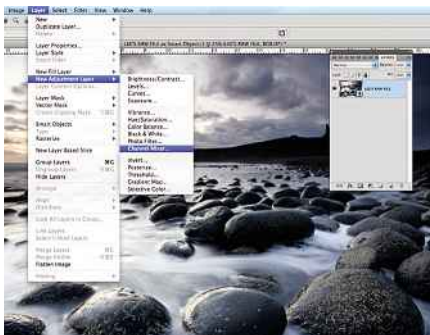
Converting your image to mono in Adobe Camera Raw or using a Black & White adjustment layer can give great results, but we shouldn't neglect the Channel Mixer, which was a favourite method for many until CS3. It's a step up in quality and a lot more controllable than a Grayscale conversion. And while not as advanced as the other methods, it allows you to work with the colour information in the image to enhance the tonal range more precisely, and is one of the best ways to get extreme contrast.



**1 Make Raw adjustments** Open your image in Adobe Camera Raw. The first thing that you should do is to make any necessary exposure adjustments to get the image how you want it to look. For this image, we adjusted the **Exposure** slider by adding a positive value to lighten the picture and the **Blacks** slider to slightly increase contrast.



**2 Prepare for Photoshop** When you come to open the image in Photoshop, hold down **Shift** to change the **Open Image** button into **Open Object**. This way, if you want to edit the Raw files again later – say you want to adjust the exposure further – you can double-click on the Object layer in Photoshop to revert back to Adobe Camera Raw.



**3 Add an adjustment layer** Now duplicate the layer (**Layer > Duplicate Layer**) and rasterize the image so that you can edit it by clicking on the image. Click **OK**. Next go to **Layer > New Adjustment Layer > Channel Mixer** to open its dialogue box. Using an adjustment layer means if you want to undo your conversion, you can just delete the layer as you haven't affected the original image.

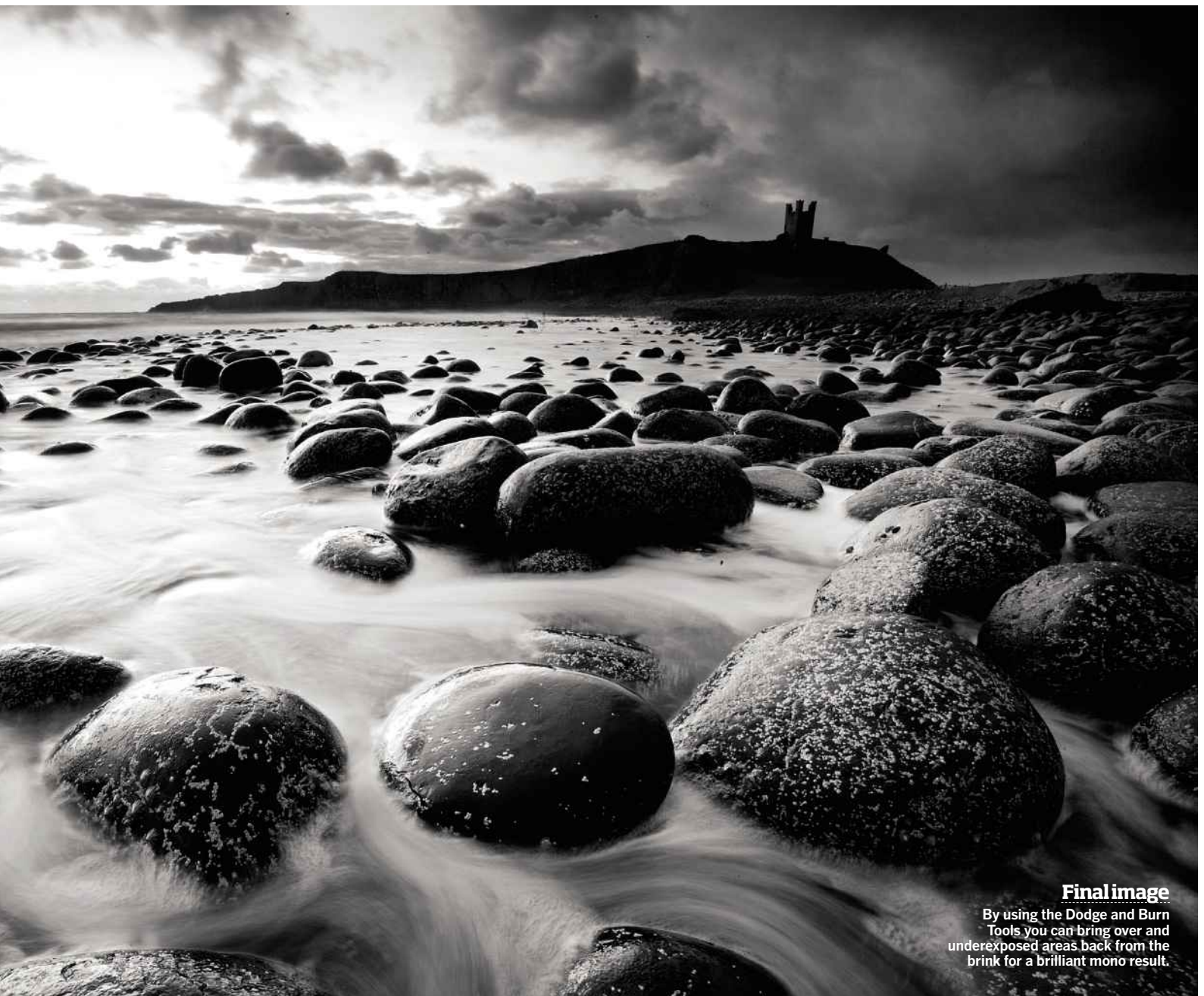


**4 Convert to mono** Click on the **Monochrome** box in the Channel Mixer dialogue box to turn the image black & white. Now use the sliders to adjust the **Red**, **Green** and **Blue** channels to improve the contrast. For the best results, avoid clipping any highlights or shadows by making sure the total value of the sliders amount to 100%. You can check the amount under the sliders.



**5 How NOT to do it** The total value here is 200% – while the shadows are well exposed, the highlights have been clipped and we've lost detail in the sky and the water. It's all about finding the right balance. If you find you have a couple of hotspots or dark areas that you can't get right using the Channel Mixer, you'll be able to correct these in the next step – just try to avoid doing it in excess.



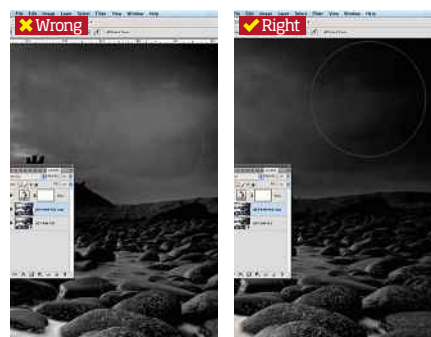


### Final image

By using the Dodge and Burn Tools you can bring over and underexposed areas back from the brink for a brilliant mono result.



**6 Selectively lighten** Click back to the **Layers** palette and select the duplicate layer. If you have some areas that need lightening, select the **Dodge Tool** from the toolbar and select a large, soft brush from the Options bar. We used a diameter of 900px and 0% Hardness. Also from the Option bar, select **Shadows** from the **Range** drop-down menu, set the **Exposure** as low as 4% and check **Protect Tones** to minimise artefacts.



**7 Continue editing** Brush over the area you want to lighten. If your brush is too hard or your **Exposure** is too high, you'll find you'll make circles over the areas you work on. For the best results, you want to build the effect up softly. Zooming in to the area by holding **Cmd** and **+** can help. Now switch the **Range** to **Midtone** and, adjusting the brush **Size** and **Exposure** as necessary, work on lightening the grey areas.



**8 Repeat** Using the **Burn Tool**, found underneath the **Dodge Tool**, repeat step seven. Set a low **Exposure**, select a soft, large brush and **Midtone** for your **Range**. Focus on the shadow areas and the darker mid-tones, increasing contrast by getting rid of as much grey as possible, without losing any detail, and boosting the blacks. If done right, this step can make the clouds look particularly dramatic.

# Add drama and depth by merging colour and mono

THIS TECHNIQUE IS a great way to convert a colour image lacking contrast and mood into one with more impact. For this snapshot of The Highlands in Scotland, the scene was fairly high in contrast and was originally converted to black & white by adding a Black & White adjustment layer. This was followed by tweaking the Opacity slider on the adjustment layer, reducing the black & white, to reveal some of the colour from the image underneath. The shot automatically gained a lot more depth, intensity to the sky and a tone that was in between colour and black & white. Although this two-step technique was effective, to improve the finish even further, the image was put through some further Photoshop steps.



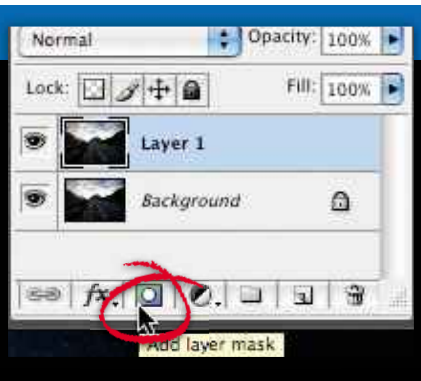
Edited



## Secrets unlocked

### USING A LAYER MASK

Instead of adjusting Opacity, you could take this idea a step further by adding a Layer Mask to the black & white layer (just click on the **Add layer mask** icon at the bottom of the Layers palette), then select the **Eraser Tool** in Photoshop and 'rub out' parts of the black & white layer to show colour through it. If you set the Opacity of the Eraser Tool quite low it will reveal the colour bit by bit. The look of the image will be similar to what is achieved here, but the main difference is you can keep some areas totally black & white and vary the amount of colour in other areas.



**1 Prepare the files** Open your image in Photoshop (**File>Open**). As this image was shot in Raw, the Levels, Curves and colour saturation was tweaked in Photoshop's Raw converter before starting this process. This technique suits almost all subject matters.

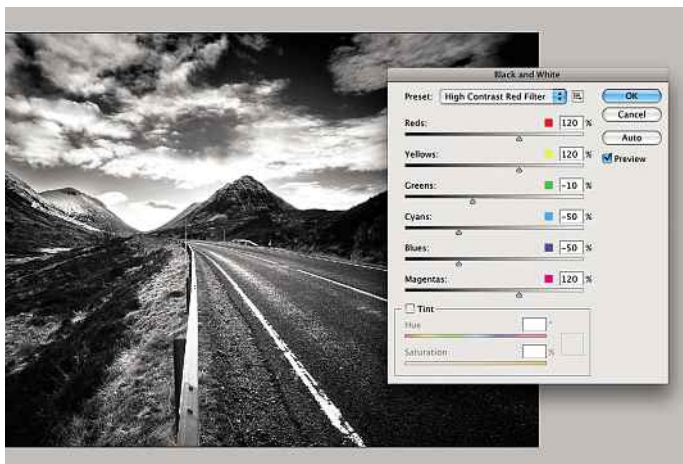
**2 Make a selection** Use the **Polygonal Lasso Tool** or the **Magnetic Lasso Tool** to select areas of the image that need the contrast adjusted using Levels and/or Curves. Adding these small tweaks will make the final image look more dramatic when you later create the black & white layer.

**3 Boost the saturation** As an optional step, you could increase the colour saturation (**Image>Adjustments>Hue/Saturation**) so that the colour looks more intense. Although it will make the image look a tad unreal at first, once you add the black & white layer, the colours will calm down.



### Final image

With Opacity at 42%, there's obvious colour bleeding throughout, but the image also has a distinct monochromatic feel, similar to a hand-coloured black & white darkroom print.



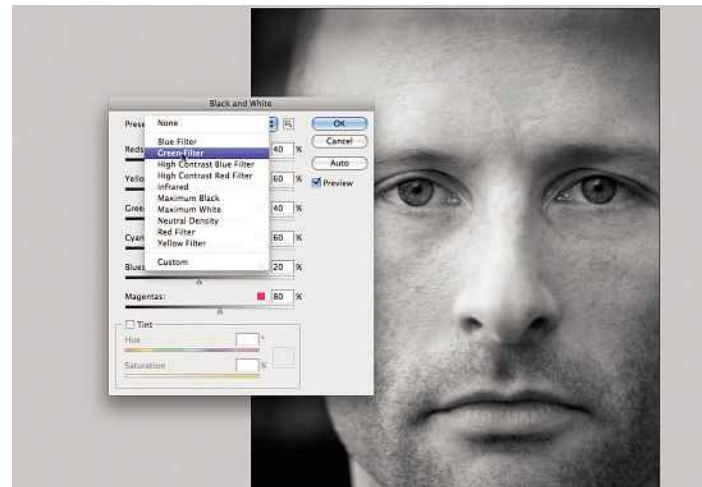
**4 Turn mono** Now add the Black & White adjustment layer by going to **Layer > New Adjustment Layer > Black & White**. Try out the different Presets at the top of the adjustment panel until you like the look of the image. For a really punchy result, opt for the **High Contrast Red Filter** preset.

