



Motherwell Photographic Society

Welcome to Motherwell Photographic Society.

The club is open to anyone wanting to learn photography, share their photography and meet others with similar interests.

This booklet contains information on how we operate as a club with talks, competitions and practical learning. We cater for all levels, from absolute beginners to experienced photographers.

In addition, the booklet contains general information on photography and settings which you may find useful.

Rodger Shearer

President
Motherwell Photographic Society

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ABOUT MOTHERWELL PHOTOGRAPHIC SOCIETY

The Motherwell Photographic Society was founded on the 14th August, 1896. A meeting was held in Robb's Hall, Motherwell, marking its official inception.

Initially called Motherwell Photographic Association, the club was formed to serve the interests of its members. The first patron of the club was the Scottish novelist J.M. Barrie. In 1901 it changed to the Motherwell YMCA Camera Club, it operated under this name for nearly eight decades. In 1980, the club rebranded to its current name, Motherwell Photographic Society, reflecting its broader community focus beyond the YMCA affiliation.

Throughout its history, the society has been a hub for photography enthusiasts in Lanarkshire, Scotland. It offers a diverse programme that includes guest speakers, competitions, practical sessions, and summer outings. The club is affiliated with both the Glasgow and District Photographic Union and the Scottish Photographic Federation

The society meets weekly on Thursday evenings from September to April at the Holytown Community Centre. During the summer months, informal meetings and photography outings are organized. Membership is open to individuals of all experience levels, and the club provides access to digital facilities, including computers, scanners, printers, and studio lighting.

GENERAL INFORMATION

Motherwell Photographic Society meets every Thursday between September and April.

During this time, it hosts various activities. Some of these are:

- **Studio style photo shoots.** This involves using the club's own studio lights and backdrops. It may involve live models or inanimate objects. Once even a motorcycle.
- **Members Night.** When any member can display a series of photographs from an event, or a short video to show to the rest of the members.
- **Guest speakers.** Guest speakers (sometimes our own members) give photo displays. Some of which display a journey and others to help describe how they were edited. Displaying a before and after.
- **Internal club competitions.** These are broken into **Image** and **Print** competitions. Any member can enter. Each competition is scored by a guest judge. These judges are generally 'photo experts', who also will supply constructive feedback on each image or print. Describing where improvements can be made.
- **Inter club competitions.** This is where we battle it out with another photographic club. In these competitions the best images or prints are placed against the other club to gain the highest score.
- **Scottish Photographic Federation** At least once a year we view the winning images from ALL of Scotland's camera clubs.

During the summer months we also meet informally. During this time, we share and learn photo editing techniques. Not everyone uses the same photo editing software, and also not everyone uses a PC. Some use laptops. Some PC's and other Apple mac's. Each delivers benefits and issues, and we try to solve each other's problems. Discussions with members throughout the year can help resolve most issues with photo technique, equipment and skill level. Although sometimes members can get specific assistance in photo editing.

PRINTING AND MOUNTS

1. If you print your images externally, the print company may offer to mount the print for you, for an additional cost.

Prints can be secured on a backboard or fully mounted. You can purchase pre-made mounts from many outlets and craft shops. Or, you can make your own by purchasing a 'mount cutter'. There are various makes and models from the cheap (££) to the expensive (£££). A search on an internet for 'mount cutter' will produce many results.

2. A mount or backboard size should preferably be 500mm x 400mm (equivalent to 20" x 16") or 400mm x 300mm (equivalent to 16" x 12"). Irrespective of the print size.

IMAGE SIZING

1. Image reference information is from Glasgow District Photographic Union website (<https://www.gdpuphotography.co.uk/section738673.html>).

All images should be in JPEG format and use the sRGB colour space. Image size should be no more than 1600 pixels x 1200 pixels.

- a) To resize an image using Photoshop, use the 'Crop Tool'. For Landscape Format set the crop size to no more than 1600 pixels by no more than 1200 pixels and apply the crop. **Photoshop Video:** <https://www.youtube.com/watch?v=m-rf0aus6zc>

To apply a white or coloured border: **Press** 'Control A' to select the image.

Select: Edit > stroke. In the stroke options box select a stroke width (4 or 5 pixels is usually enough), select the colour to be applied (usually white), select location: inside the image, blending mode normal and opacity at 100%. Click "ok" to apply the border.

