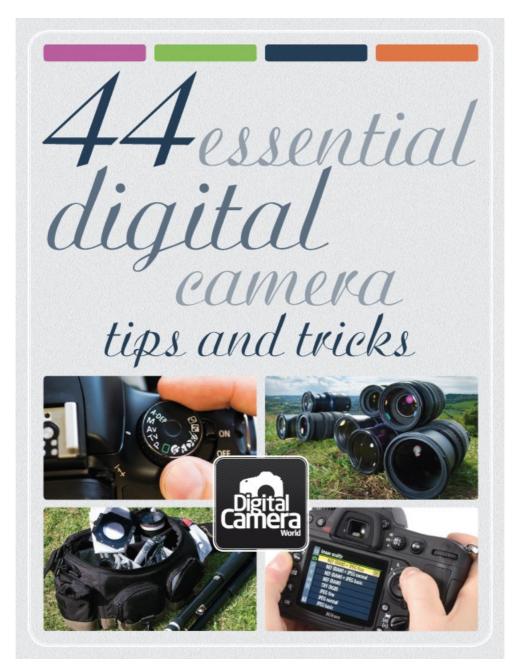
44 essential digital camera tips and tricks

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Our collection of top digital <u>camera tips</u> and essential photography advice will have you improving your photos in no time. Culled from experts and photographers who have been taking pictures for quite some time, they all agree that these 44 camera tips are essential knowledge for honing your craft. So feast your eyes below, check out some of our best <u>photography tips</u> on everything from setting up your <u>digital</u> <u>camera</u> to honing your <u>photo composition</u>, and by the end you will learn the secrets and shortcuts to getting high-quality pictures every time.



Digital Camera Tips: 01 Always reset camera settings

There are few things worse than taking what you think is a stunning picture, only to find your camera's ISO and saturation were cranked right up from a previous shoot and you've missed the moment. Avoid this by checking – and resetting – all of your settings before moving from one picture-taking opportunity to the next (find out <u>The right way to set up your camera</u>).

Digital Camera Tips: 02 Format, not erase

Formatting your memory card wipes it clean and rewrites any pertinent camera information. Erasing your images does not. So always format your cards to minimise the risk of any data corruption.

Digital Camera Tips: 03 Update your firmware

Firmware is the in-camera software used for processing images, setting a whole range of parameters and even controlling what features are available to you. Check your camera manufacturer's website to ensure your digital camera's firmware is as up to date as possible.

Digital Camera Tips: 04 Charge your batteries

Don't assume your camera's battery is fully charged – make sure it is. Charge it before you go out so you're certain there's enough life in it, and invest in a spare battery if you regularly find yourself shooting beyond its capacity.

Digital Camera Tips: 05 Set the image size

Most times you'll be shooting at the highest resolution your camera offers, regardless of what it is you're photographing. But do you always need to? Sometimes a smaller image size might be all you need, and reducing the resolution not only means more images will fit on a memory card, but you can achieve a faster shooting rate, too. If sports photography is your thing, reducing the resolution will help you avoid delays as your camera clears its buffer.



Digital Camera Tips: 06 File format: RAW, JPEG or both?

If you intend to do any manipulation or retouching, shooting RAW is often the best solution thanks to its increased bit depth. However, RAW files are larger, so take longer for the camera to deal with, and you also need to process them before they can be printed.

JPEG files, on the other hand, are processed in-camera at the time of shooting, so you can print or share them immediately, and you'll find that you can shoot a much longer burst of consecutive frames at a much quicker rate. Providing you don't want to make too many radical changes to an image after you've taken it, you may find you can't tell the difference between a JPEG file and a RAW one.

For the ultimate in choice, though, and when speed isn't important, why not shoot both? Most digital cameras give you this option, and you can then decide what you want to do when you're back at your computer. Just make sure you pack an extra memory card.

