



A RotoVision Book Published and distributed by RotoVision SA Route Suisse 9, CH-1295 Mies Switzerland

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10987654321

ISBN-13: 978-2-940378-14-2

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Printed in Singapore by Star Standard Industries (Pte) Ltd.



Photoshop

- Hints. Tips. and Techniques
- The Easy, All-in-One Guide to those Inside Secrets for Better Photoshop Images
- Mike Crawford

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Introduction

500 Photoshop Hints, Tips, and Techniques concisely covers, in four parts, all the relevant information and knowledge required to get excellent results from your digital photographs using Adobe Photoshop.

Part one examines the necessary hardware, considering which types of camera are the most suitable and practical, the choice of different computers, useful accessories, and the various options for storing digital files. The next section takes a comprehensive look at what Photoshop has to offer and explains most of the different menus, commands, effects, and filters. A knowledge of these features is very important, but it is also essential to see them used in working practice, so part three features 12 step-by-step Photoshop projects, all very different and each using a combination of controls to achieve a variety of results. What they all have in common is the use of Layers, one of the most important ingredients of any imaging program. Layers are usually described as a series of sheets, some partly transparent, others not, stacked on top of each other to allow different parts of a photograph to be shown or blended together. The more Layers are understood and used, the more creative Photoshop becomes.

While the majority of this book gives practical advice on manipulating, improving, and creating images, the final part is on the important subject of printing digital photographs as well as ways to display and distribute your work. Many initial attempts at using an ink-jet printer are disappointing, with colors and tones coming out very differently to what we see on the computer screen. This can easily be improved with a little understanding of what digital information the printer requires to give a correct color tonality, though other factors such as the choice of inks and papers are considered as well. Digital prints can of course be stored and displayed in traditional albums and frames, but there are now additional ways to present them, either on the screen, such as making digital slide shows, or viewed and sent online in the form of JPEGs and PDFs. We can even create our own gallery pages for a website. All of this is possible with Photoshop, and much more.

Though this book is particularly aimed at using Photoshop, many of the topics covered are also relevant for other imaging software, especially Photoshop Elements, which is considerably cheaper than the full version. The difference in price does not reflect the difference in the program's potential. Elements has developed with each new version and can now offer most of the useful features of Photoshop. There are even some extras found in Elements which are not yet available in Photoshop.





For anyone starting out in photography today, digital imaging is now the predominant method of practice, even though Adobe Photoshop has only been with us since 1990. Much has changed in photography during this time, and as each new version of the program has been introduced, the dominance of digital over

traditional photography has increased. A photographer familiar with film-based photography will however find common ground with Photoshop. Not with the technology and equipment used, but instead, with the methodology and thinking behind each. Both require light-sensitive materials to be used in a camera to

record an image, either on film or on an electronic sensor. A standard print can then be made from the negative or the digital file, but to achieve the highest quality results, both require further processing, in either the darkroom using an enlarger or on the computer with Photoshop.

My personal approach to the program is directly influenced by the many years spent in the darkroom printing both my own photographs and work for clients. Aside from using various filters and effects with Photoshop to achieve different styles of manipulation, the aim is still the same: to balance the

tones, colors, and contrast of the image to achieve the best visual representation of our photographs. Learning to use a program like Photoshop is both exciting and challenging, but the more we practice and experiment, the more confident, knowledgeable, and experienced we become.

I hope this book will help to further an understanding of using Photoshop, but will also show how rewarding and fun it can be to use.

GALLERY ONE

Photoshop offers countless ways to either fine-tune your work, make major changes, or even create new images.







GALLERY TWO

Various Photoshop filters can be used to add dramatic effects.









Hardware

Cameras Before starting in Photoshop, we must ensure we are using the correct equipment to capture our digital images. The following pages consider the choices available for cameras, computers, scanners, and other accessories.



Digital cameras are available in a wide price range. Generally, the higher the cost, the better the quality of image. Although this book is primarily concerned with editing and manipulating digital images, and not actually taking photographs, it is still important to consider the differences in these cameras.





Digital image resolution is measured in megapixels (M), which means one million pixels. This is one of the most important technical specifications to look for in a camera. A digital photograph comprises millions of pixels. The exact amount will determine how much the image can be enlarged. For example, a 5M camera will record an image with physical dimensions of 2,592 x 1,944 pixels, which amounts to about 5 million pixels (5,038,848 to be precise). This can comfortably be printed at Letter paper (A4) size or bigger without the pixels becoming visible in the print. Larger files, from 8M or 12M cameras, can easily be enlarged to Tabloid (A3) size or more without any loss in quality.



The quality in compact digital cameras has greatly improved in the past few years. The cheapest models often start with a resolution of 3M. More expensive cameras go up to 8M or more.









While resolution is very important, another aspect determining image quality is the lens. This is one reason why larger cameras such as SLRs (single-lens reflex cameras) are often more expensive.

005 SLR cameras

Single-lens reflex cameras normally have interchangeable lenses, and some can use optics designed for film cameras. 8M SLRs are very common, though professional, more expensive models can capture up to 15M. Undoubtedly, this figure will rise in the future.





Some medium- and large-format film cameras can be used with purpose-made digital backs that can record each photograph at 22M or more. The design of many professional digital cameras, which can capture at the same resolution, is often based on film cameras. They are often directly linked to a computer or external hard drive with several gigabytes of memory to ensure images can be recorded quickly and stored efficiently.



