

**My Short Break to the Island of Mull, Scotland.**

During the week of 21<sup>st</sup> October for 5 days my daughter had booked us a holiday home on the Island of Mull, Scotland as part of my 70<sup>th</sup> birthday celebrations (which was in May of this year). Unfortunately the weather in Scotland tends to be very wet during the later months and this week was no exception, in fact it was higher than usual rainfall!



*The house on Mull*

The house was about a 30 minute drive from the main port of Craignure and just 10 minutes from the famous village of Tobermory.



*Tobermory, Mull*

The village of Tobermory has been the setting for the children's programme Balamory. After the initial success of these programmes in the UK , Balamory is now apparently reaching a new audience in Australia.

The Isle of Mull and Iona have become one of the premier destinations for wildlife watching in the UK in the last few years. Thousands of people are attracted to the islands in the hope of catching a glimpse of the rare and unusual Golden and White-tailed Eagles, Otter, Corncrake and an abundance of other birds and mammals. The seas off the coast of Mull are important feeding areas for whales, dolphins and basking sharks.

The island is home to the most famous pair of White-tailed Eagles in the world, as featured on numerous television and radio broadcasts. The re-introduction of these iconic birds of prey has been so successful that breeding pairs can now be seen throughout the length and breadth of the island, including Tobermory. Unfortunately I never saw any of these whilst I was there.

Our house was set in a woodland area and I had been told to expect visits from a small group of red deer which regularly graze on the grass outside the house. The red deer population on the island has now reached an estimated 6000 and is having to be managed in order to prevent damage to young forests trees and homeowners gardens and flowers. Venison is plentiful in the local restaurants!



*A morning visit from a young stag (which we named "one antler")*



*"one antler" with a young doe (1/500sec, f5.6 ISO 1600 with Canon 90D with 100-400mm @ 400mm)*

Sure enough each day we caught a glimpse of these and often when we were in the lounge, late at night, they would wander into the garden and almost up to the picture window!

Even with many visitors to this house over the years they still are very timid and constantly alert, quickly bolting off back into the forest as soon as they detected your presence.

I was lucky to have with me my 100-400mm lens and on the Canon 90D gave an effective focal length of just over 600mm but I still had to use ISO 1600 to get a fast enough shutter speed of 1/500<sup>th</sup> at wide open aperture of f5.6. The 30M sensor of this camera is really amazing at picking up the available detail.

They must have extremely good low light vision as there are no street lights and after dark it is really black yet you can tell that they have crossed over the garden and over fences to graze on fresher grass and saplings on the scrub land adjacent to the house.

Using torch light I could see them happily grazing on the grass and wandering on land that was very rough under foot but they seemed at home there!

I never saw any other larger stags as we zig zagged across the island to visit other locations and in fact we saw very little wildlife at all on our visit there.

