

DIMIKA 1080 FULL HD Action Camera

DIMIKA

User Manual

Version 1.0

DIMIKA 1080 HD User Manual

Probably the most powerful video camera in its size

The DIMIKA Action Cam is an extreme powerful video camera which is designed for all activities where light-weight, small-size and high performance are required. Equipped with a true 1080p High Definition (HD) Video Image Sensor and a latest Video Processor, the DIMIKA supports high-end features such as G-Sensor, Time-Lapse, Wide Dynamic Range, Motion Detection and Low-Light-Sensitivity. Use it as a flying eye on a Quad -Copter or RC-Aircraft, as a Dash-Cam in your vehicle, as a Black-Box on your bike, as an Action Cam on the Hang-Glider or even as a Webcam on the computer - the DIMIKA camera is an all-rounder.

Before using the product, please read this manual carefully and keep it properly. This User Manual will show the user how to use and provide detailed information regarding to operation, configuration, upgrade notes and technical specifications, etc. This User Manual is a work-in-progress and will be constantly updated. In case of any problems or questions, please refer to the official website for help. <http://dimikacamera.com/dimika-support/>

IMPORTANT SAFETY PRECAUTIONS

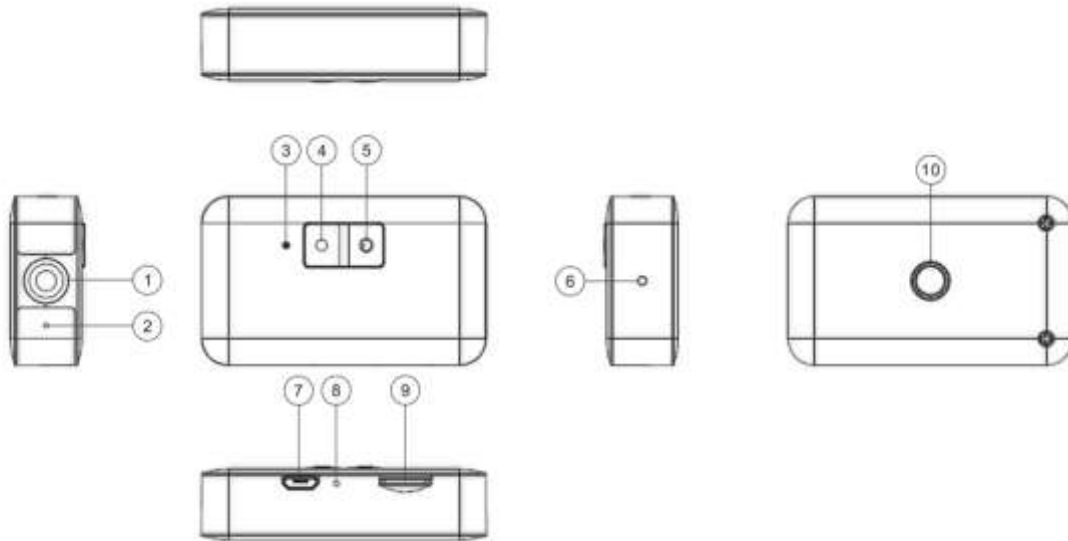
- No naked flames sources, such as candles, should be placed over or near the product.
- Keep the camera clean and never store it next to a heat source or in dirty, humid or wet places.
- Press the camera's buttons gently. Pressing them too hard can damage the camera.
- Do not subject the product to harsh impacts. Do not drop it. This may result in damage to the product.
- Do not attempt to dismantle or repair this camera by yourself, currently there are no user-serviceable parts inside. Refer servicing to qualified service personnel only.
- We will not be responsible for any memory loss caused by product damage, repairs or other reasons.
- Please operate the unit correctly as stated in this manual.
- In order to prevent program failure, never disconnect the camera suddenly from a PC during file transfers.
- Use a slightly dampened lint-free cloth to clean this camera. Do not dismantle the camera or use liquid cleaners or aerosol cleaners to clean the camera.
- The supplier or retailer accepts no liability for lost, corrupted or damaged data. It remains the responsibility of the user to ensure that they perform consistent data backups during the use of this product.
- The use of controls, adjustments, or procedures other than those specified herein may result in exposure to shock and/or electrical or mechanical hazards.
- Before plugging or unplugging the micro SD card, make sure your hands, the camera, and the card are completely dry.
- Damage caused from misuse, abuse or failure to properly maintain the camera is not covered by the limited warranty.
- Do not use the camera under hot springs, saunas or other similar condition.
- Do not use or leave the camera in direct sunlight for an extended period of time, e.g. a car heated by sunshine.

