

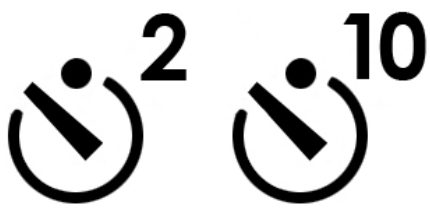





How to Take Sharp Photos

STAGE 1: \$0	STAGE 2: \$30 - \$500 or more	STAGE 3: \$0	STAGE 4: \$20 - \$50	STAGE 5: \$100 to \$1000's	STAGE 6: \$1000's
 <p><i>Technique</i></p>	 <p><i>Tripods</i> <i>Lightweight</i> <i>Rigid</i></p>	 <p><i>Timers</i> <i>2 Second</i> <i>10 Second</i></p>	 <p><i>Remote Shutter Release</i></p>	 <p><i>Lenses</i></p>	 <p><i>Camera Sensors</i> <i>Full Frame</i> <i>Crop</i></p>
<ul style="list-style-type: none"> • Where possible use the viewfinder & hold the camera so it rests against your eyebrow/forehead. • Use your left hand to cup the lens so the camera's weight is balanced in your hands. • Tuck your elbows into your body. • Brace your body against a solid structure, tree etc. • Balance your body on both feet. • Focus on the subject's eyes or main area of interest. Cameras typically focus on the nearest object covered by the active focus points. Consider selecting an individual or group of focus points that only cover the subject area you want to focus on. • Set the minimum shutter speed greater than the lens focal length, eg. 100mm focal length use 1/100th or faster shutter speed. • Use an aperture between f4.0 & f11 where possible as this range typically produces sharpest images. • Turn on image stabilisation function. • Smoothly squeeze the shutter release button to avoid jerking the camera. Poor shutter button technique is one of the most common mistakes. 	<ul style="list-style-type: none"> • Mount the camera on a tripod or monopod. • The more rigid the tripod the better but rigidity comes with weight and/or cost penalty. Too heavy and you may find you don't want to carry it around with you. Too light and it won't support your camera properly. • Use a bungee or similar to hang your camera bag from the tripod centre column to increase stability in wind. The bag should still be touching the ground and not be left to swing around in the wind. • Turn off image stabilisation when using a tripod. 	<ul style="list-style-type: none"> • Use the built-in automatic timer shutter release. This avoids contact with the camera to release the shutter. • Enable the camera's mirror lockup function. 	<ul style="list-style-type: none"> • Use a remote shutter cable or wireless shutter release. • Can be used in conjunction with mirror lockup described in Stage 3. • Replaces the need to use the built-in automatic timer shutter release described in Stage 3. 	<ul style="list-style-type: none"> • Upgrade from kit lens to premium (pro) lens to improve lens performance, particularly sharpness. • Use a website like www.dxomark.com to check the sharpness of a specific model of lens on your camera body as performance varies considerably from camera to camera for the same lens. • Prime (fixed focal length) lenses are typically sharper than zooms. A "Nifty 50" prime can be very economical to buy and provide excellent results. • Wider apertures let in more light and allow faster shutter speeds so f2.8 will let in 2X the light of f4.0, but at the cost of reduced depth of field. 	<ul style="list-style-type: none"> • Upgrade to full frame body as they have a much larger image sensor to collect more light resulting in lower noise. This allows for higher ISO and consequently faster shutter speeds where needed. Note however that given the same light falling on the sensor, a crop sensor of the same megapixels will provide an equivalent level of image quality given the same field of view (as opposed to focal length), so upgrading the body really is very much subject to individual circumstances.

SOFTWARE

- Use post-processing software to sharpen the final image after all edits and sizing have been completed. For Lightroom users, Google's free Nik Collection plug-in is highly regarded.
- If using post-processing software like Lightroom, consider shooting in RAW to retain maximum detail. RAW images are typically softer than JPG images straight out of the camera because no in-camera processing has been done.
- Sharpen for the type of use the image will be put to, eg. Print, web, projection, tablet, phone etc.