MARK D YOUNG (SAPP)

www.flightlevel42.co.za

Olympus OM-D E-M1 X

My default menu settings.

Current to Firmware 2.0

Firmware 1.1 added RAW processing via USB. Version 1.2 added support for the 12-45mm PRO and EVF auto switch control refinements. Firmware 1.3 added support for the 100-400mm lens. Version 2.0 added RAW video output over HDMI to Atomos recorders, manual focus distance indicator, support for the 150-400 PRO lens and stabiliser refinements.

In the text the iterations of the E-M1 are referenced as follows:

Original E-M1as M1.1, E-M1 MkII as M1.2, the E-M1 mkIII as M1.3 and E-M1X as M1X

Why this booklet was made

I have owned and used Olympus equipment for more than 50 years. Nearly 40 of those have involved earning an income with the equipment.

I moved from the film OM system to digital with the original E-1 and have owned and used every iteration of the OM-D system cameras since their introduction, eventually settling on the E-M1 family as the mainstay of my equipment locker.

By “use”, I mean not just a few hours at a launch jolly paid for by the manufacturer before posting a YouTube video or writing about it. (The manufacturer has never paid for any jollies or given any free kit for my use). I mean using it on assignments, in harsh African conditions, day in and day out on the wide range of assignments we are expected to do out here – from hard news to sport, corporate video and news inserts, functions, political rallies, wildlife, remote infrastructure documentation plus weekend social occasions and a range of various traditional weddings in remote areas.

The cameras have never failed to return images for my clients' needs. As time has passed, the image quality has gone beyond “good enough” at the time of the E-1 to more than good enough on the M1.1 to the current 20MP quality that matches any other system when used properly (being mindful of its characteristics). Certainly, my clients cannot tell any difference between well captured 20MP images from different systems.

Of course, if you are a pixel-peeper, the high res mode (and now the hand held high res mode on the M1X) forever banish the need to have larger, power hungry and post processed legacy 35mm size sensors in a camera.

As my assistants bade a fond farewell to our two original OM-D E-M1s in late 2019 and got their hands on two E-M1x models, we decided to have a training session to discuss the changes relative to the EM1 Mark iis we use and to see what a good set of standard parameters might be for the types of assignments we cover.

This sort of preparation is made with any new equipment to ensure that we have as seamless a transition as possible when the items get used in anger and to give them a ready reference when out in the field (The PDF is loaded on their phones and tablets.) Hopefully, you find some value in it as well.

We thought this might be useful for others to try as a good standard kick-off for their M1X bodies. So, here it is.

I have, to date, written booklets on the menu settings I used for the E-M1.1 and the M1.2 in addition to the M1.3 and the M5.3.

A personal note on Olympus camera menus and how I remember where to find things.

As mentioned, the internet and self-appointed “expert” Youtographers who have used the cameras for a few hours (in most cases) have created a myth that Olympus camera menus are horribly complicated.

Not so.

Press the MENU button on your E-M1 X and you will see, arranged along the left side of the monitor, from the top down, at the extreme left column, a camera symbol with the number 1 and then another with the number 2, a video camera symbol, a playback symbol, a gear, a spanner and a star.

This is a similar system used by other manufacturers like Canon, Nikon and others (although in different orders and Canon spread it from left to right). Unlike some, this one is very easy to work out.

If on a menu option page with a camera symbol, the settings you can access will usually affect things that you need to set before taking a photograph.

The Movie camera tab is, as you would expect, for changing settings that affect how you record movie footage.

Next is the playback symbol. This contains things you change after the image or movie clip has been captured – like how many images are displayed in lightbox view, what information on the shooting parameters are shown over the image and so forth. You can also edit images and videos in-camera using settings on this menu.

Then you will see a symbol of a gear.

This is where you tell the camera how to use all its various custom settings – just like setting up your Smartphone. *You will not usually use these adjustments from shot to shot* via the menu but they are parameters that affect how the camera responds to things like AF, release button presses, function buttons etc. Like the Canon Custom Function menu and the Nikon Set Up menus, these are often sub-divided into sub-sets of functions you can adjust.

To large degree these are logically labelled in that Auto-Focus functions will be on the A (For **A**F) tab. Related aspects like the AF Targets are then on the A2 tab.

Button functions will be on the B tab (for **B**uttons). The C tab is for settings affecting **C**ontinuous shooting or what many may know as the drive/release mode settings. All **D**isplay related items are on the D tab. Exposure related functions are on the E tab (E for **E**xposure) Guess where **F**lash functions are? Yes, you are getting the hang of this, on the F tab.

I have remembered that G equates to **G**ranularity, determined in film days by the size of the original negative and its speed and so the G tab sets the size of the recorded file, the White Balance and Colour space as would have been determined by my film choice.

Further odd remembrance tricks I use include that H is where the camera **H**olds the images i.e. the Cards and their storage settings and the EVF gives me important **I**nformation so it is controlled on the I menu. Without a battery I will, as we say in English "*Have no **J**uice..*" so battery and other power settings are on the **J** tab.

You may think this is all silly and devise something that makes more sense in your language but it has been very useful to quickly make my assistants feel at home with the Olympus equipment we use in my business.

After all these alphabetised tabs you will find a spanner symbol where you format your cards and set time, date and other aspects. (Kind of important tools...i.e. A spanner.)

Finally, in a welcome change to previous OM-D menus on this model is the Star tab which is called the *My Menu* page also found on the M1.3. Here you can set up functions you commonly use and put them in any order you wish to make your own custom menu system. There are five pages with space for up to seven options.

A less welcome change (to me) is that Olympus have added a simpler "shooting information" screen option similar to those used on Canon and Nikon equipment (Probably due to the constant complaints that the cameras were difficult to set?). This dumbing down of the display from the powerful and simple Super Control Panel (SCP) is, I think, a waste of ROM space but perhaps some may feel comforted by having a less powerful and dumbed-down interface. I simply un-tick this display option in the menu.

Throughout this (as with my other menu guides) I have added notes sharing my thoughts and reasons for the settings I propose to use on this new camera. My thoughts may change as we encounter different issues in the future but these are my current, initial settings.

However, your needs and settings may differ. Hopefully, however, you can gain a better understanding of what each setting does and how you can make the camera work as you prefer.

Items in bold type show the menu description and setting I use on my camera.

USED TO THE ORIGINAL E-M1 or the E-M1 Mark ii ?

If you are coming to the E-M1.X from the original E-M1.1 you will find that the menu has been radically re-structured.

The main change is that all movie settings are on their own page instead of being sprinkled throughout the menus of the original model and most custom settings menus are now a page at a time. Where previously you may have had up to two pages of choices, these are now split into sub-menu pages H1, H2 etc.).

Relative to the E-M1.2 the changes are not as radical but there are several areas of the setting menus that have been revised and some of the settings you know may be in new places (or a different order).

Taking time to plan how you intend to use the amazing options available will pay off in the long run and add to your ability to apply this new tool to maximum advantage.

CAMERA MENU 1

Reset/Custom Modes You can reset the camera to factory default with this option or assign custom mode settings to the C settings on the camera dial. Whatever you have set on the Super Control Panel and the mode dial when you assign settings to a C position is saved. I have a C setting for Sports, Weddings and one for Theatre work on my E-M1.2 bodies. I have added a Movie one on the M1.X.

Picture mode I tend to use **Natural.** If you are shooting kids parties, an Eastern Tamil/Hindi or traditional African wedding then you could try Vivid but that tends to overdo sallow skin tones. Your mileage may vary but using natural allows you the most leeway to either saturate or diminish colours in post production in my view. Of course if you only shoot in RAW file format then this setting can be changed in post and where it is makes no difference if you like first adjusting the colour mode when viewing RAW files.

Image size settings (that triangulated pixel symbol) >

JPEG setting is **LF (**large fine in Card slot 1**)**

Your choices include JPEG (LSF, LF, LN, LB, MSF, MF, MN, MB, SSF, SF, SN and SB) and RAW modes. Choose a JPEG+RAW option to record both a JPEG and a RAW image with each shot. JPEG modes combine image size (L, M, and S) and compression ratio (SF, F, N, and B).

Image Aspect is normally **4:3**. This uses the entire image sensor area. I crop to other aspect ratios in post.

Digital Tele-Converter is usually **Off.** This captures an image which has been digitally enlarged by a factor of 2. Effectively, this gives you twice the focal length of any lens attached. Use with caution and only when you have no other option to grab that little Tiger cub on the hillside (or similar). Quality varies from totally acceptable to lousy depending on the light and subject. A great option to remember in the back of the mind when stuck without a longer lens and you must get the shot..