Attention:

- We have done our best to produce a complete and accurate manual. However, we cannot ensure there are no errors or omissions during the printing process.
- We cannot take responsibility for any damages caused by unauthorized attempts to upgrade software or for any data corruption while the product is being repaired.
- Please back up the files! We cannot be liable for the loss of data caused by damaged products or damage due to unreadable memories or drives.
- This device contains a built-in battery. Please observe the local regulations regarding the disposal of old equipment and battery.

- Usage should strictly observe legal regulations. Users are solely responsible for proper usage. Please respect the privacy of third parties.

1. Structure



- | | | | |
|---|---|----|-----------------------------|
| 1 | 140° wide angle glass lens | 6 | Battery charging status LED |
| 2 | Microphone | 7 | Micro USB |
| 3 | Status indicator LED (red, green, blue) | 8 | Reset button |
| 4 | Shutter button | 9 | Micro SD card slot |
| 5 | Power-on/off & Mode switching button | 10 | Integrated tripod socket |

2. Power-on/off

2.1 Power-on

Shortly press the power button, release it when you see the indicator LED flashes in red, and hear a beep at the same time, when the LED remains in green, the camera is in standby mode.

2.2 Power-off

Long press the power button, and then release it when the indicator light is off.

2.3 Automatic power-off

The camera will save files and turn off automatically under the following circumstances:

- When user take videos without enough power, there will be 3 beeps from the buzzer, files will be saved automatically, and then it will be power-off automatically.
- Under standby condition, without any operation in 3 minutes.
- When micro SD card is full and the loop recording function is off, it will be automatically power-off after 3 minutes.
- Once the camera is disconnected from the power supply, and the “power-off delay” function is off, the camera will be automatic power-off.

2.4 Power-off delay

The camera supports the power-off delay function. User can switch it among off/10 second/30 second via the configuration software.

When the external power was disconnected suddenly, if this function is on, there will be 10 or 30 seconds power-off delay. If you connect the camera to the external power supply again within the 10 or 30 seconds, the camera will keep power-on. Otherwise, the camera will be automatic power-off after 10 or 30 seconds.
 Note: This function doesn't work while the camera is disconnected from the computer USB interface.

3. Mode switching/Video recording/Photo shooting

After the camera is power-on, including the default mode, currently there are totally 4 modes can be switched sequentially, please refer to the below table.

No.	Modes	Button pressing	LED status	Mode status
1	Video Mode 1 (default)	Default (without pressing)	Remains in green	Standby
		Shutter button	Flashes in green	Recording
2	Video Mode 2	Mode button once	Remains in blue	Standby
		Shutter button	Flashes in blue	Recording
3	Photo Mode	Mode button twice	Remains in red	Standby
		Shutter button	Flashes one time	Shooting
4	Time-lapse photo mode	Mode button three times	Remains in red	Standby
		Shutter button	Flashes in red	Shooting

Notes:

- a. The default mode is video mode 1. User can change the parameter for all the 4 modes via software. The parameters of video mode 1 and mode 2 are the same (please refer to article 8 for configuration method).
- b. All the button-pressing times in the upper table are counted from the standby condition.
- c. Each time user presses the button there will be a beep from the buzzer after user successfully presses the operation button.
- d. If the status indicator is not changed immediately, please don't press it again, the camera is saving data. Please wait for a moment.
- e. Under time-lapse mode, you only need to press the shutter button once, and then the camera will keep taking photo in the equal intervals of time. To stop this mode, please press one time the **mode button**.
- g. Under video modes, while taking videos, press the shutter button once to end video recording.
- h. Under photo mode, after you press the shutter button, please keep the camera stable before the indicator LED turns to "remains in red" for better picture quality.

4. Motion-detect video recording

The motion-detection function can only be switched on/off via the configuration software at present (please refer to article 8 for configuration method). There is no extra button operation available.

- 4.1 Switch on the motion-detection in the software interface, and then Sync the configuration to the camera.
- 4.2 Turn on the camera then it will start to detect the motion. You don't need to press the shutter button.
- 4.3 When the camera captures mobile objects within 3 meters, it will start to record a 1-minute-long video, and then save the file automatically, standby for next motion.
- 4.4 Once the motion detection function is on, the camera won't be automatically power-off even there is no operation within 3 minutes.
- 4.5 To stop motion detection, please long press the power button, then the camera will be power-off.
- 4.6 The default video mode for this function is mode 1, you may also stop recording or switch it to video mode 2 manually.

Note: Better ambient brightness, better motion detection performance.

5. Taking video/photo while charging

This camera supports taking videos/photos while charging via a 5V, 1A output AC adaptor, which mainly enables user to record long videos via an external power supply.