Digital Camera Tips: 07 Experiment with settings

When they're not working on an assignment, professional photographers spend a lot of time testing. This could be testing a new lens to determine which aperture or focal length it performs best at; testing the ISO and white balance to see which options give the very best results; or even testing the dynamic range so you know the sensor's limitations. You can do exactly the same with your SLR, so you know precisely where its strengths and weaknesses lie. This isn't about looking for perfect shots – just experimenting with your kit to understand it better, or trying out new techniques that you can employ at a later date.

Digital Camera Tips: 08 Don't skimp on a tripod

A good tripod is worth its weight in gold, so don't be tempted by budget options. Pay £20 and it won't last you long, or do its job properly. Dig deep for a decent tripod and it will give you many years of service, making it a sensible long-term investment (read these essential <u>4 tips for sharper shots when</u> <u>using a tripod</u>). And don't forget to take your tripod with you, either!

Digital Camera Tips: 09 Hand-held or tripod mounted?

The simple act of setting up your camera on a tripod will slow you down, and this can be enough to make you concentrate a little harder on what it is you're photographing and what you hope to achieve. At the same time, locking your camera down for every shot you take can reduce your spontaneity, so don't be afraid to mix it up from time to time. If you religiously use a tripod, set out without it and see what happens, and if you normally travel without one, take it with you to see how slowing yourself down affects the results you get.



Digital Camera Tips: 10 Impromptu camera supports

You don't necessarily need a tripod to hold your camera steady – supporting it against a wall or tree will help you avoid camera shake, and a beanbag (or just a bag of rice) can also give you a more stable shooting platform.

Digital Camera Tips: 11 Straighten up

The word horizon is found in the word horizontal, and that's precisely what it should be. If your digital camera's got an in-camera level, use it. If not, invest just a few pounds in a hotshoe-mounted spirit bubble. It will save you hours correcting your shots in Photoshop later. A number of DSLRs have a grid that can be activated and superimposed over a Live View image on the rear LCD screen, making getting level horizons a breeze. Alternatively, use the autofocus points across the centre of the viewfinder to do the same.



Digital Camera Tips: 12 Double-check your kit

It might sound obvious, but check your camera bag if you're going to be shooting away from home. You may have your camera, lenses and tripod, but if you use a quick-release tripod head, is the base-plate attached to the camera or the tripod? Have you got the right diameter adaptor ring if you use Cokin or Lee system filters (see <u>ND Grad Filters: what every photographer should know</u>)? It's these small things that are more likely to scupper a trip than the major elements of your kit.

Digital Camera Tips: 13 Autofocus or manual focus?

It's all too easy to become over-reliant on your camera's autofocus, and there are some situations where focusing manually is definitely a better option – pre-focusing to photograph a fast-moving subject on a race track, or focusing precisely for a detailed macro shot, for example (learn <u>How to use manual focus</u>).

Digital Camera Tips: 14 Which AF point(s) should you use?

Digital SLRs may have a bewildering number of AF points to choose from, but for the majority of shots you only need one – the central one. Place this over your subject, half-press the shutter release to lock the focus, and then simply recompose the shot.

Digital Camera Tips: 15 Buying lenses

A bad lens will always be a bad lens, no matter what DSLR you attach it to. So before you decide that you've 'outgrown' your SLR and need a 'better' one, ask yourself if investing in a new lens might be a better option instead? A few extra pixels and smarter features might sound enticing, but a faster maximum aperture and higher optical quality could go much further in helping you take better pictures with the camera you already have (discover How to find your lens' sweet spot).

Digital Camera Tips: 16 Manual lenses

There are thousands of lenses left over from the days of 35mm film, and as many digital SLRs are 'backwards compatible' (most notably Nikon and Pentax) they can still be used in the digital age. Moreover, as many of them are dirt-cheap it's a great way of expanding your focal length repertoire. But there is a downside. Some lenses perform better than others, and the only real way of weeding out the good from the bad is to give them a go. In general, zoom lenses and wide-angle focal lengths tend to be the worst performers. In addition, there is the need to focus manually, and in-camera exposure metering can be unpredictable and unreliable. That said, there are some cracking manual focus lenses out there, and in certain situations they can actually outperform contemporary low-cost zooms in terms of sharpness (Read more: <u>Your lens markings explained</u>).