Release mode/self timer This option of the camera settings menu duplicates the function available on the upper left button of the camera body. This lets you adjust the frame rate and release mode (Single, Multi, silent shutter, Pro Capture etc.) or engage the self timer options. You have customization options for the number of frames, the interval between each frame as well the ability to ask the camera to re-focus for each image. The last is useful if doing a sequence of something like a flower blooming where the wind may move the flower between frames.

Interval Shooting/Time Lapse: Access the interval timer settings. To do so highlight this option and press OK. You now get the option to go to “On”. Select this and the other options become available which are:

Number of frames>1 Set how many frames you need to take. I leave it at 1 and change as needed.

Start waiting timer>The camera delays triggering the first frame in the sequence of frames you set by this amount.

Interval length>As needed.

Time Lapse Movie>Off (On when needed and then I set Time Lapse Movie Resolution to Full HD (You can have 4K). I change the frame rate as needed – by default it is 10 fps).

Movie Settings: Choose the frame size and frame rate for time lapse movies.

Notes on time lapse that can prevent frustration.

1) The touch screen functionality is disabled in time-lapse mode.

2) You cannot use CAF+TR or CAF nor bracketing or HDR.

3) If you press Menu button, the lens release button, the playback button or connect a USB cable (like in trying to power the camera from a power bank) the sequence will be ended and you will have to start again.

4) You cannot use time-lapse *AND* the live ND filter, HDR mode, or exposure bracketing.

5) If you set an interval between frames of longer than 1 min 30 sec, the monitor will switch off after each exposure and enter "sleep" and will re-activate about 10 seconds before the next image is captured.

You can also access the timer/interval and other release sequences via the Super Control Panel - **SCP**.

Press OK and tap the release mode square – twirl the front dial to pick a setting and touch the shutter button to confirm your choice. Please note that **Pro Capture** will not be selectable if you are not using a native m43 lens.

CAMERA MENU 2

Bracketing – as needed. Also available on top left button and via **SCP**.

Bracketing choices include flash, exposure, ISO, ART, white balance and focus bracketing/focus stacking.

As to the **Focus Differential** (how much the focus is changed between stacked images) in the focus stacking menu option in this subset, I have found **5** to be a useful mean. However adjust as needed.

NOTES: (1) You cannot use focus bracketing with any other type of bracketing.

(2) If the *Focus bracketing* option is greyed-out, you may not have a compatible lens fitted.

(3) If you have, for some reason, set a very high ISO value (8000 +) while using focus bracketing the flash sync speed is automatically set to 1/20sec!

(4) If you touch the zoom setting during the bracketing sequence it will stop taking photos.

A great new feature, however, is that the latest version of Olympus workspace lets you stack focus bracketing images in the software if you would rather do so on your computer.

HDR – As needed. Also available via top left button pedestal (under release/drive settings) or **SCP**. You also get a sub-set of options to choose between HDR1 or HDR2 (different levels of blending) and then you can manually shoot a HDR sequence (it will not be blended in camera) if you set the EV compensation steps in the sub-menu. This offers options for between 3, 5 or 7 frames at EV steps of 2.0 and 3 and 5 frames with 3.0 steps.

NOTE: When using this option (HDR) the camera defaults to ISO200 (over rides your setting) and *Natural* colour space. If combining images in camera the default output is JPEG unless you have RAW set in which case you will get a RAW and a JPEG on the card.

IMPORTANT! If you do real estate work and intend to use the HDR setting with strobes – that is not possible. The following cannot be used in conjunction with HDR setting: Flash photography (of any kind!!), bracketing, multiple exposure (sort of logical I guess...), interval timer, keystone compensation (annoying) live ND, high res. shot and fisheye compensation.

Note to Olympus: When shooting real estate I really need keystone compensation as well as HDR with flash. Perhaps in the next firmware – somehow – please? Yes, I know, it can all be done manually but then why have all these goodies when the most obvious use combination is a no-no?

Multiple Exposure – as needed.

Number of frames. Your choice.

Auto Gain. If **Auto Gain** is **On** it changes each frame to ½ brightness. If Gain is Off the images retain the exposure level you set for them as they are stacked.

Overlay. The overlay option will only be active if you are shooting in RAW and this will stack the number of images selected into a single RAW file.

Keystone Comp. My all time favourite for buildings and product shots. See my blog article "The death of the shift lens?" When set to **On** you can swing, tilt and shift the sensor to correct perspective lines using the input dials and the arrow pad. No need for a shift lens! View cameras? What are those...?

Anti-Shock/Silent/Noise Reduction (for Silent Mode)– as needed. The Anti-Shock setting lets you programme a delay between the shutter being pressed and the exposure taking place at speeds below 1/320 sec. This is used when even the smallest movement may affect image sharpness as when shooting attached to a high magnification microscope or a telescope. The *Anti-Shock* mode affects the *mechanical shutter* and the *Silent* settings are used if using the *Silent shutter mode*. Kind of logical...however, if you set noise reduction for Silent mode, the shutter will operate after the exposure as part of the noise cancellation processing phase.

Silent mode settings>Will Vary. Usually **Not Allow** to cancel the beep, the AF illuminator and the flash trigger. Allow obviously lets the camera make beeps, send red lights out and trigger any flash fitted to

the camera. Seems a bit pointless activating these if you want to be incognito.

High Res Shot> As needed Use this and a tripod to get cracking 80MP images from your M1.X. Using it on hand held lowers the maximum resolution but it is still great. Fast moving subjects may break up into pixels, however, Suggest it be used for landscapes, studio product or architecture if anyone *really* wants huge files.

Flash charge time>3 sec Sets a delay between pixel shift steps to let studio and other flash units in use recycle.

Shooting method> [Tripod] or [Handheld].

Notes: You get 80MP RAW files on tripod mode, the flash sync is set to 1/50s and maximum useable ISO is 1600. No flash use is possible with hand held mode, maximum useable ISO is 6400 and the RAW file size is 50MP.

Live ND Shooting>On or Off as needed then...

ND Number> Choose what you need from 1, 2, 3,4 and 5 EV level cuts. If you have the next setting *On* you can get an idea of what the image will look like so use the two options to set what you need. For the benefit of those who need to know, **N**eutral **D**ensity filters cut all wavelengths of light equally to reduce the effective amount reaching the image sensor. This permits you to use slower shutter speeds than normal in bright conditions. Great for those milky wave and candy floss waterfall effects.

LV Simulation>On Shows a preview of the effect of the ND filtration in the EVF/Display. On my units refresh rate varies depending on the ambient lighting.

NOTE: Maximum ISO allowed on Live ND is 800. Shutter/Drive mode is automatically set to silent shutter. You cannot combine Live ND with High Res mode, HDR, multiple exposure, keystone compensation, bracketing, interval timer, and fisheye correction settings. So if any of those are greyed out in their menus – check to see if you remembered to switch off the Live ND option – this nearly drove me nuts on my M1.X until I cracked the reason. It would be cool if we had some kind of interlinked warning when things are greyed-out like *"First Disable (Insert the forgotten, activated mode here) to engage this setting."*

See? All these **Camera 1** and **Camera 2** menu options you will need to set before you actually take a photograph and they are not nearly as intimidating as the internet experts try to make them appear.

For most of my working life with the E-M1 series, I have used the Live Control Panel (SCP) to make 95% of all shot to shot setting changes. The great thing is this is available through the EVF so you never need to remove the camera from your eye to make setting changes once you get used to using the SCP via the OK button.

One final point on the OK button, it has a soft memory – this means it remembers the last SCP setting you adjusted after pressing it. This gives you, in effect, a rapid added function option. Press OK, navigate to the SCP setting you need to change quickly on your shoot and presto! Every time you press OK (until you navigate to a different SCP option) you will have that setting available for instant adjustment. Cool.

VIDEO MENU

Mode settings>

Movie mode>A if I need to control depth of field. If I am shooting in "run and gun style" then **P.**

Flicker Scan> Off (Normally) Will only use this if I see banding from fluorescent lighting after doing test footage at particular locations. If *On* you can look at monitor in M and S modes and adjust shutter speed with the control dial until the banding is eliminated.

Movie specification settings>

Frame size>FHD Not only do we have issues with internet bandwidth where I live but so very few folk have any 4K capable display devices. FHD is perfectly fine for usual use and widens the scope for use of higher frame rates in productions we cover..

Bit Rate>SF. All I need for FHD. (If you decide to use 4K you cannot set the bit rate.)

Frame Rate>24p Unless I need to shoot slow motion in which case there is another reason to use FHD as you cannot use 50 and 60p if you are using 4K or *All Internal* for the bit rate.

Slow or fast motion>Frame rate settings for slow-mo or fast motion.

Movie ISO Auto Set>Only available if you shoot in M mode for video. Choose an upper limit/Default. We usually set our movie ISO for purpose so this will not be activated often.