If you do not use Photoshop, the software you are using *should* have a crop or resize option. If not, your camera manufacturer normally supplies basic editing software and this will have a crop which can be used.

Canon: <https://www.canon.co.uk/software/>

Nikon: <https://downloadcenter.nikonimglib.com/en/index.html>

Sony: Check camera box

Olympus: <https://software.omsystem.com/omworkspace/en/>

2. An internet search for 'Photo editing software' will provide a list of various editing software's from the free to the expensive £££). An example of editing software's are: Affinity, ON1 Photo Raw, Gimp, Adobe, etc.
3. Images shall be submitted as follows: File format: JPEG, (1600 pixels by 1200 pixels)

Landscape format: Image size: 1600 pixels horizontal by 1200 pixels vertical. Example of 1600 pixels wide landscape format aspect ratio 4 x 3.	
Portrait format: Image size: 900 pixels or wider horizontal by 1200 pixels vertical.	
Panoramic Format examples: 1600 pixels horizontal by the desired height of the image (no more than 1200 pixels).	
Square format example: Image size: 1200 pixels x 1200 pixels.	

ARTIFICIAL INTELLIGENCE (AI)

1. For guidance the use of Artificial Intelligence (AI), full details and other useful information is available at <https://www.scottish-photographic-federation.org/competitions-guidance>.

Below are some key points from the Website.

If the Scottish Photographic Federation (SPF) is in any doubt of the eligibility of an entry, they may request RAW files or jpegs (incl. neighbouring jpegs).

Images entered must be entirely the work of the photographer. Composite Images are permitted, provided all component images meet this requirement. For the avoidance of doubt, use of images from any source including, but not limited to, royalty free image banks, textures and clipart are not permitted.

The use of AI software is allowed provided all images used have been taken by you, and only your own photographs are used in the processing. No modifications are allowed based on AI generated text input or generated using images or elements not taken by the photographer.

It is impossible to precisely define how interpretation of these statements may vary in different competitions by different Judges and Organisers. NB - An entry is also still subject to any additional specific Competition requirements. **The SPF's advice is to try your best to enter images that comply with the 'ethos' or 'spirit' of this document.**

In general

- You can add a rain drop, clouds, etc from your own photographs, but you can't add from a library of images.
- AI sharpening and AI denoise software can be used on your photographs.
- AI software to enhance your photograph can be used, as long as it doesn't add any external additions material.
- Adobe Firefly AI can be used on your own photographs but no text input adjustments or AI generated adjustments are allowed.
- You cannot photograph another image to add part or all of it to your own image.

- You can draw something and add it to your image.
- No text or fonts can be added to your image.

Because much of the software we use to edit our images already uses AI in some form or another, including Photoshop and Topaz, we can't simply say members can't use AI software, given they already have been using it for some time. We also have to accept that the software 'tools' available to us are getting better and more sophisticated e.g., in the way that content-aware tools help when removing or masking. What we do want to ensure is that any AI software is only used in processing photographs taken by the author, without the addition of any elements 'AI generated' (either photographic, text or other) that have not been taken by the photographer.

2. Further information can be found at [Competitions Guidance | Scottish Photographic Federation \(scottish-photographic-federation.org\)](https://www.scottish-photographic-federation.org) for competitions within SPF, PAGB or FIAP.
3. Any member who requires additional clarity on ANY of the above, please seek a member of the committee for assistance.

CAMERAS, DRONES AND PHONES

In our modern world we always have a camera with us. Mostly this will be part of your phone.

1. **Mobile phones** have excellent cameras built into them. We probably use the camera more than making phone calls. These cameras produce jpg file type photographs. These photographs are already edited by your phone. This editing consists of colour balance, white balance, contrast and lots more. The camera, *in this easy mode*, also controls the shutter, aperture and ISO. Built into the camera is stabilisers and a host of other software's/hardware's that enable that perfect shot.

Most of these mobile phone cameras also have a **Pro or expert** option. This allows you to control your phone just like a DSLR/Mirrorless camera. Search for it in the phone camera menu. This allows you to control the Aperture,

ISO, shutter and focus. In this mode the photo file type produced is RAW DNG (Digital Negative) file type. Both jpg and RAW photos can be edited in most photo editors. A RAW image permits you to edit with the same controls as if it were from a DSLR/Mirrorless camera.