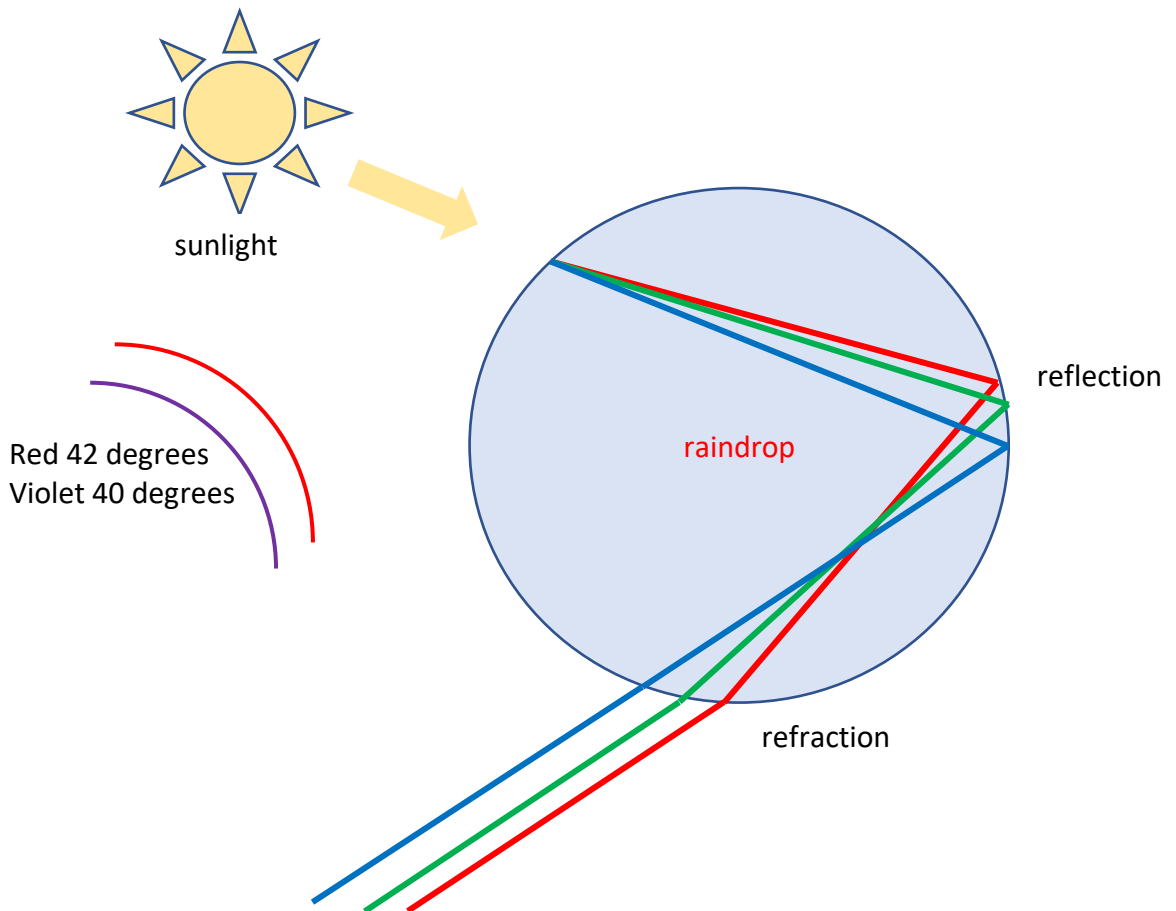


*Lochs and Glens are plentiful, not unfortunately like the sunshine which made just brief appearances!*

The heavy rain showers, plus occasional and very brief appearances of the sun, made for spectacular rainbows and as we were travelling to Iona I managed to capture this double rainbow as we passed through the village of Craignure which is the main ferry port for the island. The bow made a complete 180 degree arc across the sky and lasted for about 40 seconds after which it just poured down for most of the 50 mile journey!



*A spectacular rainbow over the Sound of Mull at Craignure*



The physics behind rainbows is quite fascinating. When we observe a rainbow we are actually seeing millions of individual droplets falling through the atmosphere, lit by the sun, and coloured by the refractive properties of water. Certain conditions need to occur before a rainbow can be seen. There has to be enough moisture in the air to cause water droplets to form and you need the strong directional light of the sun to make it possible. There is an additional factor which limits the appearance and that is the juxtaposition of the sun, the water droplets and your position. If the sun is high in the sky a rainbow will be formed very low to the ground and if the sun is higher than 42 degrees then you are unlikely to see one at all! This 42 degree angle is critical and is the result of a combination of refraction and reflection of sunlight within the spherical rain drops. Rays of sunlight entering a droplet are bent, or refracted, because the water is denser than air. As the sunlight bends it is split into its consistent colours (the spectrum or “colours of the rainbow”) just as it would be if it was been split by a prism or a diffraction grating. The rainbow is now spreading out like a multicoloured fan within the drop but soon reaches the other side. Rather than passing through it at the water air boundary again it is now reflected internally before reaching the other side of the drop and undergoing a

second refraction. This sends light back in the general direction that it came from, but having been turned to a total angle between 318 and 320 degrees.

The 2 degree difference is the apparent angle between the red wavelengths, refracted the least, and the blue/violet wavelengths which refract the most.

The 42 degree rule is why a rainbow appears as concentric arcs.

The shadow of your head is at the centre of the circle with the red band of the rainbow 42 degree away from its shadow line. If the ground didn't get in the way you will see a complete circle.

Because every rainbow is centred on the shadow of the observer's head every rainbow is unique to that observer and moves as you move. I guess this is why no one has ever found that "pot of gold" at the ends of a rainbow then!