Movie Noise Filter>Standard

Movie WB>Custom Unless going for effects we do a manual WB check at each location.

Movie All WB adjustment>You can set an over ride WB adjustment to be applied to all WB settings when using Movies. As I normally do a pre-set WB check this is a moot setting for me right now.

Movie Keep Warm Auto WB Colour>On Keeps warm skin tones under artificial lighting if using Auto WB. In case an assistant uses Auto WB this will keep our warm African skin tones.

Picture Mode>On

OM-Log400 This gives a flat, unprocessed colour curve that permits us to do full colour grading in post-production. If you do not do commercial work and your own post-production and need good footage out the camera leave this *Off.* You can then use the colour settings you use for still imaging on your video footage like *Natural, Vivid* etc. although the setting you make here is in an independent register for movie mode so you can use one type for stills and another for movies.

Movie AF/IS Settings>

Movie AF mode>SAF Usually, when shooting video, I plan and set up a scene so use the tap to focus function and the shutter button to focus. If you shoot kids or other moving subjects CAF or CAF+TR can be an option for you and it works impressively on the M1.3!

C-AF Speed>0 You can set how quickly the camera racks focus if using C-AF in movie mode. We will kick off with the default and see if we need to rack it up (or down). This is situation specific and of limited use in my corporate work. Your mileage...etc...etc...

C-AF Sensitivity>) Ditto from the above but sets how rapidly it reacts to change the focus if the subject has moved.

Image Stabiliser> M-IS1 With this setting the camera uses the sensor shift and electronic processing when stabilising movie footage. It clips the scene by a few pixels but eliminates the slight wobble seen when changing direction without this setting activated.

IS Level> 0 If doing static hand-held movies then set to +1. If doing hand-held panning, tracking or you will be tilting the camera up and down, set to -1 So, the *vlogging* setting when going walkabout with the camera should be -1 !!! (Take note Youtographers who complain about the stabiliser – yes, there are still some...now if only they would add this to the M1.2 via firmware but then we would not buy the X or 1.3....)

Movie Button/Dial/Lever>

Movie Button Function>I set the L-FN (lens function) button to stop AF.

Movie Dial Function>Head phone and Recording volume levels are assigned to the control dials.

Movie Fn Lever Function>Off You can change the allocation of the front/rear dial or play with focus settings with the options allocated to the function lever in movie mode.

Movie Shutter Function>Shutter Function – Great to set initial AF.

Movie Elec. Zoom Speed>Low Affects auto zoom speed on lenses like the 12-50 and the 14-42 EZ.

Movie Display settings>

Movie Control Settings>Live SCP

This lets you decide which controls are shown on the movie monitor if you press INFO**.**

Movie Info Settings> Use the UP/DOWN arrows to tick items you want shown in the movie monitor each time you press INFO while in movie mode. Your choices will vary here. I will probably use the level gauge, Picture Mode, White Balance, AF Mode and time code.

Time Code Settings>

Time Code Mode>Non DF I use an external, synced time code generator and shoot at 24 fps so need both to run at actual time – if you use DF and 25 fps it will correct for drop frame counts.

Count up>Rec Run Counts only when camera is recording. Free run will have a time code whizzing away on the monitor even if you are not recording.

Starting time>

Reset

Manual Input

Current time

This sub-menu lets you set an arbitrary time for the time code, carry on from the previous clip or use a zeroed one.

Battery Display Pattern>min> This sets the battery display when using Video mode to give you an idea of how much recording time you have left. If you use the other

option to show a percentage of charge left, you need to try and work out how many minutes that will be. From experience on the M1.2 and the M1.3, this tends to be conservative and you can go a bit after it reaches nil.

Movie Picture Mode View Assist>Off This – if *On* – will adjust the preview to make it easier to view the scene being filmed. Colours may not appear accurate in the preview/viewfinder only. The actual footage recorded will contain the colours, settings and other effects you might have set. I like to see what is actually happening so have defaulted to *Off* for this setting on the M1.X.

Movie Mic Settings>

Recording volume>

Built-in>Adjusted as needed. You can allocate a control dial to adjust this and the external mic. input in real time in the movie button settings.

External>Adjusted as needed. As above, you can control this with a dial.

Volume Limiter>On There is a very effective distortion limiter on this system and you have a live levels monitor on the screen. A good combination.

Wind noise reduction>Off I use an external mic with windsock most of the time hence this choice. Use *On* if using built in mic.

Recording rate> 48khz/16bit. Yay! Yay! Super cool new feature to let you set the audio quality of the soundtrack. 48/16 is industry standard and perfect for 99% of my corporate work. If you shoot "*only RAW* " you might also want the largest, data hungry 96khz/24bit mode. But then, like the need to have a RAW codec, a lot of kit cannot play back this high bit audio rate. Your choice.

Plug in power>Off I use a powered mic with its own DC supply, However if using a mic that needs to be fed power (Rode Video Mic Mini or Go etc.) then switch this "On"

PCM Recorder/Link>

Camera Rec Volume>Operative Controls the levels on the PCM recorder using the camera level inputs/volume control.
Slate Tone>On
Synchronised Rec>On If you use an Olympus PCM100 or similar then the recorder will start recording when you press the camera record button if this is "on". One less thing to "start" or "stop".
Heaphone volume> As needed. This duplicates the ability to adjust the headphone volume with a control dial while recording a movie. I use the dial.

NOTE: (1) No sound is recorded by the camera in slow motion (high frame rate) video recording or when using Art filters on movies. External sound capture (boom mic and field recorder set ups) is not affected, of course.

Movie HDMI Output>

Output Mode>Monitor Mode (Default)

Lets you change the type of output via the HDMI link in video mode. If using an external recorder (not recording on to camera cards) then Record mode makes more sense as it will be devoid of all the display guff you see on the camera monitor.

RAW mode on this option lets you output to an Atomos recorder that records it in the Apple RAW codec. (FW1.2 update)

REC Bit>This lets the camera control record start/stop on the external device. This is only supported by some external recorders so check before you buy an external recorder...

Time Code> Choose if you want to send the time code info to your external monitor.

PLAYBACK MENU

Rotate Image on playback – **On**. I shoot a great number of vertically orientated images and hate seeing it scrunched on the screen with huge wads of black either side. With this **On** the image is shown in the orientation it was shot in – and is full screen. OK, you do have to turn the camera to see it but that is a small price to pay in my view for not having to zoom the image all the time.

Edit Lets you apply some common edits to images already on the card. Press **OK** then you will be asked to **Sel Image.** Press **OK** and then **RAW Data Edit** or **JPEG edit** or the **Voice note recorder.**

You can also grab images from video footage (frame capture). There are options in this to change images to monochrome, set filter effects and more. You can also start a slide show from here as well as print directly via USB to a Pictbridge compatible printer.

Changes are applied to a copy of the image which is stored in the next available space on the card. So if you edit image 3 of 567, the edited image file will become number 568. The option I use a lot on this menu page is the voice note function.

However, you do not need to dive into the menu to do this. Press playback, select the image you wish to edit, then press OK and the editing options will be made available to you.

From these you can use the Mic symbol to record a voice note (names of subjects in image, location etc.) to aid you when cataloguing the image in post. You get 30 seconds. Be aware, however, that the voice note plays as soon as you view the image so you may wish to first adjust the volume of the camera speaker. If you forget and a voice note starts blaring from the camera, simply rotate the front dial to switch to another image and then change the volume settings. Your use of these functions and mileage may vary...

Print Order. The industry standard DPOF option available on all cameras and supported by most printers post 1998 which I have seldom seen used. Lets you indicate how many prints you want from each image and if you insert the card into a photo kiosk the selected number of prints will automatically be generated. Ho-hum... If you use this at any stage remember to reset the entire Print Order data set otherwise you will get the same number of prints generated the next time you visit a kiosk with your camera card – if you insist on inserting your card into a public slot... Also works on any *PictBridge* compatible printer.

Reset Protect If you have used the protect image option (the key symbol option seen when pressing OK after playback) to stop accidental erasing of vital images in the camera, you can reset all of the protection instructions using this option.

Reset Share Order>Remove share marking from any images or videos you may have marked using the SHARE button on the camera.

Copy All>As needed Lets you copy images from one card to another in the camera.

WiFI Connect> Choosing this option by highlighting and pressing OK starts the Wi-Fi system of the camera.

You can choose between connecting to a DEVICE (Smartphone/Laptop etc) or an ACCESS POINT.

You can also, if you set the appropriate setting in the spanner menu (*Wi-Fi/Bluetooth Settings*) permit connection with the camera switched-off. Your choice - but I will insist our cameras do not permit this for several reasons, not least that only 200 images can be marked to be downloaded in a switched-off state. It's easier to dump the entire card via a card reader and sort later. However, your choice may vary.

