HD Action Camera

DVS5M9   User's Manual

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Preface

Congratulations on your purchase of this advanced camera. Ensure that you read this manual carefully and keep it in a safe place for future reference.

About this manual

Every effort has been made to ensure that the contents of this manual are correct and up to date. However, no guarantee is made regarding the accuracy of the contents. The manufacturer reserves the right to change the contents, technology, and specifications without notice.

Copyright

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Precautions

General precautions

- Do not store the product in dusty, dirty, or sandy areas, as its components may be damaged.
- Do not store the product in a hot environment. High temperatures can shorten the life of electronic devices, damage batteries and warp or melt certain plastics.
- Do not store the product in cold areas. When the product warms up to its normal temperature, moisture can form inside, which may damage the electronic circuits.
- Do not attempt to open the casing or attempt your own repairs. High-voltage internal components create the risk of electric shock when exposed.
- Do not drop or knock the product. Rough handling may damage the internal components.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the product. Wipe the product with a slightly damp soft cloth.
- Do not open the battery cover while an image is being recorded. Doing so will not only make storage of the current image impossible, it can also corrupt other image data already stored on file.
- If the product or any of its accessories are not working properly, take them to your nearest qualified service center. The personnel there will assist you and if necessary, arrange for the product to be repaired.
- Test for proper operation before using the camera.

Operating conditions
- This camera is designed for use in temperatures ranging from 0°C to 40°C (32°F to 104°F).
- Do not use or keep the camera in the following areas:
    - In areas subject to direct sunlight
    - In areas subject to high humidity or dust
    - Near air conditioners, heaters, or other areas subject to temperature extremes
    - Inside of a closed vehicle, especially one parked in the sun.
    - In areas subject to strong vibration

Power supply
- Use only the type of battery that came with your camera. Using any other type of battery may damage the equipment and invalidate the warranty.
- Do not short the battery terminals. The battery could overheat.
- Do not attempt to split or peel the outer casing.
- Remove the battery if the camera is not going to be used for a long time. If the battery is left unused for more than 3 months, you need to charge the battery before use.

Notes on Waterproof Case

Waterproof Case performance

- The waterproof case performance is equivalent to IPX8 (60m/1hr).
- Underwater time limit: Do not use the waterproof case underwater for more than 60 minutes and 60 meters to ensure water resistance.
- The waterproof case is not dust-proof.
- The camera and other accessories are not waterproof unless enclosed by the waterproof case.
- When using the camera in cold or humid environments or when going underwater, use the anti-fog insert to prevent fogging. The anti-fog insert only provides a certain degree of prevention, results vary depending on the actual environment. The anti-fog insert is not for long-term use, it must be replaced regularly.

Notes before going underwater:

(Do the following actions indoors. Do not do these actions on sandy or dusty environment or near the water's edge.)

- Check if the area surrounding the waterproof case lock is clean, do not allow dirt or sand or foreign objects around it.
- Ensure that the waterproof case is closed.
- Ensure that the waterproof case has no cracks or scratches. If the waterproof case has been dropped, contact your dealer for a replacement.

Notes for general use:

- Avoid opening or closing the waterproof case near the water's edge (sea, lake, beach, lake, etc.). Do not open or close the waterproof case lock with wet hands, or hands with sand or dust.
- The accessories (batteries, etc.) used with the camera are not water resistant, be careful in using them.
- Do not drop the waterproof case to ensure waterproof durability.
- Do not place the waterproof case in temperatures above 40°C or below 0°C to ensure waterproof durability.
- Do not attempt to make alterations on the waterproof case or seal the vents yourself, doing so may damage its ability to maintain the camera waterproof.

When using the camera

- The waterproof properties of the waterproof case apply to fresh water and saltwater only; they do not apply to cleaning substances, chemicals, or water from spas, etc. Any such liquids should be wiped off immediately.
- Do not immerse the waterproof case in water at a depth greater than 60 meters.
- Do not subject the waterproof case to highly pressurized water.
- Do not immerse in water for longer than 60 minutes. After 60 minutes of use in water, allow the waterproof case to dry for at least 10 minutes.
- Do not immerse in water warmer than 40°C (104°F).
- Do not open or close the waterproof case lock with wet hands.
- Do not open the waterproof case lock next to water or a pool.
- The waterproof case is not dust-proof.
- Do not bump or knock the waterproof case underwater, otherwise the lock may open.

Notes on waterproof case maintenance

- The waterproof of sealing material is replaceable for a fee. The material should be replaced once a year to maintain its water resistance.

After using the waterproof case

- Be sure to come ashore within 60 minutes after going underwater, this will maintain the appearance, quality and water resistance of the waterproof case.
- After taking pictures underwater, clean the waterproof case with running tap water. Do not use any soapy water, mild detergents, alcohol or similar liquids to clean the case.
- Wipe off water drops on the waterproof case with a soft lint-free cloth (avoid fiber). Be sure to wait until the waterproof case is completely dry before opening the waterproof case lock.
- After removing the camera from the waterproof case, soak the waterproof case in a bucket of clean water for about 10 minutes. After 10 minutes, wipe the waterproof case dry with a lint-free cloth. Place the waterproof case in a well ventilated cool place to dry naturally (do not place under direct sunlight).

Other notes

- If water accidentally enters the camera or any problem occurs when it is in water, please get it out of the water immediately and take proper actions. Dry the camera and send it for repair, if required.
- Information is subject to change without notice. Refer to the important notes in the manual supplied with the camera.

