

Newsletter for week ending 21st March 2020

Typo's in the last newsletter

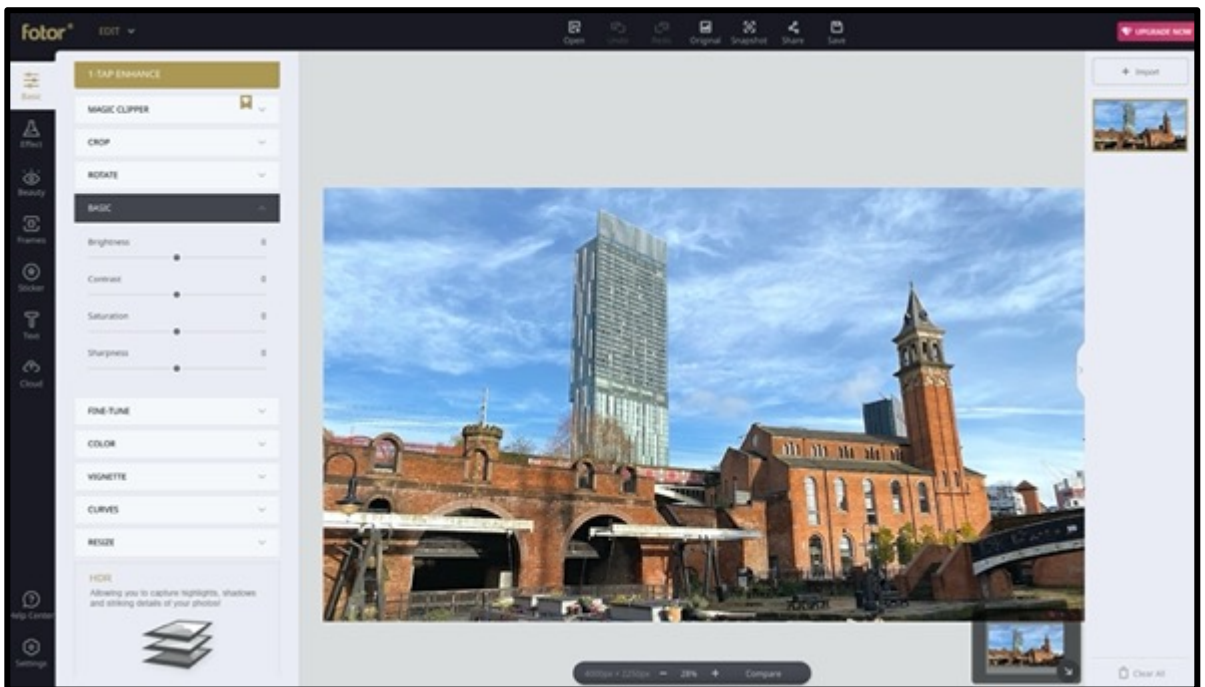
My apologies for a typo that slipped by me in the last newsletter.

It was in the link for free software.

The link for aftershotpro.com/ppmag was missing the “p” between t and r.

More Free Editing tools

If you need some basic editing tools to improve your out of camera images then try this one. <https://www.fotor.com/app.html#/editor/basic>



Fotor is a web based application and runs straight from your browser.

You can install and use the basic editor without limitation. If you like the app you can take the opportunity to upgrade to the pro version which is an annual subscription for \$3.33 per month.

The editing covers brightness, contrast, saturation and sharpness. You can also fine tune highlights and shadows. White balance can be adjusted with the Colour control. It also features curves adjustment and a resize option.

For those who like to “beatify” their images for social media there is a suite of tools for this under the Beauty panel. Other options include Frames, stickers and text options.

The second “Free” editing tool comes courtesy of Fuji Film. It’ is Capture One Express.

It is designed as a RAW editing program for all the Fuji range of cameras however it will provide a very capable jpeg editor for any camera image.

It doesn’t support advanced features like layers and masks but for simple adjustments like brightness, contrast, saturation, sharpening and noise reduction it does a really great job.

You can acquire the program by simply using this link and submitting your email address to receive back the link and activation code.

Here’s the link to get it. <https://www.captureone.com/en/download-express>

Select either Fuji Or Sony Program (for RAW modes only) and then enter your email address. The link and activation code will be sent to your email account.