Digital Camera Tips: 17 Focal length

Wide-angle lenses can give the impression of increased distance between near and distant elements, while telephoto focal lengths appear to compress perspective. Consider this when you're framing a shot and position yourself to use the focal length that's best for the image, rather than simply choosing a focal length that fits everything in.

Digital Camera Tips: 18 Use the hyperfocal distance

If you want to maximise the depth of field in your shot at a given focal length, then focus manually at the hyperfocal distance; the point at which everything from half the hyperfocal distance to infinity will appear sharp (Read our quick guide for <u>calculating hyperfocal distance in 6 steps</u>).

Digital Camera Tips: 19 Check the frame edges

The majority of viewfinders (find out <u>How to use a viewfinder</u>) don't provide you with 100% coverage, so it's easy for unwanted elements to creep into a shot. The only way to be certain is to check your

camera's LCD screen once the shot is taken. If there's anything untoward in the frame, simply adjust your composition and shoot again.

Digital Camera Tips: 20 Shoot more than you need

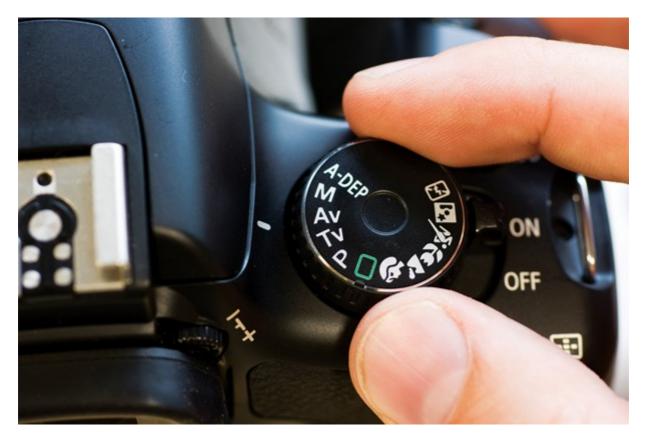
Even with static subjects, consider shooting a burst of frames using your camera's continuous shooting mode. Subtle variations in the light as clouds move across a landscape, or a portrait subject changing expression, are both examples of a 'perfect moment' that could be missed with just a single shot, so shoot a burst and pick the best frame later.

Digital Camera Tips: 21 Preset exposure modes

'Serious' photographers may frown upon them, but your DSLR's preset modes shouldn't be disregarded entirely, especially for candids. 'Landscape' mode will typically set a small aperture and boost saturation, while 'Portrait' mode combines a wide aperture with more muted colours. Both can be used beyond their intended purpose – it's just a question of understanding what the preset parameters are and exploiting them creatively (Read more: <u>Your exposure modes exposed</u>).

Digital Camera Tips: 22 Don't forget Program Shift

Grossly underrated, your camera's Program (P) mode effectively gives both aperture and shutter speed priority in one semi-automated package. If you want a wide aperture, simply 'shift' the Program to get it. You want a slower shutter speed? Then shift in the opposite direction.



Digital Camera Tips: 23 Which is best – Aperture or Shutter Priority?

In a nutshell, the aperture controls the depth of field in an image and the shutter speed controls how movement is recorded. Not sure which shooting mode to go for? Decide which of those two things you want to keep most control over in your shot and that's the priority option to go for.

Digital Camera Tips: 24 Determine your camera's dynamic range

Unless you know the dynamic range of your sensor, you won't know when a scene exceeds it and you'll lose highlight or shadow detail. There are numerous ways of measuring dynamic range, but as DxO labs has tested many digital cameras, you could always use their figures as a guide. Visit <u>www.dxomark.com</u> to see how your camera measures up.

Digital Camera Tips: 25 Try bracketing

You may be able to adjust the exposure of an image in your editing software, but lightening an underexposed shot will exaggerate any noise, while over-exposed highlights are impossible to recover. If you're in any doubt, bracket your shots to be sure you've got one that's correctly exposed – even if you choose to shoot RAW files.