Before You Start

Take some test shots before you use your camera.

Before taking pictures with this camera, test the camera beforehand to ensure that it functions properly. Any additional loss caused by the malfunction of this product (such as costs of photography or any loss of benefit generated by the photography) is not the responsibility of the manufacturer and no compensation will be given for it.

Copyright information

Take care to observe "No Photography" notices in certain locations. In these cases, you cannot record any live performance, improvisation or exhibits, even for personal purposes. Any transfer of pictures or memory card data must be conducted under the constraints of copyright law.

1 Introducing the Camera

Read this section to learn about the features and functions of the camera. This chapter also covers system requirements, package contents, and descriptions of the hardware components.

1.1 System Requirements

The camera requires a PC with the following specifications for full HD 1080p 30fps and 720p 60fps playback:

- Windows® 8 /Windows® 7 /Vista / XP (SP2) / MAC OS X 10.5 and later
- Intel® / AMD Dual-Core CPU and later
- At least 1 GB of RAM or higher
- At least DirectX 9 video card, DirectX 10 is recommended
- Standard USB 1.1 port and later
- At least 2GB or greater available hard disk space

● **Note**:

A USB 1.1 port will enable you to transfer files to and from your host PC, but transfer speeds will be faster with a USB 2.0 port.
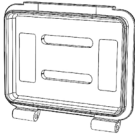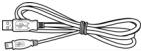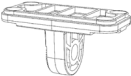
1.2 Features

The camera offers a variety of features and functions including:
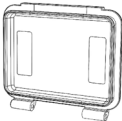
- Full HD 1080p (30fps)
- H.264 Video Clip
- 140° Wide Angle Lens
- Time Lapse, Burst, Self Timer
- 16 Megapixel Photos
- Action Camera functionality
- Li-ion Rechargeable Battery
- External Waterproof Case / Standard Mounts

1.3 Unpacking the Camera

The following items should be present in the package. If any item is missing or appears damaged, contact your dealer immediately.

Camera	Waterproof Case	Waterproof Housing Backdoor
Vented Housing Backdoor	Flat Adhesive Socket	Curved Adhesive Socket
Li-ion Battery	Micro USB Cable	Secure Tether
Swivel Mount	Swivel Mount Adapter	USB Adapter (optional)
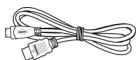
HDMI Cable (optional)	Wrist Strap Remote Control – RCW5K8 (optional)	Wrist Strap Remote Control – RCWD01 (optional)

1.4 About the Camera

Refer to the following illustrations to familiarize yourself with the buttons and controls of this camera.

1.4.1   Camera Views

OLED screen   Power /Status LED 1 / Battery LED

Power /Status LED 2

Shutter button

Power /Mode Button

Micro SD card slot

Lens

Microphone

HDMI Port

Micro USB port

Battery compartment cover

Power /Status LED 3
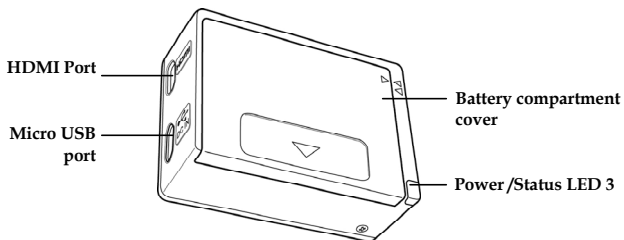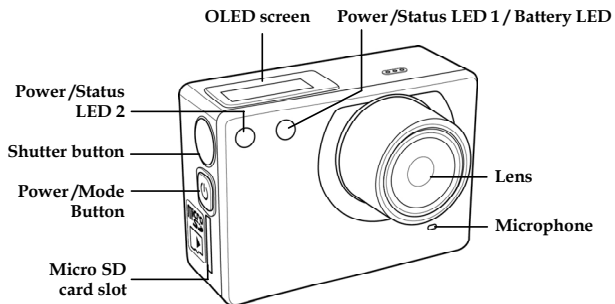
1.4.2   Button Functions

Power / Mode Button	• Press and hold for 3 seconds to turn the camera on or off. • Press to switch to different modes: **Video**, **Photo**, **Delete** and **Set** mode. • In **Set** mode, press to scroll through menu items.
Shutter Button	• In **Video** mode, press to start/stop video recording. • In **Photo** mode, press to take a photo. • In **Set** mode, press to select an item.

1.4.3   LED Indicators

The camera has three LED indicators. These LEDs are designed for users to see the status of the camera whichever way the camera is held or mounted.

LED	Color	Description
Power / Status LED	Green	During startup
	Green Blinking	Taking photos
	Red Blinking	Video recording in progress
	Red Blinking Rapidly	Self-timer
Battery LED	Red	Battery is charging
	Off	Full charge

2   Getting Started

Read this section to learn how to start using the camera. This section covers basic functions such as switching on, installing the battery and micro SD card, and configuring preliminary settings. See later chapters for advanced functions.

2.1 Installing the Micro SD Card

A micro SD card is required to capture photos and videos. The camera supports micro SDHC cards up to 32GB.

1.   Insert the micro SD card into the card slot with the gold contacts facing the front of the device.
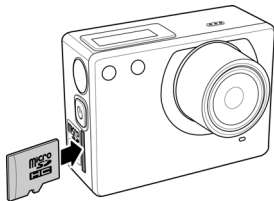
2.   Push the micro SD card until it clicks into place.