**5 Reveal colour** All that remains now is to play around with the **Opacity** slider in the Layers palette until you're happy with the effect. It might be worth experimenting with different blending modes too. Normal worked well with this image, but try out Soft Light and Hard Light, too.

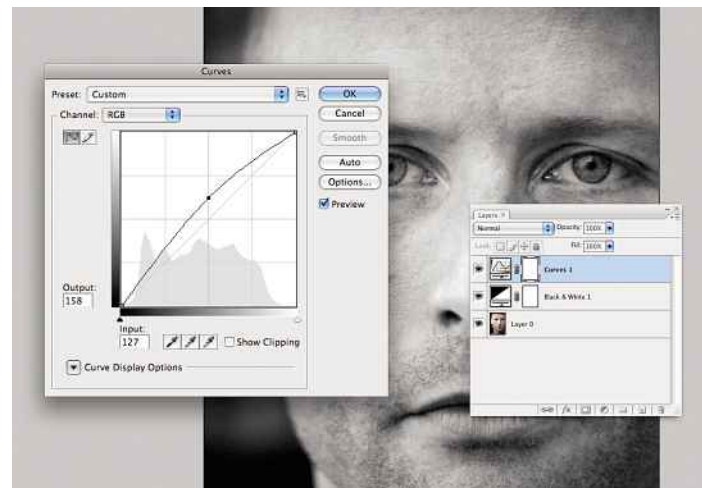


# Give portraits a mono boost

WITH BLACK & WHITE portraiture you can choose to go one of two ways. You can keep an image smooth and simple – an approach that works well for women and children – or you can push for grain, contrast and a much harsher treatment that works well for pictures of men. Here the latter approach is used. The original picture was shot with nothing more than a Canon EOS 350D and a 50mm f/1.8 standard lens. Only natural light was used with the subject, who was standing in the shade of a nearby building to shield him from direct sunlight. A large aperture provided a shallow depth-of-field that has held his eye in focus, while the rest of his features fall naturally out of focus. Now pick a picture of your own and give this gritty technique a go...



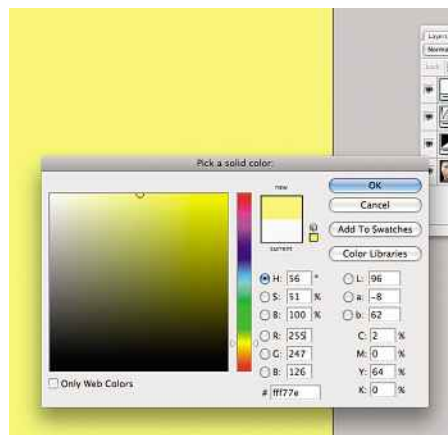
**1 Emphasise texture** The conversion itself is non-destructive as a Black & White adjustment layer (**Layers>New Adjustment Layer>Black & White**) is used, so the original image remains untouched. Here the **Red** tones are darkened a bit, which will emphasise the texture in the skin. If you are trying to de-emphasise texture then do the opposite.



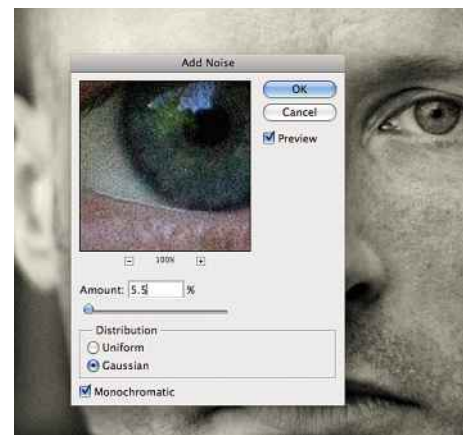
**2 Use Curves** Darkening the red tones means the brightness of the whole picture needs to be boosted. Do this using a **Curves** adjustment layer, though it could easily be done with Levels too. Again this is non-destructive so you can come back and tweak both the Curves and Black & White adjustment layers later to get the right look and feel.



**3 Add a small vignette** To add a bit of light fall-off at the edges of the image and to help focus on the eyes, use the Lens Correction filter (**Filter>Distort>Lens Correction**). Now adjust the **Vignette** slider to the left to darken the edges of the frame just a little. Click **OK** to confirm the effect.

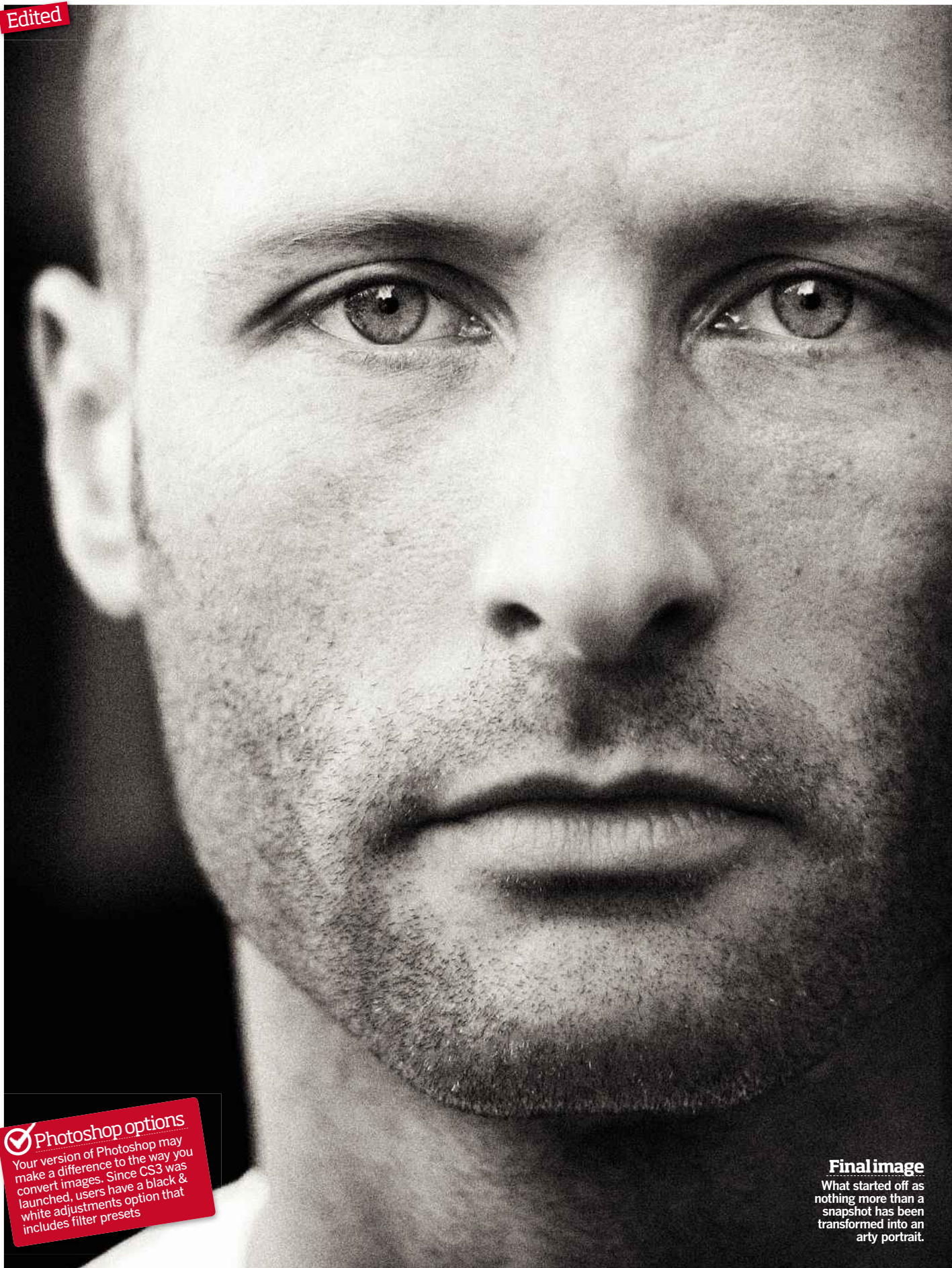


**4 Add a tint** Next up is to add a coloured tint – a gentle, warm coloured wash reminiscent of coffee staining. To do this non-destructively too, insert a solid colour layer (**Layer>New Fill Layer>Solid Color**), then choose a colour (light ones work best) and change the blending mode to **Color**.



**5 Add grain** Before you add some grain, it's a good idea to sharpen first so that you don't sharpen the grain too, which can look awful. Click **Filters>Sharpen>Smart Sharpen** to sharpen the image. Grain is added by selecting **Filters>Noise>Add Noise**. Set an initial **Amount** of 4%, which should do the trick.

Edited



 **Photoshop options**  
Your version of Photoshop may make a difference to the way you convert images. Since CS3 was launched, users have a black & white adjustments option that includes filter presets

**Final image**  
What started off as nothing more than a snapshot has been transformed into an arty portrait.

# Create a toned black & white image

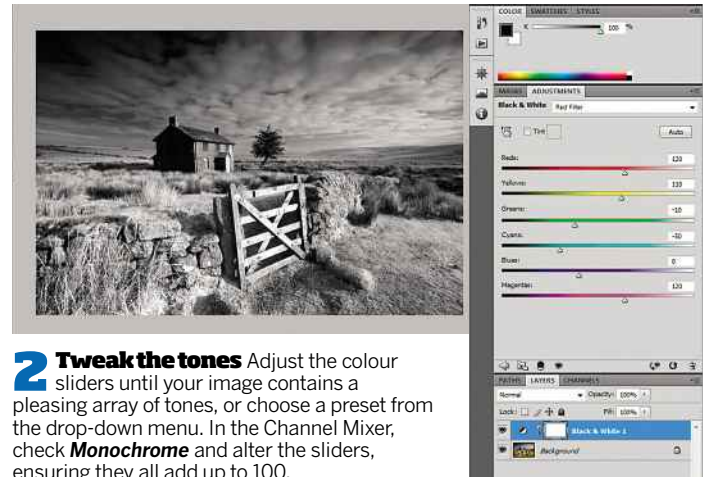
THERE IS SO MUCH you can do with a black & white photograph. You can play with its tones and contrast, make local dodge and burn adjustments to parts of the scene and even apply coloured tones or tints to give a certain look and feel.

This last part is easy to do badly, but looks great when it's done well. A slightly warm, brown cast (known as 'sepia') is reminiscent of those old photographs of yesteryear and gives the picture a classic look. Alternatively, a cooler blue tone gives pictures a more modern, contemporary look. The secret is to experiment and not go over the top.

Toning a black & white picture well needs a good monochrome conversion to start with though. Here's how to really take control of your image and make the best job of it.



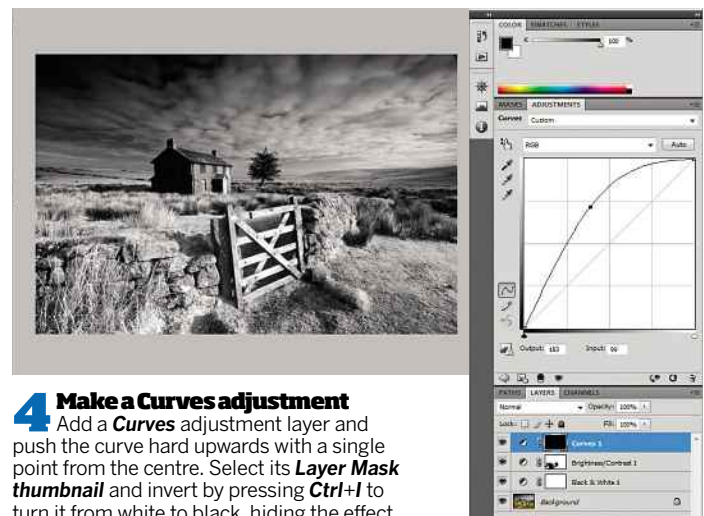
**1 Open your image** With the image open, add a **Black & White** adjustment layer by clicking the **Adjustment** icon at the bottom of the Layers palette. In CS3 or earlier versions of the software, you can use a **Channel Mixer** adjustment layer instead.



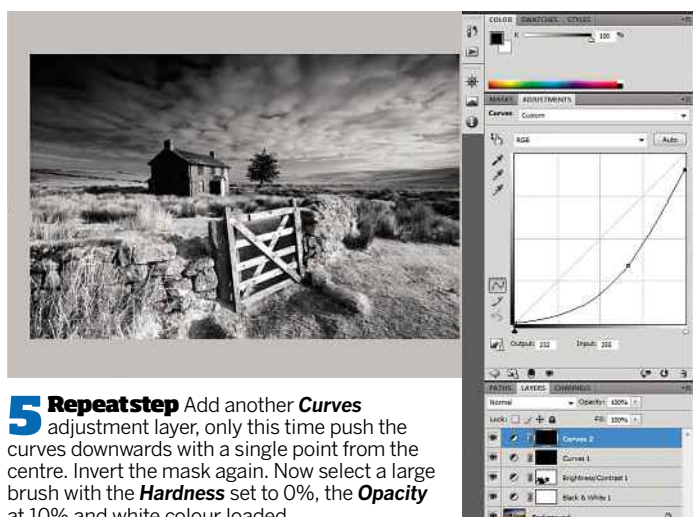
**2 Tweak the tones** Adjust the colour sliders until your image contains a pleasing array of tones, or choose a preset from the drop-down menu. In the Channel Mixer, check **Monochrome** and alter the sliders, ensuring they all add up to 100.