A fast way to gain Wi-Fi access is to tap the **WI-FI** wording on the top left of the camera screen.

CUSTOM (GEAR) MENU

Option set A for AF/MF (Auto Focus)

Sub Menu A1

AF Mode > S-AF (Single Auto Focus). For subjects moving around in the frame with neutral backgrounds CAF or CAF+TR works well for me. You can rapidly change this in the SCP or by using the pedestal button on the top left of the camera. Options include S-AF+MF, S-AF, C-AF+MF, C-AF, MF, C-AF+TR+MF, C-AF+TR and PRESET MF.

AF+MF>Off (Usually so it's good it is the default) This option lets you use the AF system to find focus but, if you hold pressure halfway on the shutter, grab the focus ring and manually re-adjust the focus. The adjusted focus will be kept as long as you keep halfway pressure on the shutter button.

AEL/AFL>

AEL/AFL>SAF>Mode 1. Starts AF on light press and locks exposure, takes photo on full depression of shutter button.

AEL/AFL>CAF>Mode 2. Starts AF when lightly pressed but only grabs exposure and shoots when fully pressed. I find this leaves the back buttons free for other important stuff when shooting sports.

AEL/AFL>MF>Mode 1. Locks metering on a light press of shutter and takes shot when fully depressed.

Halfway AF>If you use back button AF then this will be off. I will have it **Operative**.

Face Priority AF>On. Sets Face Priority to work with light shutter button pressure. If set to AEL/AFL it works with the back button AF option.

AF Scanner>

Like on my M1.2 & M.3 cameras this setting will vary between **Mode 2** (Mostly static subjects like wildlife, buildings, birds nesting, cricket etc.) and **Mode 3** (Any sort of action like soccer, touch, motor racing etc.) depending on subject. On Mode 2 it will scan the range of the lens once when button is pressed and then stop until you press it again. On Mode 3 it will carry on hunting to try and find focus. For weddings I tend to use Mode1 (Scanning off) as you can get the camera to refocus quickly by letting go of the shutter button and pressing it halfway again. *Only takes effect in C-AF, C-AF+TR, C-AF+MF and C-AF+TR+MF AF modes*

C-AF Sensitivity>

If you set this to a lower value, the camera will not change AF rapidly. Best for things like soccer and rugby/American Football when I use **-1**. At cricket when concentrating on batsmen and the odd fielder may walk between the camera and my subject I use **-2**. If you want it to keep on changing quickly use a + value...+1 makes it re-focus rapidly on anything entering the frame. *Only takes effect in C-AF, C-AF+TR, C-AF+MF and C-AF+TR+MF AF modes*

C-AF Center Start>Relevant groups to my use are selected

This lets you instruct the camera to start in the middle of any selected AF target group (the ones it will use will be those you ticked in A2) on the first attempt only. Thereafter it will scan the surrounding targets to lock focus. This is for still photography only and seems like

a perfect tool for use in erratic, unpredictable fast-paced action. This has been very useful on the E-M1 X for children running around, hockey, soccer, rugby, touch and similar action where subjects can be obscured for a moment and the camera needs to re-focus.

C-AF Center Priority>Relevant groups to my use are highlighted.

On the M1X I allocate this to one of the custom dial settings for predictable action like show jumping, cricket, swimming, birds in flight and athletics. This setting instructs the camera to always first use the middle target of any group every time it re-scans for focus and then only go to surrounding targets. The difference between this and the previous setting is that this one always begins in the middle while you have the shutter lightly pressed to acquire focus. With the previous one it will do so only on the first scan then hunt to the edges of the group.

Sub menu A2

Focus Target Mode Settings>

All>Ticked

Single Small>Ticked

Five zone>Ticked

3x3>Ticked

5x5>Ticked

Custom1>Ticked

Custom 2>Ticked

Here you decide what target modes will be displayed on the options when making AF target selections. It makes sense to tick them all. If you do not tick any option here it will not appear when trying to set AF target groups.

AF Area Pointer>On2

This lets you instruct the camera to show you the in focus targets or not. Off is obvious -it will not show you where it has focused. On1 will flash the in focus target just as focus is confirmed then not again. On2 is what you see in the M1X demo videos where the in-focus targets are shown as a morphing group as an eagle flies down to the water. If you are shooting a person, of course, it will morph to that shape of target areas if you have all targets activated. If you have custom groups or smaller groups, just those targets in that group will be highlighted.

AF targeting Pad>On

On this camera you need to tap the screen twice to activate touch pad target selection and tap it twice again to disable it. This is a change to the EM-1 Mark ii which needed just one tap (or a single nose press) to activate the pad. So this will no longer react to my nose or hands at odd times. Yay!

[AF Target Group-] Set Home>All groups set to middle of array

AF mode>S-AF or C-AF will be assigned to different C dial settings with this.

AF Target Mode>This will switch to your targets (in sequence) as selected in the target mode option. I have one for social work and one for sports and assign each into a custom set.

AF Target Point>Central position

This feature set lets you specify which AF mode the camera must revert to when you "home" the AF targets. So you can muck about with options but, if you suddenly need things to be at a given known set up, you simply press the AF target button then OK and all will be as you want it to be.

If you see a square showing HP after pressing the OK button after activating this menu option, it is waiting for you to choose a home position as you have not yet set one yet.

AF Select Screen Settings>This lets you decide what role the front/rear dial and the arrow pad plays after you press the Fn button or joystick to make an AF target selection. I have the M1.X set so that the front dial chooses the AF Target mode and the Rear dial the Face/Eye detect options while using the joystick to handle positioning of the target.

AF Target Loop Settings> Loop1 This sets how the target frame "wraps" from one side of the screen tot he other. If you push the target zone selector to one side and the target reaches the edge of the screen, it will pop around and start on the opposite edge in the same row it left if set to Loop1. On Loop2 it will go down to the next row or, if at the bottom, will start at the top edge again. Use in conjunction with the sub-setting that follows to make it easy to select targets.

Via "All">Yes If you set "Yes" as soon as the target drops off the edge of the screen all the focus points will light up for a moment before the target pops up on the opposite side of the screen. You may wish to not have this full cluster flash in your eye so the set it to "No". Note that this setting is defaulted to "No" if you have chosen to not display the focus targets in the target mode settings menu option.

AF Target Custom Mode Settings>

Size> <width by height> See note below on this set.

Step>1 for static subjects (C2) and 2 or 3 for sports is how I use this option. This changes the number of steps the target moves when you wiggle the joystick or use the arrow pad or dials.

This is where you can decide on your own custom target sizes. I have different target custom sizes on the X. I have assigned them to sport custom mode (C1) and social photography mode (C2) A 3wx11h has proven ideal for active humans and a 5 h x 8 has been good for social work. Remember you can use up to 4 custom dial settings and so have a custom target pattern for each custom memory – thus you can "tune" the camera to do different things as needed.

Orientation Linked>

AF Target Mode> Same as landscape format

AF Target Point> Same as landscape mode

Here you can save specific AF modes and Target patterns/Positions for use in portrait orientation shooting. I use this facility to keep things consistent when I rotate the camera for vertical format shots. Easy to set.

Sub Menu A3

AF limiter>

Will vary **Off/On** depending on the subject. At cricket I use it on my M1.X body and when ***On*** you can then set **Release Priority** On or Off. I usually use **On** as I tend to use this at sports and can sometimes see depth of field will compensate for any small out of focus

aspect and I can then shoot while the camera makes fine adjustments to get its transistors happy.

AF Illuminator>Off Sends out a beam of light in dark conditions to try help the AF system. A bother when you may not wish to draw attention to yourself. However, when using a dedicated flash, in dark places (like wedding receptions) I switch it *On* so that the flash AF assist beam will fire. To make it easier to activate quickly, navigate to this at the start of the reception and the next time you press MENU (if you hav enot re-set anything) it will be on this option.

Face Priority>Face and Eye Priority (Usually...)

Normally for weddings and social occasions I use (I) to focus on eyes as well. For general scenes in news and sports it is off. Quicker and easier to change this via the SCP which is where I do so.

Tracking Subject>Off (Unless I am shooting one of the learnt subjects – two of which I shoot regularly)

The famous deep learning AF tracking system. To get quick access to this item if you need it rapidly, simply press MENU and select the tab before you start shooting. Next time you press MENU the last tab position will be where you left the cursor. Will make getting to Motorsports, Airplanes.Trains and Birds painless. In quick trials I found that *Motorsports* does a great job on cyclists too.