▪   **Warning:** Do not remove the micro SD card while data is being recorded. Doing so may corrupt the saved data and damage the card.

2.1.1 Removing the Micro SD card

1. Turn off the camera.

2. With a fingertip, push the micro SD card to eject it from the slot.

3. Remove the micro SD card.

2.2 Installing the Battery

> **Warning:** Use only the supplied battery or a similar battery recommended by the manufacturer or the dealer.

1. Push down the battery compartment cover to open it.
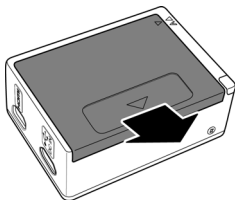
2. Align the battery contacts and then insert the battery into the compartment with the ribbon underneath the battery.
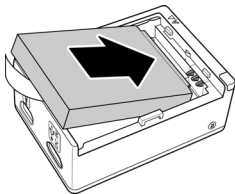
3. Close the battery compartment cover.
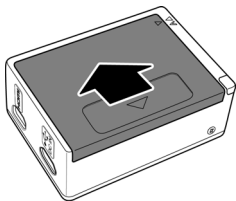
2.2.1   Removing the battery

1.   Open the battery compartment cover.

2.   Pull the ribbon to remove the battery.

2.3 Charging the Battery

You can charge the battery using the micro USB cable that came with the camera. Follow the steps below to charge the battery.

1. Install the battery into the battery compartment.

2. Plug the micro-USB connector to the USB port of your device.

3. Plug the other end of the USB cable to a computer.
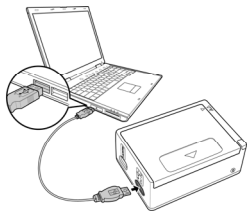
Note:
- The battery LED blinks red. After a full charge, the LED turns off.
- Approximate charging time is 240 minutes with a USB connection. Actual charging time depends on current battery capacity and charging conditions.
- You may also use the supplied AC adapter to charge your camera battery.
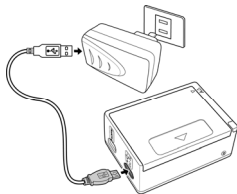
2.4 Turning ON/ OFF the Camera

- To turn on the camera, press the **Power** button. The Power/Status LED indicator lights green for 3 seconds.

- To turn off the camera, press and hold the **Power** button for 3 seconds.
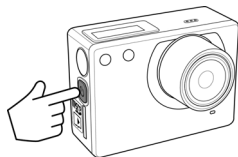
2.5 OLED Screen

When the camera is turned on, the OLED screen displays the following information:

		Current Mode	Displays the current mode of the camera.
1	🎥30 1080P	Video Mode	Use this mode to record videos. The icon also indicates the current video recording settings.
	📷 5M	Photo Mode	Use this mode to capture photos. The icon also indicates the current capture settings.
	•))	WiFi Mode	Select to connect the camera to a smartphone using WiFi connection. With this feature, videos and photos recorded from the camera can be viewed on the smartphone.
	🗑	Delete	Use this mode to delete one or all files stored in the memory card.
	⚙	Set Mode	Use this mode to adjust the settings of your camera.
2	Number of Files		Indicates the total number of files.
3	🔋	Battery	Indicates the battery capacity.

2.6 Changing Modes

Press the **Mode** button repeatedly to switch modes.

Video Mode

Photo Mode

WiFi Mode

Setting Mode

Delete Mode
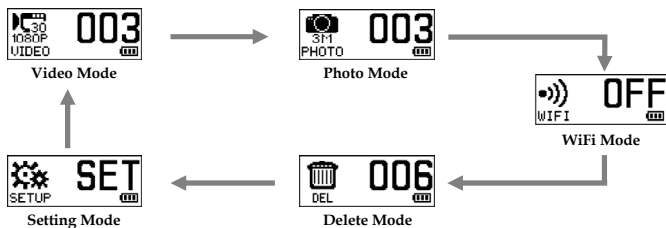
2.7 Connecting to TV (HDMI Cable)

You can also connect the camera to a TV using the HDMI cable (optional).
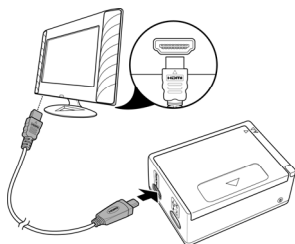
2.8 Connecting to PC (Micro USB Cable)

Connect the camera to a computer with the micro USB cable provided as shown.
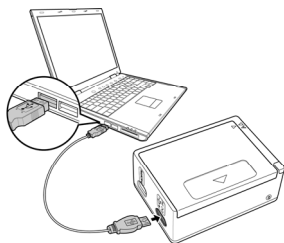
3 Capturing Videos and Photos

3.1 Recording Videos

When a video is recorded, the video is automatically saved in the memory card. By default, the camera is in **Sports DV** (**SDV**) mode.

1. Turn on the camera. By default, the camera automatically opens to **Video** mode.
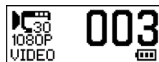
2. Press the **Shutter** button to start recording.

3. Press the **Shutter** button to stop recording.

Video recording in SDV mode can either be **NORMAL** or **SLOW**. To do slow motion recording, you must change the video setting in SET menu, see *Slow Motion Recording* on page 26.

