

# GO PRO HERO HIGH DEFINITION CAMERA

## FREQUENTLY ASKED QUESTIONS AND TROUBLE SHOOTING GUIDE

### FAQs

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1. What kind of batteries does the camera use?

The HD HERO kits include a rechargeable lithium ion battery pack. The battery is charged directly through the USB cable when connected from the camera to a computer or USB wall/car power adapter. The battery pack is designed specifically for use in the HD HERO camera and the rigorous activities that it is put through.

2. How long will the batteries last?

You will get approximately 2.5 hours of continuous video recording time in mild and warmer temperatures. Cold temps will reduce run times somewhat, however the HD HERO camera helps to minimize this by transferring the normal heat generated during operation towards the battery.

3. Does the camera have built-in memory?

No, the HD HERO camera does not have any built in memory. You will need to use an optional memory card with your GoPro camera for recording.

4. What size and type of memory card does the camera take?

The HD HERO camera supports SD/SDHC cards up to 32GB (any SD card over 2GB is considered a SDHC card). We recommend name brand SDHC cards with a class 4 rating or higher. The two cards that we mostly use in house, which work well are the Kingston and Patriot brand class 4 cards. We mostly use the 16GB class 4 card, as it gives you the most 'bang for your buck'.

5. How much recording time do you get?

Recording time will vary according to the resolution setting used and the card capacity. Here are the average recording storage times for a 32GB SD card: 1080p (30 fps): 4h 21m 960p (30 fps): 5h 26m 720p (60 fps): 4h 21 720p (30 fps): 8h 09m WVGA (60 fps): 8h 09m

6. What is the picture resolution?

The camera captures 5 megapixel digital images.

7. What is the video resolution?

You have five different video resolution options: 1080p = 1920x1080 pixels (16:9) 960p = 1280x960 pixels (4:3) 720p = 1280x720 pixels (16:9) 720p = 1280x720 pixels (16:9) WVGA = 848x480 pixels (16:9)

8. What is the video format?

The camera records in MPEG4 (.mp4) files using h.264 compression

9. Is there a zoom function?

The GoPro cameras do not have zoom, however you can vary the field of view by changing the resolution settings. At 1080p you will have a 127 degree field of view, while at the other settings you will have a 170 degree field of view.

10. What is the maximum water depth to which you can take the cameras?

You can take the HD HERO cameras in the waterproof housing to 180 feet (60 meters)

11. Is the camera compatible with Windows? Or the Mac OS?

Either. The camera is compatible with both Windows AND the Mac OS. You can use them with Windows XP (service pack 2 or later) or Vista, and Mac OS X 10.4.11 or later.

12. Are the digital cameras all the same for each kit?

Yes, all HD HERO kits include the same exact camera and housing, but are packaged with different mounting accessories.

13. How can I purchase the HD HERO backpack or HD wrist housing accessories?

The Battery backpack, LCD backpack, and HD wrist housing accessories have not been released yet. The backpack accessories are expected to be released Summer 2010. The HD wrist housing will be released in Spring 2010. You can sign up for our online newsletter to be notified of the releases.

14. How can I purchase the USB wall or car charge adapter?

We don't yet stock these items, however the USB wall and car charge adapters are standard items that can be purchased at most electronics stores. You may even already have one for your cell phone or mp3 music player, that will be compatible with the HD HERO camera.

15. Where can I find the firmware update for the HD HERO camera to add the UP/UPd options to the settings menu?

The firmware update for the HD HERO camera has not yet been released. We are currently developing a number of different features such as the UP and UPd settings that we will be releasing as soon as possible in a firmware upgrade. You will be able to download the firmware upgrade from our website for free once released. To be notified when the updates are released, you can sign up for our online newsletter.

16. Can I get a live video output from the camera?

Currently the HD HERO camera is set up to only allow playback of previously recorded files when connected. We are however working on a free downloadable firmware update, that will allow the camera to provide for a live video output when connected via the AV cables. You can sign up for our online newsletter to be notified of it's release.

