



GoPro Hero4 Black – Camera Review

A Post By: **Gavin Hardcastle**



The GoPro Hero 4 Black edition is an action cam for recording video but it's also a very powerful stills camera if you're interested in getting super wide angle shots on a budget, especially if you want to shoot underwater.

If you are into shooting video of the 4K variety, don't overlook this tiny but powerful little camera. Here's a short test film I put together to show the 4K chops of the **GoPro Hero4 Black**.

THAIBODIA - 4K UHD GoPro



The 4K Image Quality

I was so impressed with the clarity of the 4K video captured by the GoPro that I decided to shoot a little film while visiting Thailand and Cambodia. With only a cheap tripod and a slider you can create some beautiful looking 4K footage. To watch the above film in 4K click on the Youtube quality setting and set it to 2160p. Even if you don't have a 4K capable screen you'll still benefit from seeing that glorious extra resolution.

The 4K image quality is amazing when you consider the price tag, but only in the right light. When shooting in dark or shaded conditions the image quality takes a massive drop with lots of noise and hardly any shadow detail.

In low light conditions you'll get better results on your still images by shooting in the 8 Megapixel still mode.

Not Just an Action Cam

With my film I set out to create a little art piece rather than the usual death-defying action or skateboard fails that you usually see from GoPro footage. It's actually when using the GoPro in a fairly slow and stable setting, that you really get to see that crisp 4k at its best.

Once you start jumping around and adding major vibration to your recordings, you might as well just shoot in 1080p and save yourself some disc space.



Shooting Stills

Once I'd gotten over the outrageous fisheye (Wide and SuperWide) perspective of the GoPro, the sharpness of that cheap little piece of glass blew me away. Not only are stills very, very crisp if you keep the camera still, but the 4K footage is so sharp that you can easily grab stills from frames in your video and that is where the GoPro really excels for stills photography.

Yes, you'll get better dynamic range and overall image quality from hitting the shutter button to actually take a still image, but if you missed the moment, the 4K video recording most likely didn't.

Imagine having a DSLR that shoots at 30 fps. When that day arrives you'll never miss a moment of action but I doubt you'll be paying \$500 for that kind of power. Until that day, the **GoPro Hero4 Black Edition** will have to do. It fits in your pocket, weighs less than a muffin, and can go underwater when placed in the skin-tight waterproof housing.

Try doing that with your DSLR. Actually, don't!



Ease of Use

In terms of what photography settings you can control, things are very limited. You can't set focus, do long exposures, or have any control over depth of field. You can change the white balance, ISO, and exposure value by two stops but that's about it.

The idea with the GoPro is switch it on and start shooting. It's about as automatic as it gets.

You get three buttons to set the shooting mode and the preferences of those modes. Sounds simple but having used professional cameras for years I have to say this is really frustrating. I was forever switching into the wrong mode accidentally which ruined some shoots. I'd often think I was shooting a 4k video sequence when in fact all I'd done was take a still image.

You'll get much better control of the GoPro if you use the Smartphone app but even that is limited. The image quality that gets transmitted to your phone is so bad that you won't be able to clearly see everything in your frame, meaning you'll get some nasty surprises during editing.



The Touch Screen Option

For an additional \$90 you can attach a touch screen to the back of the GoPro. I found it to be a total waste of money and much prefer using the phone app. Of course, the app option won't be much help for surfers and water warriors in general, in which case, the touch screen is better than nothing.

I guarantee that it will drive you crazy the first time you try the Unlock Touchscreen swipe action, that you're forced to use through the plastic housing. It's kind of like scratching an itch while wearing boxing gloves.



Battery Purgatory

I take back all my previous complaints about the battery life on mirrorless cameras. I've had sneezes that lasted longer than the battery in the GoPro. If you're really lucky you'll get around 20 minutes of battery life in clement temperatures. I shudder to think what the battery life would be in subzero temperatures.