JPEG being edited from Panasonic camera

The main interface of Capture One Express after the image is imported. Use the **Q icon** on the edit tab to select editing controls.

Additional editing features available such as styles and levels adjustments via the icons on the same panel.

There are many tutorials available for Capture one express so it is very straightforward to begin editing your JPEG camera images with this program.

If you like the program you can upgrade to the full version and select the Manufacturer like Panasonic, Sony, Canon etc to get the full featured program with RAW support for that camera range.

IR “Pollution” Affecting Colours in Your Images.

IR-Cut (infra-red) filters are useful filters in photography because they cut some infrared frequencies that are recorded by many sensors when they receive light filtered by neutral density filters. This causes a colour deviation in the shadows from the original colour to a brown or magenta colour.

In cameras often, but not always, an IR blocking filter is already put on the sensor, but if this filter is too strong it tends to deplete some components of the red as it has a cyan colouration.

With some digital cameras we risk the phenomenon known as IR Pollution – especially those cameras with no optical lo-pass filter.

This is more of a problem when using stronger ND filters (above 4 stops attenuation), then we might see this defect when shooting in tungsten or sunlight (both containing IR elements).

The ND filters out the visible spectrum but allows the IR light to pass straight on to the sensor.

Why not use the ND filters that incorporate the IR Cut filter directly such as the Tiffen ones?

Because often it is not necessary (if the light source doesn't contain IR) and sometimes they cannot be physically stacked together.

Using say ND 3.0 (10 stop) filters to give the maximum light attenuation, and then placing before the ND filter this IR-Cut filter we will cut the frequencies of the infrared in the correct way and the image will be more neutral.

Sometimes capturing people wearing black when shooting with these high levels of neutral density can result in reddish blacks!

These filters are often called “hot mirrors” as they reflect the IR light and not absorb it like some filters.

Hence they should be placed as the first element facing the light source to reflect back the IR in the light spectrum.

We must also pay attention to the choice of IR Cut filters because the starting frequency to be cut is different from sensor to sensor.

Flowers with blue and purple colour, such as bluebells and iris, tend to render incorrect with certain cameras (Panasonic in particular!) and using an IR-Cut filter can improve the colour fidelity if you are shooting in sunlight.

To see if your camera suffers from IR pollution, just take a test shot without any filters; then repeat the shot but with strong ND filters.

If you see a significant shift in colours towards reds – especially in the shadows – then your camera has an IR pollution problem.

These filters are not cheap and unless you find that your camera has this IR pollution and you use strong ND filters for you stills or video then the outlay is probably not worth it.



The Hoya IR + UV cut filter. Note the reflected colour of the filter.

UK Photography Show Cancelled Due to Coronavirus Fears

The annual photography show, which I was due to attend on Monday the 16th March, was postponed until sometime in September as a precautionary measure against the continued spread of the Covid -19 Virus.

This Pandemic (officially classified now by the WHO) is certainly affecting many elements of business and domestic life.

I'll bet that a few companies are beginning to question the wisdom of putting all, or some, of their production in China.

With workers excluded from some factories, transportation locked down and over 3500 shipping containers waiting at docksides there must be many companies who will possibly fold due to component shortages.

Already Canon has closed several factories due to component shortages.

Cameras scheduled for release have already been delayed and it looks like my Fuji XT-4 will also not meet the scheduled May delivery. It is also possible that the most anticipated Canon M50 II will also be delayed possibly until the end of the year or now possibly 2021.

Even if cameras are not assembled in China (like Olympus use Vietnam to assemble cameras) there are likely to be delays as a lot of camera electronic components are fabricated in China!

If the predicted trend in the number of population in the UK to be affected by this virus reaches the levels like in Italy then I'm sure that we will see total lockdown here in the UK with all non-essential travel, public gatherings, sports and other recreational activities being suspended and people forced to spend up to 14 days in isolation.

Being well over 60 years of age we are classified as high risk and should exercise even more restraint in where and how we venture outside and public transport etc.

Even now it is still not hitting home to some elements of our society about the need to thoroughly wash hands before handling food or even touching your face.

People are still going to public toilets and exiting without even a basic handwash!