**3 Boost the contrast** Add a **Brightness/Contrast** adjustment layer, uncheck the **Use Legacy** box and increase the **Contrast** to suit. With the **Layer Mask thumbnail** selected, use the **Brush Tool** and black paint to hide areas of the adjustment.



**4 Make a Curves adjustment** Add a **Curves** adjustment layer and push the curve hard upwards with a single point from the centre. Select its **Layer Mask thumbnail** and invert by pressing **Ctrl+I** to turn it from white to black, hiding the effect.



**5 Repeat step** Add another **Curves** adjustment layer, only this time push the curves downwards with a single point from the centre. Invert the mask again. Now select a large brush with the **Hardness** set to 0%, the **Opacity** at 10% and white colour loaded.



**6 Dodge and burn** Select each of the **Layer Masks** on the **Curves** layers in turn. Then, using the **Brush Tool** on your image, slowly build up some dodging or burning to suit. You can use a grey brush to reduce the strength of any work you've done.



Edited



**Final image**  
The final step is to merge all the layers (*Layers > Merge Visible*) and to make any final colour adjustments.



**7 Add a tint** When your mono conversion is perfected, it's time to add some colour. Add a **Color Balance** adjustment layer and change its blending mode from **Normal** to **Color** to prevent the adjustments from lightening or darkening your image.



**8 Test out sepia** For a single colour, leave **Midtones** selected and work the sliders to suit. Try +30 Cyan/Red and -40 for Yellow/Blue to obtain sepia. For a blue tone, a combination of -35 Cyan/Red and +25 Yellow/Blue worked well with this image.



**9 Try different effects** For a red tone, +60 on the Cyan/Red slider is a good starting point. Add a touch of yellow for a salmon pink tone, or for green, do the same with Magenta/Green. Adding yellow can give a more foliage-green colour to the image.



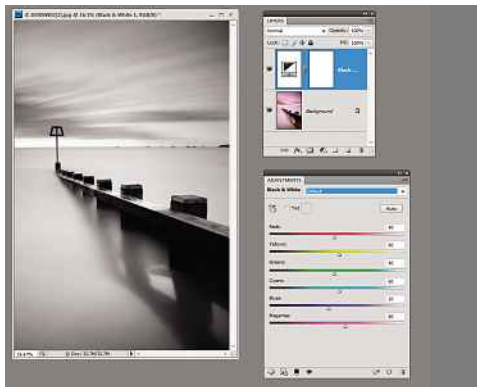
**10 Try adding two tones** For split-toning, leave the **Midtones** at zero and make changes to **Shadows** and then **Highlights** instead. As you increase the strength for each, the colours will seem to meet in the mid-tones.

# Basic skills for duotones

SPLIT-TONING, OR DUOTONING as it's otherwise known, dates back to the days of the chemical darkroom, but with digital processing, separately toning shadows and highlights has become much quicker and easier on the wallet. The treatment suits images with good tonal range, when there's clear distinction between the shadows and highlights, so that the colours don't overlap. There are so many colour combinations you can try: red and yellow work well, as do green and blue, but the effect can also be changed depending on which colour you use for highlights and which you use for shadows. For instance, red highlights and blue shadows give a contemporary, energising look, while red shadows and blue highlights can be more unsettling. There are no hard and fast rules though – keep mixing it up until you hit on something you like.

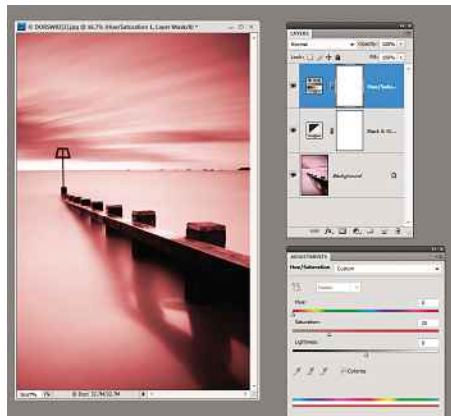
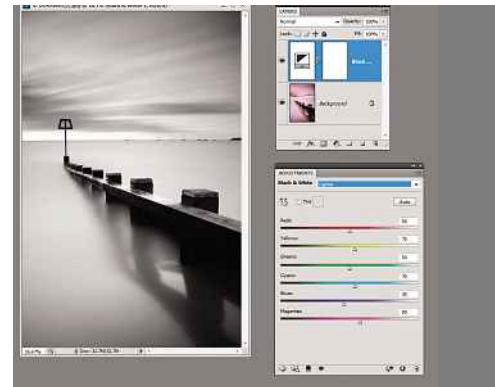
## 1 Convert to mono

Elements users should duplicate the Background Layer with **Ctrl/Cmd+J** and run **Enhance>Convert to Black & White**. Photoshop users should add a **Black & White** adjustment layer using the **Adjustment** button at the bottom of the Layers palette or by clicking **Layer>New Adjustment Layer**.

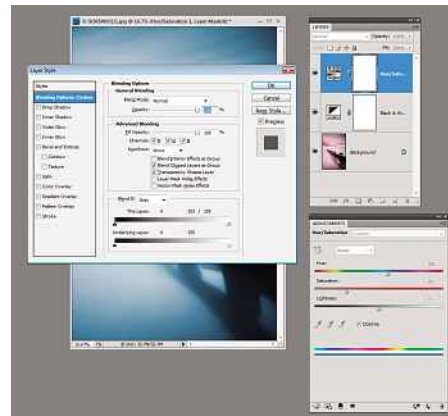


## 2 Adjust contrast

In both Elements and Photoshop, you have the option to choose a preset (use the drop-down menu in Photoshop) or work with the colour sliders to produce a desired contrast. Experiment freely with each method until you reach a look that suits the particular image in hand.



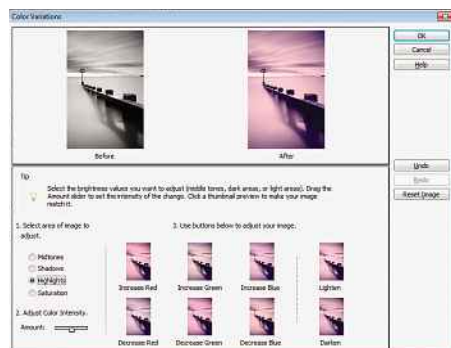
**3 Apply colour** Once the image is converted to black & white, in Photoshop, add a **Hue/Saturation** adjustment layer and check the box that says **Colorize**. Before you go any further, change the layer's blending mode from **Normal** to **Color** using the drop-down menu at the top of the Layers palette to prevent the image being lightened or darkened.



**4 Tone shadows** Drag the **Hue** slider to pick the colour wash for the shadows. Ignore the fact that the colour is applied to the whole tonal range for now. Select the **Hue/Saturation** layer and select **Layer>Layer Style>Blending Options**. Hold **Alt** and click the white triangle on the **This Layer** slider to split it into two parts.



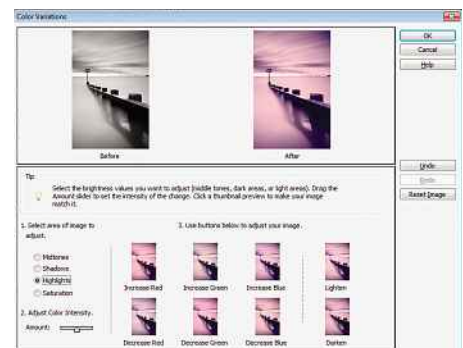
**5 Adjust the colour** Now, drag the left-hand part of the triangle along to the 100 setting and the right-hand part to 175. If you now click the **Preview** box on and off you can see how the highlight tones have been excluded from the toning. Click **OK** then add another **Hue/Saturation** adjustment layer, checking the **Colorize** box again.



**6 Tone the highlights** Change the layer blending mode from **Normal** to **Color** and move the **Hue** slider to choose your highlight colour. Click **Layer>Layer Style>Blending Options** and split the black triangle. Set the right side to 155 and the left to 80. Click **OK** to finish in Photoshop.



**7 Use Variations** Elements users don't have blending options so you need to use **Variations**. Go to **Enhance>Adjust Color>Color Variations**. Now select **Shadows** on the left to start and click the relevant picture button to add the colour of your choice to the shadows.



**8 Finishing touch** Click as many times as you need to get the desired strength, and don't be afraid to mix colour tones. Use the subtract picture button if you go too far. Check the **Highlight** button when you're done and repeat for the highlight tones. Click **OK** to finish.



## Secrets unlocked

### ✓ BLENDING OPTIONS

Although there are different ways to achieve a duotone in Photoshop, Blending Options offer by far the most control. You can be selective, using the sliders to specify the tones that receive the colour wash and those that don't; making it easier to keep colours separate as is often the danger with other techniques. **Blending Options** aren't available in Elements but excellent results can still be achieved using **Color Variations** and selecting **shadows and highlights** separately.



**Final image**

As you can see, the Photoshop treatment has given the former black & white image a new and appealing atmosphere.

# Convert colour to mono infrared

CONVERTING A SPARE CAMERA to shoot infrared images can be costly – that's if you have a spare camera lying around, which few of us do. There are cheaper alternatives, such as filters that block visible light while only letting infrared light through to the sensor. But as these filters are opaque, it's virtually impossible to see through, which makes it difficult therefore to compose your shot.

Now, thanks to our top technique, there is an easy way to achieve the mono infrared effect from a colour image: you can simulate it for free, via a few steps in Photoshop, or by applying a plug-in filter from Nik Software.

Those shooting on an infrared-converted DSLR end up with a Raw file image exhibiting a pink cast, which requires post-processing to convert it into the ethereal black & white image that has made it such a popular technique.

The creative effect works particularly well with landscape scenes that have lots of green foliage, as the green turns white, creating great contrast. Blue skies also add impact as they turn dark, making any clouds look dramatic. You can get some very interesting results if the photograph already has milky water from a long exposure too, adding to the ethereal quality of the infrared, like the image we're using for this step-by-step by professional photographer Adam Burton. It has vibrant green foliage, which should turn stark white once the effect has been applied, and a good tonal range that ensures we'll have a strong ratio of blacks and whites.



## Secrets unlocked

### ✓ CONVERT YOUR CAMERA

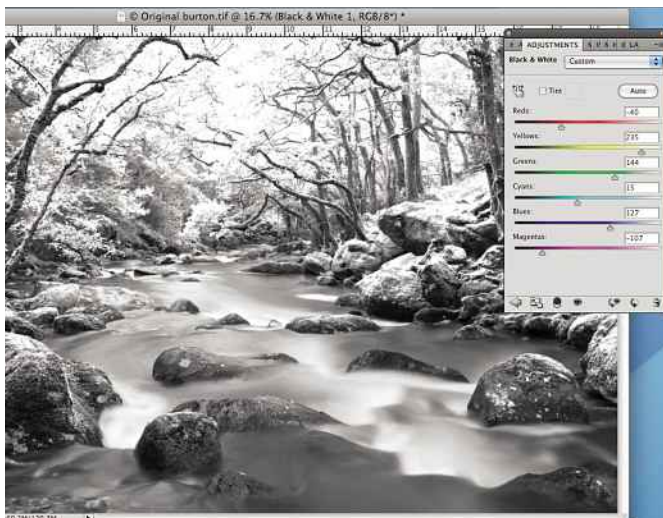
If you want to convert a camera so that it only captures infrared light, we'd recommend ACS in Norfolk due to their expertise in this area. Visit: [www.advancedcameraservices.co.uk](http://www.advancedcameraservices.co.uk)



**1 Convert to b&w** Open your image in Photoshop and apply a Black & White Adjustment Layer by clicking **Layer>New Adjustment Layer>Black & White...** This should then open an adjustment dialogue box, if not, double-click on the thumbnail in the Layers palette.



**2 Apply a Preset** You can create an infrared effect by moving the sliders to modify the colour channels.. You'll find that the Yellow, Green and Blue sliders work best. But Start by clicking on the **Infrared** preset located in a drop-down menu at the top of the Adjustment panel.



**3 Refine the effect** While the filter does a pretty good job, it's just a starting point. Use the sliders now to refine and improve the effect further if you think it needs it. Here we adjusted the **Blue** slider slightly to pop the whites in the water. Be careful that you don't overdo it though and burn out the highlights, creating hotspots where you lose detail.



**4 Convert to a Smart Filter** Next hold down the **Alt** key and select **Layer>Merge Visible** to create a black & white version of your image. Then convert this new layer to a Smart Filter by clicking on the layer and going to **Filter>Convert to Smart Filter**. This way you can edit any filter you apply after you commit to it. See page 78 for more details.

