Adobe Photoshop

Photoshop is an image manipulation application. Essentially it is a digital darkroom with the facility to import images from digital camera, film camera or scanned images. Once the image is in the application it can be enhanced or altered in many different ways. With the advent of the photoshop plug-ins (small applications created by 3rd party vendors) the effects that can be used becomes almost limitless.

The Main Screen

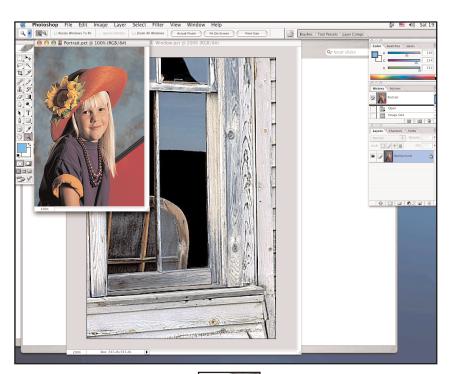
The main screen is split into different windows, the main image window, the Tools palette and the floating palettes such as History and Layers. The main image window is the work area where any manipulation of the image is done. In many cases you could be working in multiple windows and jumping between one to the other.

Each window has its own set resolution, **remember**, if you work in several windows each may be set to a different resolution this could effect the sizing of image when you paste or drag and drop. If this is the case you have make allowance for such an occurrence.

The Tool Palette

The tool palette holds all the tools you are likely to use in image manipulation. Some of the tools are specific to Photoshop itself but some also relate to the process undertaken in darkroom situations (the burn tool etc.). If you have previously worked under darkroom conditions you will understand how these tools work and what they do.

Under normal circumstances you would not utilise the full range of tools available whilst working within an image, but your specific requirements would dictate which tools you do use. The most commonly used are the drawing tools, the grabbing tools and the text tools.



The Selection Tool allows you to select an area within the main screen. The Lasso Tool allows you to select a shape freehand .. The Crop Tool allows you to select a specific area of an image. The Healing Brush Tool allows you to re draw or patch an image. The Clone Tool allows you to replicate an image or pattern. The Eraser Tool allows you to delete areas of the image. The Blur, Sharpen, Smudge Tool does what it says. The Direct and Path Selection Tool Allows you to grab paths The Pen Tool allows you to create a line for paths

The **Notes Tool** allows you to write memos and records of what you do The **Hand Tool** allows you to move

around the page.

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The Move Tool allows you to move the items within a layer.
The Magic Wand allows you to select items of the same shade/color
The Slice Tool allows you to segment the image for web function.
 The Pencil, Brush Tool allows you to create freehand lines.
 The History Brush Tool allows you to draw a line like a brush stroke.
The Gradient Tool allows you to select the direction of a gradient.
The Dodge, Burn, Sponge Tool applied from darkroom techniques.
 The Text Tool allows you to place text

or text masks on-screen. The **Shape Tool** allows you to draw a number of different shapes.

The **Eyedropper Tool** allows you to choose colours from the page.

The **Zoom Tool** allows you to zoom in and out of the page.

The Foreground & Background Selection Tool allows you to control the foreground and background colours

Importing an Image into Photoshop

Before you can work on any image within Photoshop you must first bring that image into the programme. This is done in several different ways. If you already have a file you would simply use the **Open** option in the pull-down **File** menu at the top of the screen, or click the **Command - O** keys. If however, you have no image you need to **Import** it through a scanner (if it is an external image), through drag and drop (if you have a direct link to a digital camera) or by **Copy - New - Paste** if you are importing from an application like QuickTime.

Scanner Importing

Importing by scanner is the most commonly used method of placing an image into Photoshop. Scanned images can come from photographs, transparencies, negatives, prints images (books magazines etc.)

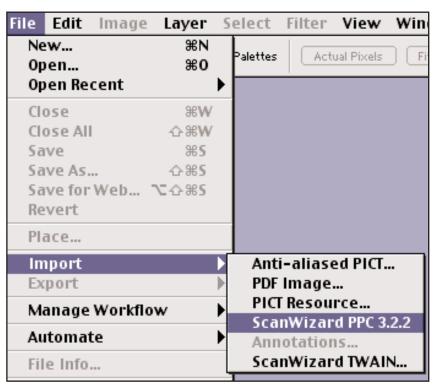
When you purchase a scanner the software will be provided with it. Scanners are made by different manufacturers so the software used will differ between makes. However, what ever the software there will be enough similarity in the functions of that software to enable you to understand how to use it. The examples here are from ScanWizard software and although the look may differ from the one you use the functions are the same.