When you consider our modern society with all the digital technology the number of times we have to use our finger to access door locks, lifts, cash machines, enter our pin-number on sales terminals, self-ordering kiosks etc., then our likely hood of picking up some form of infectious bugs is increased significantly.

My wife and I now carry a small rubber tipped stylus for times where we have to touch keypads etc. We are also very vigilant in using a hand sanitiser when it is not possible to use washroom facilities.

Even there you need to use disposable tissues to open the washroom door after you have washed your hands and then dispose of that tissue for the fact that these surfaces are likely to contain unmentionable contamination!

Even more annoying is the number of people who are stocking up on food as though there is going to be no more deliveries. At least some of our larger supermarkets have started to impose limits on the quantities of some items being purchased (like toilet rolls and canned food).

Update: it looks like us 70+ years are being asked to stay indoors for up to 4 months to protect ourselves against the virus. This for me is going to be a real challenge but I guess we have to heed the advice of our medical professionals and health comes first.

I've Switched from Panasonic to Fuji!

Many of you who have followed my YouTube channel and Photoblog for several years have probably seen my gradual dislike of Panasonic cameras – especially the travel zoom compact range.

The reason for this was the lack of sealing in those lens systems to dust and pollen ingress either causing sensor dust spots or white "orbs" from dust on the inner surface of the lens system front element.

The gradual increase in longer and longer zooms with these cameras meant that the air displacement as the lens extends has been getting more and more. It's like a miniature vacuum cleaner every time you switch on the camera and the lens extends. Any dust/debris that is sitting in the lens shutter area is likely to get sucked into the lens! Panasonic no longer clean the sensor or lens during the warranty period.

As the price of these cameras has now reached the point where you can buy a very good compact system or mirrorless camera it made little sense to me to keep buying cameras with a limited lifespan.

I have bought several Canon SX Power-shots like the SX740 HS and generally very pleased with the results except for things like the lack of mic inputs and RAW capture.



The Fujifilm X30 compact travel zoom camera

I've recently purchased a second hand Fujifilm X30 compact camera (now obsolete) and it has several handling features that I'm beginning to appreciate over the Panasonic cameras of a similar class.

The X30 features an EVF – which was the largest, brightest, fastest and highest resolving viewfinder in its class at the time of its launch in late 2014 – a large 12MP 1- 2/3" X-Trans CMOS II sensor and the EXR Processor II.

The X30 also includes a large tilting 3.0" 920K-dot premium clear LCD monitor, increased battery performance, and a strong, yet lightweight, die-cast magnesium alloy body that is superbly designed to add a real sense of style and elegance to the camera.

Here are its key features:

12MP 2/3"-type X-Trans CMOS II sensor (8.8 x 6.6mm)

28-112mm equiv. F2.0-2.8 lens with manual zoom adjustment

Hybrid (contrast + phase detection) autofocus system

ISO 100-3200, expandable to 12800 (JPEG only)

Six customizable buttons plus ring around lens

2.36M dot OLED electronic viewfinder with 0.65x (equiv.) magnification

3.0" 920k dot 3:2 tilting LCD

12 fps continuous shooting

Pop-up flash

Addition of 'Classic Chrome' Film Simulation Mode

Built-in Wi-Fi including remote control from a smartphone or tablet

Full HD movie recording (1080/60p, 36Mbps bit rate), with built-in stereo microphone and external mic input - albeit the 2.5mm jack input!



I like the out of camera JPEG "Provia" film simulation mode



The ability to capture rich colours without over saturation in JPEG mode.

The control ring around the lens barrel was a new feature for the X series compacts and was designed to deliver further proof that this is a 'proper' camera – as well as to provide quick access to certain functions.

By default the ring is set to adjust apertures in aperture priority mode, and shutter speeds in shutter priority mode. When manual focus is activated however the ring is given to the process of bringing the subject in to focus, with exposure adjustments shifted to the rear thumb wheel.

You can switch the function of the ring to control ISO, white balance, film simulation and the drive modes.

To me it makes most sense working in exposure settings, and I keep it there most of the time, but I also greatly appreciated its help with manual focusing and its automatically magnified view.

Fuji managed to add a tilting screen to the X30 which can flip out to 90 degrees to the body to act as a waist level finder, and downwards to about 45 degrees for overhead shooting. A little disappointed that the screen can't flip round to face in the same direction as the lens.