AF Focus Adj.>Off

I have not used this on my M1.2 bodies or the M1.X or M1.3 yet. This lets you make fine adjustments to Phase Detect AF accuracy (if you feel it is not as sharp as it might be) in a range of -20 to +20 steps. You would need to set the camera on a very sturdy tripod and play with the settings to see if they have any benefit for you. M43 lenses and 43 lenses on MMF3 have not needed this on my m43 kit yet.

Sub Menu A4

Preset MF Distance>Will Vary You can pre-set a focus point and I find this useful for dog shows and show jumping when covering one particular jump. Select **PreMF** in the menu then press **INFO**. Now aim at the pre-set focus object you want and press shutter halfway. Once focus is attained press **OK**. Now, the camera will always focus at approximately this distance in the first instance after the shutter button is pressed. The distance can also be set manually and the **PreMF** function allocated to a button via the custom function button menu options. I use this often when shooting cricket or show jumping.

MF Assist>

Magnify>On When focusing manually the central portion of the image is automatically enlarged 5x when the focus ring is rotated.

Peaking>On Uses highlights around in-focus items to make it easy for you to nail the focus point you want.

Focus Indicator>On Uses a sliding green indicator to tell you which way to turn your focus ring to get accurate focus when focusing manually. (Added in FW 2.0)

MF Clutch>Operative If you have an OM-D line lens with a manual focus clutch this ensures it does what it is designed to do. If you often bump the clutch into MF and get irritated by this, switch

the function to **Inoperative** (off) here. I personally love using it to pull focus in video.

Focus ring>Anti Clockwise (Default). Same direction as the OM series lenses from infinity to close up. Four decades of focusing muscle memory is hard to break.

Bulb/Time focusing>On. Lets you manually adjust focus during bulb and live time shooting on the lens ring.

Reset Lens>Off. This re-sets the focus of the attached lens on the camera body when the power is switched off. If shooting videos and you need to power down to save battery, this will take your focus off the speaker's podium or the nesting site of a bird as but two examples. If this is off then the focus will stay set where it was. Also cuts power consumption overall. Your choice may vary here.

Option set B (For Button/Dial/Lever)

Sub Menu B1

Button Function>

There are many, many buttons all over this camera. It will take you some time to find out which ones are ripe for re-allocation.

Nevertheless, the following is how I have mine set for most purposes (and why)...

Rec Function>Record Why disguise your video record start/stop button?

AEL/AFL Function>AEL/AFL Seems daft to set this when I have AEL on the shutter button but, if you use this with the metering AEL zone option set elsewhere you can get an instant spot meter (or Centre Weighted or SpotHi or SpotLow) on the AEL button. That's why I have it set this way here...

Top body button next to lens>One Touch White Balance. Aim camera at a white surface and then press shutter – instant white balance correction for mixed Kelvin lighting conditions. I will leave the certical grip option the same.

Lower body button>Depth of field preview Stops down lens to pre-set aperture for depth of focus preview in the viewfinder.

<^> Multi-selector> [---] Move focus points.

Lfn>AF Stop Lets me lock AF when covering fast action if needed by pressing the lens function button on a Zuiko PRO lens.

Multi-Selector Center Button>AF Target Selection. The most logical and gives the functionality of the original and M1.1 and M1.2

Multi-Selector Direction Key>AF Target Selection I leave these standard but you can allocate functions to the arrow pads so you can make your OM-D behave like a Canon, Nikon or Sony multi-controller and feel right at home.

Dial Function>P>Front Dial +/-, Rear dial **Ps**

>**A>**Front Dial +/-, Rear Dial **Aperture value**

>**S>**Front Dial +/-, Rear Dial **Shutter speed value**

>**M>** Front Dial **Aperture Value**, Rear Dial **Shutter speed value**

>**Menu>** Front Dial **horizontal movement**, Rear Dial **vertical movement**

>**Playback(>)** Front Dial **Prev/Next image**, Rear Dial **Zoom/Thumbnail view**

This set up mirrors my E-M1 ii bodies. Muscle memory is real.

Dial Direction>Dial 1>Exposure>Dial1 Increases the value as dial is turned to the right.

>Ps>Dial1 Increases shutter value/opens aperture as you turn it to the right.

Fn Lever Function>

>Mode 2 Switch the lever to position 2 and dials instantly change AF Mode, AF target and AF Target Point. Seeing as we have a dedicated ISO button the dials no longer need to do this as they do on my E-M1.2 bodies. There are 3 modes with which to play. Find the one that works for you.

Fn Lever/Power Lever>Fn If you wish, you can use the Power 1 or Power 2 options to turn the function lever into the camera power switch. Due to inconsistencies with using the older E-M1 and the E-M1.2 I leave this as it is on the older model and reach for the power switch up left where it has lived for nearly 50 years on virtually all of my Olympus cameras.

Sub Menu B2

Elec Zoom Speed> High Only affects photography. To set this for video use in the video menu.

C-LOCK Settings>Default Aside from some unchangeable items that will be locked if you set the C-Lock lever on (All vertical use buttons and dials) you can add the normal dials,the pedestal buttons, the multi selector, Fn lever, Arrow pad, OK button and the touch screen. Use of the camera in anger will dictate my final choices here.

NOTE: If you have the CONTROL LOCK lever on, you cannot change the functions allocated to the Function lever to alter control options. If it is configured to act as a power lever then it will operate even with the C-Lock on.

Option set C (Release/Continuous/Image stabiliser)

Sub menu C1

S-AF Release Priority>Off This ensures that the shutter will not fire unless something is in focus. As you usually use the S AF mode for portraits, weddings, products and other stuff that must be tack sharp, this is a good idea to me.

C-AF Release Priority>On/Off I will change this if I am doing specific action where I need sharp shots all the time – like sponsored race cars, athletes or football players for their agents. If *Off* when shooting those, the camera will track focus and only release if it deems the subject is sharp. With it *On*, you can pick the moment to fire and it obeys. Your mileage may vary depending on your needs. For Birds in flight or other action set this to *Off* and you will not get many (if any) out of focus shots as it tracks the bird. However, your frame rate may reduce.

Sequential Low settings>

L/Anti shock fps>5fps No logical reason for this setting other than it is what my Nikon F5 and E-3/5 could give and what I set my E-M1.1/E-M1.2/EM1.3 to. It is quite fast enough for most use when doing human based sports (except Touch). Set what you like.

Silent Shutter Low fps>5 fps I keep this at the same as the mechanical shutter rate. Why add things to remember?

Frame Count limiter>Off

Pro Capture Low>

Max FPS>18

Pre Shutter Frames>35

Frame Count limiter>Off

I propose these settings as I use the low rate for nesting birds or action that is not frantic. The reason I do not limit the number of frames in a sequence is that I do not want, on the one day I need to follow action for a long period, to suddenly have the sequence unexpectedly stop mid-way.

Sequential High settings>

H/Anti shock fps>15fps If using H then I want the maximum rate possible thank you.

Silent Shutter High fps>60 fps Ditto.

Frame Count Limiter>Off

Pro Capture High>60

Pre Shutter Frames>35

Frame Count limiter>Off

Flicker Reduction>

Anti Flicker LV>Auto This just improves the display in the EVF and the rear screen. Has no impact on images.

Anti-Flicker Shooting>Off/Disabled This *removes the ability to use electronic shutter options* as it is intended to control the mechanical shutter at high speeds and prevent flicker pattern artefacts on screens in images by timing the shutter cycles to prevent this. This means the shutter will sometimes lag when this is enabled. If you are a scientist

perhaps this has merit. For me, I leave it off.

Sub Menu C2

Image stabiliser>

>S-IS AUTO At this setting the camera automatically compensates for panning and tilting and de-activates either if needed. If set to IS1 or IS 2 you need to remember which is which and set the appropriate option if you suddenly decide to pan. I let the electronic genies sort those decisions. After all, I did pay for their abilities...

Burst Mode Image Stabilisation>

Fps Priority/IS Priority Will vary with assignment. In high speed daylight sport shooting with a monopod or tripod (cricket), then it will be Fps priority. Otherwise, mostly, IS priority.

Halfway Release with IS>On This activates the stabiliser when you half-press the shutter. Lets you see the subject without it jigging about. You can probably save a minuscule amount of power by setting it to Off but with the long lasting batteries inside the M1.X I do not bother..

Lens IS priority> Off If you have a non Olympus lens (Panasonic/Sigma etc)) with an optical stabiliser built-in, set to on. If not, set it off.

Option set D (Display/Sound/Connection)

Sub Menu D1

Control Settings>

Live Guide>Ticked/On

Live SCP>Ticked/On

Each press of the INFO button while using each mode above will cycle the display settings selected. Yes, I do love the live Super Control Panel (SCP). It is why Olympus M1 cameras do not have dedicated WB and metering buttons etc. They are not needed with the SCP.