To use the camera as a Car DV recorder, you must switch to CAR DV mode. In CAR DV mode, video recording can either be **NORMAL** or **LAPSE** mode. See *Lapse* on page 35 for more information on using LAPSE recording.

3.2 Taking Photos

1. Turn on the camera.

2. Press the **Mode** button to switch to **Photo** mode.
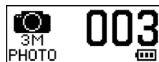
3. Press the **Shutter** button to capture a photo.

3.2.1   Time Lapse Shooting

This feature allows you to continuously capture photos with one press of the Shutter button at the preset interval time (3/5/10/30/60 seconds). Shooting only stops when the Shutter button is pressed again.

To switch to this mode, you must set the camera to **LAPSE** mode, see *Lapse* on page 29 for more information.

Once the camera is in **LAPSE** mode, press the Shutter button to start capturing photos.

3.2.2   Burst Shooting

This feature allows you to capture 3, 5, or 10 photos with one press of the **Shutter** button.

To switch to this mode, you must set the camera to **BURST** mode, see *Burst Shooting* on page 30 for more information.

Once the camera is in **BURST** mode, press the Shutter button to start capturing photos.

3.2.3   Self-Timer

This feature allows you to capture a photo after a short delay.

To switch to this mode, you must set the camera to **SELFTIMER** mode, see *Self-Timer* on page 31 for more information.

Once the camera is in **SELFTIMER** mode, press the Shutter button to start capturing photos.

3.3 WiFi

This menu allows you to connect your camera to a smartphone using WiFi connection and view the videos and photos recorded from your camera on the smartphone.

> ▪ **Note:** Before using this feature, download the **iSmart DV** app from AppStore (iOS) or Google Play (Android OS) on your smartphone.

1. Press the **Mode** button repeatedly to change to **WIFI** mode.
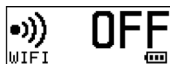
2. Press the **Shutter** button to toggle WiFi **ON** or OFF.

3. Once the "**WIFI CONN...**" appears on the screen and the LED flashes, this indicates WiFi connection is established.

4. On your smartphone, enable WiFi connection, then search and connect to the WiFi network **DVS5M9_XXXXXX**.

5. When prompted for a password, enter the default password "1234567890".

6. Use the **iSmart DV** app to view videos and photos from your camera.

3.4 Delete

This menu allows you to delete one or all files in the Micro SD card.

Do the following to delete files.

1. Press the **Mode** button repeatedly to change to **DELETE** mode.

2. Press the **Shutter** button to enter **DELETE** mode.
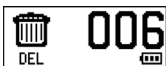
3. Press the **Mode** button to highlight **DELETE**.

4. Press the **Mode** button repeatedly to scroll through the delete options.

	To delete all files in the micro SD card.
	To delete the last captured video or photo.

5. Press the **Shutter** button to confirm.

6. Press the **Mode** button to select **OK** to confirm deletion.

7. Press the **Shutter** button to confirm.

8. To exit the menu, press the **Mode** button repeatedly until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **DELETE** mode.

4 Adjusting the Settings

To adjust the camera settings, press the **Mode** button repeatedly to switch to **Set** mode and then press the **Shutter** button to confirm. The screen below is displayed:

1	**Sport DV Menu**		Select SETUP to adjust capture settings.
	Video		Select to set the video mode and adjust the video resolution.
	Photo		Select to adjust the image resolution.
	Flip		Select to turn sensor flip auto, on or off.
	Car DV		Select to set the camera to Car DV mode.
	CAR DV Menu		
	Video		Select to adjust the car video resolution and set the video lapse mode.
	Looping		Select to enable/disable the loop recording function.

		Flip	Select to turn sensor flip auto, on or off.
		G Trigger	Select to turn G trigger on or off.
		G Sensitivity	Select to adjust G-sensor sensitivity level.
		Microphone	Select to turn microphone on or off.
2	**SYSTEM Menu 1**		Select SYS Menu 1 to adjust capture and OSD settings.
		DIS	Select to turn Digital Image Stabilizer (DIS) on or off.
		WDR	Select to turn Wide Dynamic Range (WDR) on or off.
		LED	Select to turn the LED on or off.
		OSD Flip	Select to set the direction of the OSD screen display.
		Brightness	Select to adjust the screen brightness.
		Beep	Select to adjust the beep volume.
		Date Stamp	Select to set date stamp on or off.
		Auto-Off	Select to set the time for the camera to automatically turn off when not in use.
		Exit	Select to close the SYSTEM Menu 1

			and return to the previous menu screen.
3	**SYSTEM Menu 2**		Select SYS Menu 2 to adjust basic camera settings.
	🕐	Date & Time	Select to set the camera date and time.
	((•)) RF	Remoter	Select to pair with the RF remote control.
	Hz	Frequency	Select to set the frequency.
	📅	Format	Select to format the memory card.
	⟲	Default	Select to set the camera to default factory settings.
	•)))	WiFi Password	Select to change the WiFi password.
	➡	Exit	Select to close the MORE menu and return to the previous menu screen.

4.1 Video Mode

The **Video Mode** allows users to select the resolution of a normal video or record on slow motion.

4.1.1 Resolution

When a video is recorded, the video file is automatically saved in the memory card. The camera supports seven resolution options for videos. Set the video resolution before you start recording a video.

Do the following to select the video resolution.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Shutter** button to enter the **CAM** menu.