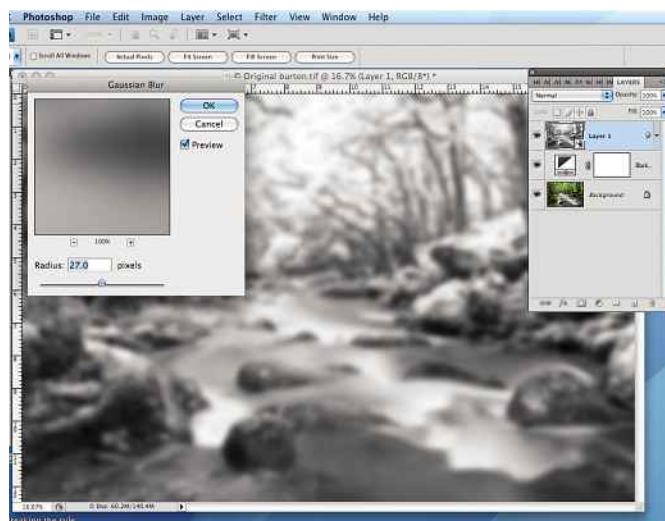




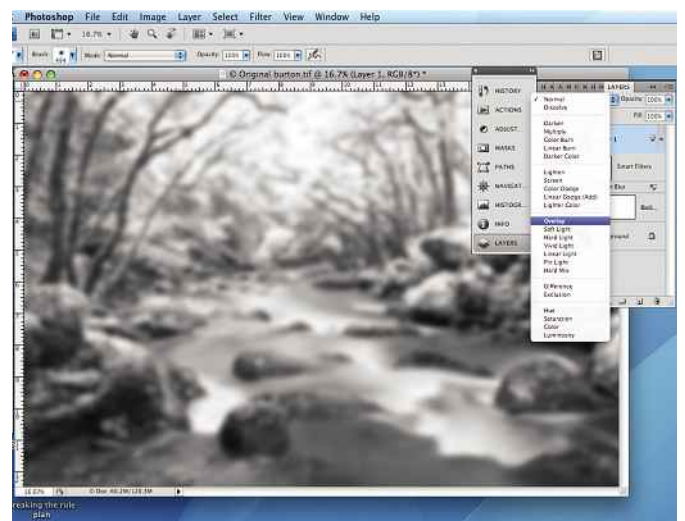
**Use Diffuse Glow**  
To really make your whites pop, try applying a small amount of the Diffuse Glow filter (**Filter>Distort>Diffuse Glow**) but be careful not to overdo it and lose too much detail

### Final image

The blur and popping whites has given a standard colour image an eye-catching and ethereal look of a fine-art infrared photograph.



**5 Add blur** To replicate a true infrared look, the whites need a slight glow, which you can easily achieve by applying some Gaussian Blur. With the smart filter layer selected, go to **Filter>Blur>Gaussian Blur**. Go heavy on the blur – we set a **Radius** of 27.0 pixels – you can always lower the layer's Opacity later by moving the slider at the top of the Layers palette.



**6 Boost contrast** Next, change the layer's blending mode (located in a drop-down menu at the top of the Layers palette) to **Overlay**, so the top layer interacts with the layer underneath and boosts contrast. If you need to bring some detail back in to the shadows, go to **Image>Adjustments>Shadows/Highlights** and adjust the sliders as needed.

# Create a 'film noir' portrait

THERE ARE VERY FEW instances when we'd ask you to try and light a portrait for deep shadows and high contrast, but it suits low-key monochrome, adding drama and mystery. We'd also normally advise you to steer clear of digital noise because its grain can ruin a shot, but when trying to simulate an old black & white film photograph, there's nothing quite like a bit of grain to add authenticity.

As opposed to a high-key portrait that's very clean and bright with light tones, a low-key portrait is gritty and moody with predominantly dark tones and it's easy to accomplish: you need one light and don't have to be overly concerned with unflattering shadows. You don't need studioflash either, you can use window light instead, but you should use a black background to enhance the dark tone of

the picture. Although Photoshop is useful for this image, you should try and get the lighting effect right in-camera and use this step-by-step for converting to b&w. Aim for deep shadows and the face to be correctly exposed. While you could set your camera to a high ISO to increase digital noise, you'll have better control over the effect if you apply the grain in Photoshop.

To add to the 1920's film effect, we asked our subject to wear a hat for added texture and interest, and to wear dark clothes so that the attention is drawn to her face and the lighting sharply falls off into blackness. As well as Photoshop, there are a lot of plug-in filters available, for instance from Nik Software, which provide you with a greater level of control and creativity over your 'film noir' image.



**1 Set-up** Position the subject a few metres from the backdrop so that none of the light from the softbox falls on it, turning it grey or highlighting wrinkles and creases. If using flash, switch your camera to manual mode and set the shutter speed to 1/250sec (or whatever your camera's flash sync speed is) and the ISO to its lowest rating. You'll need to adjust the aperture to control how the subject is exposed.



**2 Get the shot** Place the studioflash slightly in front of and at a similar height to the subject, approximately a metre away, and set to its lowest power. Take a test shot at f/5.6 to see how well the face is exposed and then stop the aperture down a few stops (ie underexpose) until you achieve the balance between lights and darks. We found between f/10 and f/13 worked well.



**3 Refine the light** Varying the light's distance from the subject and the aperture can help achieve a better effect. Be watchful of where the light falls on the subject: the eyes are important in a portrait, so make sure that these are well exposed by altering the angle or height of the studioflash or turning the subject slightly more towards it.



**4 Raw adjustments** Open your favourite image in Adobe Camera Raw and make whatever adjustments you feel you need to under the **Basic** tab, then switch to the **HSL/Grayscale** tab and click on **Convert to Grayscale** button to change the image to mono. Then adjust the colour sliders to tweak the tones. In this case the **Orange** slider improved the skin tone.



**5 Fine tune the portrait** Once you're happy with your picture, click **OK** to open it in Photoshop. Apply any cropping that you require using the **Crop Tool** and then duplicate the image (**Layer > Duplicate Layer**) to avoid working on the original pixels. Finish by removing any blemishes using the **Healing Brush Tool**. You're now ready to add the grain.

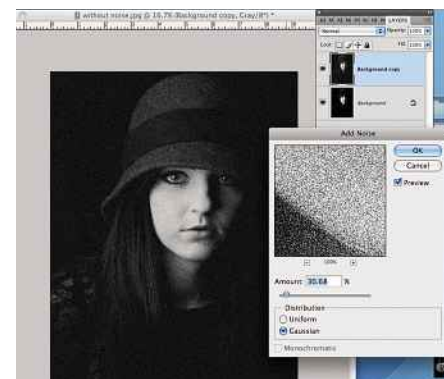
**Secrets unlocked**

**THIRD-PARTY PLUG-IN FILTERS**

Nik Color Efex Pro 3.0 Complete and Nik Silver Efex Pro 2 offers a plethora of sophisticated one-click wonder film filter effects. Once you've downloaded the software, simply open an image in Photoshop and scroll down the **Filters** menu to **Nik Software** to access a huge selection of filter options, including features that allow you to refine the size of the grain. [www.niksoftware.com](http://www.niksoftware.com)

Before

After



**6 Add noise** With the duplicate layer selected, go to **Filter > Noise > Add Noise** to open the **Add Noise** dialogue box. The **Gaussian** distribution will have a much stronger effect than **Uniform** and places random noise across the image, which is a closer effect to what film would naturally do. Adjust the **Amount** slider until you're happy with the level of noise.



**Final image**

As the noise will be added to the shadows, you'll probably find that the blacks turn slightly grey. To correct this, go to *Layer > New Adjustment Layer > Brightness/Contrast* and then adjust the *Contrast* slider slightly.

# Still-life solarisation

SOLARISATION is the term given to a technique that harks back to the darkroom era. It involved briefly exposing as partially developed emulsion to light, the result being that the tones in the final image were reversed. Today, this term describes digital techniques that produce a similar result, in other words manipulating an image so that dark areas appear light and light areas appear dark.

As the solarisation technique partially inverts blacks and whites, it's best to start with an image that already has good contrast and that you know will work well as a black & white. That way when the image is converted to monochrome, you have a good tonal range. It also works best if the subject is shot on or against a black background, as it makes the Photoshop work much smoother.

However, if your subject is primarily dark in tone, try placing it against a white background instead. Here we've used a chambered Nautilus shell, as it's visually interesting and offers good opportunity to create contrast in between its chambers.

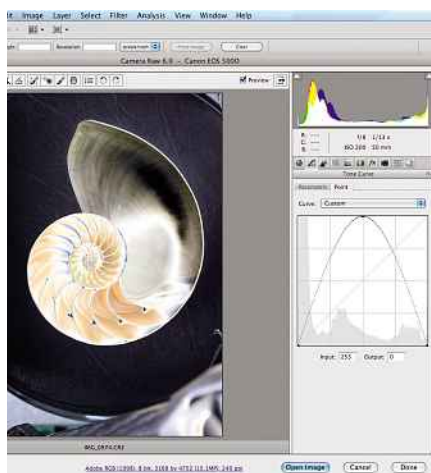
While there are filters in Photoshop and third-party plug-ins for solarisation, we've found the results are much more controllable and better achieved using Curves with the image open in Adobe Camera Raw (ACR). Working on a Raw file in ACR means you have the maximum amount of image information, allowing you to refine the technique much easier than if it was a JPEG. So, before you start, make sure your camera is set up to shoot in Raw and mount your DSLR on a tripod for extra stability and to help with the composition.



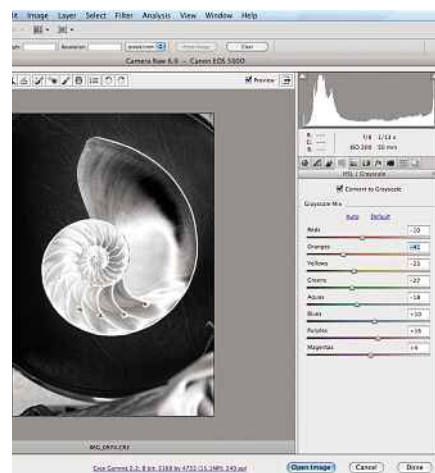
**1 Set-up** Place the subject on a black background. To ensure good contrast, use one light angled at 45° to create highlights and shadows. We used an Interfit Super Cool Lite 4 continuous light but studioflash is fine or try side-lighting with daylight through a window.



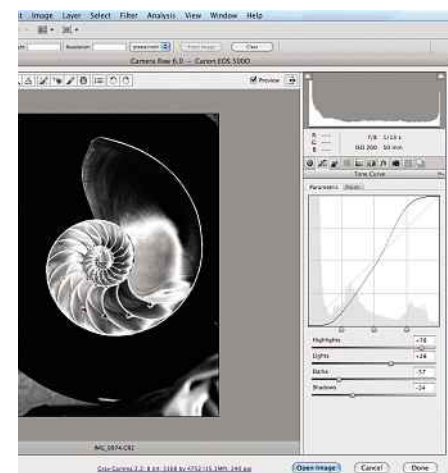
**2 Get the shot** Mount your camera on a tripod and take a few test shots. With the shell lying on the surface, the light bleached the backdrop, so we placed it on a can and masked the light with card. Rotate the shell to experiment with how the light hits the chambers.



**3 Adjust Curves** Open your favourite image in Adobe Camera Raw and start by clicking on the **Tone Curve** tab, switching from **Parametric** to **Point**. Now drag the middle of the line to the top of the chart, and the far right point to the bottom right corner.

