

Graham's Photoblog Newsletter

For Week Ending 8th May 2021



Photography on a Budget Series

The series has now concluded and I have enjoyed the process of comparing some great budget cameras.



An image from the 3M pixel challenge – the Kodak DC4800 camera

Photography on a Budget: Part 10

The 3 Megapixel Challenge



The Kodak DC4800 3.1 Megapixel camera.

Fortunately during the recording of this series the weather remained consistent and so I was able to capture the same shots for each camera in almost identical lighting. The only thing that changed was the emergence of leaves on the trees and new flowers in the grounds of Smithills hall.

For the last of the camera challenges I repeated the shots using an iPhone 12 Pro Max just to demonstrate the image quality that can now be achieved using modern camera designs.



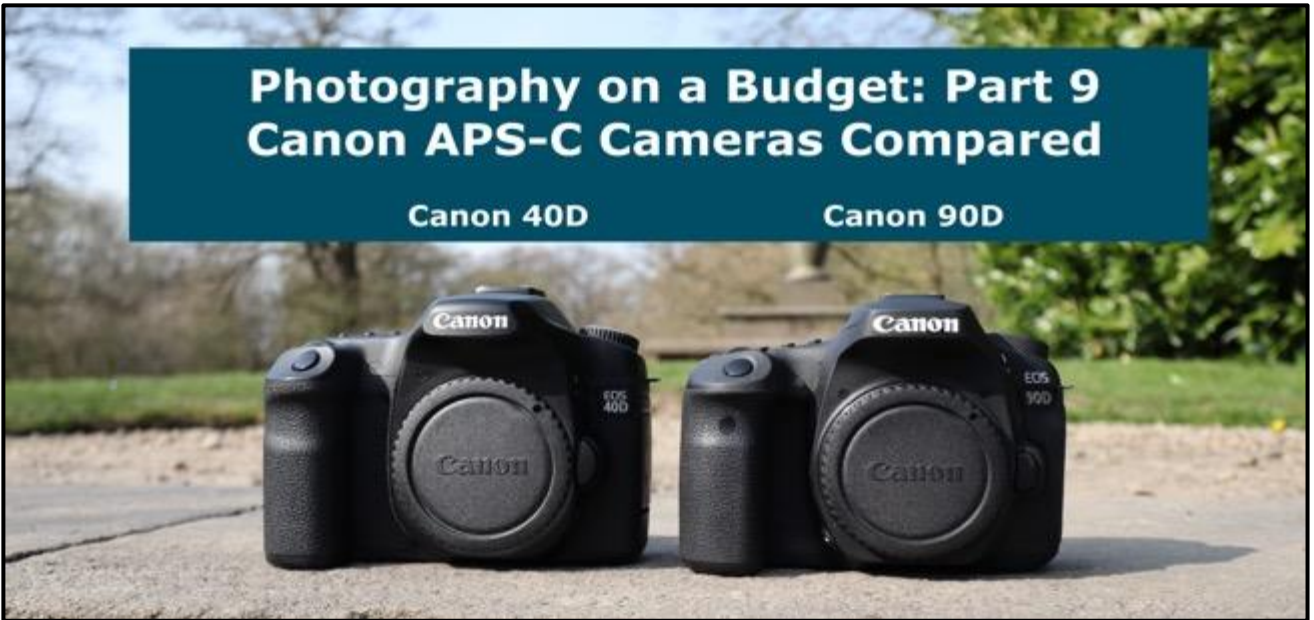
Smithills hall with the iPhone 12 Pro Max 1/1880 sec F1.6 @ ISO 32 26mm EFL

The x1 camera uses a 12M sensor with optical image stabilisation and does appear to be able to capture a wide tonal range with plenty of image detail and providing that you don't want to make prints bigger than A4 size can make reasonable prints in good lighting conditions.