17. Can I record in the standard PAL 25/50 fps rates?

Currently the HD HERO camera will only record at 30 or 60 fps. We are however working on a free downloadable firmware update, that will allow the camera to record at the PAL standard 25/50 fps. This will make it easier to edit the HD HERO videos together with any other recordings done at the PAL 25/50 rates. You can sign up for our online newsletter to be notified of it's release.

18. Can I power the HD HERO camera through an external power source?

Yes, when you have the HD HERO camera connected via the USB cable to a USB power adapter (not the computer), you will be able to simultaneously record video or pictures and charge the battery. We will also be releasing a skeleton housing for the HD HERO camera to allow access to the camera's USB and AV ports while mounted.

19. What is the rubber plug included in the small bag of accessories for?

The orange or white rubber part is a locking plug that can be inserted in between the arm ends of the quick release buckle. Having the rubber plug inserted prevents any accidental release of the quick release buckle, and also tightens up the fit. The looped end of the plug can be attached to the thumbscrew to keep it secure when not locked into place.

20. Can the camera be used for diving?

Yes, the camera housing is rated waterproof down to 180', and our head strap mount is a great way to wear the camera on your forehead just above the diving mask. Please note that due to the curved lens of the waterproof housing for the HD HERO camera and standard def Wide HERO cameras, you do get a slight loss of sharpness/focus to underwater images. In video mode with the standard def camera this hasn't been very noticeable due to the lower resolution. With the HD HERO camera this becomes more evident at the higher resolutions. Our developers are looking into whether we can possibly offer a different housing or housing lens in the future to correct this issue. Here is a sample videos to better illustrate the video quality underwater: HD HERO underwater: <http://vimeo.com/7743268>

21. What are the minimum computer system requirements to be able to handle full 1080p or 720 60fps video files?

For Windows-based computers, we require:

- Windows Vista or later
- 3.2 GHz Pentium 4 or faster
- Direct X 9.0c or Later
- At least 2 GB of system RAM
- Video card with at least 256MB of RAM

For Mac OS-based computers, we require:

- Mac OS X v10.4.11 or later
- 2.0 GHz Intel Core Duo or faster
- At least 2 GB of system RAM
- Video card with at least 256MB of RAM

22. I use a PC, what programs can be used to view and edit the videos?

Windows Media Player or Movie Maker (download the latest HD-capable version and also download a H.264 decoder to update media or movie maker). CoreCodec CoreAVC is one company that offers a codec pack for h.264. VLC media player. Download this free video media player that supports .mp4 h.264 files: <http://www.videolan.org/vlc/> For other PC based editing programs, we have had several customers give good reviews of the Pinnacle Studio HD editing software which is compatible with the MP4 files. Adobe Premier Elements PC based program that is compatible with MP4 files. If you have an existing program that does not support MP4 files, you also have the option of using a file conversion software such as Squared5 or VLC Media Player to convert your files into a format compatible with your particular editing program.

## TROUBLE SHOOTING GUIDE

1. The video plays back choppy or broken up.
  - To ensure that the video is recorded properly, please playback the videos directly on a TV with the supplied HD and AV component cables. You should get proper smooth playback on your TV.
  - Choppy video playback will usually come down to the computer not being able to process the data fast enough of the large HD video files.
  - First, please make sure you have downloaded the file to your computer and are not playing back the file directly off the SD card. You will not be able to get proper playback if playing directly from the SD card.
  - If having choppy playback from the downloaded file, you can try restarting your computer and keeping all other applications closed while playing back the video. This will maximize the computer's processing power for video playback.
  - If still having choppy video playback, then your computer system most likely does not have enough processing power to handle the high data rate of full HD or 60fps video files (r3 or r5). Recording at the lower resolution settings of r1 or r2 should allow you to playback the files smoothly on your computer
  
2. The camera will not record video.
  - Check the memory card to make sure the locking tab on the side of the SD card is not in the 'locked' position.
  - If the card is unlocked, there is most likely a compatibility issue with the SD card. First, please try reformatting the card using the delete all function in the setting menu. If that doesn't help, then please try out a different SD card. SD card performance varies widely between brands and class ratings. We recommend sticking to name brand SD cards with a class 4 rating or higher. We mostly use the Kingston and Patriot class 4 cards without any issue, so can safely recommend those.
  
