Newsletter for week ending 18th November 2023

iPhone 15 Pro Max image collage created using PIXLR app

The New iPhone 15 Pro Max

So my new iPhone 15 pro Max finally arrived the second week of October and I was eager to get out and test the new x5 optical lens of the camera.
Although making the leap from 77mm EFL (x3) to 120mm EFL (x5) meant some sacrifice as 77 mm was an "ideal portrait" focal length the x5 would be more beneficial for the subjects that I mainly capture with the smartphone.
To achieve 77mm now with this camera would mean a significant crop of the x1 main lens and even though the new sensor has 48Mpixel it would still be quite a granulated image.

The other thing that I was anxious to try was against the light shots, particularly night shots, where the illuminant is in the image as the previous versions of the iPhone always showed some flared highlight on the image.
The new lenses are said to have better coatings to reduce this.
Long story short! This upgrade is very disappointing especially upgrading from the iPhone 14 Pro.

The iPhone 15 Pro Max in the new titanium case

The iPhone 15 Pro and Pro Max are defined by their refinements and represent one of the most compelling Apple releases in years.

The iPhone 15 and the Pro Max now feature USB-C charging/data port which simplifies the need for different chargers and leads.

Faster CPU processing chip and GPU makes for much faster responses.
A new side button, which is customisable for several functions, replaces the mute switch found on previous versions.

It features a new “always-on display”.
Also a new Dynamic Island cut out for the front-facing camera and Face ID sensors.
It has increased storage options and improved 5G connectivity.

However very little has changed on the main and super wide lenses and sensors – image quality remains as it did on the iPhone 14 Pro

With the x1 lens no change from previous versions – except it is now capable of producing a much more detailed image from the 48Mpixel sensor allowing a 24Mpixel images rather than 12Mpixel from the other sensors.

The x5 lens produces a very acceptable image albeit only 12Mpixel!

X5 lens full image at 12Mpixel

Original image

Processed for shallower DOF.

One of the interesting features that comes with IOS 17 (I think) is the fact that if you shoot in portrait mode you can new select the effective “aperture” to create a fairly convincing depth of field affect. This can be done after the image has been taken in the photo editor.

The x5 lens showing full size image and the lower image is a 300% crop from 12Mpixel image.
The front facing camera is also 12Mpixel but now has autofocus (phase detect) which is welcomed.

I'm still testing video performance and waiting for a ND filter system (on order) to help with shutter speeds as with the native camera app setting as are restricted – using the new Black Magic cinema camera app is looking very good and I hope to bring a couple of test videos shortly.

Canon Officially Announce the end of the EOS M line of Cameras and Lenses

I guess the writing has been on the wall for a long time now. No further development of the M series lenses and the EOS M6 mkII was the last of the EOS M bodies.
I have to admit that I love this camera concept and hence the reason why I have the number of bodies and lenses that are shown above. From my original EOS M through the M5, the M50 mk1 and Mk2 and the EOS M6 Mk2 I find the APS-C form factor is ideal.
The weight is far less than traditional DSLR's with APS-C sensors and the compact lenses are just superb.
With the EOS M to EF adaptor I can use all my EF and EFS lenses without any loss of quality and still maintain autofocus and aperture control.
With the EOS M6 mkII having the same dual pixel autofocus sensos as the Canon 90D it gives the same image quality in a much lighter and smaller body. The M50 M1 and MkII are probably my favourite cameras as the EVF and articulating screens just make for ideal shooting.
I know the lenses are expensive with that 32mm F1.4 prime was nearly £500 but the quality really shows especially when paired with the 30M sensor in the EOS M6 mkII.
I could never understand why Canon (and others) have now put all their effort into chunky full frame cameras and lenses. The combined wight and size is something that a lot of us "older" photographers just don't want to carry for all day hikes etc.

From what I believe the reasons camera manufacturers are focusing on full-frame cameras are:

Image quality: Full-frame sensors are larger than smaller sensors, such as APS-C and Micro Four Thirds, which means that they can collect more light and produce images with better detail, sharpness, and dynamic range.

Low-light performance: Full-frame sensors are also better at performing in low-light conditions, due to their larger size and pixel size. This is because each pixel on a full-frame sensor is larger, so it can collect more light and produce less noise at higher ISO settings.

Shallow depth of field: Full-frame sensor cameras can also produce a shallower depth of field than smaller sensors, which is desirable for many types of photography, such as portraiture.

Professional appeal: Full-frame cameras are often seen as being more professional than smaller sensor cameras, and many professional photographers prefer to use full-frame cameras for their work.

In addition to these technical benefits, full-frame cameras are also becoming more affordable and accessible to consumers. This is due to the increasing popularity of mirrorless cameras, which are often smaller and lighter than older DSLR cameras.