Photography on a Budget: Part 9 Canon APS-C Cameras Compared

Canon 40D

Canon 90D



The Canon APS-C sensor cameras model 40D and 90D cameras

In part 9 I took the Canon 40D and the 90d and paired them with the 18-150mm EFS lens.



An image from the Canon 40D 12M sensor camera

As you can see the image detail is very good from the Canon 40D and it does stand up well to closer inspection. In comparison the 12M iPhone image has also the same level of detail when you enlarge the images to the same degree as shown in the following illustration at 500% enlargement.



500% enlargements from the iPhone 12 pro max and the Canon 40D



An image from the Canon 90D 30M sensor camera



500% enlargement from the Canon 90D

As you can see the image detail reflects the resolution that is obtained by using a sensor with a higher pixel count.

My Canon EOS M50 mk1 User's Guide



I finally managed to get the Canon EOS M50 mk1 User's guide into publication and is now on sale at Amazon market places. It is also available as a full colour PDF file from [My store page](#) on my photoblog site.

You can see the contents of the book by “looking inside” [link to amazon preview](#)

Of all the manuals that I have written this one turned out to be the one where I learned more about the camera set up than any other camera and this added to the pleasure that I still get when shooting with this camera.

I would have loved to have seen some improved features on the MK2 version however I'm sure it was a sneaky move on Canon's behalf into making us believe they were still looking after the EOS M line and really the mk1 could have had a firmware update to match what was delivered in the mk2. The EOS M6 mk2 is a very nice camera with superb 4K video (no crop) but only has the tilting LCD rather than an articulated screen and of course it doesn't have an inbuilt EVF (although you can buy a slide on EVF).

I think that the EOS M50 mk1 is still the USA's most popular mirrorless camera.

Clean HDMI for Live Stream, OBS Video Recording and Zoom etc Using USB Webcam Software.

If you want to use a camera HDMI output to live stream, capture video on an external recorder or to act as a “webcam” for Zoom meetings etc., then the HDMI output needs to be what is referred to as “clean”.

This means that all the usual camera overlays on the LCD screen on the camera are not included on the signal that is going out to the external device.

There is a lot of issues when trying to find a camera which supports this feature. Some cameras will output a HDMI output only in the replay mode and not allow simultaneous internal recording when the HDMI is in use. Panasonic cameras are really guilty of this.