4. Press the **Shutter** button to enter the **VIDEO MODE** submenu.

5. Press the **Shutter** button to enter the **NORMAL** submenu.

6. Press the **Mode** button repeatedly to scroll through the resolution options.

	16:9, 1080P (1920x1080, 30fps)
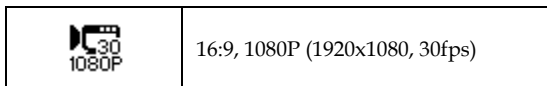
▶📹30 960P	4:3, 960P (1280x960, 30fps)
▶📹60 720P	16:9, 720P (1280x720, 60fps)
▶📹30 720P	16:9, 720P (1280x720, 30fps)
▶📹60 WVGA	16:9, WVGA (848x480, 60fps)
▶📹30 WVGA	16:9, WVGA (848x480, 30fps)
▶📹90 VGA	4:3, VGA (90fps)

7. Press the **Shutter** button to confirm.

8. To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **CAM MENU**.

10. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **SET** mode.

Note: The FOV of every resolution is different.

Resolution	Resolution	Field of view
1080p30	1080p * 30F	95.5°
960p30	960P * 30F	138.6°
720p60	720P * 60F	126.9°
720p30	720P * 30F	126.9°
WVGA60	480P * 60F	126.9°
WVGA30	480P * 90F	138.6°
VGA90	640 X 480	140.3°

4.1.2   Slow Motion Recording

A video can be recorded in slow motion.

Do the following to select the slow recording setting.

1.   Press the **Mode** button repeatedly to change to **SET** mode.

2.   Press the **Shutter** button to enter **SET** mode.

3.   Press the **Shutter** button to enter the **CAM** menu.

4.   Press the **Shutter** button to enter **VIDEO MODE**.

5.   Press the **Mode** button to select **SLOW**.

6.   Press the **Shutter** button to enter **SLOW**.

7.   Press the **Mode** button repeatedly to scroll through the slow recording options: **1/2X**, **1/3X**, and **1/4X**.

8.   Press the **Shutter** button to confirm.

9.   To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10.   Press the **Shutter** button to exit **CAM MENU**.

11.   To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.2 Photo Mode

This menu allows you to set the resolution before you capture an image or change the capture mode into lapse, burst, or self timer mode.

4.2.1   Normal Resolution

This menu allows you to select the image resolution.

Do the following to select the image resolution.

1.   Press the **Mode** button repeatedly to change to **SET** mode.

2.   Press the **Shutter** button to enter **SET** mode.

3.   Press the **Shutter** button to enter the **CAM** menu.

4.   Press the **Mode** button to highlight **PHOTO MODE**.

5.   Press the **Shutter** button to enter **PHOTO MODE**.

6.   Press the **Shutter** button to enter **NORMAL**.

7.   Press the **Mode** button repeatedly to scroll through the image resolution options: **16M, 5M**, 3**M**, and 2**M**.

8.   Press the **Shutter** button to confirm.

9.   To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **CAM MENU**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

Note: The FOV of every resolution is different.

Resolution	Resolution	Field of view
Still image 16M	4640 x 3480 (16M)	140.5°
Still image 5M	2560 x 1920 (5M)	140.5°
Still image 3M	2048 x 1536 (3M)	140.5°
Still image 2M	1920 x 1080 (2M 16:9)	133.8°

4.2.2   Lapse

This feature allows you to continuously capture photos with one press of the Shutter button at the preset interval time (3/5/10/30/60 seconds). Shooting only stops when the Shutter button is pressed again.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Shutter** button to enter the **CAM** menu.

4. Press the **Mode** button to highlight **PHOTO MODE**.

5. Press the **Shutter** button to enter **PHOTO MODE**.

6. Press the **Mode** button to highlight **LAPSE**.

7. Press the **Shutter** button to enter **LAPSE**.

8. Press the **Mode** button repeatedly to scroll through the Lapse options: **3 sec**, **5 sec**, **10 sec**, **30 sec,** and **60 sec**.

9. Press the **Shutter** button to confirm.

10. To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **CAM MENU**.

12. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

13. Press the **Shutter** button to exit **SET** mode.

4.2.3 Burst Shooting

This menu allows you to enable burst shooting and set the number of photos to capture with one press of the **Shutter** button.

Do the following to set the burst shooting mode.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Shutter** button to enter the **CAM** menu.

4. Press the **Mode** button to highlight **PHOTO MODE**.

5. Press the **Shutter** button to enter **PHOTO MODE**.

6. Press the **Mode** button to highlight **BURST**.

7. Press the **Shutter** button to enter **BURST**.

8. Press the **Mode** button repeatedly to scroll through the burst shooting options: **3**, **5**, and **10**.

9. Press the **Shutter** button to confirm.

10. To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **CAM MENU**.

12. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

13. Press the **Shutter** button to exit **SET** mode.

4.2.4   Self-Timer

This menu allows you to enable the self-timer mode and set the delay of capturing the photo after the **Shutter** button is pressed.

Do the following to set selftimer.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Shutter** button to enter the **CAM** menu.