As a result of these factors, I guess that camera manufacturers are seeing a growing demand for full-frame cameras. This is why they are investing more resources in developing and marketing full-frame cameras.

For example the following line up of full frame camera is now available:
Canon has released a number of new full-frame mirrorless cameras in recent years, including the EOS R5, EOS R6, and EOS R7.

Nikon: Nikon has also released a number of new full-frame mirrorless cameras, including the Z6 II, Z7 II, and Z9.

Sony: Sony is currently the leader in full-frame mirrorless cameras, with a wide range of models to choose from, including the Alpha a7 IV, Alpha a7S III, and Alpha a1.

I guess that it is most likely that camera manufacturers will continue to focus on full-frame cameras in the years to come, as they become more affordable and accessible to consumers at the expense of smaller compacts and bridge cameras.

I have the Canon 5D mkIV full frame DSLR and that will serve me for all my needs should I need the benefits of a full frame sensor but for most work the APS-C is my choice in mirrorless and my micro four thirds when I need the additional focal length reach for wildlife shots etc.

It will be interesting to see what happens to the price of the EOS M50 mkII and M6 mkII will they fall or will collectors who appreciate the benefits be willing to pay more to own this system?

One possibility is that I have one of the EOS M converted to full spectrum as I do like IR photography.

Tips For Filming In Low Light

Whether you are filming a scene at night or in a dark interior, filming in low light can be one of the harder and more challenging scenarios for us amateur videographers. If it's done right though it can be a great way to bring a cinematic feel to your project, so here's some of my tips on what to look out for.

When it comes to choosing the right camera for shooting in low light, a camera with a larger will sensor will most likely perform better in low light and produce less noise.
Improvements in camera technology mean that many cameras are now utilising features such as dual ISO, which gives you a second ISO range to utilise for darker environments while keeping a clean image.

If you already own a camera, or have one in mind for you low light shoots, there are several settings you can adjust to achieve better results

The first one is ISO. Choosing a higher ISO setting means the analogue signal from the sensor gets amplified and results in a brighter image. This sounds straight forward enough, however the higher the setting means the noisier the image will be as a result and it can also reduce the dynamic range, but this varies depending on the camera.

The next one is shutter speed. Basically, the slower the shutter speed, the more light the camera lets in per frame, so naturally the footage is brighter.
The challenging part is that slower shutter speeds create more motion blur, however if you're filming a static wide-angle scene this can be useful, but if you're filming fast paced action you'll need to choose your shutter speed carefully.

Probably the most often forgotten is the frame rate.
While it might be tempting to film everything at a high frame rate to give the flexibility in post-production to produce slow-motion some clips, choosing this setting can lower the exposure.
So it's best to plan ahead and decide which clips you want to be in slow-motion and save those for the high frame rate recording.

Picking the right lens – the wider the aperture, the better!

The lenses you pick will have a massive impact on how much light gets to the sensor of the camera.

The first thing to look for when choosing a lens is its maximum aperture.
The wider the aperture of a lens the more light it lets through to the cameras sensor.
This is measured as a F-stop (or T-stop in the video world) number and the lower the number, the wider the aperture.

For best results look for a lens below F4 or even F2.8, and it's important to choose a high-quality lens, as some lenses can produce a softer image at this range.

It's also worth noting that a wider aperture will also shallow the depth of field, making focusing more challenging.

If you're looking for a lens with a wider aperture, the best place to start is with a prime instead of a zoom lens, and also avoid wide angle lenses as these are often have a smaller aperture.

Obviously filming in low light is not when you want to be using your ND filters but it's also worth noting that certain filters, like polarisers and mists, can reduce the amount of light through the lens, so decide carefully when choosing a filter for your low-light shoot.

Add more light, or use what's available.

If you're filming in low light, then the solution should be easy enough, just add more light!
But this isn't always possible, you might be in challenging location and there's not always the time to scout ahead and see what might be needed.

If you do have the ability to light your scene though, the advent of LED lighting is only making it far easier to add additional lighting. I've done several reviews on popular LED lights.
When it comes to choosing LED lights, there are a load of options available so make sure to check some out.

If you are short on time or budget then there a few ways you can utilise natural and practical lights even when it's not daylight.
Car headlights, neon street lights, a campfire, or even a mobile phone screen don't just have to be part of the background or a prop, but tactically used and well positioned can be used to light your subject creatively.

What you can do in post-production

Even once you've wrapped your shoot, it might not be the ideal solution, but there are still some things you can do in post-production with your video clips.

Make sure to get familiar with colour-grading software as this can be a great tool to give a boost to any under exposed footage.
Also, if you have a camera with the ability to shoot in log or raw, make sure to utilise this when filming, because when it comes to post-production this will give you even more headroom.