It is a 3" 3:2 screen with 920,000 dots on which to compose and review your images. It is clear, bright and the colours seem as accurate as one could expect in a consumer grade camera.

Fuji still haven't added a touch screen at this level of camera – and that would have been a big plus – but in 2014 few models had this feature anyway.

Enter The Fujifilm XT-3



I am a self-confessed camera and accessory “junkie” and as I was totally taken in by the Fuji operating system that I thought that I would try out one of their APS-C mirrorless cameras.

As the new XT4 was scheduled for launch in May (now possibly the end of year due to supplies issues) the XT-3 saw some aggressive discounts in the UK and as extra inducements several accessories were also made available free of charge by one of the UK major retailers (Jessops). I managed to get this XT-3 some £300 off the list price and a holster case and 32GB memory card with the deal.

Here are its key features:

It has a 26 MP sensor.

It has 2.16M phase detection pixels

AF down performance down to -3EV.

Shoots at 11 FPS with mechanical shutter.

Shoots at 20 FPS with electronic shutter, 30 FPS with electronic shutter in 1.25x cropped mode.

“Sports Viewfinder mode” captures a subject with a 1.25x crop (16MP) marked in a smaller region of the viewfinder, allowing you to see what's going on outside the image capture area.

“Pre-Shoot” function with electronic shutter in which the camera starts shooting a scene when the shutter button is half-pressed, and begins to record at the moment when the shutter button is fully pressed.

It was the world's first mirrorless camera capable of recording 4K/60fps 4:2:0 at 10 bits to an in-camera SD card.

It was the world's first mirrorless camera with at least an APS-C sensor capable of HDMI output to an external recorder at 4K/60p 4:2:2 at 10 bits.

The shutter can be either mechanical or electronic with:

Mechanical Shutter speeds of: 1/8,000 – 900 seconds.

Silent Electronic Shutter speeds of: 1/32,768 – 900 seconds.

Bulb Mode: Up to one hour.

It has a 3.0" (76 mm) diagonal LCD with 1,040,000 dots with a 3:2 aspect ratio.

It tilts up by 90°, down by 45°, right by 60° but not to the left.

It features two card slots and each works with SD (up to 2GB), SDHC (up to 32GB) and SDXC (up to 512GB) cards, UHS-I, UHS-II and Video Speed Class V90.

The battery is charged by plugging it into a USB-C power supply/power bank. A green LED lights on the back as it charges, and turns off when done.

I purchased it with the kit lens 18-55mm F2.8-F4 which has inbuilt image stabilisation.

I also purchased a Vitrox FX1 Canon EF – Fuji X mount adaptor allowing me to use my complete range of Canon lenses (both EF and EFS).

This adaptor is the electronic type allowing Autofocus, Image Stabilisation and Aperture control to be controlled by the Fuji XT-3 body.

It is not the “speed booster” type as I found that this caused a bright “hot spot” due to reflections from the sensor being reflected back by the flat exit surface of the lens in the FX2 adaptor.

It was OK at maximum aperture but as you stopped down or used longer focal lengths the hot spot became very noticeable. I returned it as I had purchased through Amazon which fortunately has a great returns system.



I have also a 28mm manual only Meike lens which was donated to me several years ago. Although a 28mm prime lens (42mm equivalent) it is a very sharp lens and ideal for video as it does not have fixed aperture stops (click-less aperture).

Also using an Pentax K-mount to EOS adaptor I am also able to utilise several Manual Pentax Lenses like to beautiful 50mm F1.7 lens. Giving a nice 80mm portrait lens.

The menu system takes a little getting used

to – just like the Olympus system but thankfully all the main features can be accessed by the “Q” button.

Another feature which (without resorting to the manual!) which took some sorting was the ISO locking button on the ISO dial. You pop it up to adjust the ISO value and then have to pop it back down.

This is opposite to all other systems that I have used where pressing down the button allows you to set the ISO and then it springs back up to lock the value in place!



Captured with the Vitrox FX1 adaptor and the Canon EF 24-105mm F4 L series lens at F11

Can You Achieve Good 1080P Video with Panasonic 1-2/3 inch Sensor Bridge Cameras?

One of the most frequent email questions that I get is reporting that people are somewhat unhappy with the quality of 1080p video from the bridge camera.

