WARNING

- Do not store the device in any place with following conditions:
  - High temperature (45°C or higher)
  - Exposure to the direct sun rays or a heating device
  - Inside the car with closed windows (especially, in the summer)
  - Humid place such as the bathroom

- When removing dust, use soft, dry cloth. Do not use organic solvents such as thinner or benzene or wet cloth
- Do not place a debit card or a bus pass near the speakers. Magnetic interference may occur, which will damage the card.
- Do not place the device near a magnet. The device may not work properly.
- Do not repair, disassemble, or remodel the device.
- Do not use the product in a place where use of electronic devices is prohibited.
- Do not operate or set up this device while driving. If it is required to change set up, please do it after pulling over the car or before driving.
- Do not heat up or short the main body or the battery
  When using an auxiliary device, leave a gap between the auxiliary device and the main device.
- Incorrect use of the product by the user or a third party or static electricity or electric shock loaded on the product may cause loss of or change in the data saved in the product during repair services or replacement of the battery.
- Keep the device out of reach of children.
- Waterproof Capability
  - The waterproof capability of this camera is similar as IPX6:
  - Please do not use the camera under water.
Thank you for choosing the HD082 1080p Full HD 1080i Helmet DV to pursue your digital video adventures. Whether you are racing at the track, pedaling through the woods or gliding through fresh powder, to get the utmost satisfaction from your digital video, please take a moment to read this manual. It’s contents will send you on an educational journey into you camera’s multiple capabilities.

APPROVAL INFORMATION

All our products meet the requirements of approval FCC or CE, and are granted the FCC or CE certification. They are authorized to bear FCC or CE mark.

FCC:
This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

CE:
This product complies with standards including Low Voltage Device Directive 73/23/EEC; EMC Directive 89/336/EEC and R&TTE Directive 1999/5/EC. It passed the subject tests by the authority concerned and is authorized to bear CE mark.

ABOUT THE MANUAL

We do our best to ensure all content and details contained within this manual are accurate and up to date with the product specifications at the time of printing this manual. However, product functions and specifications may change without notice. In the event that the manual information does not match the actual product functions or specifications, the products functions or specifications will be considered correct and the manual considered incorrect.
Main Features

- 1.5inch TFT LCD(480X240)
- 5.0MP High definition CMOS image sensor
- 1080P H.264.MOV video recording format
- Waterproof function(Rain water level)
- Easy operation for recording and taking a picture
- Optional picture resolution(12M,8M,5M,3M)
- Video and Picture playback available
- Internal SD card reader for memory expand(SDHC 1GB~32GB available)
- High speed USB2.0 interface for power charge and date transfer
- HDMI 1080i output
- 3.7V 1300MA removable and rechargeable Li-ion battery
- Secure mounts for different use

The Name of Each Part

1. MIC
2. Power charging indicator
3. MENU
4. Down/Fast Forward
5. Up/Rewind
6. Recording indicator/Power on
7. 1.5inch LCD
8. Power ON/OFF,/Picture Capture/Quit/Confirm
9. Record/Play/Choose
3. Package Contents

- HD082
- Manual
- Disc
- Power charger
- HDMI Cable
- USB Cable
- Battery
- Head Strap
- Universal Clip
- Helmet Grip
- Goggle Mount
- Handlebar Grip
1. Checking the Battery Status

To install the battery, open the battery door by sliding the latch up (Latch is tight. You may need to use a coin). Insert battery and rotate locking tab as shown. Close and latch battery door fully before use.

1) Charging the battery

User can charge HD082 by connecting the USB cable to a computer or by using the AC Adaptor.

A. Charging by connecting to PC

Connecting to the PC with the camera off will charge the battery. Connecting to the PC with camera on will allow for data transfer.

B. Charging with AC/DC Adaptor

2. Battery Charging Time & Operating Time

<table>
<thead>
<tr>
<th>Charging Time</th>
<th>Continuous play time</th>
<th>Recording time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. 1 hrs in Power on</td>
<td>Approx. 4 hours</td>
<td>Approx. 2 hours and 30 minutes (1080P)</td>
</tr>
<tr>
<td>Approx. 3 hrs 30 mins in Power Off</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When plugging or unplugging the AC/DC adaptor, turning off the unit is strongly recommended. The maker strongly recommends using a supplied AC/DC adaptor, but if it is necessary that another AC/DC adaptor is purchased separately at a shop, please check its electric specification is in accordance with HD082’s specification.
3). Battery Remaining Status

<table>
<thead>
<tr>
<th></th>
<th>Full Charge</th>
<th>Some Power Consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power almost drained</td>
<td>NO Power</td>
</tr>
</tbody>
</table>

To make sure the battery and power charger work as long as possible.

- Do not leave unit plugged in for extended periods. Excessive power charging will reduce the battery working life and possibly damage the unit;
- The battery will gradually lose charge when not in use, always charge it prior to use.
- Please disconnect power when unit is not in use.