Dynamic Range

I realize I'm totally spoiled with a background using DSLR and **mirrorless cameras** so it's unfair to expect the GoPro to perform on that level, especially at just \$500. I have to say though that the dynamic range of the GoPro 4K footage is pretty feeble. You'll have to get used to blown out skies and murky shadows that you just can't recover in post.

I'd happily pay considerably more for a Pro version that allowed for better image quality and some kind of RAW video format that allows better control of shadows and highlights, but I'm not sure if that's currently possible for such a tiny little camera.



There was no chance of recovering the blown out highlights of the trees in the background in this 4K video frame.

Exposure Shifting Issues

I had to scrap a lot of footage due to the fact that you can't lock the exposure on the GoPro. As you move the camera around it's constantly adjusting exposure. While that's an essential requirement for action footage recording, it totally ruins artistic slider shots. If ever a Pro version of the GoPro becomes available I'd like to have a RAW video format and exposure locked where I decide to set it.

Slow Motion

Another cool feature of the latest GoPro is that it can record at 120 fps (frames per second) but unfortunately that's only at 1080p resolution. When played back at 30 fps in editing software you get super smooth slow motion. I can't wait for the next generation of GoPro that records 4K at 120 fps.



Should GoPro Owners Upgrade

If you already own a previous version of the GoPro and you're thinking of upgrading, I'd ask yourself if the 4K recording means that much to you. If you're recording dirt bike adventures in 4K you'll not see much of an improvement over upscaled 1080p footage. All that shaking and fast movement really makes the 4k quality pointless.

If you're filming drone or slider footage, the 4K image quality is a major upgrade and gives you that added option of grabbing sharp stills from the frames of your video.

Things I love about the GoPro4 Black Edition

- Fits in your pocket
- Sharp 4K video for under \$500
- It's waterproof (when placed in the housing)
- Weights less than a muffin
- Super wide angle for less than the cost of a DSLR fisheye lens
- Ideal for drones
- The phone app

Things I dislike about the GoPro4 Black Edition

Battery life is beyond pathetic

You cannot lock the exposure value

The three button controls are annoying

The optional touchscreen is painful to use

Conclusion

Grumbles aside, I'm still impressed by the things I can do with this sub \$500 camera. Capturing crispy 4k video footage from a palm sized toy is a breath of fresh air for me, especially when you consider the heavy gear I usually lug around on my travels. I'm giving the GoPro Hero4 Black Edition a generous four out of five stars.

Summary	
Reviewer	Gavin Hardcastle
Review Date	2015-03-15
Reviewed Item	GoPro Hero 4 Black Edition
Author Rating	★★★★☆



Read more from our **Cameras & Equipment** category



Gavin Hardcastle

is a fine art photographer, writer and instructor from BC, Canada. Become a better photographer today with his free photography guides and photography tutorials. You can learn from Gavin directly at his global **photography workshops** in some of the worlds most spectacular locations. Upgrade your post processing skills with his online video tutorials for Photoshop and Lightroom.

I need help with...



LANDSCAPE
PHOTOGRAPHY TIPS



PORTRAIT
PHOTOGRAPHY TIPS



PHOTO
COMPOSITION TIPS



BEGINNER
PHOTOGRAPHY TIPS



PHOTO POST
PROCESSING TIPS



GET STARTED WITH
CAMERAS AND GEAR

Join over 1.6 million Subscribers!



I need help with...



LANDSCAPE PHOTOGRAPHY TIPS



PORTRAIT PHOTOGRAPHY TIPS



PHOTO COMPOSITION TIPS



BEGINNER PHOTOGRAPHY TIPS

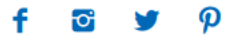


PHOTO POST PROCESSING TIPS



GET STARTED WITH CAMERAS AND GEAR

[About dPS](#) / [Write for dPS](#) / [Advertise on dPS](#) / [Affiliate Program](#) / [Terms and Conditions](#) / [Privacy Policy](#)



© 2006 - 2024 Digital Photography School, All Rights Reserved / [Disclaimer](#)