The road to Fionnphort (to catch the ferry to the island of Iona) is over 35 miles of single track road from Craignure and takes just over one hour to drive and has very little opportunity to take in the scenery as a lapse of concentration could be disastrous in some places!

With the added heavy rain it was also adding to the visibility on some sections of the road but fortunately the rain cleared up about 20 minutes before reaching Fionnphort and the sun made a watery appearance which counteracted the wind chill from the blustery winds.



*The ferry from Fionnphort to Iona*



*The Abbey at Iona*

The short 10 minute ferry crossing to the island was quite exhilarating as the wind was causing a very rough crossing, but these skippers are pretty well practiced in these rough conditions and we docked without incident.

Vehicles are not allowed on Iona except by permit so the only car was the local post office mail van making his daily drop off and pick up of local mail.



I only had 2 hours to spend on the island and, as it was “out of season”, a lot of the places were closed so I just enjoyed a walk on the hills around the vicinity of the ferry port and watched the sea birds and crows. The Iona community centre was closed and the Abbey information centre was also closed for lunch!

A quick 10 minute ferry ride followed by another 1 hour and 40 minute drive back to our house to get ready to go out for our evening meal.



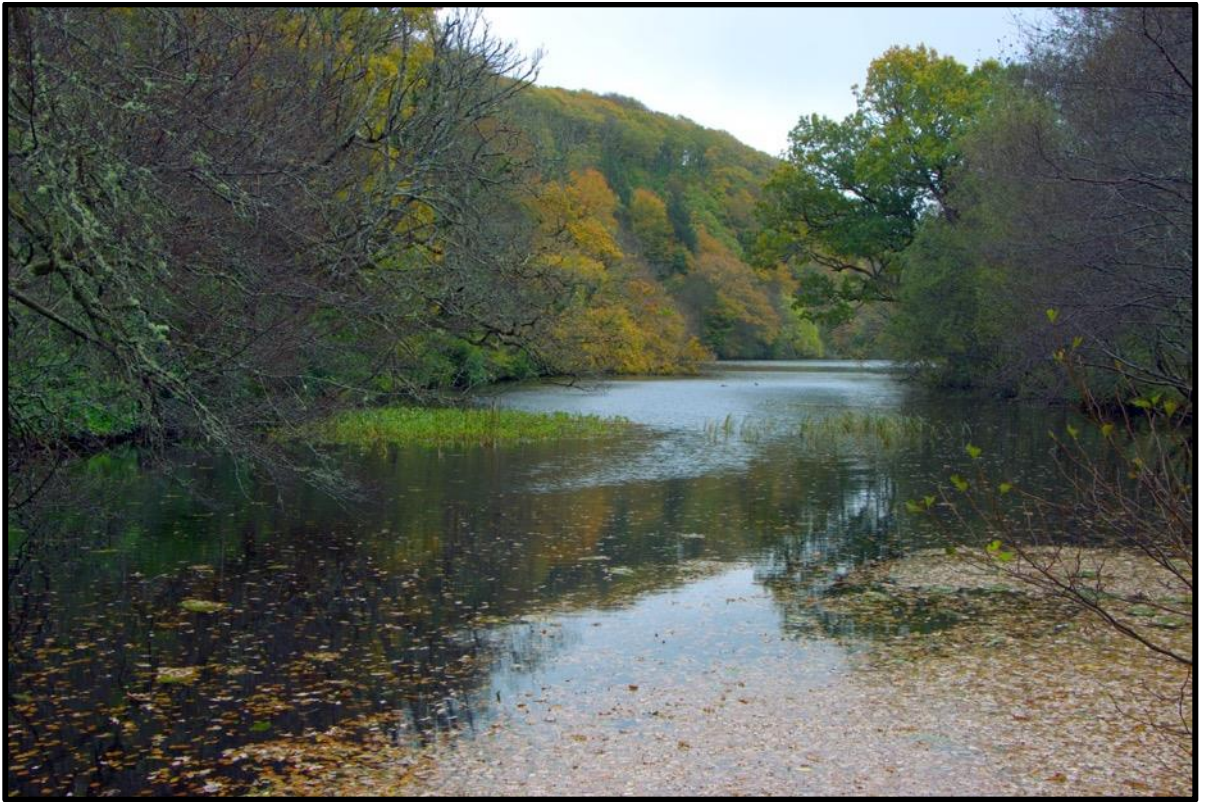
Not very far from Tobermory is Aros Park where, due to the heavy rainfall, the waterfalls were in full spate.