For the first time usage, charge the battery at least 12 hours. Make sure power off when charging battery.

1. Card Type and Capacity

A, The DV built in 13MB ROM memory is for system files only.
B, The DV built in SD card reader supports SD and SDHC cards up to 32GB.
Note: Some SD or SDHC cards may not work properly, SD/SDHC cards made by sandisk are Strongly recommended.

2. Checking the Memory:
User should check if the SD card is installed well before using the camera.

<table>
<thead>
<tr>
<th></th>
<th>Internal Memory</th>
<th>External Memory (SD card)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please install the SD/SDHC card correctly, the side with metal faces up, the side with character faces down.
Mounting the gear wheel with Handlebar grip, Helmet grip or Goggle Mount.

Rotate the lens $-90^\circ$ to $+90^\circ$ degree by different mounting desired.

Rotate the lens $90^\circ$ degree anticlockwise.

Notice:
The rotated range is from $-90^\circ$ to $+90^\circ$; rotate fiercely or overly may cause structure damage.
Manual Structure

Main Menu
  Record Setting
    System Setting

Motion detection
  ON
  OFF

Record Setting
  Size
    1920X1080
    1440X1080
    1280X720
    848X480

  Size
    12M
    8M
    5M
    3M

  EV
    +0/-0.3/-0.7/-1/-1.3/-1.7/-2.0
    +2.0/+1.7/+1.3/+1/+0.7/+0.3/+0

  White B
    Auto/Fluorescent/Tungsten/Cloudy/Sunny

  Contrast
    Standard
    Soft
    Hard

  Sharpness
    Standard
    Soft
    Hard

  Effect
    Off/Vivid/Monochrome/Negative/Sepia/Art

  Recycle
    No
    15Mins
    30Mins
    45Mins

  Audio
    On
    Off

System Setting

  Volume
    1/2/3/4/5/6/7/8

  Language
    繁體中文
    簡體中文
    English
    Russian
    Italiano
    日文

  Date
    YYYY-MM-DD

  Clock
    HH:MM

  Format
    No
    Yes

  Sys.reset
    No/Yes

  Auto Off
    Off
    5Mins
    3Mins
    1Mins

  Light Fred
    50Hz
    60Hz

  Stamp
    On
    Off

  Lcd Off
    Off
    5Mins
    3Mins
    1Mins

  Version
    V20120323802
Basic Operation

1. Record Setting
Press \( \circ \) to power on, then press \( \text{MENU} \) to enter the setting menu.

Use \( \uparrow \) and \( \downarrow \) to select menu, press \( \rightarrow \) to change setting and press \( \text{MENU} \) to save and quit.

2. System Setting
Press \( \text{MENU} \) to enter the record setting menu, then press \( \text{MENU} \) to switch to the “system setting” menu.

Use \( \uparrow \) and \( \downarrow \) to select menu, and press \( \rightarrow \) to change the setting, then press \( \text{MENU} \) to save and quit.

3. Zoom function
Press the \( \circ \) button to boot into the screen, press the \( \uparrow \) or \( \downarrow \), the zoom function of the choice of;

4. Formatted, the system setting function
Menu choice, press the \( \circ \) button to select the formatting features YES, press \( \circ \) to confirm, the system set up similar;

5. Take picture and Record video
Short press \( \circ \) under monitor condition will take a picture, the red recording indicator will flash one time.
Short press \( \circ \) under monitor condition will start the video Recording. While recording, the red recording indicator will flash and the red REC icon will be displayed in the upper left corner of the screen. (Figure below)
Red indicator mean the camera is under recording condition, 00:03:29 is the recorded time.

Estimated SD card recording time.
Below is the available recording time for video and pictures. (For reference only, real parameters shall control)

<table>
<thead>
<tr>
<th>SD Card</th>
<th>1280X720P</th>
<th>1920X1080P</th>
<th>848X480P</th>
<th>2592X1944</th>
<th>3200X2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>8GB</td>
<td>200 min</td>
<td>120 min</td>
<td>320 min</td>
<td>3996 photos</td>
<td>3193 photos</td>
</tr>
<tr>
<td>4GB</td>
<td>100 min</td>
<td>60 min</td>
<td>160 min</td>
<td>2386 photos</td>
<td>1565 photos</td>
</tr>
<tr>
<td>2GB</td>
<td>50 min</td>
<td>30 min</td>
<td>80 min</td>
<td>1148 photos</td>
<td>753 photos</td>
</tr>
<tr>
<td>1GB</td>
<td>25 min</td>
<td>15 min</td>
<td>40 min</td>
<td>589 photos</td>
<td>386 photos</td>
</tr>
</tbody>
</table>

6. Video playback
A. Playback in the camera  
Long press to enter the playback condition, use and to select the files, short press to play the files.  
While playing the files, you could use and to do Fast Forward and Rewind.  
Press to stop playing and quit.  
Long press to quit playing back menu.  
Video file display:  
Picture file display:

Slide show playback: 
To review videos and pictures in slideshow mode, press under playback condition, use to select “SLIDE SHOW” menu. Press the to select the slideshow mode, press to Recognized and play. Press the or to stop the slide show. Stay in the current browser's file, press the button to pause playback, press the to select the menu function, Long press to stop slide show and return to video mode.

