

GoPro Hero4 Black

Firmware Version 2.00.00

Video

Camera Weight 3.1oz (89g) W/ housing 5.4oz (152g)

Video Mode	Screen Resolutions	Frames Per Seconds NTSC/PAL	Field of View (FOV)
4K	3840 X 2160	30, 25, 24	Ultra Wide
4K Super view	3840 X 2160	24	Ultra Wide
2.7K	2704 X 1520	60, 50, 48, 30, 25, 24	Ultra Wide, Medium
2.7K Super View	2704 X 1520	30, 25	Ultra Wide
2.7K 4.3	2704 X 2028	30, 25	Ultra Wide
1440p	1920 X 1440	80, 60, 50, 48, 30, 25, 24	Ultra Wide
1080p	1920 X 1080	120, 90, 60, 50, 48, 30, 25, 24	Ultra Wide, Medium, Narrow
1080p Super View	1920 X 1080	80, 60, 50, 48, 30, 25, 24	Ultra Wide
960p	1280 X 960	120, 60, 50	Ultra Wide
720p	1280 X 720	240, 120, 60, 50, 30, 25	Ultra Wide, Medium, Narrow
720p Super View	1280 X 720	120, 60, 50	Ultra Wide
WVGA	848 X 480	240	Ultra Wide

SuperView video mode captures the worlds most immersive wide angle perspective. Allowing you to capture more of yourself and your surroundings in the shot.

Video Formats

H.264 codec, mp4 file format

Video + Photo

Capture video and time lapse photos at the same time. Available in 5, 10, 30, 60 second intervals.

Video Resolutions	Video Frames Per Second	Video FOV
1440p	30, 25, 24	Ultra Wide
1080p	30, 25, 24	Ultra Wide, Medium, Narrow
720p	60, 50, 30, 25	Ultra Wide, Medium, Narrow

Looping Video

Record a continuous video loop that overwrites itself until press the shutter button to stop and save it.

Auto Low Light

Auto low light mode automatically adjusts frame rates to lighting conditions for enhanced low-light performance.

Photo Mode

Resolutions	Screen Resolution	Field of View
12mp (default)	4000 X 3000	Wide
7mp	3000 X 2250	Wide, Medium
5mp	2560 X 1920	Medium

Continuous Photo (up to 30 seconds)

Hold down the shutter button to continuously capture a series of photos until the shutter button is released.

Continuous Interval

3 photos/ 1 second (default)

5 photos/ 1 second

10 photos/ 1 second

Time Lapse Video

Automatically creates a video from frames captured at set intervals. Available only in 4K and 2.7K 4.3 resolutions.

Time Lapse Video Intervals

0.5, 1, 2, 5, 10, 30, 60 seconds

Multi-Shot Mode

Resolutions

12mp (default)
7mp
5mp

Screen Resolution

4000 X 3000
3000 X 2250
2560 X 1920

Field of View

Wide
Wide, Medium
Medium

Burst

Capture up to 30 photos per second.

Burst Rate

30 photos/ 1 second (default), 30 photos/ 2 seconds, 30 photos/ 3 seconds, 30 photos/ 6 seconds
10 photos/ 2 seconds, 10 photos/ 2 seconds, 10 photos/ 3 seconds
5 photos/ 1 second
3 photos/ 1 second

Time Lapse

Automatically capture a series of photos at timed intervals.

Photo Intervals

0.5, 1, 2, 5, 10, 30, 60 seconds

Night Lapse

Capture a series of photos at specific intervals and exposure times.

Night Lapse photo intervals

15, 20, 30, 60 seconds
2, 5, 30, 60 minutes

Night Photo

Capture a single photo with a customizable exposure time.

Shutter

Applies to both **Night Photo** and **Night Lapse** modes which determines the amount of time that the shutter is open.

Shuttersetting

Auto (default)
Fixed (custom)

Description

up to 2 seconds
2, 5, 10, 15, 20, 30 seconds

Advanced Video and Photo Capture Settings

Protune

Protune unlocks the GoPro Hero4 Blacks full potential, delivering minimally compressed, cinema caliber video optimized for professional productions, and advanced manual controls for photo and video. Open your creativity with customizable settings for color, ISO limit, white balance, sharpness and exposure.

Protune Settings

White Balance Adjusts the overall color tone of videos and photos.

White Balance Settings

Auto (default)
3000K
5500K
6500K
Native

Recommended Lighting Conditions

Automatically adjusts color tone based on environmental conditions
Warm light incandescent, sunrise, sunset or golden hour lighting
Slightly cool light, cool fluorescent, average daily light
Cool light (overcast conditions)
Standard optimized color best for post production work

Color

Allows you to adjust the color profile of your video and photos.

Color Setting

GoPro color (default)
Flat

Color Profile

GoPro color profile
Flat, neutral color profile that can be color-corrected to better match footage captured with other equipment offering greater flexibility in post-production.

ISO Limit

ISO Limit

Adjusts the camera's sensitivity in low-light environments, and creates a balance between brightness and resulting image noise. Image noise refers to the graininess in the image.

Protune for Video ISO Limit

Setting

6400
1600 (default)
400

Video Quality

Brighter video in low light
Moderately bright video in low light, increased image noise
Darker video in low light, reduced image noise

Protune for Photo ISO Limit

Setting

800
400
200
100

Photo quality

Darker photo in very low light, increased image noise
Darker photo in low light, moderate image noise
Bright photo in indoor lighting, marginal image noise
Bright photo in outdoor daylight, minimal image noise

Sharpness

Controls the sharpness of your video or photos

Sharpness Setting

High (default)
Medium
Low

Quality

Ultra sharp video and photos
Moderately sharp video and photos
Softer video and photos that allows for more flexibility in post-production

Spot Meter

Spot meter is ideal for filming within a dark space with the camera point towards a brighter setting (like filming the outdoors from within a car).

Exposure Value Compensation (EV COMP)

Effects the brightness of your video. Adjusting this setting can improve image quality when shooting in environments with contrasting lighting conditions.

EV COMP Settings

-2.0
-1.5
-1.0
-.05
0 (default)
+.05
+1.0
+1.5
+2.0

Storage (Memory)

- MicroSD memory card with class 10 UHS-1 rating required
- Up to 64GB capacity supported
- Record times will vary between resolutions and frame rates

Ports

Mini USB

- Charging
- Connecting to computer for playback, file transfer, charging
- Supports optional 3.5mm stereo microphone adapter (sold separately)
- Supports playback with optional composite TV video cable (sold separately)

Micro HDMI

- Supports playback to HDTV with optional cable (sold separately)

MicroSD

- Memory card

Audio

- Format: 48kHz sampling rate, AAC compression
- Advanced AGC (Automatic Gain Control) with multi band compressor
- Internal microphone:
 - Mono
 - External microphone supported with 3.5mm microphone adapter (sold separately) High quality ADC (analog to digital converter) to support studio quality microphones.