5.1 The auto-record function is on

The camera will be turned on and start to taking videos automatically under the default mode. To stop recording and start to use other function, press the shutter button once.

5.2 The auto-record function is off

User needs to press the shutter button manually to take a video. The functions like mode switching, photo shooting are same as no-charging condition.

Note: This camera does not support this function via connecting to the computer USB port!

6. G-sensor

6.1 Image rotation

The camera has a G –sensor for image rotation, user can change the configuration via software.

a. Auto

No matter the camera is upright or inverted (upside down), the image will be always upright, and even you turn over the camera during recording in any mode.

b. 0°

If the camera is inverted, the image will be inverted (180° rotated), too.

c. 180°

Even if the camera is inverted, the image will be upright. But the image will be 180° rotated when the camera is upright.

6.2 Anti-shock file protection

The camera will automatically generate four folders in the micro SD card, "Video", "JPEG", "T-lapse" and "Event". While the camera (for example, used as a car DVR) is recording, then there comes an impact to it suddenly, the camera will save the whole recording file that includes the impact to the "Event" file folder. Files in the "Event" folder will be protected.

7. Charging

The camera has a built-in polymer rechargeable battery. Please charge the battery before you use it at first time.

7.1 Charge condition: 5.0VDC \approx 1A, at constant current of 0.2C.

7.2 Plug the small end of the USB cable into the micro USB port on the camera. And connect the large end to an available USB port on your computer or adaptor.

7.3 Full charging time via USB 2.0: It takes about 2 hours from a fully discharged battery. The camera will be automatically power-on when the USB is connected to the power supply, if you just want to charge the battery, please long press the power button to turn off the camera for saving charging time.

7.4 When charging, the indicator LED at the bottom of the device will be in red, when the battery is full, the LED will be off.

7.5 Charging via AC adaptor while recording video at the same time takes about 5 hours to fully charge the completely discharged battery.

Note: Please do not leave the camera unattended while it is charging.

8. Connecting to computer

Connect the camera to the computer via USB interface, there will be 3 beeps, and then camera will be power-on automatically.

8.1 Removable Disk Mode

Once the camera is connected to the computer, it will be charged, and enters into removable disk mode (without pressing any button), the status LED will be in green. Find the “removable disk” in explorer (or my computer), now you can copy your files in the camera as a removable disk.

8.2 Web-cam mode

Under “removable disk mode”, press the mode button one time to enter the web-cam mode, there will be a beep, and the status LED will be in red. For Windows XP system, a "camera" icon will appear in explorer (my computer), double click the icon to use it as a web-cam. Other operation systems may need third party software (for example: AMCAP or other video chat software) to find and open the web-camera.

8.3 Configuration mode

This mode is same in the “web-cam mode”. Under “removable disk mode”, press the mode button one time to enter the configuration mode, there will be a beep, and the status LED will be in red.

- Under the configuration mode, open the “DIMIKA” software, and then the software will read the current configuration automatically. (refer to below pic. 2)
- Click the relevant rows in the “parameter value” column, and then click the arrows to select the parameters. The modified parameter will be in red. (refer to below pic. 3)
- After modification, click the “sync button. If the synchronization is successful, the software will pop up “sync ok”. (refer to below pic. 4)

The configurations of the camera are as follows. The bold parameters are default value.

No.	Item	Parameters
1	Photo Resolution	12M /10M/ 8M/ 5M / 3M
2	Photo Time Stamp	ON/OFF
3	Video mode 1	1920*1080 @30FPS /1280*720 @60FPS/1280*720@30FPS
4	Video mode 2	1920*1080 @30FPS/1280*720 @60FPS/ 1280*720@30FPS
5	Video Data Rate	Low/ Medium /High
6	Loop Recording	1 minute /3 minutes/5 minutes/OFF
7	Video Time Stamp	ON/OFF
8	Auto-record	ON/ OFF
9	Recording Mute	ON/ OFF
10	Power-off delay	10S/ 30S/ OFF
11	Motion detection	ON/ OFF
12	G-sensor	Auto /0°/180°
13	ISO	Auto /100/200/400
14	White balance	Auto /Daylight/Cloudy/Tungsten/Fluor H/Fluor L
15	Exposure	-2/-1/ 0 /+1/+2
16	Time-lapse	3S/ 5S /10S/30S
17	Flicker Frequency	50Hz /60Hz
18	Buzzer	ON/OFF

Notes:

- Operation system for the above 3 modes: Windows 2000/XP/Vista/Windows 7/Windows 8

- b. If user connects the camera to the computer with the USB cable while the camera is recording, your camera might be crashed. This could cause SD card corruption and loss of your video and photo files.
- c. The time and date of the camera system will be synced with the computer while syncing the configuration.
- d. If user open the “DIMIKA” configuration software without connecting the camera to computer in “configuration mode”, the value column will be in blank (not available for modification), and the parameter will be in gray. (refer to below pic. 1)
- e. Please download the configuration software on the official website. <http://dimikacamera.com/dimika-support/>



Pic. 1



Pic. 2



Pic. 3



Pic. 4

9. Micro SD card (not included)

This camera has no built-in memory. It needs an extra micro SD memory card (Not included in the camera) to work. The camera supports up to 32GB micro SD card. The micro SD card, also called TF card, is 15mm x 11mm.