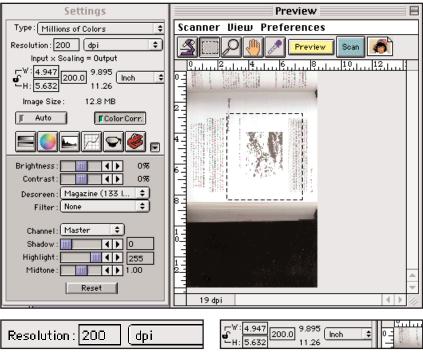
Preview: there will be a preview function to scan the whole page in low resolution and a window to view the image. this allows you to select the specific area you will scan.

Scan: when you have selected the previewed area there will be a scan button. this will scan the image and bring it into Photoshop.

There will be a section which allows you to choose the **Type** of colour setting - Millions, Thousands, 256, Grayscale, Line Art etc. Select the type you wish to use The higher the setting the more memory the image will take-up.

Resolution: there will a section to set the required resolution of image in dpi (dots per inch). The higher the resolution the more memory the





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image will take up.

Size (input/output -scaling): there will be a section which allows you to choose the output size eg: 100 = 100%of image size (same size), 200 = four times the size (the size is taken linearly - when you double the size along the base it will give you an area four times the original size.)

Descreen: there will be an option that allows you to descreen a printed image. Printed images are made up of dots of offset colour printed side by side in a pattern. The scanner is sensitive enough to pick up this pattern and reproduce it in the image (a moray pattern) this can destroy the clarity of the image. To stop this, the descreen option is used to defocus the scanner so that only the colour or tint is seen not the pattern. There will be a number of options here to select between high and low resolution printed images.

ിയ Brightness: 1111 None Contrast: Newspaper (65 lpi) Magazine (133 lpi) Descreent Art Magazine (175 lpi) Filter Custom

Positive Transparency

Reflective

Negative Film

Original Image Type: there will be an option to choose between original image types.

> Reflective - A photographic image placed face down to the laser. Transparency - a positive image on film

> Negative - usually the negative film from which the print is done.

Choose the options carefully before you start the scanning and there should be no problem. One word of advice if you are unsure of how the image is going to be used in the final work, scan the image in a high resolution setting. The resolution can always be altered at a later date in Photoshop.

Floating Palettes

The floating palettes contain the aspects of the programme which directly influence and record actions taken within the main image window. As well as the standard aspects used in floating palettes, Colours, swatches, styles etc., other aspects the palettes contain information on:

History -	which keeps track of everything you have done stage by stage in the window. You can backtrack on any event and alter it from that point.
Layers -	which keeps track of layers created for image and text and gives you access to the inbuilt options available on each layer.
Channels -	which gives you control over the colour sets (RGB CMYK etc., and alpha channels (the control over invisibility and masking when imported into other applications).
Paths -	which gives you control over paths created by the pen tool. The ability to use the drawn paths as selection areas for specific events within the image window.
Brushes -	which gives you the brushes styles and sizes options.

Plus many other options which give you control over many aspects of image manipulation.





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Layers

The layers floating palette gives you a great amount of control and option within the layers. Inbuilt as default is a series of options which can create effects within the image you are working. Options such as Drop Shadow, Inner Shadow, Inner Glow, Outer Glow, etc., can instantly create some of the more used effects in image manipulation. Their limitation however, is in them being pre-set, you have to stay with the style and effect given. For example if you wanted to create a deeper drop shadow to use in your image you would have to create it outside the default.

	Layer Style				
Styles	Blending Options General Blending	ОК			
Blending Options: Default	Blend Mode: Normal	Cancel			
Drop Shadow	Opacity: 100 %	New Style			
Inner Shadow	Advanced Blending	Preview			
Outer Glow	Fill Opacity:	_			
Inner Glow	Channels: 🗹 R 🗹 G 🗹 B				
Bevel and Emboss	Knockout: None				
Contour	Blend Interior Effects as Group				
Texture	Blend Clipped Layers as Group				
🖂 Satin	Transparency Shapes Layer Layer Mask Hides Effects				
Color Overlay	Vector Mask Hides Effects				
Gradient Overlay	Blend If: Gray				
Pattern Overlay	This Layer: 0 255				
🖯 Stroke					
	Underlying Layer: 0 255				
	•				

These effects however, do help with the more standard kind of effect and in some cases make image manipulation a more speedy process.