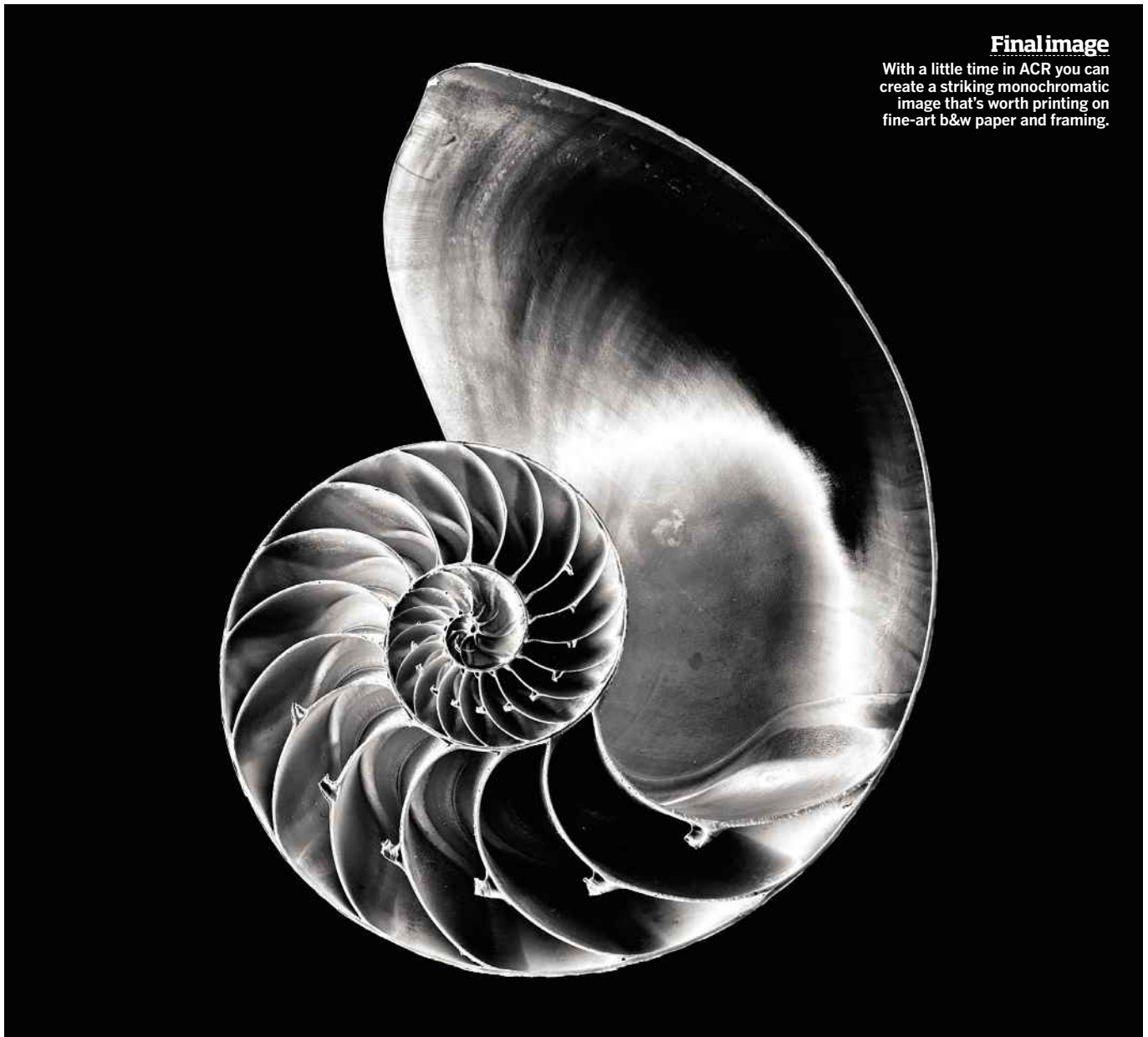


**4 Turn b&w** Click on the **HSL/Grayscale** tab and check the **Convert to Grayscale** box to change the image to black & white. To improve the contrast, move the **Grayscale Mix** sliders to target and modify the tone of certain colours that make up the black & white image.



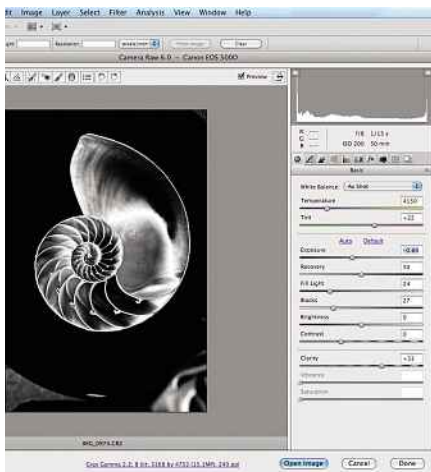
**5 Improve contrast** At this stage the highlights in the image are too bleached, so to bring back shadow detail, we switch back to the **Tone Curve** tab and adjust the **Parametric** sliders to improve the contrast and target the Highlights, Lights, Darks and Shadows.





### Final image

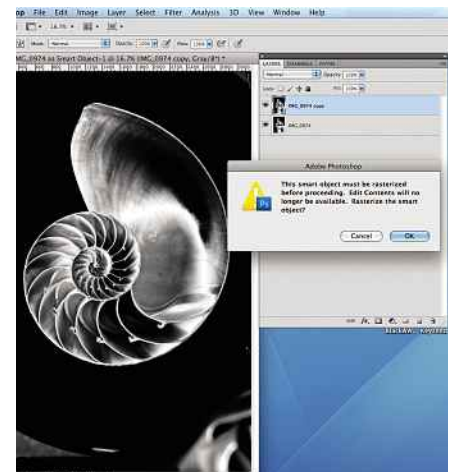
With a little time in ACR you can create a striking monochromatic image that's worth printing on fine-art b&w paper and framing.



**6 Darken the shadows** While this effect looks good, it could do with a few extra tweaks to darken the shadows in the chambers. To do this we switched to the **Basic** tab and reduced the **Exposure** slightly, while adjusting the **Recovery**, **Fill Light** and **Blacks** sliders too.



**7 Open in Photoshop** Once you're happy, hold **Shift** and you'll see the **Open Image** button turns to **Open Object**. Click the button to open the image in Photoshop as a Smart Object. Now if you want to re-edit it in Raw you just need to double-click on the thumbnail.



**8 Fill in the background** Duplicate the layer (**Layer > Smart Objects > New Smart Object via Copy**) and then select the **Brush Tool** to fill in the background. Rasterize the layer so you can edit it by clicking on the image, then finish off by clicking **OK**.



# PHOTO CORRECTION BUNDLE

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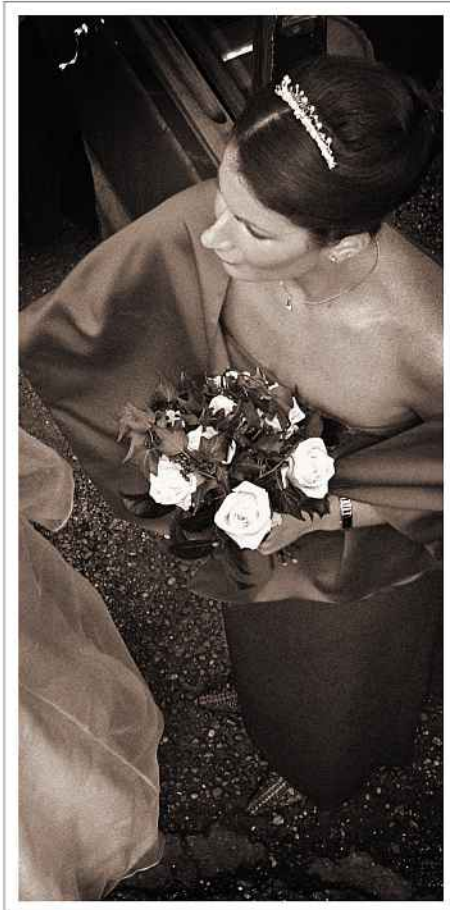
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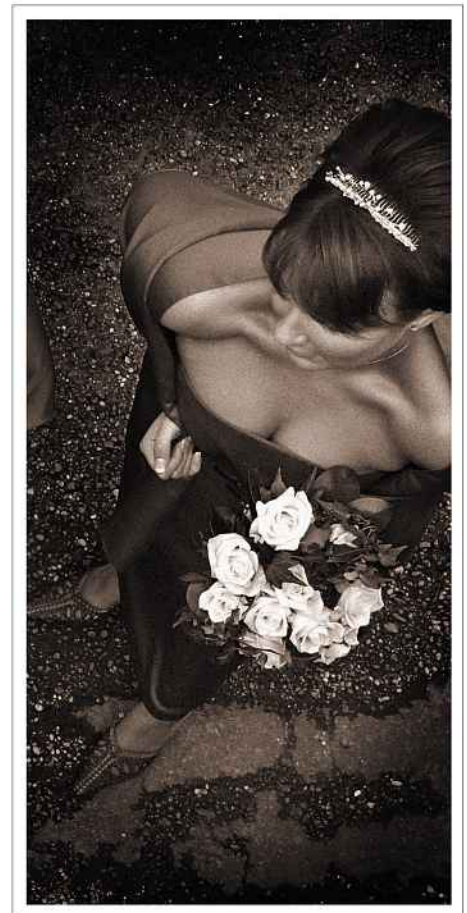
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[akvis.com](http://akvis.com)

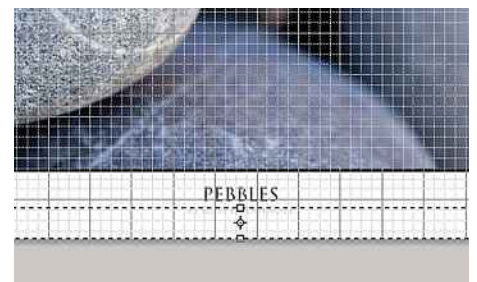
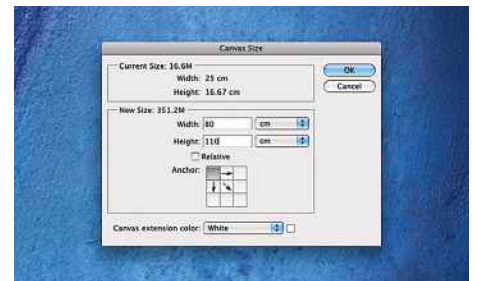
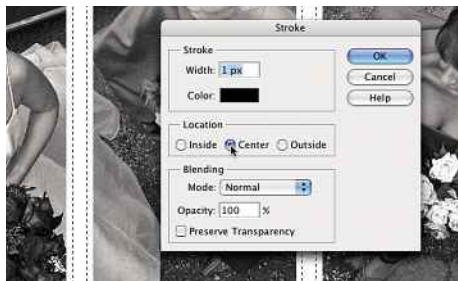


Step-by-step tutorials



# PRESENTATION

Add a finishing touch to your photograph with our top three ways to present your pictures



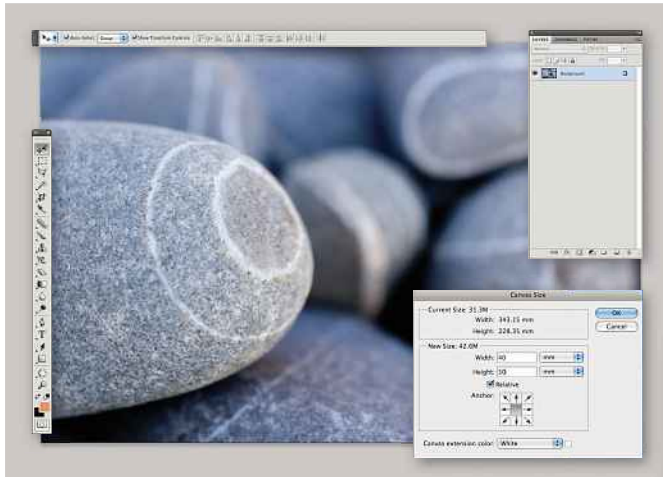
# Fantastic framing

WE SPEND A LONG TIME deliberating over how to take our best photographs, but little time considering how to translate them to print. Nowadays, the choices for ways to present your pictures are endless: at-home inkjet prints, speciality lab prints, canvas prints, acrylic prints, art posters or simply just showcased on a website. However you decide to present your images, you should make sure it looks its best and that doesn't stop with Photoshop adjustments. Preparing a picture for output is probably the most overlooked part of post-production but spending a little bit of time framing and titling your image gives it a professional finish and elevates it from a pretty picture to a saleable product. Simply take a look in art stores, or even IKEA, and you'll be hard-pressed not to find a print without these finishing touches. Find out how to do it...

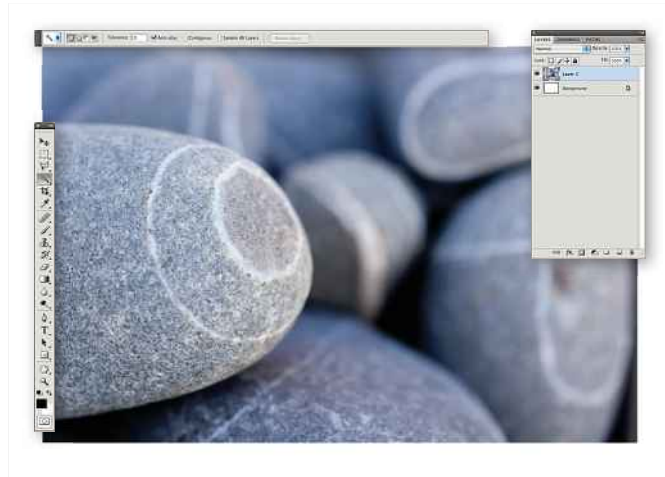


## TIP: ALTERNATIVE FRAMING

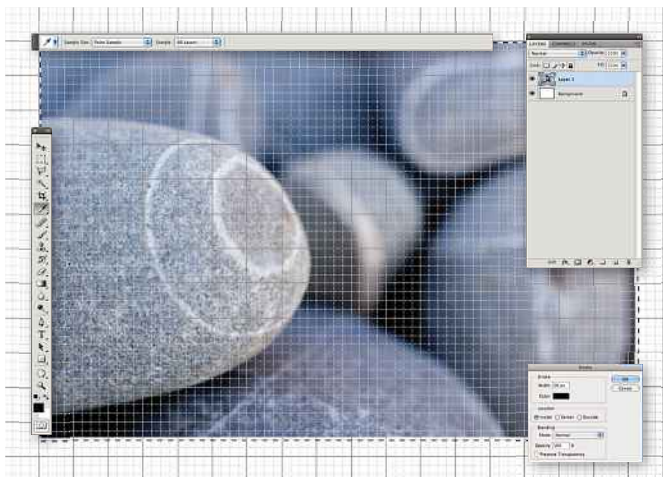
Instead of a white border, why not chose another colour that complements your image. An easy way to change the colour of the border, after you've created it, is to select it using the **Magic Wand Tool**, then using the **Paint Bucket Tool** fill the border with your chosen colour. You may need to change the colour of the **Stroke** border too, as explained in step three.