2. **Drones** are becoming more and more popular. And the photos that can be obtained from even the cheapest drone (with camera) is on a par to a mobile phone. Remember to use a drone with a camera, you have to register to use it. <https://register-drones.caa.co.uk/individual>
3. **Cameras** come in varies models and styles. From the point and shoot, to DSLR and mirrorless. And they vary from ££ to £££££ in price. If you're starting out don't rush out and buy the most expensive camera you can afford. First do your research. What do you want to use the camera for? Speak to members of Motherwell Photographic Society, they for the most are amateurs as well and all have been at this very stage in deciding what camera to get. Also think of the second-hand market. This can greatly reduce the cost. Members of Motherwell Photographic Society may be able to advise on what to check before purchasing.
When buying a lens for your camera, do your research. Just because the lens is the same make as your camera, and it fits your camera. Does not mean that it will work with your camera.

BASIC PHOTOGRAPHY SETTINGS

Each different camera manufacturer has different symbols or letters on the controls. Understanding what they all mean is important. The three basic ones are Aperture, Shutter and ISO. These are essential for good photography. Everything about photography is light. Too much light, overexposed (white-out), too little, underexposed (blackout). And the sweet spot in-between. There is lots of information available in books and the internet on these. Also, each camera has lots of different settings. With any camera, and irrespective how confident you are, a read of the manual is invaluable.

1. The **Aperture** controls how much light comes through the lens to the sensor on your camera. This is the same for all cameras wither DSLR or a phone camera. It

Focal Length (F N°s)

1.8 - 2.8 - 4 - 5.6 - 8 - 11 - 16 - 22



Shutter Speed (sec)

1 - $\frac{1}{2}$ - $\frac{1}{4}$ - $\frac{1}{8}$ - $\frac{1}{15}$ - $\frac{1}{30}$ - $\frac{1}{60}$ - $\frac{1}{125}$ - $\frac{1}{250}$ - $\frac{1}{500}$ - $\frac{1}{1000}$

movement blur
use tripod

Hand
hold

freeze action

is like the pupil of your eye. The Aperture is defined by 'f' numbers. These are 2.8, 5.6, 16. As shown above.

The aperture also controls the depth of field. i.e. blurry backgrounds or everything in focus in the photograph. The larger the aperture (small 'f' number) the lighter the picture, and less of the picture will be in focus.

2. The **Shutter** is a cover that protects the sensor. It opens when you take a picture. The shutter control (or dial) controls how long the shutter is open. i.e. how much light gets to the camera sensor. A long shutter speed (a slow shutter) can cause a significant amount of motion blur. i.e. someone walking would be blurred. A short shutter speed (a fast shutter) the person would be frozen.

Situation	Recommendation
People who pose	1/125 of a second
Blurring water	1 to 10 seconds

Perched birds	1/320 of a second
Birds in flight	1/2000 of a second

As a general rule, any shutter speed slower than 1/60 of a second the camera should be placed on a tripod.

3. The **ISO** (International Organization for Standardization) is used to brighten an image when the shutter speed is high and the aperture is small (large 'f' number). The ISO increases the sensitivity of the sensor. The higher the ISO the more grain or noise is introduced to the photograph.



All DSLR and mirrorless cameras have a dial  Which permit you to control the camera. Different camera manufacturers use different lettering.

	Automatic	Shutter	Aperture	Manual
Canon	A	Tv	Av	M
Nikon	A	A	P	M
Olympus	P	S	A	M
Panasonic	P	S	A	M
Sony	P	S	A	M

Auto mode the camera is in charge. This works much like your mobile phone. Point and shoot. Make sure the lens is on auto and the camera controls the Aperture, Shutter and ISO for you.

Manual mode you have control of everything. You must set the shutter speed, the aperture and the ISO. The lens can still be on auto.

Aperture mode you control the aperture ('f' number) and the camera automatically selects the Shutter and ISO settings for you.

Shutter mode you control the shutter speed and the camera automatically selects the Aperture and ISO for you.

