



**Newsletter for Week Ending  
17th October 2022**



*Collage produced using Pixlr Smartphone App*

**Ai Camera trackers again**



Since reviewing the Andycine S2 Ai tracking device, a couple of months ago, I also received a request from Hohem to review their 2 Axis Ai automatic tracking system the Hohem Go.

It's a much more compact unit than the Andycine so I was anxious to see if it could offer the same payload and tracking ability.



Benefiting from the advanced Face Tracking Algorithm, the GO motion tracking phone holder tracks your face/body through the built-in camera more smoothly and without blur. The unit does not require any "app" to be installed on the smartphone to operate it. No matter how you move, the lens always follows on you.

Within the best face recognition range from 1.65ft to 9.84ft, the 2-axis 360 rotation selfie stand supports 360° horizontal tracking and 30° vertical tracking (that is +/- 15°), which is ideal for shooting video content that requires many movements, such as dance tutorials or live streaming.

In order to make video shooting more convenient, Hohem's GO auto tracking stand adopts gesture control to free your hands.

Make the "OK" gesture to enable tracking, while making the "PALM" gesture suspends tracking.

GO smart tracking phone holder allows for less manual adjustment to prevent any damage to the video equipment when you're shooting cooking, makeup, painting tutorial videos, etc.



As this unit has a payload of 480 grams it can hold most of the current "action" cameras like the DJI Osmo Action or GoPro cameras.

These can be mounted if you make a simple bar 50mm long by 10mm thickness and 15mm high from metal or wood and then drill a 6mm hole in the centre of the 10mm dimension and then glue a 1/4 x 20 threaded bolt leaving 10mm pf thread exposed. A 4mm locking collar should be screwed over the stud to allow the correct positioning of the attached camera.

Travel zoom or other small compact cameras can also be mounted using this option. I managed to use the Canon G7X mk3 without issue.



The camera platform can accommodate phones/tablets up to a maximum thickness of 13mm. It can support 11 inch tablets up to the maximum weight of 480 grams.

If using a 11 inch tablet in the "portrait" mode there may be some stability issue if the camera tilts up at the maximum angle of 15 degrees.

If this is the case a small tripod may help to improve the stability.

This can be screwed into the 1/4 x 20 threaded bush in the base of the unit.

In use I found that the unit has a similar “gear backlash” as the Andycine S2 meaning that as the device changes direction left to right or right to left there was a slight delay in the tracker starting the tracking movement. This is more noticeable on the longer distance shots.

The Andycine S2 did appear to track over a further distance than the Hohem Go and easily managed to tracker at up to 6 metres (19 feet) compared to about 4 metres (13 feet) with the Hohem Go.

## The Panasonic FZ200 10 Year Anniversary



*The Panasonic Lumix FZ200*

My Panasonic Lumix FZ200 Photographed in late 2012 for my first publication of the Bridge Camera User's Guides.

This guide was first released on Amazon and then I added it as a freely downloadable file in the Downloads section of my Photographic blog.

I still use this camera occasionally for table top pictures as the camera excels at this type of distance and image magnification.

Even 10 years on this camera still has very good image capture specifications like the F2.8 constant aperture lens.

This cannot be understated as the ability to collect light for images with as little noise as possible as light levels begin to fall is of the most importance.

Compare this to those cameras which may start at F2.8 but very quickly reach F4 (that's half as much light reaching the sensor) then the noise level increases significantly.

Remember that using any camera with a sensor size less than full-frame employs a "crop-factor" and this must be applied to all the parameters when comparing lenses.

So with the 1-2/3 inch sensor of the FZ200 having a 5.4 crop factor this means that the "full-frame" equivalent aperture is 5.4 times that of the FZ200.

That is why the depth of field of the FZ200, even at f2.8, gives the same depth of field as approximately F16 when compared to the same focal length lens on a full frame camera.



*Although not the FZ200, it is a camera with the same size sensor and the equivalent focal length as the full frame camera. You can see the full frame camera needs the lens stopped down to F16 to have the same DOF as F3.9 on the smaller sensor camera!*

That raises the issue of the lens focal length!