Info Settings

Playback Info>Image Only-Overall-Histogramme-Highlight/Shadow-Light Box

Each time you press INFO after displaying an image you have taken, the display will cycle through the settings you choose here**.**

Playback Magnified Info>Magnify Frame-Magnify Scroll-Select Frame

Lets you change images with the dials or arrow pad while in enlarged view. Useful to see if that "*...always has his eyes closed..."* subject has them open in any of the frames you took.

Live View>Image only-Custom 1 – Custom2

If you set Custom1 you get a red overlay on blown highlights and a blue overlay on blocked-out shadows in real time while previewing an image on the screen or in the viewfinder if you cycle the INFO button

Custom2 displays the level gauge on the next press of the INFO button.

Thumbnail settings> 4 – 25 – Calendar

After displaying an image for review, turning the rear dial to the left will display a 4 thumbnails and then 25 before showing a calendar display. Choose the options you like.

Picture Mode Settings>All Why switch off an option you paid for? However, if you only use one or two and never the others, you can limit which ones are available on the SCP and Picture Mode menu option here. Will save you seeing picture modes you do not wish to see or use.

Drive Mode/Self Timer Settings>All Here you can limit the available options form which to select when you press the Drive mode pedestal button, activate drive mode options in the SCP or in the menus. If you only use single frame (which you cannot de-select) this will save you seeing options you will not use.) Seems daft to me to de-select any but that's me...

Multi Function Settings>All This lets you decide which modes will be available when you use the multi-function settings.

Sub Menu D2

Live View Boost> Off

You can allocate SOVF to a button and this setting does not affect Live Time or Bulb photography so I have it off thank you as I like previewing my exposure in the displays.

Art LV Mode>Mode1 On mode1 you see the exact effect in the EVF of the ART filter you are using but sometimes the refresh rate drops to show it. If you use Mode2 it is the fastest EVF refresh

rate but the effects are not as pronounced and not always what you eventually get.

Frame rate>Normal/High Will change...you can only use this adjustment if you do not have the boost and SOVF modes activated elsewhere. Normal is usually great but when shooting sports/fast action I put boost and SOVF off so I can get the fastest EVF refresh rate. NOTE: If the camera's internal temperature rises beyond a certain point the rate defaults to low. So, if you have been blasting away at birds in flight or a sports event and the refresh rate suddenly drops to standard, that is why. (Caught me off guard the first time it happened :-)

LV Close Up Settings

LV Close Up Mode>Mode2 When you enlarge an area in Live View this Mode2 setting will leave the view enlarged and perform AF when you press the shutter button without changing the enlarged view. In Mode1 it flips back to the reduced size view when you press the shutter button.

Live View Boost>Off ON if in the studio. If on the display will brighten when focusing.

Playback Zoom Default Setting

>Recently

Choices include *Equality Value* (a 1:1 ratio when a 1:1 symbol will appear on the display) or x2, x3, x5, x7, x10, x14. *Recently* will use the last ratio you used.

Depth of field preview settings>

Preview Lock>Off Pretty obvious this one. I like to press the preview, check what the depth of field effect is and have the aperture go back to wide-open when I let go. Less to remember. Your choice may be different.

Live View Boost>On This brightens the EVF or rear screen display to compensate for the usual dimming of the image when the aperture stops down in depth of field preview. Only works while depth of field preview button is in use and if LV Boost is not activated elsewhere.

Sub Menu D3

Grid Settings>Off

Options if *On* are:

Display Colour>Your choice of colours and transparency. Save two options for later...

Displayed Grid>Many options available (including a wide-screen grid).

Apply Settings to EVF>Will also use your settings in the EVF.

Peaking Settings

Peaking Color>Yellow You can choose from Red, Black, White and Yellow. I find yellow to be the most consistently visible colour with most subjects.

Highlight Intensity>Normal Different intensities of peaking marking. Normal works for me.

Image Brightness Adjust>Off If **On** the image intensity varies as peaking is displayed.

Histogram Settings>

Highlight 250

Shadow 5

Aha! Why this? Well, if you couple this setting to a change of the Live View INFO setting to Custom 1 as described elsewhere, you will get the option to show the blown out areas of your shot in the viewfinder (or rear screen) in red as you preview the image. With the highlight warning set to display at 250 (and not 255) you will have a bit of "headroom" built in to your exposure if you avoid having any highlights in red in the preview. Blacked out shadows will show as blue but with a similar amount of leeway for working in post production. Also affects the histogramme (the English spelling) display on review. Works for JPEG and RAW shooting. Has been a feature of the display of Olympus mirrorless cameras for many years - with due respect to some Olympus *Visionaries* who claim their friend "discovered" this and told them about it. (It has been in the user manual since it was introduced as a feature on the digital camera range! RTFM guys...)

Mode Guide>On

If set to on each time you select a new menu option or turn the mode dial a little box detailing the purpose of the menu option or setting will appear. Good idea on a new camera model.

Selfie Assist>On

This decides if the monitor will show a corrected mirror-image of the view through the lens on the monitor when it is flipped around to face the front. Great when doing vlogging or videos of children.

Sub Menu D4

Sound/Beep>Off

Turns off that little beep-beep noise when the camera confirms focus. You may like to sound "professional"...most of us who actually are, do not. Anyway, you have a green focus confirmation in the EVF/Rear screen so who needs an annoying beep?

HDMI>

Output Size>1080i If connecting to a conventional large screen via an HDMI cable. If the monitor or projector is a 4K one then C4k or 4K. Why not give the best signal possible?

HDMI Control>On With this on you can power the camera on and off and flip through images with the screen/HDMI device remote control.

Output Frame Rate> PAL My country uses PAL TV signals. Set according to your locality.

USB Mode>Auto When you plug the camera into a USB device this setting calls up a menu on the rear display for you to decide which USB mode to use. Your further options, are now as follows:

Storage> The camera acts as a USB device so you can read data and write data via USB.

MTP>Lets you read images from the camera on a Windows PC.

PC RAW> Lets you use the camera CPU to convert RAW files using the Olympus Workspace software. You get incredibly fast RAW conversions this way.

Tethered Shooting>(Pic of PC linked to camera) Using Olympus Capture software.

USB PD> For **P**ower **D**elivery from a USB battery pack/charging via USB. (NOTE: Does not work if you have let the internal battery level drop below 10%.)

Option set E (For **E**xposure/Metering/ISO)

Sub Menu E1

EV Step>1/3 Sets how it increments values with each click of a control dial. On this setting count thee clicks for each full stop of compensation.

ISO Step>1/3 Same as EV step on all my cameras.

ISO Auto Set>

High Limit>5000

Default>200 ISO The camera uses this setting (which is the native ISO of the sensor and thus no interpolation of the signal is performed) as far as possible if AUTO ISO is set. Otherwise this is the place to set ISO just to the right rear of the shutter button...

Lowest S/S (Shutter Speed) setting>Auto

This setting instructs the camera to not let the shutter speed fall below a given speed. In my experience it appears that Auto uses the equivalent to the focal length of the lens in use. i.e. if using a 300mm the shutter speed will drop to 1/300 second before the ISO is boosted. Your mileage...etc., etc. You can set a specific speed if you wish, however.

ISO Auto>P/A/S
The auto ISO setting is a great tool if you cannot be bothered to set ISO for each particular subject and condition you encounter. You can decide which modes use auto ISO and you can define the parameters of the Auto algorithm's range of options to use. The Default ISO you set should be 200. The camera will always use that and only increase the ISO if the lower shutter speed limit set in flash sync settings is reached. And it will only increase as far as it needs to to maintain the lower limit you set.

While I use this on P/A/S settings, you could turn manual into an automatic mode. If, for example you want to use 1/1000 sec at F=1:8.0, you can set that on manual mode. Now, if you set the ISO settings shown here the camera will change the ISO to ensure that you get good exposures with your settings but it will not exceed the maximum ISO you have set. I will use ISO 5000 as the upper limit as I have consistently found that to deliver good, sharp images with good colour and not too much break-up on well-exposed images on the original E-M1 and E-M1 mark ii.

Noise Filter>Standard Sets the amount of filtering undertaken at high ISO values. If you often shoot black cats in coal mines at night then you may wish to see if the Auto perhaps blurs detail too much for your taste and try low. However, the trade-off in using low at high ISO settings is increased noise. Your mileage is up to you here and this only affects JPEG files. On the M1 family I use *standard* as that is impressive.

Low ISO Processing>Drive Priority

If you insist on using an artificially lowered ISO setting from the native 200, then you may as well go the whole hog and set this to *detail priority*. I do a lot of action and normally do not need artificially lowered ISO so have mine on *Drive Priority*.

Noise Reduction>Auto Choices are Off, On or Auto. If you shoot mainly JPEG then Auto is good. It only kicks in *when you use slow shutter speeds or the internal camera and sensor temperature rises*. If it activates on a slow shutter speed exposure the camera will process the image for the same period as the exposure time.