*Tobermory from Aros Park*



*The lower falls at Aros Park*



*Rain and Autumn Colours in Aros Park*





*Snow on the upper slopes of the mountains on Mull*

On our final morning the view back from the ferry revealed that the night had plunged the temperatures low enough for snow to fall on the higher elevations. The week ahead looked to be set fair but with ever decreasing day time and night time temperatures.



*Arrival back in Oban ready for the long journey home*

## Apple iPhone 11 Pro Upgrade

I decided to upgrade my iPhone X to the new iPhone 11 Pro with its three cameras.



*The triple cameras on the iPhone 11 Pro*

Adding to the x1 and x2 optical cameras a new 0.5x (super wide) camera has been added giving an equivalent field of view as a mm lens.

Here's a summary of the cameras:

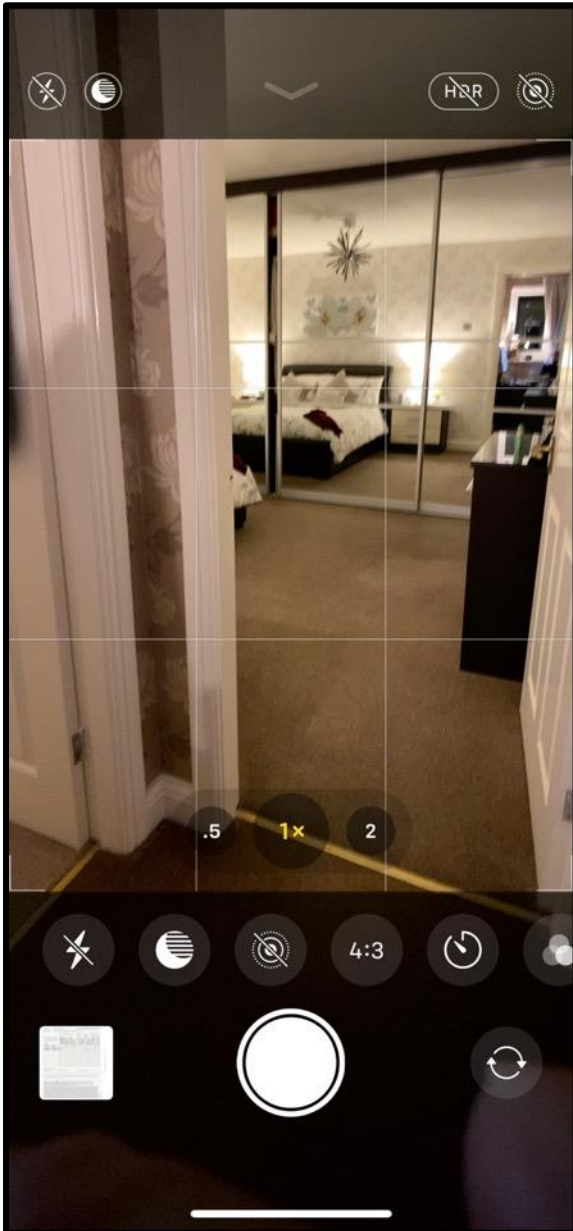
A 12-megapixel wide-angle camera with optical image stabilization (OIS) and an f/1.8 aperture. 13mm EFL

A 12MP telephoto camera with 2x optical zoom, OIS and an f/2.0 aperture. 26mm EFL

A 12MP ultrawide camera with an f/2.4 aperture that captures a 120-degree field of view 52mm EFL.

The ultrawide camera is the newest addition here. That's not to say that the implementation here is perfect, though.

The ultrawide occasionally struggles to capture evenly exposed photos when it's dark, and it isn't nearly as good at capturing fine detail as the standard wide camera. On a phone screen, all you'll really see is the extra space and context this camera provides — on a large monitor you will see the lack of detail/clarity in these images and it's important to consider lens distortion when the camera is not held perfectly parallel to the verticals of your subject.



A new feature of the “camera App” is that by scrolling up the black bar that is used to select the camera mode a new set of controls is exposed.

These allow you to set things like the aspect

There are a few other additions worth pointing out: Quicktake lets you easily switch from framing up a photo to shooting a video by holding the shutter button down. (You now activate Burst mode by swiping that button to the left.)