Digital Camera Tips: 26 Read the histogram

While your DSLR's LCD screen will give you a guide to how well an image has been exposed, it shouldn't be relied on. In bright light, images will appear darker than they actually are, while looking at the screen at night will make images appear bright, even if they're actually slightly under-exposed (learn <u>How to read a histogram</u>). The histogram is the only way to accurately assess an exposure on your camera, and the main thing to avoid at the time of shooting is clipping the highlights and, less serious, the shadows. If the histogram hits the right edge of the scale, consider reducing the exposure and shooting again.

Digital Camera Tips: 27 Expose for the highlights

It's far easier to recover detail in areas of shadow than it is to disguise burnt-out highlights, so when the contrast is high, expose to preserve the highlight detail.

Digital Camera Tips: 28 Spot the midtone

While your camera's Pattern metering mode (aka Matrix or Evaluative) will deal with most scenes, a Partial or Spot metering pattern can also be invaluable when you're shooting in mostly bright or mostly dark situations, when you can use it to take a reading from a nearby midtone, such as a pavement or grass.

Digital Camera Tips: 29 Assess the contrast

As well as enabling you to take a precise meter reading, you can use your camera's Spot meter to determine the contrast in a scene. Take one reading for the brightest highlight area, and another for the deepest shadow to determine how many stops separate the two readings. If this exceeds your camera's dynamic range, you'll have to accept some clipping in the shadows, highlights, or both, or consider shooting a bracketed sequence for an HDR (High Dynamic Range) shot (find out how to <u>Make HDR images from 2 exposures</u>).

Digital Camera Tips: 30 Shoot for HDR

To determine the exposure range for an HDR image, take Spot meter readings from the highlights and the shadows in the scene, with the camera set to Aperture Priority. Switch to Manual, set the aperture, and use your Spot readings as the start and end points of your HDR sequence. Adjust the shutter speed a stop at a time until you have covered the exposure range. The exposures can then be combined in software such as Photomatix. (Want to see how it's done? Take a look at 21 great examples of HDR photography.)



Digital Camera Tips: 31 Use an ND grad filter to balance exposures

You can banish featureless skies from your landscape shots by using a graduated ND (neutral density) filter to balance the exposure between the sky and land. It's best to have a set of ND grads with different transitions so you're prepared for a variety of conditions. Alternatively, make two exposures – one for the sky and one for the foreground – and then blend them in your photo-editing software (see <u>ND grad filters:</u> what every photographer should know).

Digital Camera Tips: 32 Use a solid ND filter to extend exposure times

Solid ND (neutral density) filters are great if you want to extend your shutter speed, but they can be used to control the aperture as well. A three-stop ND filter would allow you to open the aperture by three stops to get a shallow depth of field, even in bright conditions.

Digital Camera Tips: 33 Polarisers

The effect of a polarising filter is impossible to recreate digitally, which makes it the number one filter choice for outdoor photographers looking to cut down reflections or intensify blue skies. Don't skimp on price, or you'll be skimping on quality.

Digital Camera Tips: 34 Black & white: in-camera or in-computer?

Unless you know that you definitely want to print black-and-white images from your memory card, it's best to shoot in colour and then convert to mono later in your image-editing software – it will offer a lot more control than your camera. If you decide to shoot black-and-white JPEGs, don't forget about incamera filters: red, orange and yellow filters can all add drama to boring skies, while an orange filter will reduce the appearance of freckles and blemishes in portraits.

Digital Camera Tips: 35 Use a white balance preset

Because they're processed in-camera, you'll want to get the colour right for JPEG files at the time of shooting. So use your camera's preset options (Daylight, Shade, Tungsten, etc) instead of relying on the auto option to get it right. Although Auto White Balance is often considered a little 'basic', if you're shooting RAW files there's no reason to choose anything else – you can set the white balance when you process your images.