Other DSLR and mirrorless camera types are Pentax, Sigma, Hasselblad, Leica and Mamiya.

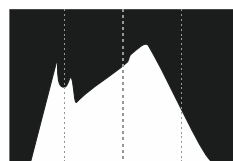
The exposure meter is an excellent tool for checking the picture setting before taking the photograph. DSLR and mirrorless cameras have this meter as do some drones and camera phones. Reading the camera manual and practicing with these settings will improve your photographs.

Exposure Settings

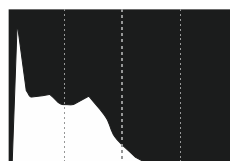


On DSLR and mirrorless camera are histogram that display the tonal range of the picture. Again, check with the camera manual and practice with these settings can only improve your photography.

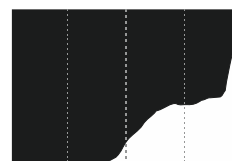
Histogram showing tone distribution



Even tone distribution



If the image is dark, tone distribution is to the left



If the image is light, tone distribution to the right

Of course, inside the camera menus offer all different complex settings. These are wildly different in layout, operation, control, context and availability to each individual camera and manufacturer.

The manual for each camera is an invaluable asset and tool. If you don't have one, simply go to the manufacturer's website and search for the model number or serial number of your camera. This can then be held electronically on your mobile phone for future reference.

PHOTO EDITING SOFTWARE

As already mentioned in this document there are many different photo editors available. The most popular among professional and amateur photographers is Adobe Photoshop and Adobe Lightroom. But there are many others like Capture One Pro, Affinity, ON1 Photo Raw, Pixlr, Gimp and many others.

Not everyone works or learns the same way. So, one photo editor may not suit everyone. Also, they all vary in price. Some are subscription (you pay a small amount every month for as long as you use the software). Others you can buy and own forever. Most give a free period to access their capabilities for yourself. Most also have lots of videos showing how to use certain aspects of the software or how to obtain certain effects. These videos can be found on the software's website or on the internet.

Each of the software's come with a library of add-ons like clouds, weather (rain, fog, snow, etc), flying birds in the distance, etc. These are mostly royalty free (free to use) unless stated. These can help produce your desired effect on your photo. Which is great. But these *library* items supplied with the software or gained by other means cannot be used in any competition photo. As mentioned throughout this document all parts of any competition photo must be entirely your own.

Check that minimum and maximum requirements of the software, against your computer type.

Things to look for:

• Does it work on your computer type (Mac, Windows (version), Chromebook), Linux • Processor type and spec • RAM amount • Hard drive size and wither it's SSD and space availability • Is the Internet required for use?	• Graphics card specifications (check for resolution, Vram, Direct X, Vulkan, OpenGL, Metal • Can the software integrate with other software's? • How much support is available
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Basic tools to look for in software are:

• Can it work with RAW photo files? • Does it work with YOUR camera RAW files? • Can you control the Exposer?	• Can you control the contrast? • Can you alter colour temperature?
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Of course, all of these tools and specification lists are endless. And certainly, through this journey of choosing the editing software for you, you will no doubt come across endless stories on the internet of what doesn't work, and this runs slow, or waste of money. As well as lots of praise for them all.

What is also on your computer makes a difference to how these software's work and operate correctly. For example:

If your photo editing software is running slow or sluggish?

Is anything else running? And you'll be amazed by what is (internet browser, social media, etc)

Has the software been updated, and if so is the specifications updated?

If your photo editing software stops working?

- Has the trial period expired?
- Has the subscription expired?
- Is everything else working?
- Are you connected to the internet?

Your photo editing software cannot do what you want it to do?

- Is it capable of carrying out the task required?
- Have you checked and read the manual on this topic?
- Has the software been updated and your computer is no longer capable of doing the task?

Remember ALL computers (within the service period of the operating system) update from time to time. Some computer types are better at choosing when to carry out the update than others. But it will be an inconvenience for a short period of time.

Not only does the computer require to keep itself up-to-date, but your software may require you to check if it is up-to-date. Check regularly for updates.

Updates on your editing software and your computer are essential. Not only does it give you the latest software, but it removes bugs and errors. That were unknown before the software's release. This helps you to keep your software and computer running smoothly and efficiently.

[illegible]