There's also a new High Key Light Mono setting for the Portrait mode, which snaps a black-and-white headshot of your subject with a pure white background.

I also find it a little short sighted that the iPhone Pros' camera lacks any kind of dedicated "pro" controls like control of shutter speed, ISO and especially manual focus.

You need to switch to third party apps like Camera+ or Halide to get these options as well as the facility to shoot in RAW mode.

Unfortunately, Apple's most important new photographic feature won't be ready for a few more weeks at least. Deep Fusion promises to combine nine different exposures into a single, highly detailed photo.

If it's as impressive as Apple claims, Deep Fusion could change the experience of shooting with the iPhone Pros entirely, so I'll update you once this feature eventually goes live (it's in public beta test at the moment).

**Update 29<sup>th</sup> Oct. IOS 13.2 released and I just installed it.**

With IOS 13.2 comes the long awaited Deep Fusion Update

With Deep Fusion apparently the iPhone takes a reference photo that's meant to stop motion blur as much as possible. Next, it combines three standard exposures and one long exposure into a single "synthetic long" photo. Deep Fusion then breaks down the reference image and synthetic long photo into multiple regions identifying skies, walls, textures and fine details (like hair). Next, the software does a pixel-by-pixel analysis of the two photos -- that's 24 million pixels in total. The results of that analysis are used to determine which pixels to use and optimize in building a final image.



This "selfie" taken in the Night mode.



Enlarged crop from image- quite impressive at 1/5 sec ISO 1000



*The night mode uses multiple exposures to create images with less noise.*

The “Night Mode” switches in automatically and will use multiple exposures to create images with less noise. The camera may make 2-3 exposures when handheld, depending on available light and how much you’re shaking the phone. Stick it on a tripod and you can set it to up to 30 seconds, which is best illustrated with starry sky shots.

4K Video at 60fps produces very nice clips and the front facing camera can now also be used for 4K video as well. Overall a great improvement on the iPhone X but a shame about the quality of the 0.5x 13mm lens.

Here’s a summary of the three lenses and their operating modes:

#### **Standard wide lens X1**

Supports Deep Fusion for low to medium light conditions

Supports Smart HDR for bright conditions

Supports Night Mode for very low light conditions (below 10 lux)

#### **Telephoto lens x2**

Supports Deep Fusion for low to medium light conditions

Supports Smart HDR for bright conditions No Night Mode support. The 2x zoom in Night Mode doesn't use the telephoto lens. (The zoom is digital not optical.)