4. Press the **Mode** button to highlight **PHOTO MODE**.

5. Press the **Shutter** button to enter **PHOTO MODE**.

6. Press the **Mode** button to highlight **SELFTIMER**.

7. Press the **Shutter** button to enter **SELFTIMER**.

8. Press the **Mode** button repeatedly to scroll through the selftimer options: **2 sec**, **5 sec**, and **10 sec**.

9. Press the **Shutter** button to confirm.

10. To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **CAM MENU**.

12. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

13. Press the **Shutter** button to exit **SET** mode.

4.3 Sensor Flip

This menu allows you to set the sensor flip to **AUTO**, **ON** or **OFF**.

Do the following to set sensor flip.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Shutter** button to enter the **CAM** menu.

4. Press the **Mode** button to highlight **SENSOR FLIP**.

5. Press the **Shutter** button to enter **SENSOR FLIP**.

6. Press the **Mode** button repeatedly to scroll through the options: **AUTO**, **ON**, and **OFF**.

7. Press the **Shutter** button to confirm.

8. To exit **CAM MENU**, press the **Mode** button repeatedly until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **CAM MENU**.

10. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **SET** mode.

4.4 Car DV

This menu allows you to set the camera into **Car DV** mode and allows you to configure the video recording settings.

Do the following to enter the **Car DV** mode.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the Shutter button to enter the **CAM** menu.

4. Press the Mode button to highlight **CAR DV**.

5. Press the **Shutter** button to enter **CAR DV**.

6. Press the **Mode** button to highlight **OK**.

7. Press the **Shutter** button to confirm.

8. To exit **SET** mode, press the **Mode** button until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **SET** mode.

4.4.1 Resolution

This menu allows you to set the resolution of the captured videos in Car DV mode.

See *Resolution* on page 23 for more information.

4.4.2　Lapse

For Video lapse function, those continuous shots are combined and saved into one video automatically. The recorded video is played back in fast motion (faster than the normal playback speed).

1. In **CAR DV** menu, press the **Shutter** button to enter **VIDEO MODE**.

2. Press the **Mode** button to highlight **LAPSE**.

3. Press the **Shutter** button to enter **LAPSE**.

4. Press the **Mode** button repeatedly to scroll through the Lapse options: **1 sec**, **3 sec**, **5 sec**, **10 sec**, **30 sec,** and **60 sec**.

5. Press the **Shutter** button to confirm.

6. To exit the **CAR DV** menu, press the **Mode** button repeatedly until the **EXIT** screen appears.

7. Press the **Shutter** button to exit the **CAR DV** menu.

8. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **SET** mode.

4.4.3 Looping

This menu allows you to set the camera to continuously record the video until the memory card storage is full or the recording is manually stopped. The length of videos are recorded according to the set time.

Do the following to set this feature.

1. In **CAR DV** menu, press the **Mode** button to highlight **LOOPING**.

2. Press the **Shutter** button to enter **LOOPING**.

3. Press the **Mode** button repeatedly to scroll through the Looping options: **2 min**, **5 min**, and **15 min**.

4. Press the **Shutter** button to confirm.

5. To exit the **CAR DV** menu, press the **Mode** button repeatedly until the **EXIT** screen appears.

6. Press the **Shutter** button to exit the **CAR DV** menu.

7. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

8. Press the **Shutter** button to exit **SET** mode.

Looping video mode

- The loop video function is only applicable when the video resolution is set to 1080p30.

- Multiple small segments are written to the memory card, and these segments will be overwritten during loop recording.

- Without any looping files, the system will indicate that the card is full when the remaining storage is less than 800MB.

- The looping video will perform when the remaining storage and saved looping files capacity are more than 800MB.

- When looping video mode is enabled, you can do the following operations in **SET** menu:

  Disable the looping video mode, enable/disable the upside down function, delete all the looping files.

- When you perform the *Delete All* operation, only the looping files will be deleted.

- When the loop recording is enabled the auto power off time will depend on the **Auto Power Off** setting. For example, the **Auto Power Off** is set to 10 minutes, the camera will automatically power off after being idle for 10 minutes.

- If you power on the camera manually, you need to start and stop the video recording manually too.

Looping video mode with USB adapter

- When the camera is connected to a USB adapter, the video recording starts automatically. When the USB adapter is

disconnected, the recording will stop recording after 3 seconds. Then it will automatically save the file and turn the device off.

- When the camera is connected to a USB adapter, the video recording starts automatically.
  If you manually stop the recording:

  ✓ the camera will automatically power off after being idle for 10 minutes when Auto Power Off is set to 10 minutes.

     OR

  ✓ the camera will automatically power off after 3 seconds when the USB adapter is disconnected or without power supply.

4.4.4   Sensor Flip

This menu allows you to enable sensor flip automatically or manually by turning it on or off. See *Sensor Flip* on page 33 for more information.

4.4.5   G Trigger

This menu allows you to turn G-sensor trigger on or off.

1. In **CAR DV** menu, press the **Mode** button to highlight **G TRIGGER**.

2. Press the **Shutter** button to enter **G TRIGGER**.

3. Press the **Mode** button repeatedly to scroll through: **ON** or **OFF**.

4. Press the **Shutter** button to confirm.

5. To exit the **CAR DV** menu, press the **Mode** button repeatedly until the **EXIT** screen appears.

6. Press the **Shutter** button to exit the **CAR DV** menu.

7. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

8. Press the **Shutter** button to exit **SET** mode.

4.4.6 G Sensitivity

This menu allows you to set the G-sensor sensitivity level.