- 9.1 The card can only be plugged one way, forcing plugging may cause damage. Please plug the micro SD card with the logo print side upward and the golden fingers downward, otherwise the camera or the micro SD card will be damaged.
- 9.2 Please use at least a brand high-speed (CLASS 4 or above) micro SD card to achieve better and more fluent video quality. For fast and accurate photo saving, please use a class 10 SD card while taking time-lapse photo in 3 seconds interval.
- 9.3 It is recommended to use at least a 4GB micro SD card for a minimum storage.
- 9.4 In-camera micro SD card formatting
 - In order to make the camera and micro SD card reach good compatibility, we suggest user format micro SD card in FAT32 before you using it at the first time. Please format the micro SD card as follows.
 - Under video mode, press the shutter button for 5 seconds, and then the indicator LED flashes in red, when the LED finishes flashing, the formatting is finished.
- 9.5 When micro SD card is full and the loop recording function is on, the previous files will be replaced sequentially.
- 9.6 There will be 5 beeps from the buzzer under below situation: without micro SD card, micro SD card is full, micro SD card error. The green and red indicator LEDs will be on at the same time.
- 9.7 The maximum FAT32 file for this camera is 4GB. Namely, about 50 minutes 1080P video file, 100 minutes 720P video file. While the loop recording is off, the camera will save the file automatically when the video size is near 4GB, and then, turn off by itself after 3 minutes without any operation.

10. Firmware upgrade

Normally, the user doesn't need to update the firmware, only if there are problems with the current firmware or we release a new version. Please upgrade the camera as follows.

Copy the new firmware file to the root of the micro SD card, turn on the camera, under the standby mode, press the power button once, and then the indicator LED will flash in red, when the LED finishes flashing, the camera will be power-off automatically, the upgrading is finished.

Notes:

- a. Please make sure the camera battery has enough power before upgrading. We highly suggest upgrade the camera with the external power supply from the AC adaptor, but not from the computer USB port.
- b. Please do not press any button or cut the power while upgrading.
- c. Please do not change the file name of the firmware, or else the upgrade will fail.
- d. User can download the latest firmware on the official website. <http://dimikacamera.com/dimika-support/>

11. Reset

When the device works abnormally due to incorrect operation or other unknown reasons, it might need to be reset. Use a pin to press the reset button once which is besides the USB port, and then the device will be reset.

12. The integrated tripod socket

There is an integrated M ¼ thread tripod socket at the rear side of the camera. The depth is 4 mm only.

While using the tripod or other mounts, please do not forcibly screw the mounts to the rock bottom of the socket.

Once the user feel the screw is near to the socket bottom, and the camera is mounted stably, the user should stop screwing. Otherwise the over-screwing will cause the tripod spring back and becomes loose.

To protect the tripod socket, we highly recommend the user to use a tripod or mount with an adjusting lock nut.

13. Specification

CPU	360 MHZ
Sensor	1/3.0-inch true full HD (1080p) CMOS image sensor
Lens Angle (diagonal)	140°
Video Resolution	1920*1080P@30fps 1280*720P@60fps 1280*720P@30fps
Video Compression	H.264 MOV
G-SENSOR	Supported
Loop Video Recording	Supported
Time Stamp (ON/OFF)	Supported
Webcam Mode	Supported
Motion Detection	Supported
Auto-record	Supported
Power-off Delay	Supported
Time-lapse photo	Supported
Picture Resolution (Sensor)	2480*1536(3M)
Picture Resolution (Interpolated)	4000*3000(12M), 3648*2736(10M), 3264*2448(8M), 2560*1920(5M)
Audio	1411kbps
Battery Capacity	600 mah
Recording Time	Up to 60Min
Power supply	USB 2.0
Charging Time	About 2 hours
Storage	Micro SD Card, Max. 32GB (Class 4 or above)
Supported OS	Windows 2000/XP/Vista/Windows 7/Windows 8
Flicker Frequency	50 Hz/60Hz
Mount	Built-in tripod socket
Dimensions	Approx. 64*38*16mm
Weight	Approx. 38G

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