**Ultra-wide lens 0.5X**

Does not support Deep Fusion

Supports Smart HDR for bright conditions

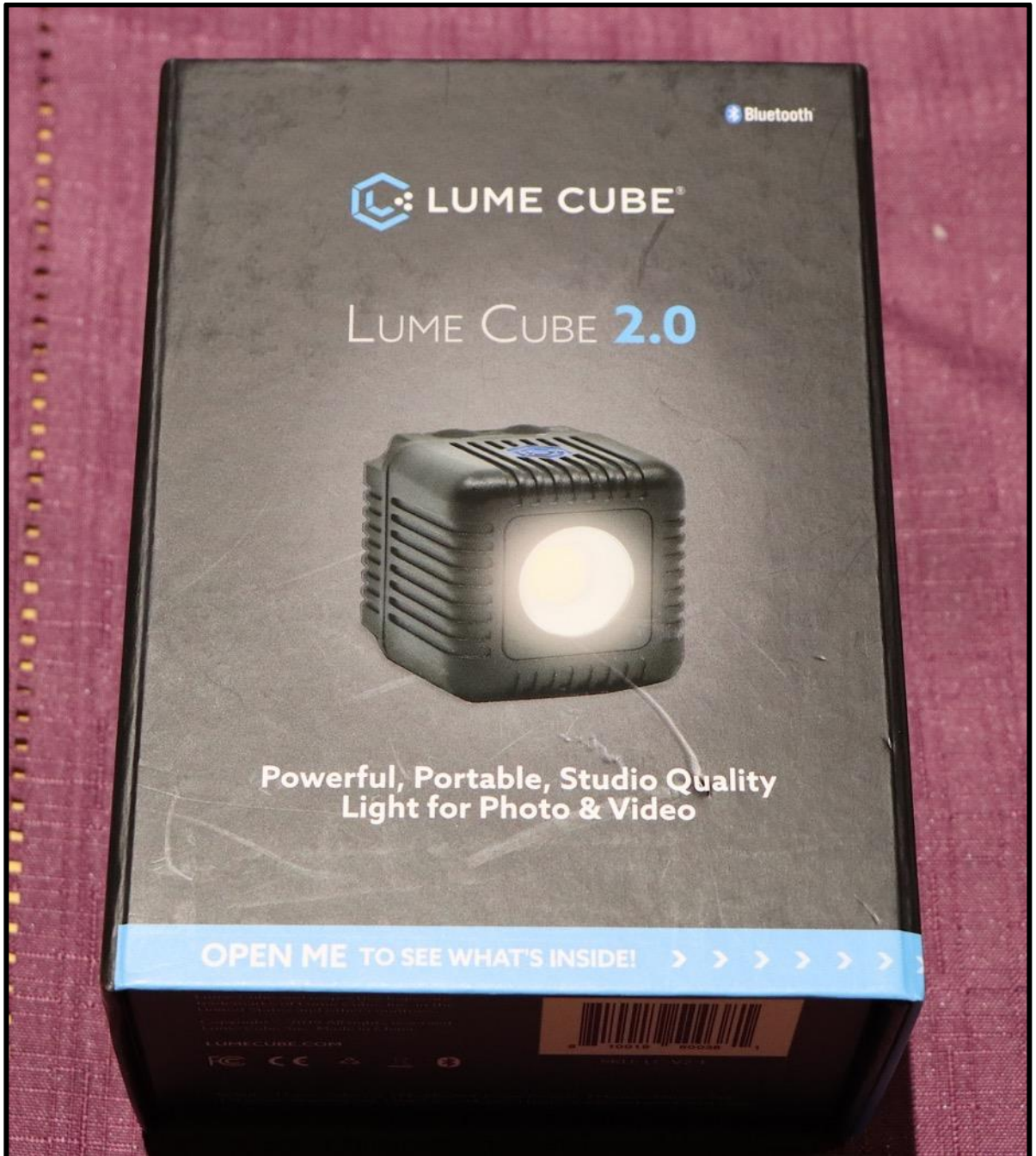
No Night Mode support.



*1/35 sec, F1.8 @ ISO 500 Deep Fusion enabled image iPhone 11 Pro*



## The New Lume Cube 2.0 LED Light for Photo and Video



I was approached by Lume Cube to review their new video light and produce a demonstration video of it in action.

The new light is an upgrade to their original Lume Cube and has undergone a few changes in response to feedback from consumers. It now has a much brighter light with a 95 CRI (colour rendering index) and a lower colour temperature of 5600K (daylight). The reflector has been redesigned to produce an even light with gentle fall off to the edges and no

noticeable hot spots. The power buttons are now labelled and control the light intensity from 10% to 100% in 9 steps and there is also a low light mode (engaged by pressing the two buttons for 3 seconds) and this drops the light output to 1% to 10% in 9 steps. The light can also be controlled from a Bluetooth connection using the Lume X app on a smartphone.

This app allows you to control the light intensity and when using the optical slave flash, the duration of the flash or strobe mode.

The rated output is 700 Lux at 1 metre however I could only achieve 219 lux taking the measurement with two light meters.

The light is fully waterproof but the new design of USB-C charging port is sealed with a rubber plug rather than a screw seal. This limits the dive capacity to just 10 metres where the original light could be used at depths up to 100 metres. Accessories can be attached using the accessory holder which has magnetic mounts. Supplied with the light are a diffuser panel and a #3 warming filter which drops the colour temperature to 4700K.

Other accessories (purchased separately) include diffusion domes, barn doors, honeycomb grids and snoots.



The accessory holder with the 4 magnets can be used to “stack” accessories if needed for some lighting application.



Using the Lume Cube 2.0 as the only light source for video presentation.



*The standard accessories supplied with the Lume Cube 2.0*



*Some optional accessories that I purchased*

To give you the best chance of using the light “straight out of the box” the Lume cube 2.0 is supplied with a white diffusion panel to soften the light output (loses just over 1 f-stop), a warming level 3 panel which drops the 5600K to 4700k (loses 1/3 f-stop) and the adaptor frame containing the magnetic mount system.