B. TV playback(HDMI)  
Connect the camera with TV by HDMI cable, power on the camera, switch the TV to the HDMI video channel.
Basic Operation

Long press @ to enter the playback condition under playback condition. Use ▲ and ▼ to select files, short press @ to play the files. While playing the files, you could use ▲ and ▼ to do Fast Forward and Rewind.

Press [MENU] to stop playing and quit.

Long press @ to quit playing back menu.

Attention:
Output resolution is 1080i in playback mode and 480i in record mode. A 1080p HD TV is required to view the 1080i HD signal. The camera will recognize the TV system when connected.

C. Delete files
Under the playback condition, press to switch out the delete menu and do the delete operation.(Figure below)

Press @ to confirm “delete” operation.

D. Connect with Computer
Connect HD082 to PC thru the provided USB cable for downloading or uploading files and upgrading firmware.

1. Connect the Camera with Computer by the USB cable.
2. Power on the camera.
3. The screen of the camera will display “USB connected”.

Press @ to select YES or delete all.
Basic Operation

Attention: User can not do any operation on the Camera after connected with the computer, only operation in computer available.

4. Open "My Computer" and navigate to the correct removable disk. (The disk may be called "NO_NAME" or it may be blank depending on your operating system).

Picture details:

5. Copy or move the files to your PC.

6. You can play video files using any .MOV compatible player installed on your computer.

Advise: Advise the user to use "KM player" media software to play the video files.
## General Specification

<table>
<thead>
<tr>
<th>SPEC</th>
<th>Detail &amp; Support</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Storage Device</td>
<td>13MB</td>
<td></td>
</tr>
<tr>
<td>SD Card</td>
<td>1-32GB</td>
<td>Support SDHC 32GB</td>
</tr>
<tr>
<td>LCD</td>
<td>Size</td>
<td>1.5inch</td>
</tr>
<tr>
<td>Resolution</td>
<td>480*240,TFT</td>
<td></td>
</tr>
<tr>
<td>Sensor</td>
<td>Optical Format</td>
<td>1/3.2inch(4:3)</td>
</tr>
<tr>
<td>Active Pixels</td>
<td>2592Hx1944V</td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td>Output Ch</td>
<td>Mini-HDMI</td>
</tr>
<tr>
<td>Audio</td>
<td>Built-in MIC</td>
<td>YES</td>
</tr>
<tr>
<td>Output Ch</td>
<td>1Cj</td>
<td></td>
</tr>
<tr>
<td>Speaker</td>
<td>Mono</td>
<td></td>
</tr>
<tr>
<td>PC Interface</td>
<td>Mini-USB</td>
<td>USB2.0</td>
</tr>
<tr>
<td>Power</td>
<td>Battery</td>
<td>3.7V,1300mAh Li-ion Polymer</td>
</tr>
<tr>
<td>AC/DC Adaptor</td>
<td>DC 5V, ≥ 500mA</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Dimensions</td>
<td>117x53x32.7mm</td>
</tr>
<tr>
<td>Weight</td>
<td>133g</td>
<td>Battery installed</td>
</tr>
<tr>
<td>Other functions</td>
<td>Motion Record</td>
<td>YES</td>
</tr>
<tr>
<td>Timer Stamp</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>LCD On/Off</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Slide Show</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Video/Audio Select</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Auto Power Off</td>
<td>YES</td>
<td>5min,3min,1min</td>
</tr>
<tr>
<td>Image Thumbnail View</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Record Quality Select</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Support LCD Off to Recording</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Recording backup to low battery</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Recording</td>
<td>Video Format</td>
<td>NTSC/PAL Video=Audio,Video</td>
</tr>
<tr>
<td>Recording Resolution</td>
<td>1920x1080 30fps</td>
<td>1280x720 30fps</td>
</tr>
<tr>
<td>Audio Rec.</td>
<td>Video&amp; Audio Rec.</td>
<td>YES</td>
</tr>
<tr>
<td>Recording Resolution</td>
<td>848x480 60fps</td>
<td>640x320 60fps</td>
</tr>
<tr>
<td>Playback</td>
<td>Video Resolution</td>
<td>1920x1080</td>
</tr>
<tr>
<td></td>
<td>1280x720</td>
<td>640x480</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>Max.30fps</td>
<td>Max.60fps</td>
</tr>
<tr>
<td>File Format</td>
<td>HD=H.264</td>
<td></td>
</tr>
<tr>
<td>Playback speed</td>
<td>1/8,1/4,1/2,1,2,4,8</td>
<td></td>
</tr>
<tr>
<td>PC Player</td>
<td>KM Player</td>
<td>Stored in the folder of HD082</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internet Download available</td>
</tr>
</tbody>
</table>