1. In **CAR DV** menu, press the **Mode** button to highlight **G SENSITIVITY**.

2. Press the **Shutter** button to enter **G SENSITIVITY**.

3. Press the **Mode** button repeatedly to scroll through the senstivity level options: **HIGH**, **MID** and **LOW**.

4. Press the **Shutter** button to confirm.

5. To exit the **CAR DV** menu, press the **Mode** button repeatedly until the **EXIT** screen appears.

6. Press the **Shutter** button to exit the **CAR DV** menu.

7. To exit the **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

8. Press the **Shutter** button to exit **SET** mode.

4.4.7   Microphone

This menu allows you to enable the microphone and record audio while recording video.

1. In **CAR DV** menu, press the **Mode** button to highlight **MIC PHONE**.

2. Press the **Shutter** button to enter **MIC PHONE**.

3. Press the **Mode** button repeatedly to scroll through: **ON** or **OFF**.

4. Press the **Shutter** button to confirm.

5. To exit the **CAR DV** menu, press the **Mode** button repeatedly until the **EXIT** screen appears.

6. Press the **Shutter** button to exit the **CAR DV** menu.

7. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

8. Press the **Shutter** button to exit **SET** mode.

4.5 System Menu 1

This menu allows you to adjust the capture and OSD settings.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Mode** button repeatedly to scroll through the submenu options.

6. To exit **SYS MENU1,** press the **Mode** button repeatedly until the **EXIT** screen appears.

7. Press the **Shutter** button to exit **SYS MENU1**.

8. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **SET** mode.

4.5.1   DIS

This menu allows you to enable Digital Image Stabilizer (DIS) feature.

Do the following to enable this feature.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Shutter** button to enter the **DIS** submenu.

6. Press the **Mode** button to select **ON** or **OFF**.

7. Press the **Shutter** button to confirm.

8. To exit **SYS MENU1,** press the **Mode** button repeatedly until the **EXIT** screen appears.

9. Press the **Shutter** button to exit **SYS MENU1**.

10. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **SET** mode.

4.5.2   WDR

This menu allows you to enable Wide Dynamic Range (WDR) feature.

Do the following to enable this feature.

1.   Press the **Mode** button repeatedly to change to **SET** mode.

2.   Press the **Shutter** button to enter **SET** mode.

3.   Press the **Mode** button to highlight **SYS MENU1**.

4.   Press the **Shutter** button to enter **SYS MENU1**.

5.   Press the **Mode** button to highlight **WDR**.

6.   Press the **Shutter** button to enter **WDR**.

7.   Press the **Mode** button to select **ON** or **OFF**.

8.   Press the **Shutter** button to confirm.

9.   To exit **SYS MENU1**, press the Mode button repeatedly until the **EXIT** screen appears.

10.   Press the **Shutter** button to exit **SYS MENU1**.

11.   To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12.   Press the **Shutter** button to exit **SET** mode.

4.5.3 LED Indicator

This menu allows you to turn the LED indicator on or off.

Do the following to enable this feature.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Mode** button to highlight **LED INDICATOR**.

6. Press the **Shutter** button to enter **LED INDICATOR**.

7. Press the **Mode** button to select **ON** or **OFF**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU1,** press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU1**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.5.4 OSD Flip

This menu allows you to display the OLED screen upside down.

Do the following to enable this feature.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Mode** button to highlight **OSD FLIP**.

6. Press the **Shutter** button to enter **OSD FLIP**.

7. Press the **Mode** button to select **ON** or **OFF**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU1,** press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU1**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.5.5 OSD Brightness

This menu allows you to adjust the OLED screen brightness.

Do the following to adjust the OLED screen brightness.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Mode** button to highlight **OSD BRIGHTNESS**.

6. Press the **Shutter** button to enter **OSD BRIGHTNESS**.

7. Press the **Mode** button to scroll through the brightness options: **100%**, **60%**, and **30%**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU1**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU1**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.5.6   Beep Volume

This menu allows you to enable or disable the beep sound when you press the **Power / Mode** or **Shutter** buttons.

Do the following to enable or disable the beep sound.

1.   Press the **Mode** button repeatedly to change to **SET** mode.

2.   Press the **Shutter** button to enter **SET** mode.

3.   Press the **Mode** button to highlight **SYS MENU1**.

4.   Press the **Shutter** button to enter **SYS MENU1**.

5.   Press the **Mode** button to highlight **BEEP VOLUME**.

6.   Press the **Shutter** button to enter **BEEP VOLUME**.

7.   Press the **Mode** button to scroll through the brightness options: **100%**, **60%**, and **OFF**.

8.   Press the **Shutter** button to confirm.

9.   To exit **SYS MENU1**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU1**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.5.7   Date Stamp

This menu allows you to enable the date when the photo/video is taken to be shown on the photo/video.

Do the following to enable this feature.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Mode** button to highlight **DATE STAMP**.

6. Press the **Shutter** button to enter **DATE STAMP**.

7. Press the **Mode** button to scroll through: **ON** and **OFF**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU1**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU1**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

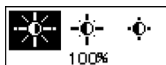12. Press the **Shutter** button to exit **SET** mode.

4.5.8　Auto Power Off

This menu allows you to program the camera to automatically turn off after being idle for a specific period of time, or you can set the setting to OFF to keep the camera on until you manually turn it off.

Do the following to select the auto-off option.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU1**.