I did purchase some additional accessories to use with the system and this is where I felt the quality of these products was not up to the standard of the main light.

I purchased the Barn Doors which allow you to shape the light from a narrow slit to a wide shape and prevent extraneous light spill.

In my particular example the barn doors were quite loose on the hinges as they are just a push fit over the plastic hinge pin.

The two honeycomb grids, which are used to reduce the light output and give a cleaner light distribution, had issues with the magnets being pulled out when attaching them to the adaptor frame.

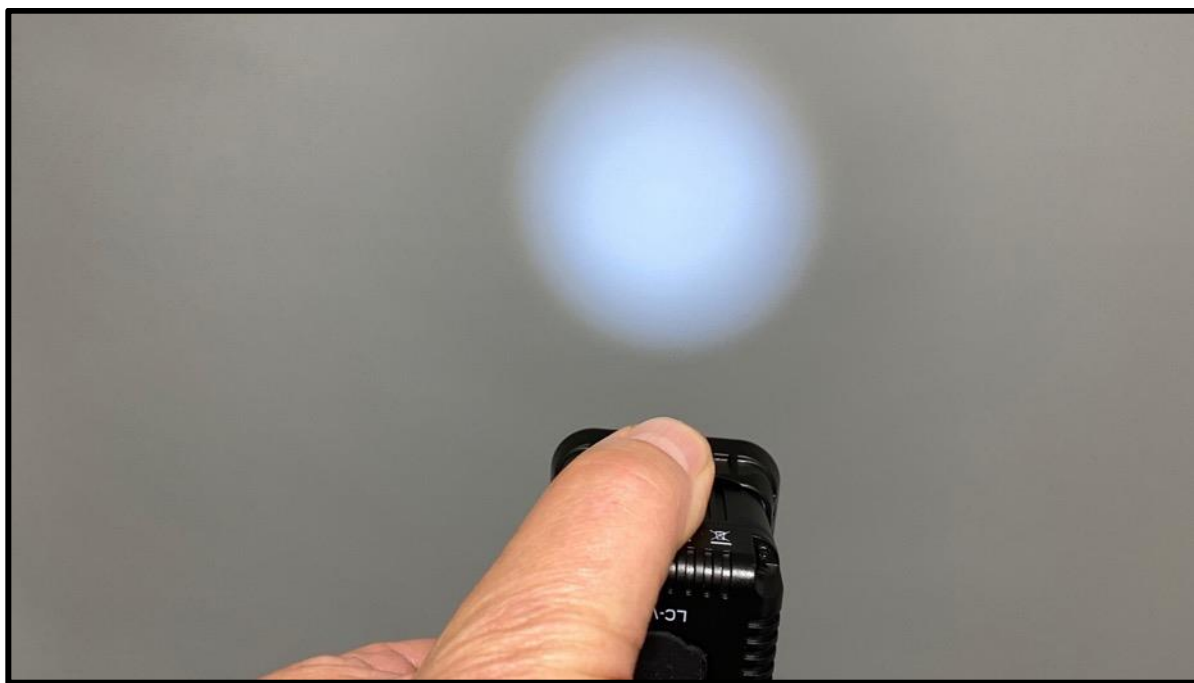
Also although there is an embossed logo on them it does not face forward as you might expect when fitting them as the magnets are in opposing mode.

I superglued all the magnets into the plastic frames and added a “front” label to quickly identify the orientation when using them.

Without using the white panel diffuser very noticeable hot spots were visible when the light was projected against a plain background.

The snoot is designed to concentrated the light into a round spotlight shape for accent light.

Without the diffuser there was a very noticeable central, brighter light.