Sub Menu E2

BULB/TIME Timer>Variable This sets the maximum time available for Bulb photography. We have up to 60 minutes.

BULB/TIME Monitor>-7 Sets how bright the monitor will be when you are shooting with BULB or Live Time settings. It is usually dark so I turn it down by default. If you need it brighter you can do this on location as required.

Live BULB>On

If On, you can monitor the image as it builds-up during a bulb exposure.

Live TIME>Will Vary

This determines how often the display is updated during a live time sequence.

Composite settings>Will Vary

The time you set is the time interval at which updates will be made to the display. Total exposure time is the time between your first shutter press and the next one which ends the composite image exposure.

Flicker Scan>Variable

You can adjust the shutter speed while viewing the image to eliminate banding when shooting in conditions with flickering illumination.

Sub Menu E3

Metering>ESP Available on the SCP. Set to taste. .

AEL Metering>Spot Sometimes this will change to Spot-Hi or Spot-Sh. What this does is it instantly changes the metering area to a spot, Spot-Hi or Spot-Shadow mode when you press the AEL button. See the options for AEL earlier. The spot meter follows the position set for the AF target frame. Cool

Focus Target Spot Metering> Activated

If you have selected spot metering the camera will only meter the in-focus target. (This de-activates Face Priority settings while spot meter is in use.)

Exposure Shift>

ESP>0

Centre Weighted>0

Spot>0

If you find that all your exposures are off (too much or too little exposure) you can make an adjustment to each of the light meters built in to the camera (ESP, Centre weighted or spot sensor here.

Option set F (**F**lash Custom settings)

Flash X-Sync>1/250 Its the fastest you can use with electronic flash units unless they are Olympus FP mode compatible. With studio flash units I use 1/160 to gain all the emission colours as the tubes emit blue green at the start of their discharge and red/orange at the end. If you use 1/250sec with studio strobes the shutter will then be closed before the warmer wavelengths are exposed.

Flash Slow Limit>1/15 I might change sometimes but this is a good floor limit in my experience.

Flash/Exposure compensation>Off If this is on, any adjustments you make to the flash exposure compensation are *added to* the EV value you may have adjusted for exposure. This often gives you over-exposed images as it racks up the ambient *and* the flash exposure at the same time but you will only get a preview of the ambient exposure in the EVF.

As you can quickly set flash compensation with the multi-function lever to position 2 and top left buttons or using the SCP, I leave this off.

Flash WB>WB Flash This determines what white balance the camera applies to JPEG files when photographs are exposed with a dedicated flash unit.

Flash RC Mode>Off until needed.

Option set **G** (Picture quality/Colour/White Balance)

Image size set (That pixel graphic)

1>LF

2>LN

3>MN

4>SN

Pixel Count

M/Middle>3200x2400

S/Small>640x480

These give me great fast JPEG output options for use when shooting things only for web or Facebook use. Seldom used but save a lot of fiddling when they are needed.

Shading Compensation>On Keeps older lenses and non 43 glass images from showing vignetting.

WB>As needed. Change via SCP or multi-mode controller and a dial. It's faster.

ALL WB Compensation>

All set

All reset

This applies the same WB shift adjustment to all WB modes or resets them to factory default.

WB Auto Keep Warm Colours>On

In Africa we like warmer tones when shooting in artificial lighting. Your mileage may vary. Use if a JPEG shooter, immaterial if you only shoot RAW.

Colour Space>Adobe RGB

If you only shoot JPEG and view images on a phone or PC screen out the camera, then sRGB is a good setting to use. If you shoot RAW or work commercially, use Adobe RGB as it has a wider colour gamut than sRGB. However, images tend to look “flat” compared to sRGB on the same screen until post processed.

Option Set **H** (Record and Erase settings)

Sub Menu H1

Card Slot Settings>>

> **Dual Same with Up arrow** (For still photography) Saves duplicate files with identical parameters (As set in your image quality selection via the SCP or the menu) on both cards. If one card fills up, the other will be still be available to save images as opposed to using the same option with the Down arrow which stops writing if one card fills up. This gives me total redundancy and a vital backup on assignments where I cannot tell the client "Oops, the card malfunctioned..."

There are several options and I will explain them as best I can in case you might prefer another option. **NOTE:** All options revert to Standard when you only have one card in the camera.

Standard Select a card on which to save images and the camera will save to that designated card.

Auto Switch Camera fill sup one card then uses the second as an overflow storage facility.

Dual Independent with Down arrow Each image will be stored on both cards but you can specify different quality levels for each card. This is useful, as but one example, where you are shooting set items for both print and internet. You can set LF for one card and a set size of 640x480 pixels SF on the other. This saves time normally used for scaling large files for this purpose. Alternatively, one can save image files and the other video files. **NOTE:** Any Down arrow mode stops writing to both cards if either one is full.

Dual Independent with Up arrow Images are saved to both cards, but you can specify different parameters for the file sizes and types to be stored. Storage will continue to card where space remains if either card fills up.

Dual Same with down arrow Each image is mirrored to both cards but saving stops if either card fills up.

Photo Save Slot> 2

Movie Save Slot> Video Slot 1

Playback Slot> You can specify which card is read if the playback button is just pushed as normal. I find it easier to press and hold the playback button and turn the front dial to switch which card I want to view from via the SCP. This is usually only needed if you are shooting video to one card and images to another in my experience.

Assign Save Folder> This setting lets you create a specific named folder for saving camera output. I only use this if shooting two or more assignments on one day where I need to keep client's images separate. Usually, however, most photographers will organise images into folders and categories in post production. However, it is here if you can make use of it.

File Name>Auto

This setting remembers the last file name and number on any previous card and increments it on a new card. Prevents you landing up with hundreds of images with the same file-name which is what happens if you choose "Reset"**.**

Edit Filename>

sRGB> (First position) M

AdobeRGB>(First position) M

This puts the letter or number you choose in the file-name at the position chosen. When several folk from my studio use cameras at a function/event this is a handy way to differentiate who shot what. I am the only staff member whose name starts with "M".

dpi Settings>350dpi Saves you having to scale everything from a huge 72dpi file to get print ready files.

Copyright Settings>

Copyright Info>On Adds the copyright detail you supply in the next two fields to the EXIF data of the file. If you make money off your photos (and even if you do not) it is worth using this.

Artist Name (Your name**)**

Copyright Name (Your website or copyright file/link/warning or whatever...)

Lens Info Settings>Add information about non-electronic lenses – like legacy OM system lenses used via adaptor -to assist camera in making corrections and other adjustments when these are being used. I will do this for my legacy glass as needed.

Sub Menu H2

Quick erase>Off

Asks you to confirm deletion of an image with a default answer of No. If *On* it erases as soon as you press the erase button with no confirmation step. One day you will be glad this is off.

RAW+JPEG Erase>JPEG

When shooting news events I shoot RAW and JPEG. JPEG for the news service and RAW for my library. If I get accosted by an overly self-important policeman or security official demanding that I erase a photo I may have taken, then this deletes the JPEG but not the RAW file and keeps them happy.

Priority Set>No If set to No this will put the cursor on the position you move to or a default negative when you choose to change something. If ON the camera will automatically move the cursor to a point that will complete the chosen action if you press OK. I need the added time to move cursors to make sure it is a good idea before I press OK. You may feel differently.

Option set I (Built in EVF)

EVF Auto Switch>On2

Your options here are:

Off: Disables the eye sensor so if you are using live-view on the rear screen and then look through the viewfinder, you will not see anything. You need to press the display button to switch between the EVF display and the monitor display.

On1: Eye sensor operates regardless of whether the rear monitor is open or closed. If you are using the screen flipped-out to the side for low angle shots (as an example) and the screen keeps going blank when you move your hands about, this is most likely the setting you have active. Press the display button to switch between the rear-panel monitor/Live View display/Super Control Panel display but it can then have a mind of its own with the screen pulled-out.

On2: The eye sensor does not operate while the rear-panel monitor is open. So if you press the display button to switch between the rear-panel monitor Live View display/Super Control Panel display the display you last selected will stay on and not be cut off when you move your hand near the viewfinder sensor.

EVF Adjust>

EVF Auto Luminance>On

Automatically adapts the EVF to prevailing lighting conditions. Otherwise if off it is a constant brightness level which can be dazzling in dark wedding venues, theatres or when shooting floodlit sport.

EVF Adjust> Zeroed

I have found the EVF to be pretty accurate in colour and White Balance. You may wish to fiddle though...

EVF Style> Style 3 Gives maximum real estate to the image and overlays data selected. You also have choices to make it look like an old fashioned SLR finder.