We always refer to the camera lens focal length in 35mm terms. That makes the FZ200 a 25-600mm lens (x24 zoom) however the actual lens of the camera is not a 25-600mm zoom it is a 4.5 to 108mm lens.

If you multiply the native focal length times the crop factor you will arrive at the "35mm equivalence".

So this really explains why it is so hard to achieve blurred backgrounds for portraiture with this camera.

The only effective way is to use the longer focal lengths and keep the subject as close to the camera as possible and as far from the background as possible and then use the F2.8/F3.2 aperture for best results.



Although the ergonomics of the camera do leave a little to be desired (the hard plastic EVF is the main culprit) and the “low” resolution EVF and LCD with no touch screen are probably the main reasons against this camera in 2022 nevertheless with the addition of the Nikon DK rubber eye cup fitted to the EVF it makes the camera a little more pleasurable to use.



Perhaps one of the most underestimated features of the camera is the GUI (graphical user interface) when in the Manual Focus mode. This not only shows the focus distance but also gives a very good indication of the depth of field that will be captured when using the focal length and aperture settings. (the Yellow bar in this example)

[My video review, 10 years on](#)





FZ200 1/60sec, F3.2 @ ISO 100

Showing the image quality available with the FZ200, 10 years after its official launch.

## Can the Panasonic FZ1000/10002 compare to and APS-C Camera for image quality?

We can all probably appreciate that carrying a mirrorless or DSLR with interchangeable lenses is not the easiest of things to do and especially if you have to swap lenses to capture just one shot and then swap the lens back over.

Two years ago I started a comparison test between the Fuji XT-4 with two lenses versus the FZ10002 – one of those projects that lockdown put an end to.

I tried to capture the same shot with each camera keeping the effective focal length the same. I did not try to keep aperture equivalence between each camera.

Some of the results were amazing and the ease at which focal lengths can quickly be changed on the FZ10002 meant that I could capture images very quickly where I missed a couple of opportune moments with the Fuji XT-4.



Backlit images from the XT-4 and the FZ10002



Both cameras captured the same dynamic range looking at the shadows versus the highlights.

In many of my comparison images (which I will show in an upcoming video) it is really hard to tell the difference between the two cameras but the sheer convenience of the FZ10002 really makes the difference.



In this shot the FZ10002 looks to have captured more detail and better contrast.

Both the FZ1000 and the later FZ10002 both seem to have a sweet spot around 200mm EFL but do go a little softer towards the 400mm EFL and especially if you dial in F8 where diffraction creeps in a little as well.

### **Extended Optical Zoom on the FZ Series cameras.**

Using the JPEG only option of the EX optical settings can overcome the limitation of just a 400mm EFL lens. If all you want to do is show the images on social media or webpages then the 2m EX mode giving

1920 x 1080 pixel images might be good enough. Here's a heron from about 60 metres away using this method and the FZ1000 camera.



I then managed to get to within 20 metres and then used the 8M option to capture the next shot.



Also worth trying is the i.Zoom method which can give larger image size with up to x2 magnification.

You can see examples of both methods in my [latest FZ1000 video](#) on YouTube

## 52mm Filter Adaptation for Smartphones Using the Manfrotto Xume System



Using a spare case which I had for my iPhone 13 pro I “super glued” the 52mm Xume magnetic lens adaptor over the cut out in the case for the lens block.

This was part of a 52mm Manfrotto Xume system (which was kindly donated to me by Carl Smith) so I could then clip the 52mm magnetic filter holder into this.



Then, by screwing onto the back of the filter that I want to use the magnetic filter adaptor ring I can then magnetically attach the filter to the adaptor on the smartphone body. Each filter has its own magnetic filter adaptor.



Fixed and variable ND filters as well as CPL have been fitted with these adaptors.

The adaptation appears to work quite well even though I was a little sceptical about the ability of the “super glue” to bond the metal filter ring onto the soft/flexible case for the iPhone. So far it has held despite inserting and removing the iPhone quite a few times now. It certainly was a much cheaper option than purchasing the dedicated case for these cameras.