Cellphones

Even a 2M camera in a cellphone can produce images whose quality is relatively decent if processed correctly in Photoshop and not enlarged too much.





There is often the tendency, encouraged by some camera magazines and, of course, manufacturers, to upgrade cameras as new models are introduced. It is naturally a good idea to use as good a camera as you can afford, but a new camera will not make you a better photographer. If you are pleased with the results from your existing camera, and the quality of your prints, then keep using it unless there are technical limitations that stop you from taking the photographs you want to take.

Computers

After the camera, the most important piece of equipment required for digital photography is a computer. Like cameras, they come in all shapes, sizes, and prices.

Apple Mac or PC?

Your choice of computer will probably be determined by the other uses it will be put to, as well as personal preference. Apple Macs tend to be the choice of professional photographers and designers, though for home and office users there is more software available for PCs. Image-editing programs, such as Photoshop and Photoshop Elements, run perfectly well on both systems providing the computer has sufficient memory and processing speed.





Desktop computers

Today, some desktop computers come with integral monitors, rather than having a separate monitor and computer tower. Buying one can be an advantage in terms of having an efficient, uncluttered workspace, but if the monitor fails or is damaged, you effectively have lost the whole computer. If you buy a computer with an integral monitor, it's good practice to back up your work onto a separate hard disk. This is good practice regardless of what type of computer you have.



Despite their small size, laptops can be as powerful as desktop computers, though they tend to be more expensive. Their portability, however, giving the user the freedom to work almost anywhere, has made them very popular.



N2 Processing speed

The computer's ability to perform and process guickly and efficiently is expressed in gigahertz (GHz). For digital editing, a minimum of 1GHz is recommended. Most modern computers have this capacity.

RAM (Random Access Memory)

When a computer program is running, it uses RAM to process files. RAM is expressed in megabytes (MB) and gigabytes (GB). One gigabyte is 1,000MB. For digital photography, 256MB is the minimum requirement. However, extra RAM can be bought and installed onto your computer.



Applications, programs, and files are stored on the computer's hard drive, which commonly has the capacity to store more than 80GB of information. For efficient working, it is prudent not to fill this drive. And for long-term storage, especially of images, it is worth buying an external hard drive (see tip 25).







N5 Screens

Though traditional, CRT (Cathode Ray Tube) computer screens are still used, many people now prefer the slimmer LCD (Liquid Crystal Diode) screens, which are standard with laptops. LCDs are more expensive than CRTs but take up less desk space.

016 Efficient working

When using your computer, work in as much comfort as possible. Invest in a chair that encourages good posture and supports your back. If necessary, provide support for your wrists so that they don't become strained. Ensure the screen is at the correct eye level and that the room is well ventilated. If using the computer for a long period, take plenty of breaks. One of the disadvantages of using a laptop is that, because of its small screen, the user tends to hunch over it instead of sitting upright.

Scanners

While digital capture is now the most common way to take photographs, scanning film or prints is still very popular and brings the benefits of digital editing to analog images. There are various types of scanners available, each with different uses.



These are the most popular and economical, and will scan artwork (photographic prints, book pages, and anything else on paper) up to Letter paper (A4) size, though larger, professional models are available. Most contain a transparency hood that allows negatives or transparencies to be scanned. The results can be very good, though for film, especially 35mm, dedicated film scanners are preferable.

N R Film scanners

These are used only for scanning film, with optics designed specially for smaller formats. They are recommended if a scanner is only required for scanning negatives or transparencies.





The best quality when scanning is provided by the drum scanner, which is used by professional reprographic houses. However, they are very expensive. As an alternative, many professionals use a Flextight scanner. While costing thousands of dollars, it is still cheaper than a drum scanner and will give comparable results.

SilverFast-SE Epson Perfection49





determined by the size of the image to be scanned and the proposed size of the finished print. Resolution is measured in pixels per square inch (ppi). 300ppi will be adequate for Letter paper (A4) artwork to be reproduced or printed at the same size, while a 35mm negative would need to be scanned at more than 2,000ppi to be reproduced at Letter paper (A4) size.

02 Dust and scratches

When scanning, especially from film, tiny scratches and particles of dust are recorded, which require careful retouching. Scanners often come with software, such as ICE (Image Correction and Enhancement), that automatically removes many of these marks, though this will increase the scanning time.

N22 Sharpening when scanning

Although most scanners will provide the option to "sharpen" an image using an Unsharp Mask (see tip 211), it is best to avoid this. Any sharpening required should be done in Photoshop after all other work has been completed.



Many manipulations require careful use of the mouse to draw around areas to be altered. Graphic tablets, which comprise a pen and a small tablet, allow this to be done with far more precision. They also usually come with a cordless mouse that can be used on the tablet for normal controls.





Digital storage

Digital imagery soon takes up a lot of storage space on your computer's hard drive, so other storage options should be considered.

024 CDs and DVDs

These are very useful for storing and distributing digital images. A CD can hold up to 800MBs of data, and a DVD more than 4GBs.



025 External hard drives

The preferred method for long-term storage is an external hard drive. The most powerful can currently hold up to 500GBs, though this figure will rise.







Nemory sticks

For temporary storage and transferring files from one computer to another, small memory sticks, which plug into a USB socket, are very practical. They store anything between 256MBs and 1GB.