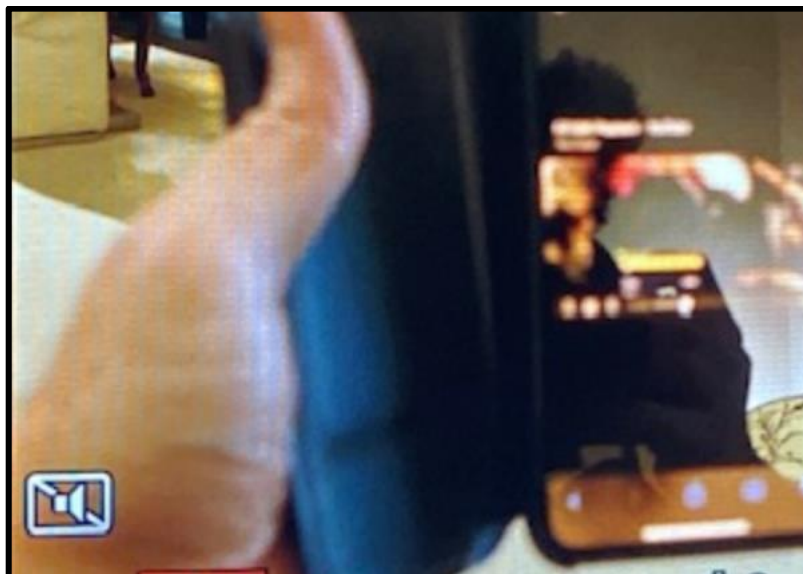


*The light pattern produced by the snoot*

To find out more about the light visit [www.lumecube.com/lumecube2](http://www.lumecube.com/lumecube2)

### Audio Not Playing Back in Camera Video Clips

I had a message from one subscriber asking help on how to get in-camera shot videos to play back audio. He has a speaker icon on the screen with a line through it.



The solution was that Silent Mode was turned on!

This is the 2nd item on page 1 of the custom tools (the wrench with the C) menu.

### Video Files not Transferring with the Panasonic Imaging App

In another question concerning why Video files would not transfer from camera to smartphone with the Panasonic Image App the solution was in the fact that currently the imaging app does not transfer 4k video files or AVCHD. The use of a card reader or via the camera USB cable into either a OTG connector on Android or the camera connection kit on a IOS device.

### New Magnetic Step Up Rings from Freewell Filters



A while back I reviewed the magnetic quick swap filter system from Freewell. These very high quality filters are designed with several advanced features and rival the more expensive offerings from the leading brands.

I had the problem though that I usually buy the biggest filter size to fit my largest lens and then use step up rings from the smaller lenses and at the time Freewell did not have any magnetic step up rings to match the system.

Now they have remedied that and have a complete range of filter step up rings to match the quick swap system filters and lens caps.

These are extremely well made and the threads engage smoothly on lenses and should you need to attach conventional filters via their threads the threaded part of this magnetic ring also screw in very smoothly.

The rings have very tactile knurling making them very easy to screw and unscrew from your lens, if needed. The rings clearly indicate the lens size to the filter size by the arrow – for example 67→72 designates a step up from a 67mm lens to a 72mm filter.

Available on Amazon are: 49-67, 62-67, 67-72, 67-77, 52-67, 55-67, 58-67, 67-82, 72-82, 72-77 & 77-82

Price in the UK is £29.99 and \$29.99 in the USA per step up ring.

## **The FZ1000 MK2 User's Guide**

I have to report no further progress in writing this updated guide for the FZ1000.

Despite my best efforts to sit down and finish the book I never seem to have enough quality time to spend doing so.

Before my wife retired I had all day, and three days a week, where I could write pages every day, now I don't seem to have enough time.

There are always jobs that I seem to have to complete before winter arrives, rooms to decorate and other DIY tasks to finish.

I'm not blaming her but I do feel guilty sitting in my study writing away whilst she is at home.

It's not only the book that has suffered I have several electronics kits that I have bought to build sitting in my cupboard, several crafting projects that I want to try and changes I want to make to my studio.

I do get very frustrated with not being able to manage my time more effectively.

Despite best efforts at allocating time to concentrate there is always something that pops up to prevent this happening.

I do want to finish the book if only for my own reference.

There's been no rumours of any further Panasonic bridge camera updates, maybe the R&D went into the full-frame mirrorless system and with a global downturn in camera sales maybe there will not be any new models until 2021.

## LED Torch For Photography?



This 3 AA powered torch has a wide beam and reasonable power output (330lux at 0.5 metres)

I tested it for colour temperature against my studio LED light and it is very good and probably a good candidate to put in my camera bag as a back-up/fill light for outdoor close-up shots



From the colour checker patches you can see that the torch light is 5400K with a +32M tint and the studio LED light is slightly warmer at 5100K +23M tint.

It might be worth having a look at your LED torches, especially later generation LEDs as they pack a considerable light output – even brighter than the Lume Cube 2.0!

Until next month, take care. *Graham*