3. The computer won't recognize the camera when I plug it in.
  - Restart the computer.
  - Try plugging the cable into the camera and computer with camera off.
  - Make sure the USB cable connection is good on both ends.
  - Make sure you have a SD card inserted into the camera. (without a SD card, the computer will not have any external disk drive to recognize since there is no internal memory)
  - Power up the camera and the computer should recognize the camera/SD card as an external disk drive.
  - No luck? Please contact our support team by using <http://gopro.com/support> for further assistance.
  
4. The camera will not power on.
  - Remove the battery and SD card from the camera.

- Reinsert the battery into the camera.
  - Connect the camera via the USB cable to your computer or USB wall/car charge adapter. Keep the camera powered off, and the red LED on the front of the camera should light up to indicate that the battery is charging. Once the battery is fully charged, the red LED will turn off.
  - Once fully charged, please try powering on the camera with no SD card by pressing the power/mode button.
  - No luck? Please email our support team through <http://gopro.com/support> for further assistance.
5. Underwater images are out of focus.
- Due to the curved lens of the waterproof housing for the HD HERO camera and standard def Wide HERO cameras, you do get a slight loss of sharpness/focus to underwater images. Our developers are looking into whether we can possibly offer a different housing or housing lens in the future to correct this issue.
6. I'm recording at 60fps, but the video does not playback in slow motion.
- Just because you record at a higher frame rate, it does not mean that the video automatically plays back in slow motion. Recording at 60fps simply provides for a smooth video playback when you do slow down the playback speed on your video player. You will need to manually change the playback speed settings of your video playback software to a setting lower than 1 x for slow motion.
7. The inside of my housing lens keeps fogging up.
- Temperature differences between the air inside and outside of the housing, can cause condensation to occur on the inside of the lens. Here are several things you can do to prevent fogging of the lens.
  - If you are not using the camera in an application where the closed back door is needed, use the open back door. The open back door will allow the outside in inside housing temps to be equalized so that no fogging will occur.
  - Close the housing in a dry atmosphere. Using a hair dryer on the inside of the housing right before closing can eliminate any moist air.
  - GoPro has developed it's own [anti-fog accessory](#) for the HD HERO camera. The kit includes 3 sets of desiccant inserts, and retails at \$14.99. Each set lasts 4-5 uses and can be dried in an oven (3 minutes) to be reused.
8. 'SoS' is appearing on my LCD screen.
- If you see SoS that means your file was corrupted during filming for some reason. While SoS is showing on the screen, press ANY BUTTON on the camera and the camera will repair the file. This almost always works. It's a feature that didn't get mentioned in the instructions because it was added to the camera right before launch.

9. My PC will not playback the .mp4 video files.
  - If using Windows Media Player or Movie Maker, make sure you download the latest HD-capable version and also download a H.264 decoder to update media or movie maker. CoreCodec CoreAVC is one company that offers a codec pack for h.264.
  - VLC media player is another video media player program that you can download for free, which supports .mp4 h.264 files: <http://www.videolan.org/vlc/>
  
10. The camera does not power on into the correct default setting.
  - To have the camera power on in the correct mode, please select the appropriate option in the settings menu (F, P, 3, PES) and then press the Power/Mode button to save the setting that you selected. Once you have the correct setting selected, exit the menu and turn off your camera. When you go to turn it back on, just press the Power/Mode button once briefly. Your camera should then go into the correct mode. If you hold down the power/mode button for too long or are accidentally hit it twice, you will end up powering on the camera in the next sequential shooting mode.

We didn't answer your question? Please contact us using the form at <http://www.gopro.com/support> and a member of our helpful support team will get back to you ASAP.