It's important to have a powerful NLE (non-linear editor)system when it comes to editing in general, but some effects like noise reduction require a lot of processing power so it's especially important here.

Noise reduction can help if the ISO setting you chose was a little noisier than intended and is a powerful tool to help clean up the image.

There's a few things you can do creatively both technically and artistically to make filming in low light easier.

Developments in video editing technology are improving all the time.

Use a larger external HD monitor a waveform monitor to help expose correctly. Use focus peaking and false colour to help with checking exposure clipping and how noisy the image is when raising the ISO.

Artistically, there are endless possibilities to what you can achieve when adding lighting.
But even in scenarios using limited natural light there are still some techniques.
For example, the instinct is to light any dark spots, but try using the shadows to create a silhouette of your subject to make a cinematic look.
Or you could try scouting a location ahead of time with interesting available light that could work in your favour, the point being that getting creative can open up possibilities for filming in low light and even add a cinematic feel to your work if done right.

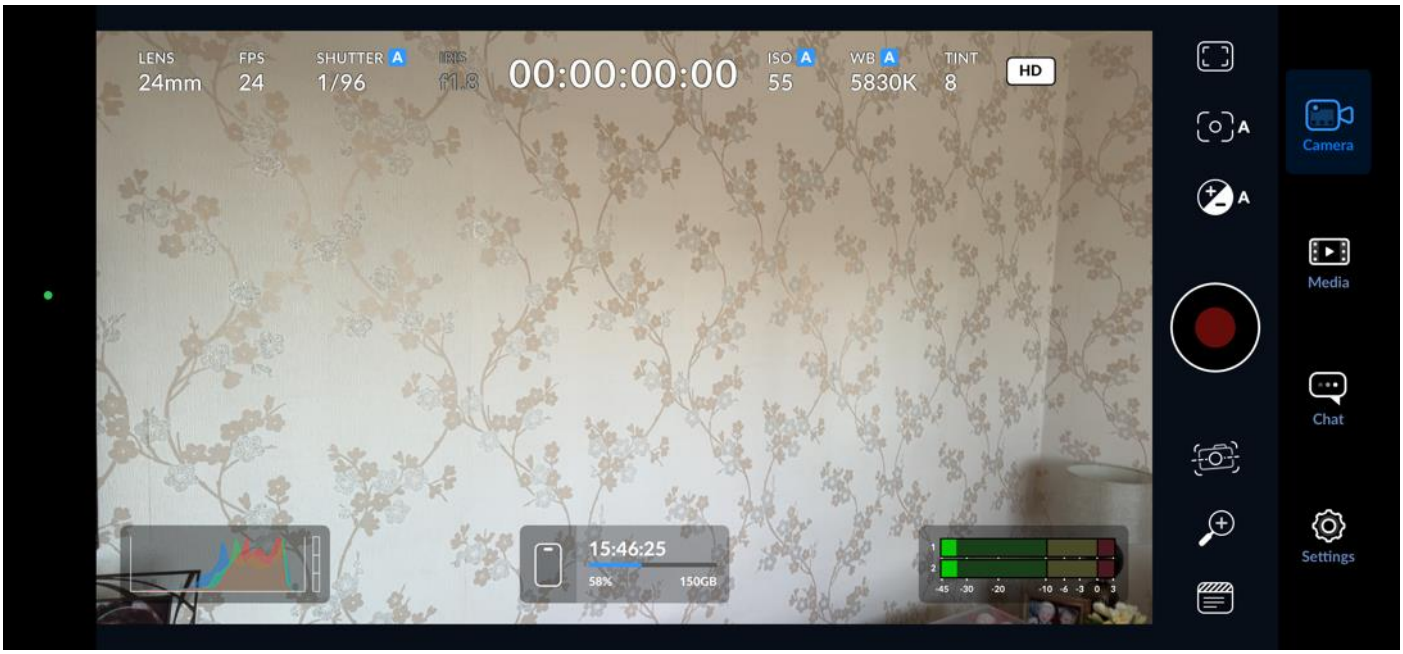
If you haven't tried the free editing software Black magic Davinci Resolve then it will be a great opportunity to try it to enhance your editing skills.

Here's the link. Use the free download option:
https://www.blackmagicdesign.com/products/davinciresolve/

…and whilst we are talking Black magic – have you seen the black magic camera app for Apple smartphones.

It's a great alternative to the now subscription based Filmic Pro App.

Check it out here: https://www.blackmagicdesign.com/uk/products/blackmagiccamera



Here's the app running on my iPhone 15 Pro Max

It will make a welcome addition to my latest gear acquisition the Blackmagic 6K cinema camera

This is the Blackmagic 6K cinema camera with the Andycine 4K monitor.
It's the original 2019 camera with a super 35mm sensor and Canon EF lens mount.