Digital Camera Tips: 36 White balance bracketing

If you're shooting JPEG images and your camera allows it, try activating white balance bracketing. JPEG files take up minimal space on your memory card and it could save you hours on your computer spent correcting a slight unwanted colour cast.

Digital Camera Tips: 37 Using the wrong white balance

Deliberately setting the wrong white balance can add an overall colour cast to your images – blue if you shoot in daylight with a Tungsten white balance, and a warm orange if you shoot under tungsten lighting with a Daylight white balance. During sunsets, an auto white balance setting can try and correct for the overall warm tone, which is exactly what you're trying to capture. 'Trick' your camera by using the Cloudy preset, which is designed to warm up cool scenes.

Digital Camera Tips: 38 Shoot a colour target

If you want your colours to be consistent from shot to shot, include a colour target in the first frame of a sequence. When it comes to processing, set the grey point (and black and white points) using the target reference frame, and your software will match the subsequent batch of images.



Digital Camera Tips: 39 Fill-in flash

Fill-in flash is great for lifting shadows, but it can also be used to create quite dramatic images. Use your camera's Exposure Compensation to reduce the overall exposure by 1/2 a stop, and then increase the Flash Exposure Compensation to +1/2 to balance the exposure. (Some cameras enable you to adjust the exposure for the ambient light without affecting the flash exposure, and in this case you wouldn't need to dial in +1/2 for the flash.) The result is a flash-dominated shot where a well-lit subject stands out against a subtly darkened background.

Digital Camera Tips: 40 Get the flash off-camera

Getting your flash away from your camera will transform your portraits, especially if you use a dedicated flash that can be controlled wirelessly by the camera, and reflectors to reduce any harsh shadows.

Digital Camera Tips: 41 High speed flash

The duration of a flash is much shorter than your DSLR's exposure times, which allows it to 'freeze' high-speed events. Water drops are the easiest place to start, and all you need is a dark room, a flash, and a whole heap of patience. Follow this guide to <u>amazing water drop photography</u> to take your first steps in high speed flash.

Digital Camera Tips: 42 Shooting video on your DSLR

Video-enabled DSLRs that use a CMOS sensor utilise a 'rolling shutter', which can cause some peculiar artefacts when you shoot video (find out <u>How to set up your DSLR for shooting video</u>). A rolling shutter exposes each individual frame in a video sequence in rows, starting at the top and working down – similar to the way a scanner scans a document. If the camera doesn't move while this is happening, there's no problem, but if you're panning – particularly horizontally – vertical lines in a single frame can become distorted. Handholding the camera and using telephoto lenses can exacerbate the effect, so use a tripod

and/or wider-angle focal lengths. Cameras with a CCD sensor are unaffected as they use a 'global shutter' that exposes each frame in its entirety – just like shooting stills.



Digital Camera Tips: 43 Choosing video frame rates

Most SLRs that let you shoot video offer a range of frame rates. In the UK, the television standard is PAL, which operates at 25 frames per second (fps). This is the rate you should consider as 'standard' for your video if you intend to show it on a TV. However, if your camera lets you, you can also shoot at 50fps to create a slow-motion effect – when it's played back at a rate of 25fps it will effectively be seen at 'half speed', so a second of recorded footage will play for two seconds on screen. The other frame rate to consider is 24fps, the standard rate for film (as opposed to video). Although a single frame per second difference doesn't sound much, it is enough to give your footage a 'cine look' that is favoured by many pro film and video makers.

Digital Camera Tips: 44 Changing lenses

So much has been said about 'dust bunnies' (small particles of dust that can land on your camera's sensor and cause dots in images) that many photographers seem paranoid about changing lenses – but that's one of the main attractions of DSLR photography! There are some simple precautions to take though. Always switch the camera off when changing lenses, as this removes any static charge from the sensor which can attract dust particles. Shield the camera from the wind and weather and make sure you have the replacement lens ready to fit. Finally, keep the camera's lens opening pointing downwards when changing lenses, to minimise the risk of anything falling into it.