The filter chosen was 52mm – just large enough to cover the lens block of the iPhone. It did not cover the lens block of the Samsung Galaxy S22 Ultra. I'm looking into that as well as the Samsung produces excellent video.

### Opportune Wildlife Captures



The first opportune capture was whilst making the FZ1000 tutorial. I was walking from one location to another alongside this stream.

Suddenly out of the corner of my eye I saw this animal with a trout. I didn't have time to change any of the camera settings as he spotted me. So it was at 25mm F4 and ISO 125. This is a severe crop from the image.

Now I have asked on Facebook for identification. I thought it was a weasel or similar however it was suggested that it might be a mink.

I thought that it might have been an otter but it was very small, which is more mink like, and I didn't see the characteristic tapered tail.

His head is more pointed compared to the squarer head of the otter.

5 seconds later he dropped the fish and dived deep into the stream and was gone.

I waited for ages to see if it would come back and retrieve the fish which had floated just inside that clump of Himalayan mountain balsam plants stems. He didn't return whilst I stood way back – pity.

The mystery is the trout that he has caught. The stream is only the overflow from a local water treatment works and is only about 300 metres long before it goes over 10 metre high weir.

I've seen many small fish like sticklebacks and minnows but never anything as big as this. There is a fishery some 30 metres from the weir which is well stocked so it may have got it there and then carried it back to its den somewhere along the banking.

I'll have to pay attention and see if there are larger fish in this stretch of water.

The next shot was whilst filming the FZ1000 opening shots with my drone. I had been following the grey heron and it looked like he was paying close attention to quite a few places on the meadow. I watched him for about 30 minutes but he hadn't made a strike. I thought That I would take the Mavic Mini 2 drone up about 20 metres above him and use the X2 telephoto setting of the camera, which was recording in 4K 25p. After I had been filming him for quite a few minutes all of a sudden he struck out at a clump of grass and came out with a vole in his beak. He made several attempts the crush/shake the vole into lifelessness before eventually flying off, presumably to his roost to consume it. You can see the whole sequence [in the tutorial video](#).



*The heron makes his move!*



*Dinner is served!*

## Autumn (fall) Colours



Sometimes just the change in focal length can dramatically affect how your image appears. Wide angles sometimes create inspiring images, and telephoto settings bring you closer to the subject.

By using various focal lengths to optimise shots from various angles, you can bring out more of the qualities of the autumn foliage.

Capturing the autumn colours, just as you see it, requires not only the right direction of light, but also adjustment of brightness and colour saturation using the camera settings.

Whilst the camera automatically adjusts the brightness and colour, the results may not match the image you're envisioning.

If you're having difficulty capturing what you see, try adjusting the exposure compensation and white balance.

The image that expresses what you truly see has the appropriate colours and brightness.

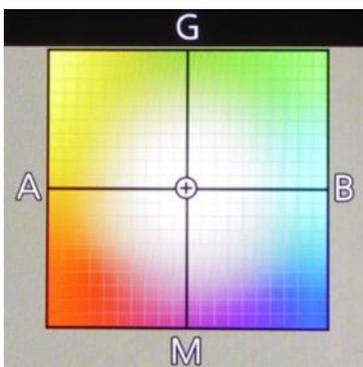
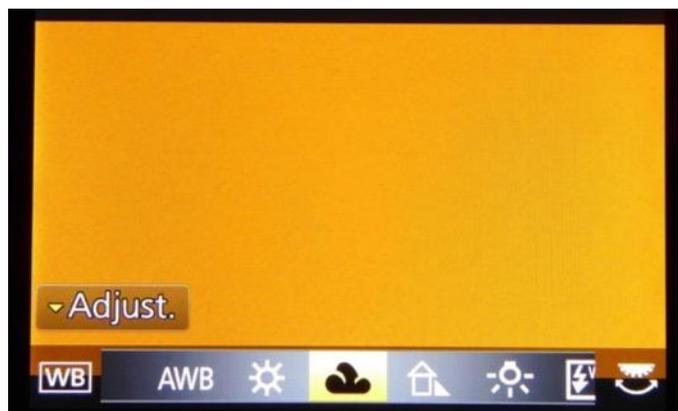
The necessary adjustments vary according to the direction of light, weather conditions, and subject type.

