

## Group test

# Helmet cameras

Reporting careless or dangerous driving can be easier with video evidence to back you up. Prolific YouTube broadcaster **Dave Brennan** reviews helmet cameras

Digital video cameras that fit to a cycle helmet or handlebar have been designed largely with recreational users in mind – mountain bikers who want to film a section of singletrack, for example. But they're just as useful for cycle commuters, to log incidents of careless or dangerous driving.

Video footage can and has been used in court to convict road users who have endangered cyclists

If you don't wear a helmet but still want the camera to track your vision, head straps are available for some cameras.

The quality of helmet cameras has

increased significantly over the last few years. Whilst there are still plenty of cameras available at lower resolution, the majority of new cameras are providing High Definition (HD) video.

Video from this test can be viewed at: [www.magnatomp.net](http://www.magnatomp.net).

### Video quality

Resolution is important for video quality but it's not the whole story. Differences in bit rate (amount of data used to store the images) and compression (the way the data is reduced in size) can have big effects on the quality. A camera's sensitivity to light is also important, especially if you plan to use it at night. The simplest way to assess a camera's footage is to look for user videos on sites such as YouTube.

### Memory

How much memory your camera needs depends on the camera's capability (is it HD or lower resolution?) and the length of your commutes. Manufacturers usually quote expected data requirements per minute or hour. Take these into account when buying the camera, as you may need to spend extra on memory cards to increase capacity.

### Weatherproof

Unless you are a fair weather cyclist you'll need a camera that can cope with the rain. Most cameras now are at least splash proof. Some need a special waterproof case, to be purchased separately.

### Battery life

You don't want to have to stop and change batteries en route, so battery life must at least equal your typical commuting times – and longer is better. Since you'll be using it often (recording over unneeded footage), you'll want a camera with rechargeable batteries. Many cameras allow batteries to be recharged while remaining in the camera.

Battery lives assume use at 21°C. It's rarely that warm at 8am, so expect shorter run times then.

### Sound

Microphone technology is not rocket science but many cameras don't do sound well.

Wind noise can be a big problem if the camera hasn't been designed with that in mind. Watching online user videos can help to determine whether a camera can record sound well, or you could look for a camera that can use an external rather than integrated microphone.





### CONTOUR GPS £299.99

This is a well-constructed camera, whose sturdy aluminium shell should cope well with the inevitable knocks of normal use. It is very easy to use, with laser sights and a rotatable lens to help with camera positioning. There are a number of mounting options, although a dedicated cycle helmet attachment is not supplied with the camera (it's available separately). Whilst the camera is not totally waterproof it is sold as splash- and weather-proof, so should cope with most conditions. Daytime video quality is good, though it is softer than the POV.HD. However, it's the best at nighttime, coping well in urban lighting and even providing some useful video when using bright bike lights on dark lanes. It also has the best sound quality of the cameras on test, coping well with wind. Weight: 150g. [www.actioncameras.co.uk](http://www.actioncameras.co.uk)



### POV.HD £499.95

When you unpack this half-a-grand camera you can feel the quality. The separate recorder and camera (connected via a cable) are sturdy and waterproof. The recorder, which you would need to store in a bag or pocket, is quite large and heavy. There are plenty of camera-mounting options. Features include a remote control, which could be mounted on you or your bike, and an LCD screen that helps to position the camera correctly and to review footage. Daylight video quality is excellent, the best on test. Number plates are visible even on fast passing cars. However, the nighttime footage, even with exposure settings optimised, was disappointingly poor. It is possible that future firmware upgrades could improve this. Weight (inc. recorder) 400g. [www.dogcamSPORT.co.uk](http://www.dogcamSPORT.co.uk)



### DOGCAM BULLET HD £99.95

This is the cheapest of the HD helmet cameras on test, and that's evident in the video and the features. It is a tiny 'point and shoot' camera. The video quality is the lowest of the cameras on test, but considering the lower cost, isn't too bad. Its sensitivity in the dark is actually quite good, so this camera could be used year round. The on/off button is too sensitive, so it is easy to stop or start recording accidentally, and the very small LED status indicator can be difficult to see. The field of view (the width of the video) is very restricted. This limits the peripheral view of video and makes it difficult to point the camera correctly. Sound quality also suffers. However, if you're on a budget, and looking for HD, then you are unlikely to get any better at this price. Weight: 32g. [www.dogcamSPORT.co.uk](http://www.dogcamSPORT.co.uk)



### DRIFT HD170 £279.98

The bright orange Drift HD is a large and conspicuous camera. It comes with a good helmet mount and has a rotatable lens and an LCD screen, ensuring the camera can be pointed correctly. The camera is waterproof enough for UK weather, while the rubberised outer shell feels like it will cope with knocks. Its daytime video quality is similar to the Contour's, though perhaps suffering a little more distortion due to video compression. Its specific nighttime mode produces reasonable video, but does not have the same low-light capabilities as the Contour. The Drift HD is let down by its poor sound. Wind noise is a major issue. You can attach an external microphone, but the camera would no longer be weatherproof. Weight: 138g. [www.actioncameras.co.uk](http://www.actioncameras.co.uk)