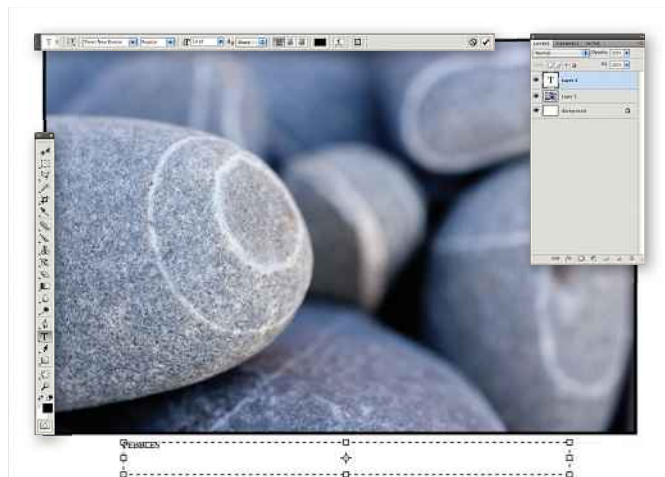
**1 Create the border** The first thing to do is add a white frame around the image. Go to **Image>Canvas Size** and add an extra 40mm to the **Width** and 50mm to the **Height**. The extra 10mm is to allow room for the text to be added later. Leave the **Anchor** centred, select the **Relative** box and set the **Canvas** extension colour to White.



**2 Extract the image** Select the **Magic Wand Tool** from the toolbar and click on the white border. If part of the image is selected too, decrease the **Tolerance** level in the Options bar. Go to **Select>Inverse** to select the image and then choose **Layer>New>Layer** via Cut to extract the image and paste it on to a new empty layer.

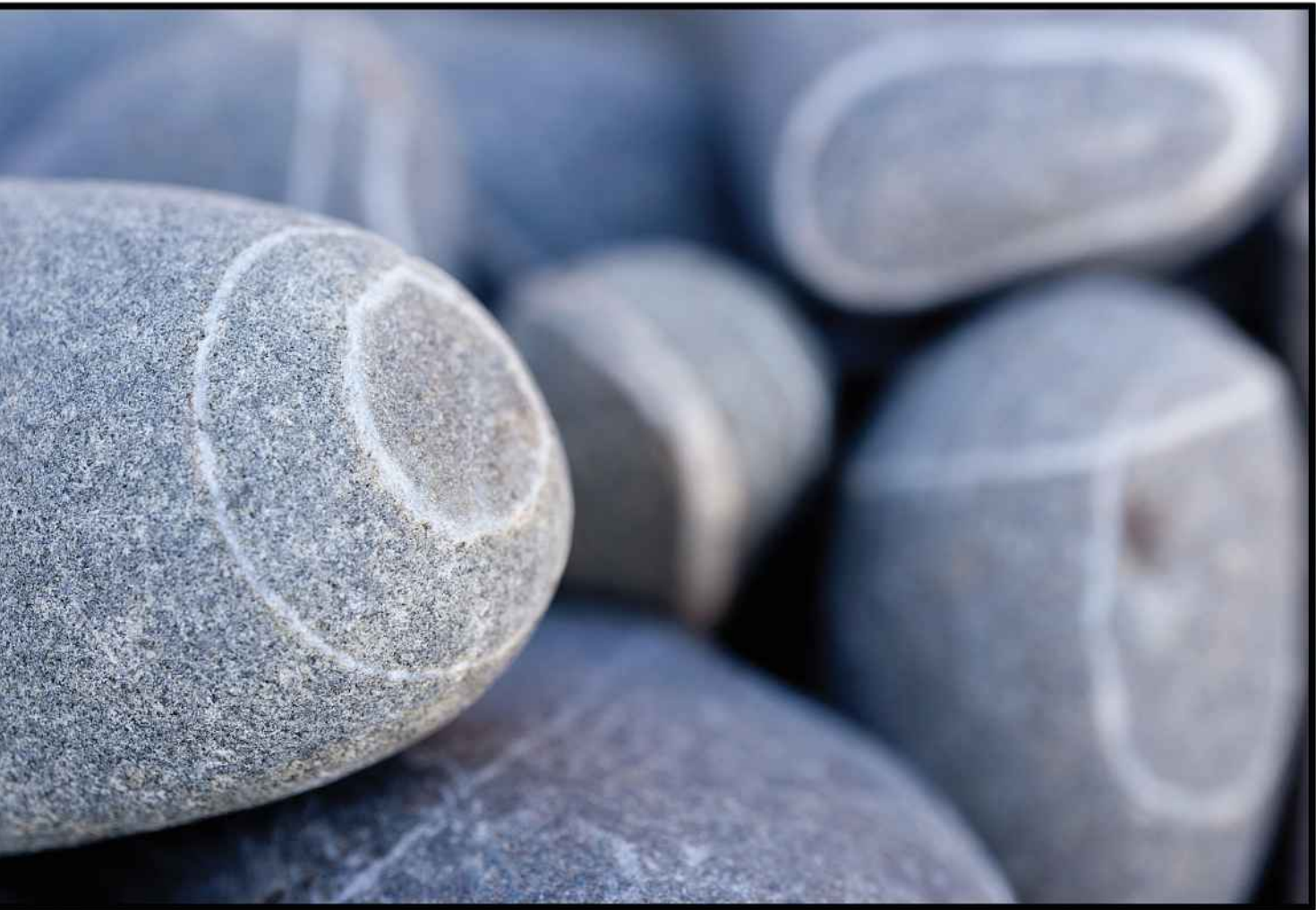


**3 Position the image** To help with alignment, go to **View>Show>Grid** and then **View>Snap to>Grid**. Using the **Move Tool**, drag the image so the edges are equal width on the top, left and right side – using the grid as a guide. Next using the **Rectangular Marquee Tool**, select the image, then go to **Edit>Stroke** to add a thin black border. Set the **Width** to 20px.



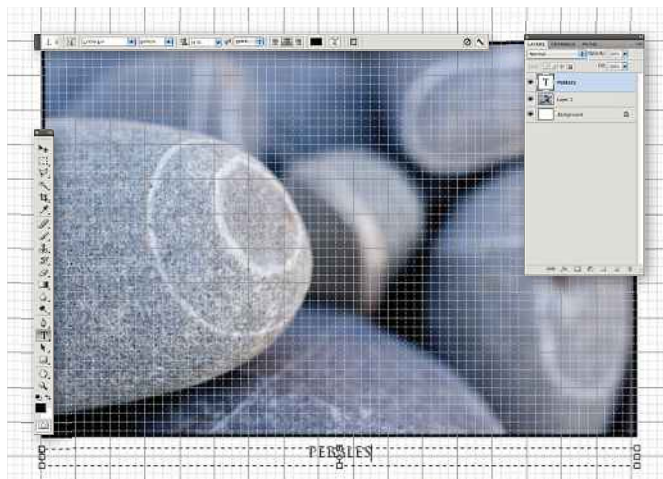
**4 Add a title** Go to **Select>Deselect** to remove the selection and turn off the grid (**View>Show>Grid**) so it is easier to read the text you'll be writing. Using the **Horizontal Type Tool**, create a text box on the white border below the image and type out your title. Use the Options bar to select the text size, type, weight and colour.

Edited

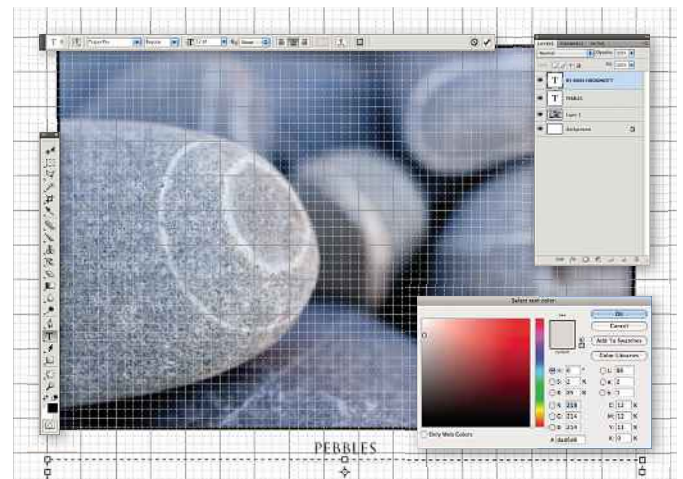


## PEBBLES

BY ROSS HODDINOTT



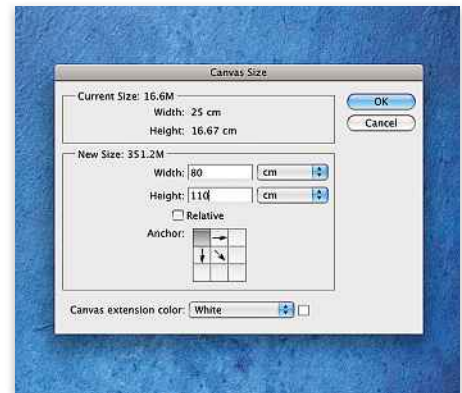
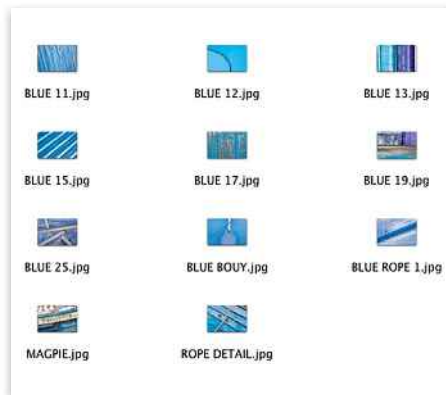
**5 Perfect the alignment** Once you're happy with the text, click on the **Center Text** icon in the Options bar to centrally align the text box with the image. Activate the grid lines again to help with this step (**View>Show>Grid**) and using the **Move Tool**, drag the text box over until it snaps to the centre of the image/middle grid line.



**6 Finishing touch** Repeat steps four and five to add a credit line beneath the title. It aesthetically looks better if you make the credit smaller than the title and alter its colour so it's less prominent than the main heading. To change the colour, select the right layer in the Layers palette and click on the coloured box in the Options bar to access the colour picker.

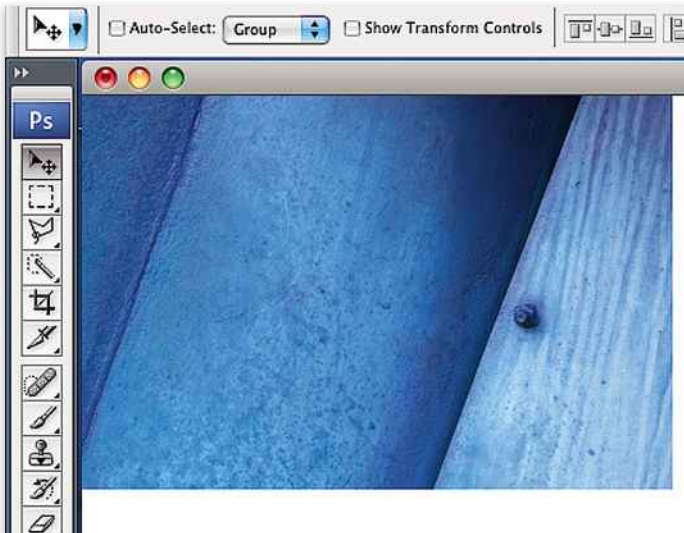
# Pick a colour: create a poster!

A montage is a fantastic way of presenting a group of images that have something in common, for instance taken at the same event, of family and friends, or simply a colour, as is the case here. The fundamental principles of this step-by-step can be applied to any collection of pictures, but we think picking a single colour not only makes good photo practice but a poster with impact too. Why not spend a day with your digital camera and go in search of subjects of the same colour and see what you can come up with. Most likely you'll find yourself shooting abstracts, which can only strengthen your eye for detail. Then, instead of keeping the files on your hard drive, make something of them but following this Photoshop tutorial to creating an art poster so you can admire your inspiring handiwork for a long time to come. While this technique is based in CS features, it's easily translated to Elements so there's no excuse not to give it a go.