Whilst I will only be using the 1080p HDMI output it can be controlled over HDMI from my Blackmagic Atem Mini switcher software so all the colour science within the camera can be accessed and adjustment made to primary and secondary colour as well as White balance, contrast, hue and saturation.

Aperture, ISO and shutter angle can also be controlled.
Although it has the facility to autofocus it doesn't employ continuous AF – but that's not a problem for my needs.

I also discovered that Canon EFS lenses also work although it is advertised as EF only compatible.

I just have to now adapt my XLR mic to mini XLR so I can use it on this camera.
If necessary I can record with the full resolution 6K file to an external USB-C hard drive/SSD should I ever need that.
At the moment I will continue to use an external HDMI recorder on the output of the switcher as this gives adequate 1080 50p footage to grade if necessary.

A Little Change From Photography

My wife wanted a small corner unit to display photo frames, plants and other bits and pieces.

Having looked at quite a few in stores etc I wasn't impressed by the finish and. more importantly. the cost of these items.

So I decided to dust off my woodworking tools and set about designing and making my own version.

The challenge I set myself was to have 5 degree sloping legs, 4 corner radiused shelves and no screws or nails in the construction.

So all the frame was cut to give the5 degree side sloping legs and all the joints were glued and dowelled – that was 32 dowels in total or 4 in each cross frame. The shelves were cut from 12mm MDF and finished with a round over cutter in my router.

At this point I realised that 12mm was probably too thin to take 6mm dowels leaving only 3mm wall thickness on the top and bottom so I decided that I would have to use 3mm screws to secure the shelves having pilot drilled with a 2mm drill bit.

The whole thing went together with remarkable precision thanks to a new mitre saw that I bought a couple of years back when I was fitting the lounge wooden flooring planks.
Finished with a couple of coats of MDF primer on the shelves and then 2 coats of satin white all over.

I think that it turned out as good as I was expecting however if I was to do it again I would make a few changes to make assembly easier however it was a good challenge and one which I enjoyed doing.

Sometimes Our Images Need a Little Help to Provide a Better View

Quite often when we shoot images we don't often notice elements which have crept into the frame which can be visually distracting.
Articles like beer cans, crisp packets and other junk that has been discarded can ruin what might otherwise be a great shot.
This can happen when photographing nature and some employ "gardening" techniques to clean up around plants and fungi.
It can also be distracting when photographing birds in trees,
Quite often branches or leaves will cover part of the bird and be visually distracting.

With the power of modern editing programs like Adobe Photoshop, Lightroom and Affinity Photo it is possible, with a little practice, to remove these distractions and thus improve the appearance of the image.
Purists may argue that this isn't the role of photography however I tend to disagree.
I don't like to disturb plants in their natural settings and cutting down offending tree branches simply isn't an option.

So when I was sent an image by one of my readers, from the USA, of an egret for an entirely different reason I had to have a go at cleaning up the image to see how it could be improved. Shot with the Panasonic Lumix FZ1000.

The original image.

My "cleaned up" version using Photoshop Clone tool to remove the branches.

A little touch of sky replacement to break up the plain sky

What are your thoughts on altering images to accentuate the subject?

Let me know at mailto:support@grahamhoughton.com?subject=Thoughts on image altering

Using Lightening Accessories on the new iPhone 15

If you have upgraded to the latest iPhone with the USB-C port then you may be left with a whole set of your existing lightening port accessories like earphone, car connection cable, audio connection cable and other dedicated peripherals like camera connection kits, card readers and HDMI adaptors.

Well I did find the Apple solution to this (no third party have developed this yet!).
It's as you would expect, expensive however it does save having to purchase the USB-C equivalents of your devices.

https://www.apple.com/uk/shop/product/MUQX3ZM/A/usb-c-to-lightning-adapter

My Flir infra-red camera works with this – as there is no type C version available.

Lens Flare Not Fixed on the new iPhone 15 Cameras!

One of the complaints about iPhone cameras was the bright "orbs" which would appear on images where the light source was in the image as well.

The new lens coatings were supposed to reduce/eliminate this effect.
I tried this the other day and I see no reduction at all when shooting these types of images.

Sometimes the Cheapest Cameras Produce Outstanding Images

I was looking through my photo library for one particular image for 2024 Calendar for a friend of mine when I noticed the following images from an old Go-Pro camera – the Hero 4 Silver.

Only a 12Mp camera but capable of capturing images at 30 frames per second. I still have it along with my Hero 9 black edition. So given good light just about any modern camera should be able to capture some great images.

Well that's it for this newsletter. I'm hoping to bring a Christmas special edition featuring some of the local Christmas markets (any excuse for a Glühwein)

All the best,
Graham