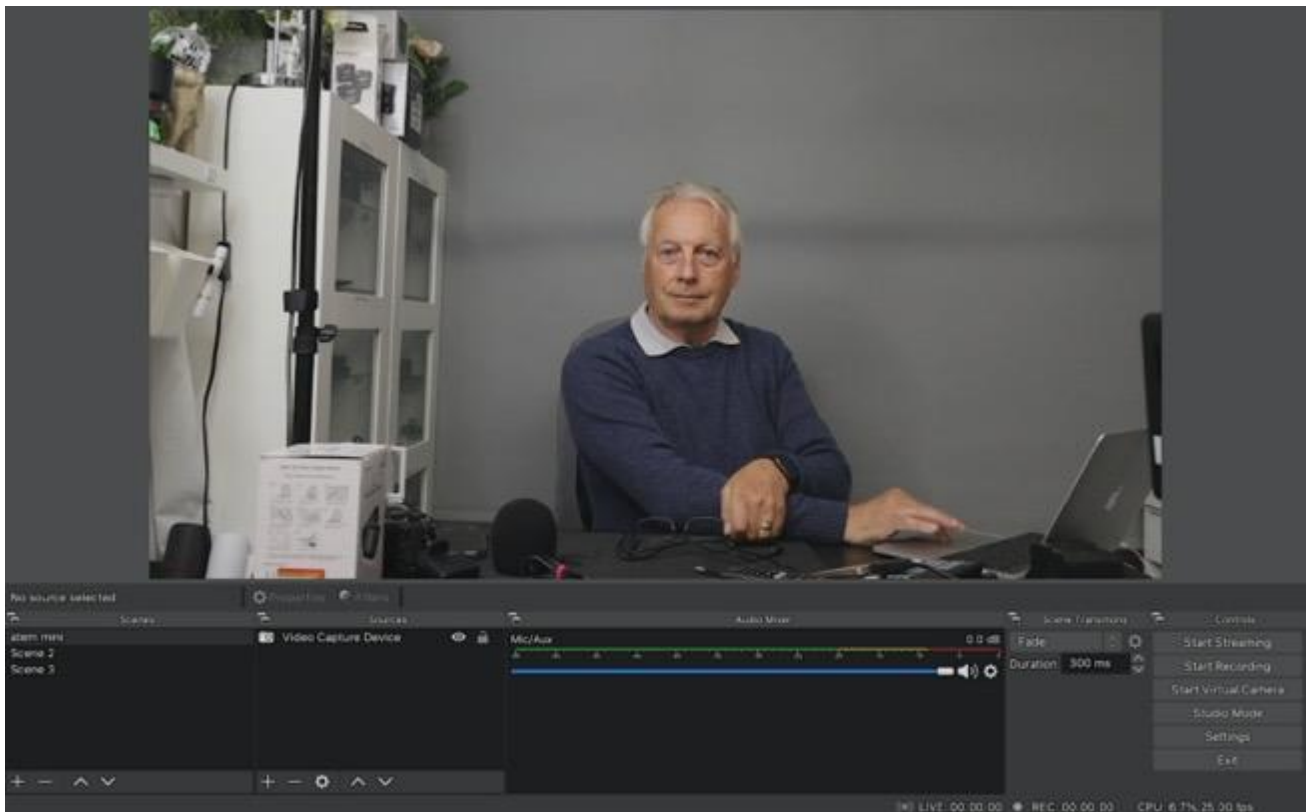
Cameras like the fabulous Canon EOS M50 mk1 don't have a clean HDMI output if you have the camera in the AF modes. You can use it with manual focus such as with a static filming setup where the subject distance doesn't alter.

The EOS M6 mk2 and the M50 mk2 do allow you to set clean HDMI out even in the AF modes in 1080p or 4k mode.

To activate this you need to be in the creative video mode and then in the Rec Setup menu on page 9 (m50 mk2 and Page 5 M6 mk2) you can set HDMI info either a clean 4K or clean 1080P output.

Compounding this issue you may find that some cameras (Canon in particular) may not output audio with the video feed on the HDMI port (the m50 mk1 doesn't however the EOS M6 mk2 does). This means that you have to use an external recorder to capture audio or use the mic input of your PC if using OBS. You then need to set an audio delay as the HDMI video feed will have about 3-4 frames of latency.

With Canon's Webcam utility the M50 without a clean HDMI when using AF modes can be made to output a clean USB signal into programs like OBS. It's only 576P but the image quality is better than inbuilt webcams and can be used as a 1080p source using upscaling in OBS.



The OBS with the Canon EOS M50 mk1 with Face detect AF operational (no focus rectangle!)

With the official Canon webcam software the 30 minute shutdown is also removed so you can livestream or record into OBS for long periods of time. You must also turn off the Eco Mode and the auto power off feature of the camera.

You can also record internally with the camera capturing the Full video to your SD card as you stream out over USB.

The limitations of 576P might be the bandwidth limitation over USB however it could be Canon limiting the output!

With the Canon EOS webcam app running on your PC or Mac based computer you may be able to use older cameras from Canon that can now be pressed into action as higher quality webcams for Skype, Zoom, Facebook etc.

Most of the camera manufacturers have introduced webcam software for their cameras however you may find that they need to be later versions that already have USB tethering as an option.

Panasonic only have the Compatible models: DC-S1H, DC-S1R, DC-S1, DC-S5, DC-GH5S, DC-GH5, DC-G9 and DC-G100/G110 that will allow their webcam software to operate.