Cloudy days naturally produce flatter, more muted colours than those seen in bright sunshine.

However rainy conditions can also add vibrance to your images through the brighter highlights.

The camera white balance control can also be used to emphasise the vividness of the autumn colours.

When shooting on a cloudy day or in the shade, setting the white balance to the [Cloudy] position can increase the overall reds in the image and make both the reds and yellows in the autumn foliage appear more vivid.



Fine-tuning the white balance is also effective for making detailed adjustments to the colours by positioning the control in the Yellow (A)/Magenta (M) sector of the white balance fine control adjustment.

Shooting autumn foliage is not just about capturing trees and leaves as your subjects. Incorporating streams, lakes, and other surrounding scenery can make autumn foliage look more attractive, and fallen leaves by themselves can create an expression of an autumn landscape.

Try shooting various compositions of various subjects from a broad perspective, and enjoy the freedom of capturing images of autumn (fall) foliage.

## Shooting Fungi (Mushrooms and Toadstools)



Fungi are the “fruiting bodies” of mushrooms and toadstools, producing the spores (equivalent of seeds) from which new fungi grow. In a sense they are a bit like flowers. They come in many shapes, sizes and beautiful colours and most appear in autumn season.

Here in the UK very few of these fungi are poisonous ( the death cap is probably the best known) although many of them can make you ill if you eat them!

I think the fly agaric (which I captured yesterday on my walk) is the classic fairy-tale toadstool, red with white spots and looks to me like a pizza topping. This beautiful toadstool is poisonous and pretty common, usually found under birch or pine trees.

Another beautiful toadstool is the amethyst deceiver.

The deceit is that although this toadstool is a bright purple colour it is in fact quite harmless.

This delicate toadstool’s cap is only 5-8 cm across, quite abundant preferring shady woods.

Sadly a lot of these plants live for just a couple of days before they rot or are eaten by mice and voles etc. Trying to get flawless specimens is itself quite a challenge!



Mushrooms and toadstools love dark habitats which is bad news for us photographers. Natural lighting is generally limited when photographing fungi, so it will often need supplementing with reflectors or more commonly flash although small LED lights can be used to good effect.

The underparts and gills receive much less light than the cap, and if you don't balance the light, detail in the gills and stem will probably be lost. You can balance the light by way of using fill flash or a reflector.

Natural light plus a white card reflector might give enough illumination to capture hand held shots however I prefer to use diffuse flash held at an angle to create good modelling light.

This will need the use of an off camera flash cord and a separate flash unit. The Godox TT350 is a good choice for this type of photography.



Quite often quite a bit of “gardening” is needed to clean off fallen leaves, bits of soil and other distractions. A small brush or rocket type blower can be used to good effect here.

Just be careful that you don't damage the plant in the process or create an un-natural environmental view.



*Incredibly resilient to even forest fire!*

When photographing toadstools or mushrooms, the camera viewpoint is often key. Although an elevated view can suit some smaller variants that grow close to their hosts, rarely will an overhead viewpoint be best. A low shooting angle looks far more natural.

When photographing mushrooms, you'll want to try to capture the beauty and texture of the gills underneath their cap.

Therefore, a shooting angle from slightly below the subject often produces the most striking composition. It also creates an interesting, false sense of scale and height. It helps to carry a large plastic sheet to kneel on as most of these habitats are very damp!

Well that's it for this edition of this newsletter.

Thanks to everyone who opens and looks at the content and a special thanks to those who have taken the time to reply via email to some of the topics raised.

I would also like to thank those of you who make purchases from Amazon using my affiliate links.

It does help to offset some of the costs of hosting the photoblog website each year.

Until the next newsletter, probably the 18<sup>th</sup> November, take care.

**Graham**