Now there are a lot of reasons why this can be the case and to cover this in more depth I have done a short video answer.

You can find it [here on YouTube](#)



Smarter Smartphone Photography.



There is a saying in the photography community that the best camera for the job is the one you have when a photo opportunity arises.

Thanks to the advances in camera phone technology today we are lucky enough to have a camera to hand cable capturing incredible moments.

The image above, captured on a grey overcast day in a local park with my iPhone 11pro even viewed at full resolution on my 25 inch iMac is absolutely astounding and it's hard to believe that it is a smartphone picture.

To capture images which are, in many respects, as good if not better than some compact cameras requires both the understanding of the smartphone camera, the app used to capture the image and application of some of the rules that we apply when taking pictures with larger cameras.

These include the use of light and compositional techniques to add to the viewing pleasure of the captured image.

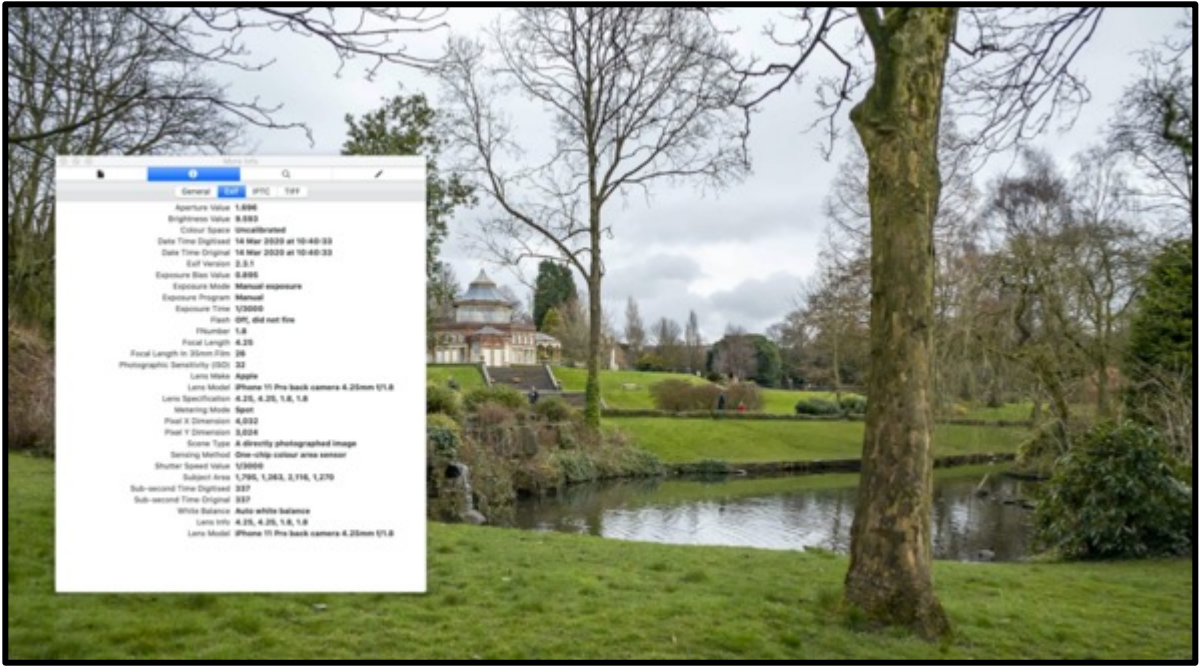
The next image is a crop from the image above and you can see the level of detail in the image.

The bark of the tree has no mushy areas and the distant conifers still have plenty of detail in them.

There's a lot of dynamic range and the camera has coped with this very well.

Exposure was 1/3000sec, F1.8 and ISO 32 as you can see from the EXIF data.





If you are using an Android smartphone then you need to consider using the Pro Mode (see your camera manual how to select this).

With the later iPhones it is definitely worth considering using a camera app like “Halide” which allows you to capture both JPEG and RAW image formats.

This is probably one of the only circumstances where I consider RAW to be an advantage as the in-camera processing is normally very good but aggressive noise reduction can tend to render areas (like the tree bark) as “mushy” or painterly like. The Pro Camera app is another good capture program though this is not a free app like Halide.