Filters

Within the programme are a number of filters already provided as default. Filters are special sub programmes which link in to the main programme and give you the ability to change, distort or alter the working image. Many filters are created by 3rd party vendors, with plug-ins such as KPT and Eye Candy. These plug-in filters are placed into the Plug-In folder in the application folder and the Photoshop is then able to access them. The Twirl filter is given here as an example.

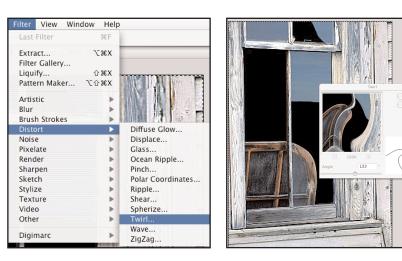
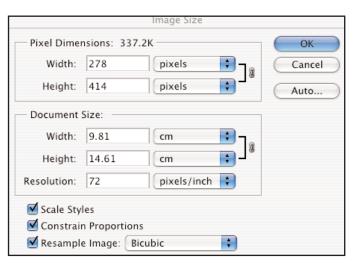


Image Size

The specifications of the image size and resolution can be altered in the **Image Size** option found in the **Image** menu at the top of the screen. Generally when this option is used the Image Size dialog box is automatically constrained. this means that if you change one of the sizes - width for example, the Height automatically alters with it so that there is no distortion of the image. This however, if required, can be switched off by unhighlighting the Constrain Proportions and Scale Styles buttons in this menu.

The resolution is altered in the Resolution box (here set to 72 pixels per inch, the standard screen setting.



Save, Save As

The Save and Save As options in the File menu do the standard save functions as any other application, but in Photoshop they will function in a further way.

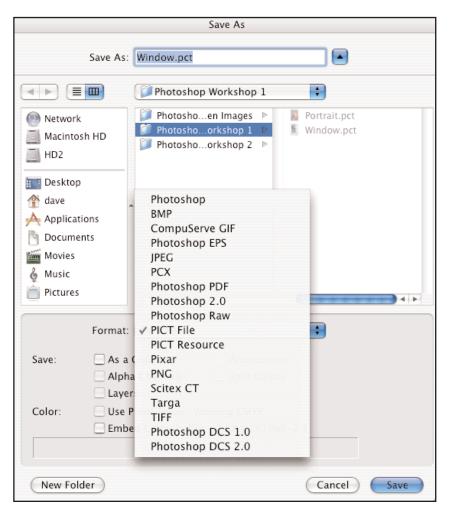
When you import or work in an image, photoshop could be working in many different file types, Photoshop .psd, Photoshop.PDF, Photoshop.EPS, Gif, BMP, PICT, TIFF, PNG, etc. The file format dictates what kind of Mode the image will be in. This in turn will dictate which save options appear in the save dialog box when you go to save the image. If any of the options appear in light grey you will not be able to open them or save in that file format. In this case go to the Save As, or Save a Version option, or if you are specifically doing image for web then utilise the Save for Web option.

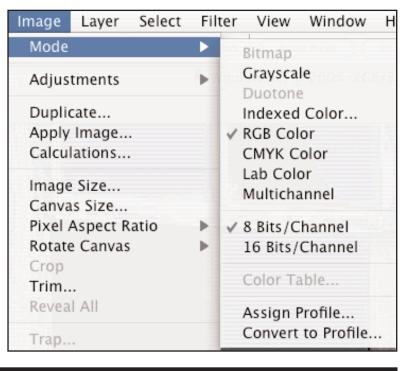
The save file formats are there so the file can be saved in a specific format for another application or platform (PC, Sun, NeXT, Etc) to open. When you have selected the correct format save the file.

Mode

The mode of the file you are working on refers to the way the colour structure is made up. **Bitmap** is pure black and white image with no tonal variation. **Grayscale** has the same tonal variation as colour but it is in mono (grays). **Duotone** is where two colours are overlaid normally a grayscale and a blue or sepia colour, but the second colour is selectable. **Index Color** is normally from a 4 up to a 256 colour scale with a defused pixel. **RGB** refers to the monitor colours Red, Green and Blue. **CMYK** refers to the four colour printing process colours, Cyan, Magenta, Yellow and Keyline (Black)

8 Bits refers to colour ranges allowing 256 colours. 16 bit is thousands of colours. 32 bit is millions of colours.





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