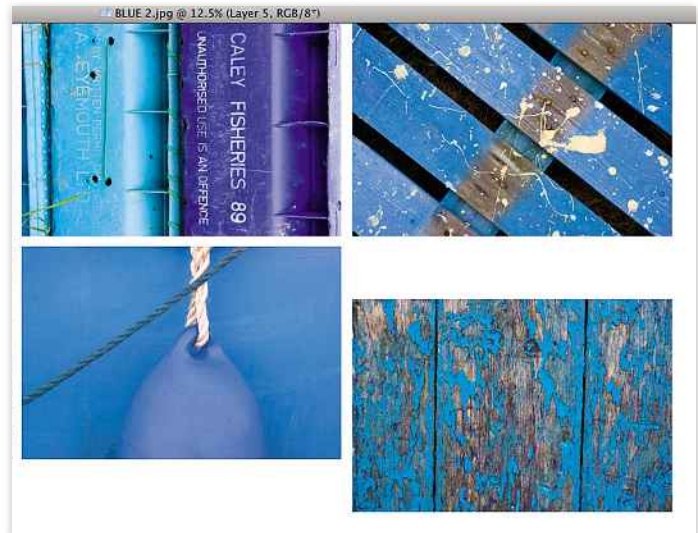


**1 Process the files** After making your image adjustments, re-size the Raw files to 25cm wide at 300dpi by going to **Image>Image Size**. Then save each image as a JPEG file to reduce the file size: you'll be working with several pictures at once and don't want the computer to fry!

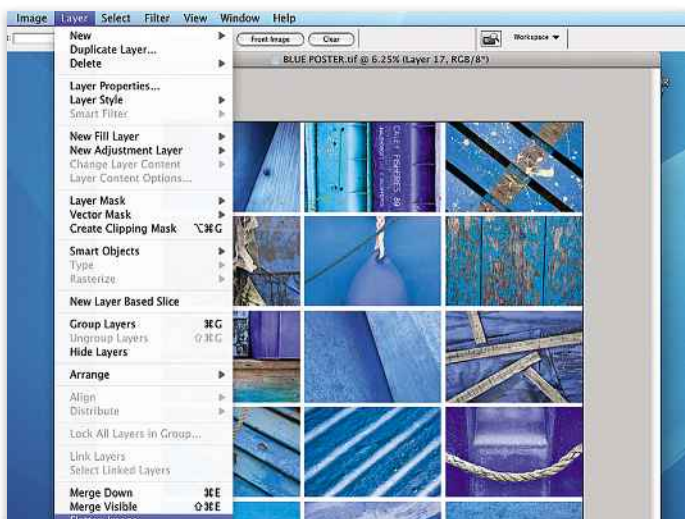
**2 Increase the canvas** Go to **Image>Canvas Size** and set **Width** to 80cm and **Height** to 110cm as this should give you enough room to create a montage that's three images across and six down. You can always make the canvas bigger later or crop any excess canvas.



**3 Place the images** Open your first image and using the **Move Tool**, drag and drop the image onto the canvas. Use the **Move Tool** to position the image in the top corner of the canvas. Repeat this step with all the images, using the **Arrow** keys to refine the position, leaving a small gap between each.



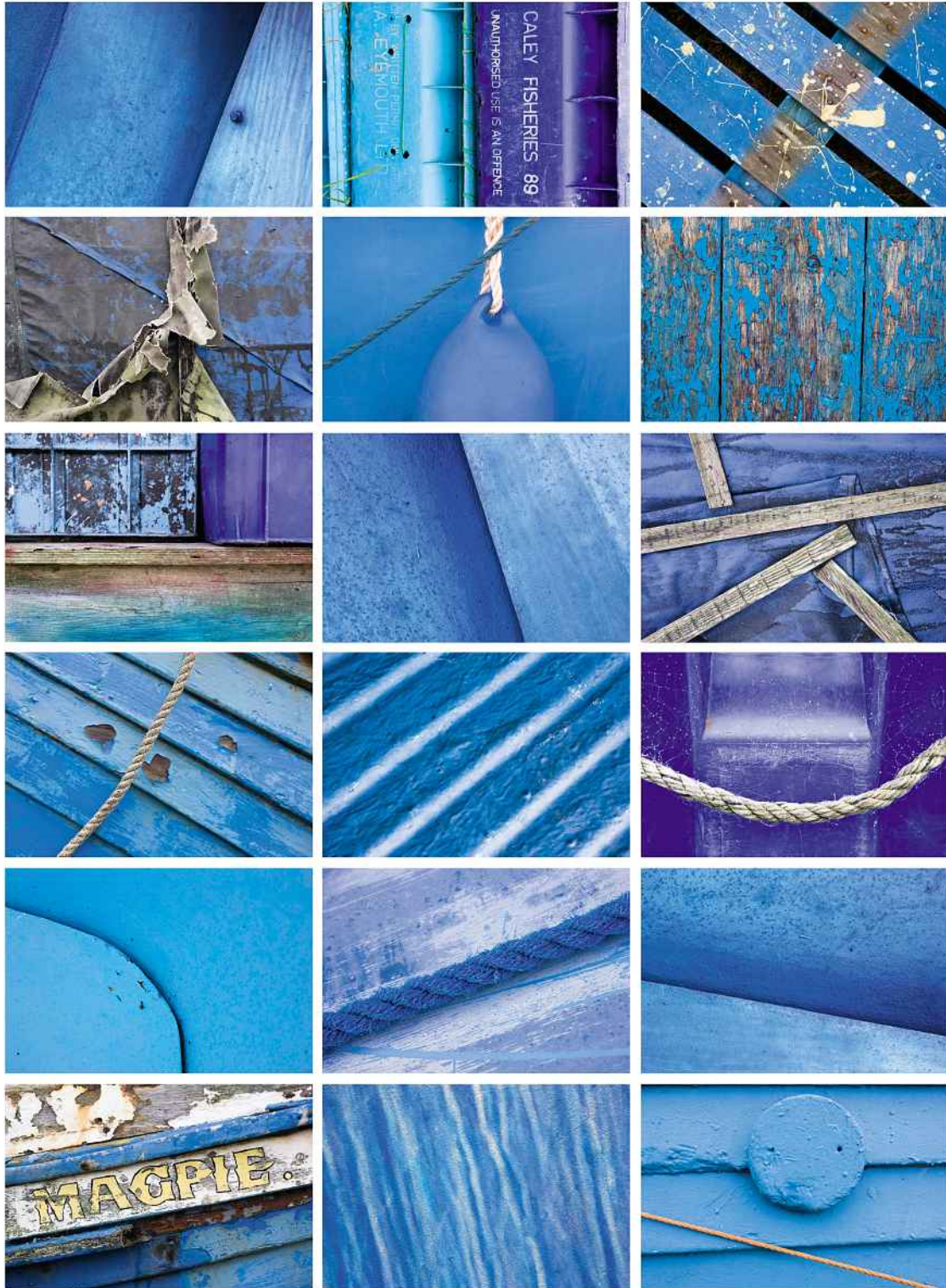
**4 Edit the layers** If you need to make changes to any of the images, open the **Layers** palette (**Windows>Layers**) and click on the appropriate layer and do what needs to be done. Remember to save the montage as you go by pressing **Cmd & S**.



**5 Frame the images** With all images in place, crop any excess canvas then go to **Layer>Flatten Image** to merge the layers. Add a border by extending the canvas via **Image>Canvas Size** and increase it evenly on all four sides. Select **Image>Canvas** again and extend the bottom edge to add text.



**6 Add the text** Click on the **Type Tool** icon and drag the cursor across the bottom border of the poster to create a text box. Next, add a title, experimenting with different type sizes, fonts and colours via the Options bar. See page 140 for more details on how to do this.



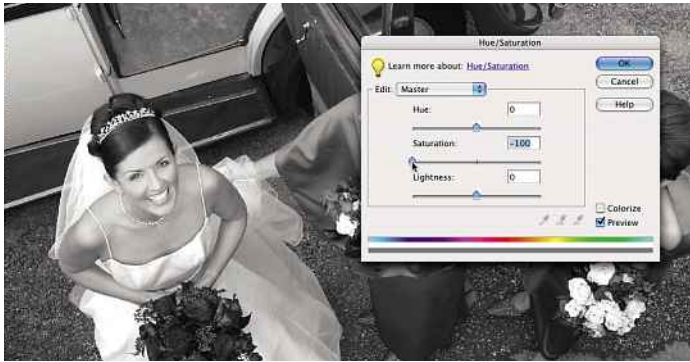
# MOODY BLUES

Lee Frost

# How to create a triptych

PROFESSIONAL SNAPPERS are always looking for new ways to present images, especially in the wedding and portrait photography markets. Canvases, framed prints and images etched onto glass are popular. Even the triptych has made a comeback.

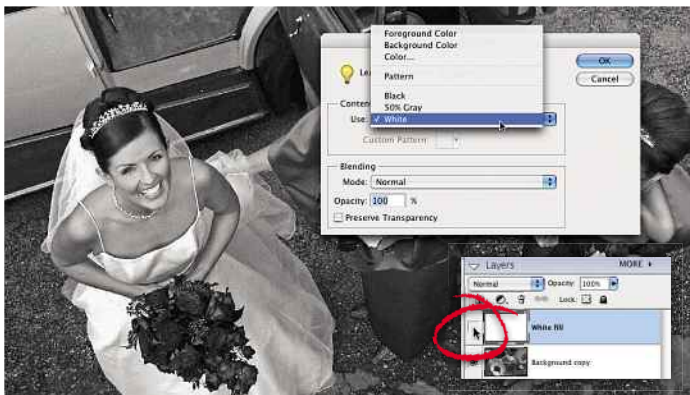
A triptych is a series of three pictures that are meant to be displayed together. They can be related but shot separately, or extracted from the same image, as in this case. How a triptych is presented is really up to you. You can combine all three images into the same file if the finished picture is to be shown on the web or printed as a single sheet. Or you can print them separately, hanging three pictures on the wall next to each other. As always, the key to success lies in experimentation.



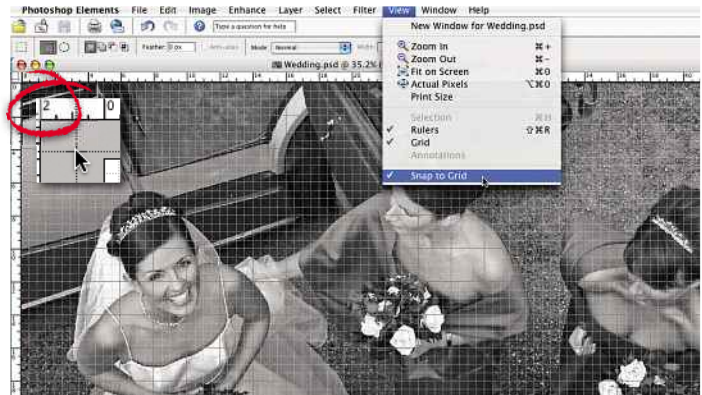
**1 Turn black & white** This photo is a perfect candidate for turning into a triptych image. We want to create a really classical look that will work well with the frame, so we decide to go mono! Using **Enhance>Adjust Color>Adjust Hue/Saturation** in Elements move the **Saturation** slider all the way to -100%, to remove all colour from the selected image.



**2 Tweak the tone** With mono images, it's a good idea to have a play with the shadows and highlights to see what unusual effects can be created. Click on **Enhance>Adjust Lighting>Shadow/Highlights** and, with the **Preview** box ticked, play with the sliders until you have a result that is interesting but not unnatural looking, then click **OK**.



**3 Create a new canvas** The next step is to create a false canvas to hold the new frames, so go to **Layer>New Layer**. This new layer becomes active by default so use **Edit>Fill Layer** and select **White** in the **Content** drop-down menu, then hit **OK**. The layer is solid white, so to continue, first click the eye icon on the layer thumbnail to hide the layer.



**4 Use a grid as a guide** With the white fill layer hidden, select **View>Grid**, which shows the canvas grid over the image, and is an excellent tool for accurate alignment. The grid shows increments in relation to the ruler, made visible via **View>Ruler**, and can be repositioned by clicking in the top left corner area (inset) and dragging over the canvas.



**5 Divide the image in to three** To divide the image, you should first ensure that **View>Snap to Grid** is ticked. This will allow for the selection to 'magnetically' snap to the grid lines, aiding in an accurate selections. Now, with the **Rectangular Marquee Tool** selected, create three frames of equal proportion using the grid as a visual aid.