High contrast captured fairly well with good rendering of the background birch trees.



Again using the x2 lens it is possible to get the shallow DOF to isolate the subject from background

Again viewed at full resolution reveals just how good these images can be when the light is sufficient for the small sensor camera.

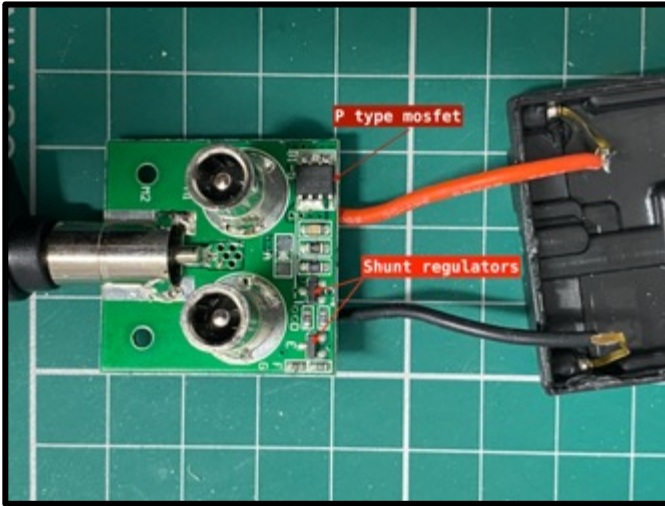
There's plenty of reason not to dismiss these cameras as just for casual snapshots.

Over the coming months (where it looks like I'm going to be restricted to staying at home!) I'll be pushing the limits of these cameras by shooting subjects in my garden, some still life by window light only and trying the cameras for portraiture.

Solitary confinement will also give me the chance to sit down and finish the FZ10002 User's guide!

Gonine NP-F970 F960 F750 F550 Power Distributor Review





The internals of the unit showing the PCB which contains the two shunt regulators and the output power mosfet to the battery connectors. The two shunt regulators provide the low and high voltage protection for any device where the battery plate is installed. The low voltage regulator cuts off power when the power supply drops below 6.1 volt and the higher voltage regulator cuts off at 9.6 volts.



I think that this little power distribution unit is a big plus to anyone wanting the power multiple devices on camera rigs etc. With three wired in parallel 5.5 x 2.1 mm connectors it allows the opportunity to connect other devices using the supplied 5.5 x 2.1mm connector cables. The NP-F battery plate is able to supply protected power to the device into which it is plugged. The PCB in the device prevents over and undervoltage from possibly destroying the unit to which it is attached. The circuit is self-resetting one the supply voltage falls between the protected range of 6.1 to 9.5v. The connectors and cables are of high quality and the whole unit is manufactured using high quality plastic injection mouldings.

The units is available on Amazon UK <https://amzn.to/39WaJV5> at £21.29 and with power supply on the Amazon USA site <https://amzn.to/2IOQZ9T> at \$38.

The main 9v can come from AC power supplies (like the USA version has) or USB-C power banks with the modification I listed a few newsletters ago or from two series/parallel lithium-ion cells (giving 8.4v) like I have done to power my FZ2500 rig with external HDMI monitor and dummy DCC8 battery box to power the camera.

Using the Panasonic Lumix FZ80/82 for Sports

Following quite a few emails regarding trying to capture sports/action shots with this camera I thought that I would give you the response that I have made to those people. It may help you to understand how to get some better images with this camera and also understand why and when it may not produce the results that you might want it to give.



With the FZ80/82 it is very important to remember that as you zoom with this camera the f-stop reduces unlike a camera like the FZ330 which has a constant aperture whatever the zoom setting that you use.

This means that with the longer telephoto shots and especially in grey overcast days you may need to raise the ISO in order to be able to set a shutter speed which will stop the subject motion blur.

The camera image stabilisation does a good job of stopping your handshake at longer focal lengths but does not take into consideration your telephoto focal length where you should use the rule of thumb that the minimum shutter speed should always be faster than 1/focal length.

So let's say you have zoomed to half the capable zoom of the FZ82 i.e. 600mm EFL (effective focal length) then you need to shoot with at least 1/640 sec shutter speed. Of course, if you shoot at the full 1200mm full zoom you need to use a shutter speed of 1/1200 or faster.