Fuji X-webcam supports X-H1, X-Pro3, X-Pro2, X-T4, X-T3, X-T2, X-S10, X-T30, X-E4 and X100V

[Download link](#) for Fuji

[Download link](#) for Panasonic

[Download link](#) for Canon

L Plate for FZ1000 allowing Battery Box Access



The Arca style “L” plate allows quick orientation change of the camera when the tripod is fitted with an arca style base plate.

I haven’t found one that does the job without any modification that allows you free access to the memory card/battery box compartment.

The plate normally extends over the hinge of the battery box and thus prevents it from opening.

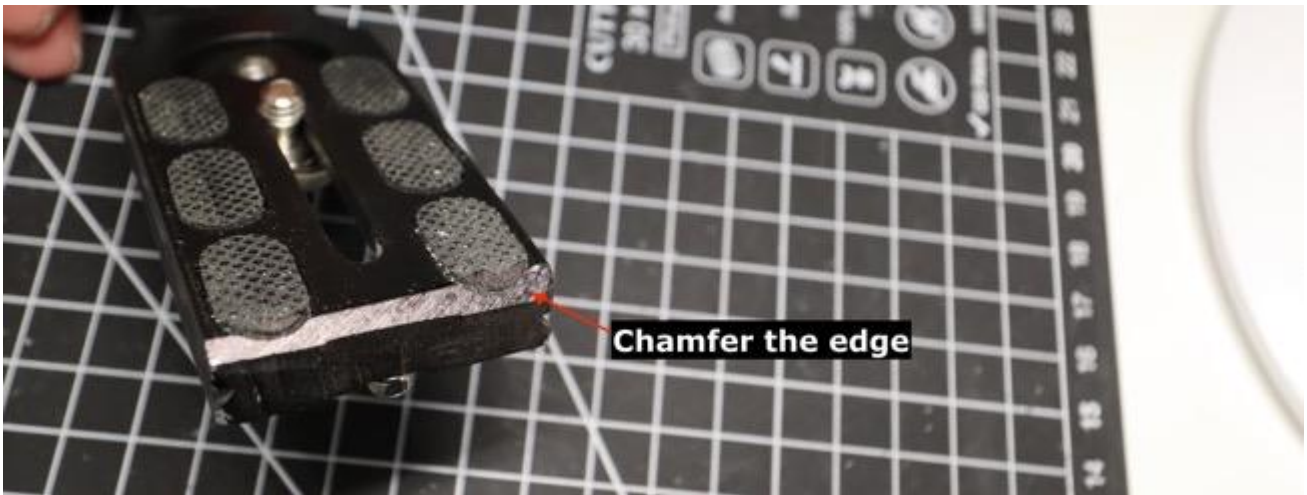
I found this plate that with a slight modification works Okay. Link to [Amazon UK](#)

With a simple cut with a hacksaw and slight filing of the slot in the base plate the plate can be fitted and left installed on the FZ1000. You can just about get access to the 3.5mm mic input socket if you need to use an external microphone.



Showing the completed plate allowing access to the battery compartment





Depending upon the length of the elongation that you make it may be necessary to just apply a small chamfer to the top surface to allow the battery cover to move to the vertical position.



The finished plate milled and spray painted

The plate costs £12 in the UK

The Panasonic Constant Preview Mode

When you shoot in the **manual mode** there is an option to allow you to preview the exposure, depth of field and amount of subject motion blur even before you half depress the shutter button.

This is done by setting the Constant Preview to ON in the Custom screen.



If you don't have this set to ON then if your exposure is "way-off" i.e. it's very under or overexposed then when you half depress the shutter button to focus the screen will go very light or very dark as the camera is "previewing you the exposure"

It's easier to use this mode with an EVF as if you want a slight amount of underexposure the LCD screen may be a little hard to view.

Buying Second Hand Lenses - What to look out for.

I've recently sold some of my Panasonic M4/3 kit and older Canon bodies in favour of the Olympus OMD E-M1 mk2 camera.