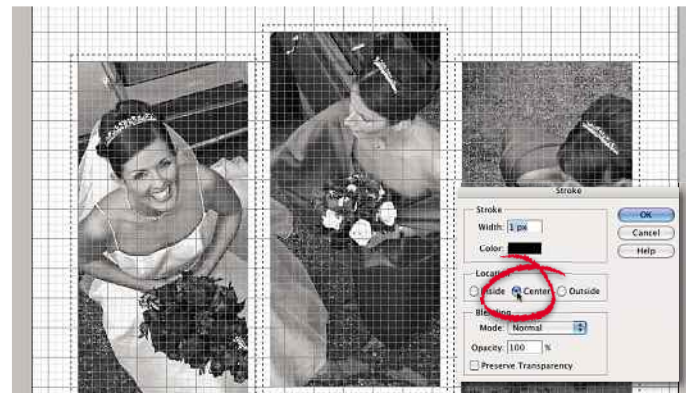


**6 Reveal the image** Make the white fill layer visible by clicking on the blank space where the eye icon sits, making it reappear along with the layer. Now with the selections in place and the white layer selected, use **Edit>Delete** to remove the selected areas of the layer, revealing the image beneath. You can then use **Select>Deselect** to remove the marquee.





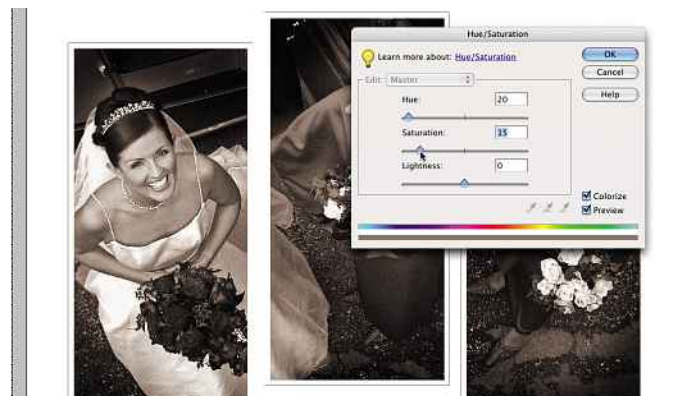
**7 Centrally align the images** The beauty of creating frames this way is that when the windows are in place, you can refine their position by moving the layer over the image (using the **Move Tool**, circled). You'll also notice the frames are not central to the overall composition, but this is easily rectified by using the **Crop Tool** (inset), to extend the canvas to suit.



**8 Frame the triptych** In order to put a thin line around the images, we first make the grid visible with **View>Grid**. Then, as before, create Rectangular Marquee selections; this time just outside the image edges. Then use **Edit>Stroke (outline) Selection** and in the window, enter a **Width** of 1 pixel and click **Center** to position the line. Click **OK**.



**9 Add vignettes** That's the frame done, now it's time to go back to the image itself. Click on the **Background Layer** in the Layers palette to activate it. Next, use the **Burn Tool** (inset left) to darken the edges within each frame window. Not only will this reduce the distraction of open background space, but it will also help to define further the frame.



**10 Finishing touch** You're almost finished, and should be happy with the way the images work within the canvas. One last adjustment to the tone of the image could well be the icing on the cake, so revisit **Enhance>Adjust Color>Adjust Hue/Saturation**, click the **Colorize** box, and use the sliders to introduce just a hint of colour.

## Photoshop accessories

While editing software is essential for the post-production of digital images, there are a few items (essential and luxury) that can make your job a lot easier and your pictures far superior to what they would be without them. From calibration devices and monitors to tablets and printers, we give you the lowdown on the brands worth looking at and recommend models that we've tested and given our seal of approval based on performance and value for money.

### ✓ Graphics tablets

Graphics tablets are not new arrivals to the world of digital imaging, but they do offer a more natural method of editing for a photographer. They allow you to use a pen to control your on-screen cursor, which can be particularly helpful for freehand drawing, dodging and burning, and cutting out. Fine artists who like to paint over their images are the biggest users but tablets can have uses for almost everyone. It can take time to get used to though, as it feels very different to a mouse. If you've never used a graphics tablet before, we'd recommend you start with a budget model as despite their advantages, they can be quite alien to begin with. A good choice would be Wacom's Bamboo Fun (RRP £90); its responsive and offers precise control over pressure, angle and positioning. Other options include tablets by Trust ([www.Trust.com](http://www.Trust.com)), although all but the top model are not compatible with Macs, and Aiptek Media ([www.aiptekshop.de](http://www.aiptekshop.de)). For the more advanced user, we highly rate the professional Wacom Intuos 4 (available in various sizes, ranging from £200-£700): It's definitely one of the very best on the market. Visit [www.wacom-europe.com](http://www.wacom-europe.com) for more details on their products.

### ✓ External hard drives

After hours of shooting and editing, it would be a shame to lose your precious photos because your computer's hard drive crashes, which is why we always advise in investing in at least one external hard drive to back up your images. There are countless models on the market, so we advise that you shop around, but LaCie and Western Digital are sure-fire winners that you won't be disappointed with. Freecom and Buffalo are other brands worth investigating. Whatever brand you go for, we advise at least opting for a 500GB or better still a 1TB or 2TB if you can afford it, as those Raw files fill up space quick.

### ✓ Inkjet printers

Printing pictures is a dying art, as more photographers keep their images digital and viewable on screen via the web. We think that's such a shame! The process of printing has become easier, and on the whole, cheaper. Plus the intelligence and print quality of at-home printers are better than ever, so there's really no excuse. The choice of models is immense, especially as many can now print larger than A3 for maximum impact. From our tests, the Epson Stylus Photo 1400 (A3+) is a favourite and is a continually popular choice for advanced amateurs and semi-pro photographers, despite newer models being released since its launch. It delivers superb prints with bright colours, good contrast and fabulous skin tones. Another top model is Canon's PIXMA iX4000 (A3+): It's fast and image quality is pleasing. Also check out the Canon PIXMA iP4700 and Epson Stylus Photo 3880.

### ✓ Monitors and colour calibration

Presuming that you plan to print your photographs, or share them online, a monitor calibration device is fundamental to successful results. How can you expect to edit colours accurately, if what you see on screen is not a true representation of the image? Monitor calibration devices are the most affordable means of ensuring your pictures look their best on other people's screens and in print. There are a range of products available, ranging from £100 to £500. One we highly recommend is Datacolor's Spyder 3 Elite (RRP £175): it's an advanced version of the Spyder3 and is designed for professional use, but there are options for basic and advanced control. It's a great choice if you want pro quality on a budget. Other models we recommend include the slightly cheaper Pantone Huey PRO and X-rite's ColorMunki Photo. While it's more than double the price of the Spyder, it can also be used for printer calibration and delivers superb results. Visit [www.colourconfidence.com](http://www.colourconfidence.com) to read more about all these brands and models. Another way to help ensure quality is to invest in a decent monitor like the LG IPS231, the NEC SpectraView Reference 271 or EIZO's self-calibrating ColorEdge CG275W.

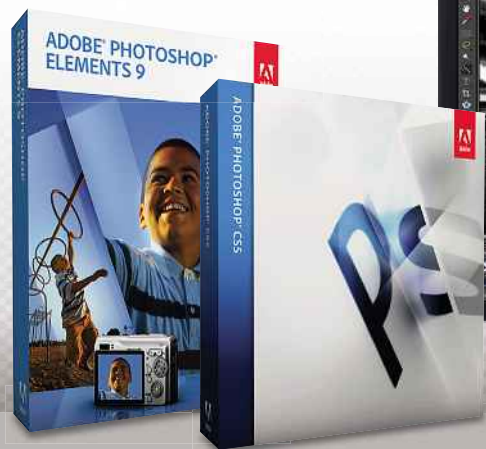


# Useful Photoshop shortcuts for PC & Mac

| General                                     | PC-Windows                      | Apple Mac                          |
|---|---------------------------------|------------------------------------|
| New file                                    | <Ctrl> N                        | <Cmd> N                            |
| <b>Open file</b>                            | <Ctrl> O                        | <Cmd> O                            |
| Close file                                  | <Ctrl> W                        | <Cmd> W                            |
| <b>Save file</b>                            | <Ctrl> S                        | <Cmd> S                            |
| Save file as                                | <Shift> <Ctrl> S                | <Shift> <Cmd> S                    |
| <b>Print file</b>                           | <Ctrl> P                        | <Cmd> P                            |
| Step backward (undo)                        | <Ctrl> Z                        | <Cmd> Z                            |
| <b>Step forward (redo)</b>                  | <Ctrl> Y                        | <Cmd> Y                            |
| Free Transform                              | <Ctrl> T                        | <Cmd> T                            |
| <b>Apply Transform</b>                      | <enter>                         | <return>                           |
| Copy selection                              | <Ctrl> C                        | <Cmd> C                            |
| <b>Cut selection</b>                        | <Ctrl> X                        | <Cmd> X                            |
| Paste selection as new layer                | <Ctrl> V                        | <Cmd> V                            |
| <b>Image size</b>                           | <Alt> <Ctrl> I                  | <option> <Cmd> S                   |
| Levels                                      | <Ctrl> L                        | <Cmd> L                            |
| <b>Select default colours</b>               | D                               | D                                  |
| Swap background / foreground colours        | X                               | X                                  |
| <b>Repeat last filter used</b>              | <Ctrl> F                        | <Cmd> F                            |
| Adjust Hue / Saturation                     | <Ctrl> U                        | <Cmd> U                            |
| <b>Show / hide rulers</b>                   | <Shift> <Ctrl> R                | <Shift> <Cmd> R                    |
| Toggle Quick Mask mode                      | Q                               | Q                                  |
| Auto Adjustments                            | PC-Windows                      | Apple Mac                          |
| Auto Smart Fix                              | <Alt> <Ctrl> M                  | <option> <Cmd> M                   |
| <b>Auto Levels</b>                          | <Shift> <Ctrl> L                | <Shift> <Cmd> L                    |
| Auto Contrast                               | <Alt> <Shift> <Ctrl> L          | <option> <Shift> <Cmd> L           |
| <b>Auto colour</b>                          | <Shift> <Ctrl> B                | <Shift> <Cmd> B                    |
| Auto red-eye fix                            | <Ctrl> R                        | <Cmd> R                            |
| Selections                                  | PC-Windows                      | Apple Mac                          |
| Select all                                  | <Ctrl> A                        | <Cmd> A                            |
| <b>Deselect</b>                             | <Ctrl> D                        | <Cmd> D                            |
| Invert selection                            | <Shift> <Ctrl> I                | <Shift> <Cmd> I                    |
| <b>Feather selection</b>                    | <Alt> <Ctrl> D                  | <option> <Cmd> D                   |
| Add to selection                            | <Shift> and selection tool      | <Shift> and selection tool         |
| <b>Remove from selection</b>                | <Alt> and selection tool        | <option> and selection tool        |
| Show / hide selection boundary              | <Ctrl> H                        | <Cmd> H                            |
| <b>Constrain marquee (circle or square)</b> | <Shift> and shape tool          | <Shift> and shape tool             |
| Draw marquee from centre                    | <Alt> and shape tool            | <option> and shape tool            |
| <b>Exit crop tool</b>                       | <esc>                           | <esc>                              |
| Layers                                      | PC-Windows                      | Apple Mac                          |
| New Layer                                   | <Shift> <Ctrl> N                | <Shift> <Cmd> N                    |
| <b>Copy Layer</b>                           | <Ctrl> J                        | <Cmd> J                            |
| Group layers                                | <Ctrl> G                        | <Cmd> G                            |
| <b>Ungroup layers</b>                       | <Shift> <Ctrl> G                | <Shift> <Cmd> G                    |
| Merge layers                                | <Ctrl> E                        | <Cmd> E                            |
| <b>Merge all visible layers</b>             | <Shift> <Ctrl> E                | <Shift> <Cmd> E                    |
| Zooming                                     | PC-Windows                      | Apple Mac                          |
| Zoom in                                     | <Ctrl> +                        | <Cmd> +                            |
| <b>Zoom out</b>                             | <Ctrl> -                        | <Cmd> -                            |
| Fit on screen                               | <Ctrl> 0                        | <Cmd> 0                            |
| <b>Actual pixels (100% zoom)</b>            | <Alt> <Ctrl> 0                  | <option> <Cmd> 0                   |
| Scroll using hand tool                      | <spacebar> use mouse            | <spacebar> use mouse               |
| Drawing tools                               | PC-Windows                      | Apple Mac                          |
| Eye dropper                                 | <Alt> in painting or shape tool | <option> in painting or shape tool |
| <b>Fill with background colour</b>          | <Ctrl> <backspace>              | <Cmd> <delete>                     |
| Increase brush size                         | ]                               | ]                                  |
| <b>Decrease brush size</b>                  | [                               | [                                  |
| Increase brush hardness                     | <Shift> ]                       | <Shift> ]                          |
| <b>Decrease brush hardness</b>              | <Shift> [                       | <Shift> [                          |

THE IDEAL  
COMPANION FOR  
YOUR DIGITAL CAMERA!

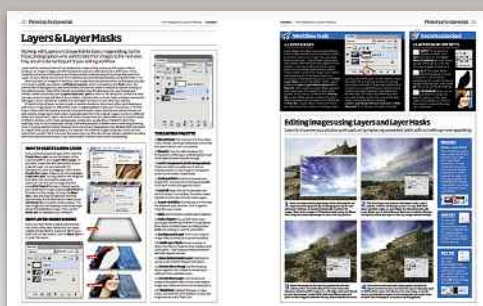
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