So how can you ensure that the camera can set this speed for you?

Well, there's no automatic way that works (iISO is supposed to analyse subject motion and raise the ISO so that subject motion blur is reduced, however, this algorithm still isn't perfect and mostly doesn't work so I would discount using that).

The best way is to use shutter priority mode (S) and set the shutter speed to the reciprocal of the average focal length that you will be shooting at and I would suggest no longer than 1/500 sec.

I would set the ISO to AUTO mode so that the camera will adjust ISO when it cannot achieve the exposure even when it has set its largest aperture (and that will depend upon the ambient light and the focal length of the lens).

Keep an eye on the ISO in the viewfinder and if you see that the camera is having to use ISO 800 or more then you have to accept that there will be an element of noise introduced at this level of signal amplification.

On bright days this may not be an issue as ISO 200 is easily achieved but on dull days this camera will struggle because of the small aperture that is set when you zoom in.

If you see the camera is using ISO 800 or more then the only option is to reduce the shutter speed and accept the possible motion blur or pull the zoom back and also reduce the shutter speed.

For the focussing issues its best to use single area AF mode and set the target as small as possible and keep it in the centre of the screen (where presumably most of the interest will be) and use the AFS setting.

AFF is supposed to be able to predict subject focus distance changes but again the algorithm isn't perfect and often causes more out of focus shots - especially again in low light.

To sum up. The camera is what I usually call a sunny weather camera when you want to use the longer than 600mm zoom setting.

The focus system depends upon subject contrast to quickly set the focus point.

In low light (ambient) it may struggle when you have longer zoom setting as the light reaching the sensor is already reduced by the nature of the lens design.

Still Life Transformation

Sometimes a fairly plain image can be made to look far more presentable with the use of a couple of useful techniques using an easy to use Photo editing program – Smart Photo Editor <https://www.anthropics.com/smartphotoeditor/> still at £19.95 in the UK.



These effects are just one click events, in most cases, though by the use of masks etc., the results can be very satisfying.



Daffodils from the garden



With a simple, plain coloured, background a white reflector board and just window light it is possible to capture some very nice images of flowers and small objects.

If you choose an overcast day (not very difficult here in the north of England) rather than one when sun may be streaming through the window the light is very soft.

This allows you capture the very subtle shades of colours that may be present in the subject.

I've shown the setup that I used to create the images in this newsletter.

If you can get a roll of cheap craft paper from a craft store, then this is ideal.

Choose a colour complement to your subject for best effect.

Otherwise look for wallpaper in the DIY stores and get a few contrasting samples to your subjects.

The light is coming from the left-hand side so to bounce light back into the shadow side I use the reverse side of a sheet of art board but any large white card would suffice.

You could make one from a large sheet of cardboard and cover it with white sheets of paper.

The fact that it is white is all that is needed for this reflector.

For stronger reflected light, you could use the board covered in aluminium kitchen foil. It is important though, if you use this material, to first "crumple" it up and then flatten it out.

This produces a much brighter, but softer, reflected light than using the flat foil which gives harsher light.

It is best to shoot using a tripod as this allows you time to create the right composition and set the focus point exactly where you want it to be.

Performing a Factory Reset with Panasonic Cameras.

Sometimes, for no apparent reason the camera begins to operate strangely, and at other times when we have been experimenting with settings and got a little lost with getting back to an understandable setup we need to resort to perform a Factory Reset.

This facility is in the Tools menu (the spanner/wrench icon) under the menu heading of RESET.

This operation allows you set the camera back to the out of box set up.

Depending upon model you may be asked to RESET up to three settings. It is best, in my experience, to reset all the options even though you will lose any faces that you may have set up in face recognition.

After you have done the reset operation you then proceed to setup the camera as you like it, setting customised button operations, Photostyle default parameters, metering modes etc.

Things like the shutter count, power on cycles and errors are not cleared when you do this reset and your image data will stay the same when you begin to shoot again with the camera so there will be continuity of the image numbers etc.

That's it for this newsletter and Covid-19 permitting I'll catch up with you next month.

If you are in self isolation pick up your camera and get into the garden and try new things.

The image below was taken today 16th March and is the first butterfly I've seen and is the Coma butterfly. FZ330 @ F4 and ISO 100

Graham

