

Cyclist Safety Cameras

Why Use a “Safety Camera”?

While negotiating the hazards of Britain’s busy roads, more and more cyclists are opting to use cameras to capture careless, intolerant or intimidating driving. Increasingly footage is being recorded as a personal insurance policy in the case of accident, near miss or other incident. A good quality video provides an evidential record which is invaluable particularly in the absence of other witnesses or when cycling alone. Even conscientious drivers make mistakes (as do careful cyclists), but inattention at the wheel of tons of fast moving metal is an inordinately greater hazard to those who are vulnerable and unprotected.

What sort of Camera?

It’s important to distinguish between two basic types available on the market. Most common are “sport” or “action” type cameras, typically the popular GoPro and similar which do an excellent job for their intended purpose. Ideal for short action sequences, most have shortcomings that make them less effective as a safety camera. Many stop recording without **adequate warning** in as little as an hour when their internal battery becomes depleted or the memory card becomes full. Some are bulky and/or need a supplementary waterproof case.

An effective safety camera must be compact, lightweight, waterproof have a good quality image and be capable of running continuously **without intervention** for long periods. There should be **no need to swap or recharge batteries or replace the memory card**, even on an extended day ride.

Attaching a Forward Facing Safety Camera.

Helmet or headband mounting provides a **far superior evidential record** than fitting a camera to handlebars. High up, the camera records virtually everything that you see, including side approaching hazards, your own actions, it confirms that you did look right or left and did hand signal your intentions. If you are separated from your bike during the aftermath of an incident, the camera still remains effective recording both sound and vision. Bullet type cameras are ideal for head mounting, being small, lightweight and unobtrusive. Rectangular cameras tend to be bulky and awkward and look somewhat incongruous stuck on the top of your head!

Tip – to ensure the camera captures what you see, move your head (not just your eyes) towards potential side hazards!

Tip - don’t forget safety cameras record your own misdemeanours as well as those of others!

Tip – don’t forget to switch the head camera off when you visit a public convenience!

Rearward Facing Safety Camera.

Best located on the bike frame, seat post, rack, or on top of a rigid mudguard, a rearward facing camera provides additional evidential footage and is particularly good at identifying vehicles and drivers approaching from the rear. Two cameras are excellent at capturing incidents involving other accompanying cyclists during a group ride.

The table on the following page is a check list for **essential safety camera** features:



Cyclist Safety Camera Checklist

Essential Features	Detail	Notes	✓
Waterproof, compact, unobtrusive and lightweight.	Totally waterproof, not just splash proof.	At least rated IP66, but better IP67 (i.e. capable of briefly surviving immersion into water).	
Longevity of battery run time.	Virtually all cameras have limited internal battery runtime (as little as an hour and rarely more than two). Many stop working without adequate warning when the battery runs flat.	Choose a camera that has the facility to run on an external battery pack – without compromising water resistance! Lithium Ion/ Polymer rechargeable batteries have higher energy densities than older technology.	
“Unlimited” video capacity by employing continuous “Loop Recording”.	Loop recording is where the camera automatically records a series of fixed length files. The most recent file overwrites the oldest when the memory is full.	Most cameras use solid state SD or Micro SD cards with a capacity up to 32 GB. Use only faster (suitable for video) “Class 10” versions from a reputable supplier.	
Time and date stamp.	The camera continuously records time and date on the video image.	Important if video is needed for evidential reasons.	
High quality image.	Minimum 720p, but better 1080p High Definition. 1080p will fill the memory card faster.	Each video frame is made up of “dots”, 720p records 1280 across and 720 down. 1080p captures more detail with 1920 dots across and 1080 down.	
Fast frame rate for a judder free image.	Minimum 25 frames per second. Better 30 FPS or more.	High frame rates will fill the storage card more quickly.	
Wide angle lens to capture more peripheral detail.	The wider the angle of view the better, 110 degrees or more. Many sport cameras have a narrower field of view.	Wider angle lenses tend to distort or “Fisheye” the image, not an issue for a safety camera.	
Continuous sound recording.	Ability to record sound adequately without an external microphone.	External microphone must not compromise the waterproof integrity of the camera.	

What’s my Setup?

I now use two 1080p RoadHawk Ride R+ cameras as their specification entirely satisfies the above checklist. Separate external lithium ion 5600 mAh USB battery packs connected via waterproof leads provide about 7 hours of continuous runtime. After a very near miss by an overtaking delivery van, the older 720p RoadHawk Ride cameras that I previously used for cycling are now permanently hardwired to my car electrics using the dedicated leads that came with the units when new.

YouTube review of 1080p RoadHawk Ride R+:

<https://www.youtube.com/watch?v=KhpIJ71QXEI>

RoadHawk RIDE R+ availability:

<http://www.dogcamSPORT.co.uk/roadhawk-ride-r-bullet-camera.html>

Waterproof Lead for RoadHawk RIDE R+:

<http://www.dogcamSPORT.co.uk/bullet-hd-2-usb-power-cable.html>

Roadhawk R+ Waterproof Power Pack (4 Hours+ runtime)

<http://www.dogcamSPORT.co.uk/waterproof-bullet-battery-pack.html>

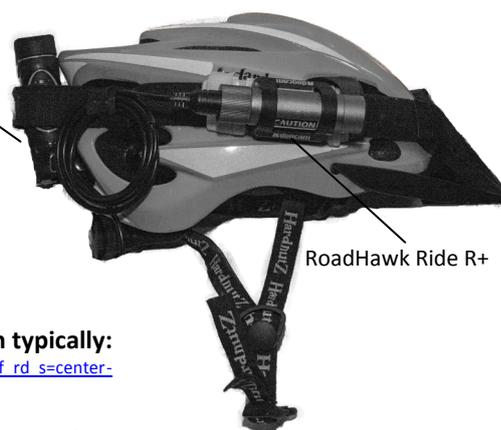
720p RoadHawk Ride availability:

<http://www.dogcamSPORT.co.uk/roadhawk-ride.html>

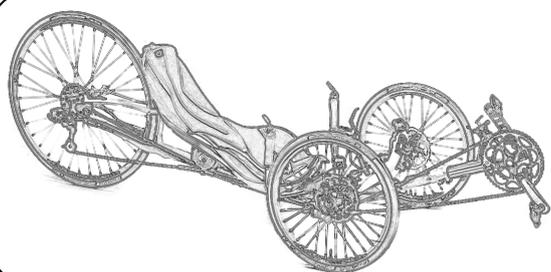
USB battery packs for long runtimes are available cheaply on line from Amazon typically:

http://www.amazon.co.uk/gp/product/B00P8SY7HQ/ref=s9_simh_gw_p23_d1_i2?pf_rd_m=A3P5ROKLSA1OLE&pf_rd_s=center-2&pf_rd_r=18E2KAKC95VD15FBXG0W&pf_rd_t=101&pf_rd_p=455344027&pf_rd_i=468294

5600 mAh
USB battery



Note: Most USB battery packs are not water resistant – a plastic bag, cling film or similar will suffice.



RecumbentTrikeRider on YouTube

<https://www.youtube.com/user/RecumbentTrikeRider>