EVF Info Settings>

Basic Information

Custom 1

Custom 2

You need this on the custom settings if you want to see the red and blue highlight/shadow overlay when you toggle the INFO button described earlier.

Field Sensor InfoL Activated Switches on geographical data sensor outpurt capture from where you took the image ot the EXIF data field if the image files. You may wish to be more private and de-avivate this. I think it is a good additional copyright protection.

EVF Grid Settings>

Display Colour>Preset 1 (Factory default)

Displayed Grid> Off As I said before, if I do not know where the thirds are by now...

Halfway Level>On

S-OVF>Off

If you want things to look like they do through a flappy mirror camera viewfinder and lose exposure preview and all the other great mirrorless advantages, set this on. There are other ways to get SOVF quickly. One is via the Fn2 button and a dial twirl. Far faster.

Option set **J** (Utility)

Sub Menu J1

Pixel mapping

This takes a look at all the pixels and checks their response. Dead or stuck pixels are then mapped out of the photographs. I do this before all important assignments. Another feature some visionaries only recently "discovered". Been there for more than a decade on all Olympus cameras.

Press and Hold Time>1.0 sec. A great feature to control how "sticky" buttons are. If at 0.5 a button operates almost instantly. The longer you set it, the longer you need to press for the function to operate. I find 1 sec avoids accidental presses.

Level Adjust This allows you to re-set the level indicator. Never had to do it yet.

Touch screen settings>On You may not want this on. I love the speed of settings with the SCP and touch screen.

Menu Recall>Recall If you de-activate the Recall option then you will always have to start navigating the menu system from the first tab and first option. However, if you set this to **Recall** you then have a further "soft programmable" button on the camera.

If you need to call up a particular menu option to chop and change it while on a specific shoot, press Menu and navigate to the setting. Now touch the shutter button. Each time you press the Menu button – even after you switch off the camera and power it on again – the last menu option you used (in this example that special option you need to access rapidly for your shoot) will always be recalled for quick access. Neat.

Fisheye Compensation>If you use a m43 Zuiko Fisheye 8mm PRO, then you might adjust these settings. I do not, yet. So cannot offer any advice on this.

Sub Menu J2

Battery Settings>

>Battery Priority>1 or outer battery

>Battery Status – Info on the battery such as how many shots are left on current charge, charge cycle life and its serial number.

Backlit LCD>8 seconds

Sleep>1 minute. Simply touch the shutter button softly to get display up and going again.

Auto Power Off>1 hour. If you do not use the camera in this period (like you left it switched on before putting it away) it will power down and you need to cycle the power switch off and on to get it going again.

Quick Sleep Mode>Off

Sub Menu J3

Record GPS location>Off

This section requires the field sensor info to be "On" as discussed earlier. Her eyou can control what is rewcorded and when/how. I set the GPS locationoff on commercial assignments. My clients may not like the location included when images are uploaded. Also saves battery power.

Will use as needed.

GPS Priority>

GPS Accuracy>

Battery Power>

Sets the accuracy tolerance of the GPS Sensor. If accuracy is chosen the power consumption goes up.

Elevation/Temperature>

Calibrate Elevation> Use this if you get told you are at sea level but obviously on top of a mountain...

m/ft>Imperial or metric measurements at your beck and call. Mine will be **meters**

C/F>Temperature scale to use. Mine will be **Celcius**

Field Sensor Logger>

Start Log

Stop Log

Save Log

Stores a data log in the camera memory if you choose **Start Log.** It will stop if it runs out of internal memory or the battery power drops below 15% on the last remaining battery. It deletes the internal log when it is saved and when a firmware update is applied.

Certification>Displays all the logos and approval guff from places like EU, FCC and other government bodies...in case you are ever asked. ;-) A legal requirement in places where government regulators have become overly officious.

Setup menu

Card Setup>Slot 1 Slot 2 As needed. Once you have selected a card slot your options are *Format* and *All Erase.* Use to erase all images without formatting or fully format cards.

I always format cards before first use in the camera and before any vital assignment. Contrary to what some popular Youtographers may say, formatting is the sensible, safe and professional option before doing any important work.

Here is why: Firstly, the camera manufacturer suggests it. So do the card manufacturers. That, alone is good enough reason.

Secondly, when you format the card, the camera writes its own file system and folder structure to the card so that it operates in a manner it expects. Thus the card becomes a part of the imaging system and operates as it should and as the camera expects..

If you just repeatedly *Erase All* you increase your chances of encountering a read/write error and losing vital images when the camera tries to write to a logical sector that is no longer operational or not where it expected a folder or sector to be.

Also, do not use your cards in multiple devices if you are working professionally. Camera cards should be only for your camera – not anything else. They use their own file table system that is different to a PC. PC's and other devices could allow malware to get loaded on to the cards. While these cannot affect the camera, they can corrupt the file system, slow down the write speed and other maladies. We keep our camera cards for the camera only and format regularly.

If only using one card in the camera, the option to choose which slot is formatted is not displayed.

Date and time> As you require. Local is sensible. You also have an option to set time zone and have the camera update the clock via the GPS system. However, this will only be accurate if you set the correct time zone for your location.

Language>English for my convenience, You may set it as you please.

Monitor Adjustments>Zeroed I find the monitor and EVF pretty good right out the factory. If you wish, you can change the settings here but personally I never do fine review on the camera anyway. Its far more important to have your computer monitor and other downstream items colour matched.

A useful tip is that if you press INFO while viewing in the EVF adjustment menu, you can change the monitor from Neutral to Vivid colour saturation.

Rec View>OFF!!!! If this is on, (as it is set by the factory) each time you take a photo the EVF/rear display will display it for a fraction of a second. No hope of following subjects then. This is on by default. Do not know why. Options are 0.3-20 sec, Off and Auto Playback where the camera plays back the image until you switch it back to live view. The first thing I swotch off on any new OM-D body.

Wi-Fi/Bluetooth Settings>

Availability> OFF

This sets the built in Wi-Fi and Bluetooth transmitters either on or off (makes the camera discoverable to other wireless networks and devices.) I would have this off until I want it on.

Connection Password>You can set your own Wi-Fi and Bluetooth passwords. I would strongly suggest that you do so. I will.

Power off standby>Disabled/Off This will let the camera connect to smartphones even when switched off. Will use power so I will keep it off until I need it on.

Reset WiFi settings All WiFi gadgets need this occasionally. Also a good wheeze if you forget the new password you set up in the connection password setting.

Firmware> Check on www.olympus-europa.com or your country Olympus site for the latest firmware and update to it.

Firmware updates address issues found since introduction and/or add new features. On this camera it is fairly certain that new features will be added from time to time and this will be updated via firmware.

My Menu Options

When you navigate the menu system you may find features you would like to have available for fast access. This is where the final tab on the menu system comes into its own.

If you press MENU and browse to a menu item, look in the top right hand corner of the display. If you see a * (Star) symbol shown there, the particular item you have chosen can be assigned to a My Menu tab. If there is no * symbol in the top right hand corner then you cannot record that function to the My Menu pages. (So before you fire off indignant social media posts or make angry You Tube videos, check the top right hand corner of the camera display...)

Create a My Menu entry:

Press **MENU**

Navigate to the function you want.

Check the top right hand corner of the display for the * symbol.

If there is a * symbol after you highlight a menu choice you can then simply "record" this choice by pressing the red video record button on the top right of the camera.

The camera will prompt you to choose a page on which to record this option with a list showing *1, *2, *3, *4, *5.

Use the UP/DOWN arrow keys or the front or rear dial (depending on your control set up) to select a My Menu page on which the recorded item must appear.

Press the **OK** button and the camera will confirm the item has been *Added to My Menu*.

Once you have added an item to a My Menu page you will see the star in the top right of the screen change to Yellow if you navigate to the option again. This is a handy way to remember which items you have added to My Menu while browsing the menu system in the future.

Remove items from My Menu

Navigate to the item and press the record button again. You will be asked if you want to remove the item from My Menu and you simply need to use the UP/DOWN arrow to highlight *Yes* and press OK.

Arranging items in the My Menu system.

OK. This one took me a while to work out but it is logical when you consider how the My Menu is populated in the first place.

Press MENU

Use the UP/DOWN arrows to go to the My Menu Page you want to edit/arrange or the item you want to move.

Press the red movie record button.

If you do this on a My Menu page you will now be shown the following options:

Rearrange Order> If you have highlighted an item then pressed the record button, you can now use the UP/DOWN arrows to move to a new slot in the lis tof 7 slots per page and then press OK to place the highlighted item in that location.

Remove this item>Highlight an item first then press record and choose this option and confirm by highlighting *Yes* and pressing OK.

Remove this * tab>Deletes all items on the current page. Highlight *Yes* and press OK.