This meant that in reality I had to invest in new lenses which would have been a considerable outlay and so I decided to go for second user lenses. Rather than risk sites like eBay where you can't really judge the quality from the product description and often awful smartphone captured pictures I decided to use either a traditional on-line camera shop (like Park cameras here in the UK) or a couple of the larger stores like CEX and London Camera Exchange (in the UK).



My Olympus 12-40mm F2.8 Pro lens bought at CEX

With the current pandemic situation the only real option for a long time was to use the on-line purchase option until we were allowed back into the stores. When CEX re-opened I took the opportunity to look at one of their Olympus lenses they had in the local branch. It was in reasonable condition however it was missing the original box, instructions and a lens hood. Here's what I would suggest that you do if you can get a physical hold of your potential purchase.

Do a complete visual check of the lens and pay attention to scratches, dents, and anything that would indicate that the lens may have endured a hard life. If the lens has been dropped or abused, then it is quite possible that there are damage issues internally. Minor scuffs on lens focus and zoom rings are normal.

OPTICAL CHECK: Remove the front and rear caps and look through the lens pointing it towards a bright light. Check carefully for dust or dirt particles between the optical elements. Generally, these items can be removed or cleaned, and you need to factor that cost against the asking price. Small particles exist in even pro-grade lens and usually don't affect image quality Also, look for scratches on the front and back elements of the lens. Small faint scratches are not a deal breaker, but anything other than this should signal that this is not going to be a good purchase.

Mechanical Check: Check out the zoom and focusing rings. Make sure they are free and easy to turn, not loose. Most lenses now will be focus by wire so you are not actually moving focus - except lenses like the Olympus shown where there is a clutch to engage manual focus. If they are loose this may indicate that the lens has been dropped.

FOCUSING AND OIS MOTORS: If the shop will allow you to mount the lens on your camera body (or on one of their bodies) Check the Auto Focus and Image Stabilisation. Simply attach the lens to your camera body and shoot photos at different focal lengths and focal distances. As you do this, you will want to listen carefully to the focusing/stabilisation motor as it works. A loud motor is standard on some lenses, but a rasping, grinding sound is not.

APERTURE BLADES: While you are checking lens motors, watch the open and close action of the aperture (use the DOF preview button if your camera has one). It would be best if you did this while it is connected to the camera, and it should turn smoothly with no hesitation. Shuddering or sticky movements are indicating to you that this lens has issues.

After Sales/Warranty:

Most camera stores or dealers also offer a limited warranty on the camera and in the case with CEX I got a 2 year warranty!

The disadvantage of buying from an instore source is that most dealers only have a small inventory from which to choose. Additionally, you may have to visit several to find what you are looking for or wait for your ideal model to show up in the used camera department. Some stores allow you to go on a waiting list for equipment traded in or have it shipped from another branch for you to inspect

Online, most large camera dealers have used cameras or pre-owned cameras and lenses sections within their website. Such an example is Park Cameras or London Camera Exchange (in the UK), which boasts a large inventory of used equipment. Also, dealers such as MPB sell used equipment online exclusively. You will find many others with a simple Google search.

Online Dealers usually rate the equipment so that you can determine before you buy what to expect and to judge the camera value or make the best offer if that option is available. Rating Systems vary somewhat from dealer to dealer with a range from nearly new to well used or by grade A to C.

Summary

Pre-Owned lenses are a great way to stretch both your budget and your imagination with equipment that will help you create exceptional work. I estimate that lenses in very good to excellent condition will attract a price between 60 and 75% of the retail price if they have the original box and accessories.

Lenses seem to hold resale values fairly well whereas camera bodies generally depreciate rather quickly and it can be upsetting to find that a camera may have lost over 50% of its retail value under 2 years. Such is the pace of technological advance.



A slightly shortened version this month due to the completion deadline of the Canon EOS M50 mk1 User's guide.

Until the next newsletter (early June 2021) stay safe

Graham