4. Press the **Shutter** button to enter **SYS MENU1**.

5. Press the **Mode** button to highlight **AUTO POWER OFF**.

6. Press the **Shutter** button to enter **AUTO POWER OFF**.

7. Press the **Mode** button to scroll through the auto power off options: **60 MIN**, **30 MIN**, **10 MIN**, **5 MIN**, **3 MIN**, **1 MIN**, and **OFF**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU1**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU1**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.6 System Menu2

This menu allows you to adjust the basic camera settings such as date and time, frequency, etc.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Mode** button repeatedly to scroll through the submenu options.

6. Press the **Shutter** button to confirm.

7. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

8. Press the **Shutter** button to exit **SYS MENU2**.

9. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SET** mode.

4.6.1 Date and Time

This menu allows you to set the camera date and time settings.

Do the following to set the camera date and time.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Shutter** button to enter **DATE & TIME**.

6. Press the **Shutter** button repeatedly to adjust the year.

7. When done, press the **Mode** button to go to the month field.

8. Press the **Shutter** button repeatedly to adjust the month value, and then

press the **Mode** button to go to the day field.

9. Press the **Shutter** button repeatedly to adjust the day value, and then press the **Mode** button to go to the hour field.

10. Press the **Shutter** button repeatedly to adjust the hour value (in 24 hr or military time), and then press the **Mode** button to go to the minute field.

11. Press the **Shutter** button repeatedly to adjust the minute value, and then press the **Mode** button to to the second field.

12. Press the **Shutter** button repeatedly to adjust the second value, then press the Mode button to highlight **OK**.

13. Press the **Shutter** button to complete the date and time setting.

14. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

15. Press the **Shutter** button to exit **SYS MENU2**.

16. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

17. Press the **Shutter** button to exit **SET** mode.

4.6.2   Remoter

This menu allows you to pair your camera with the RF wrist strap remote control (optional accessory). When the devices are paired, you can record videos or capture photos by pressing the corresponding buttons on the RF wrist strap remote control.

<u>**Using Wrist Strap Remote Control (RCWD01)**</u>

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Mode** button repeatedly to highlight **REMOTER**.
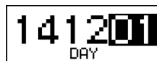
6. Press the **Shutter** button to enter **REMOTER**.

7. Press the **Mode** button to select: **SCANNING** or **OFF**.

8. The camera RF antenna is enabled and ready to be paired with the RF wrist strap remote control.

9. On your RF watch remote control, press the **MODE** button to switch to **Preview** mode. Then press and hold the **SET** button to enter to **SET** mode.

PHOTO button

MODE button

LEFT button

SET button

RIGHT button
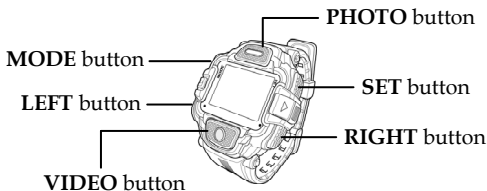
VIDEO button

10. Use the **LEFT** or **RIGHT** button to select **Pairing** and press the **VIDEO** button to enter **Pairing** menu.

11. Use the **LEFT** or **RIGHT** button to select the preview window that you want to pair with your camera and press the **VIDEO** button to start pairing.

12. When pairing is complete, press the **SET** button to return to **SET** mode. Then press the **SET** button to switch to **Preview** mode.

13. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

14. Press the **Shutter** button to exit **SYS MENU2**.

15. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

16. Press the **Shutter** button to exit **SET** mode.

Using Wrist Strap Remote Control (RCW5K8)

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Mode** button repeatedly to highlight **REMOTER**.

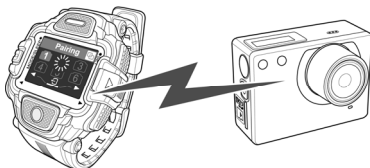6. Press the **Shutter** button to enter **REMOTER**.

7. Press the **Mode** button to select: **SCANNING** or **OFF**.

8. The camera RF antenna is enabled and ready to be paired with the RF wrist strap remote control.

9. Press both the video and photo buttons on the RF wrist strap remote control to process pairing. When the red LED on the RF wrist strap remote control flash once, this indicates the pairing is complete.

10. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **SYS MENU2**.

12. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

13. Press the **Shutter** button to exit **SET** mode.

4.6.3 Frequency

This menu allows you to change the camera frequency.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Mode** button repeatedly to highlight **FREQUENCY**.

6. Press the **Shutter** button to enter **FREQUENCY**.

7. Press the **Mode** button to select: **50 HZ** or **60 HZ**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU2**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.6.4 Format

This menu allows you to format the memory card.

Do the following to format the memory card.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.
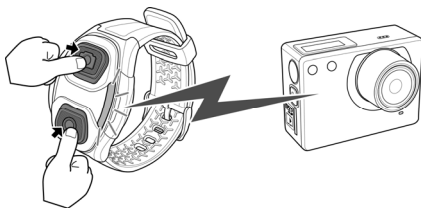
3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Mode** button repeatedly to highlight **FORMAT**.

6. Press the **Shutter** button to enter **FORMAT**.

7. Press the **Mode** button to select **OK**.

8. Press the **Shutter** button to confirm.

9. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10. Press the **Shutter** button to exit **SYS MENU2**.

11. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.6.5   Factory Default

This menu allows you to restore the default factory settings of your camera.

Do the following to restore the factory default settings.

1.   Press the **Mode** button repeatedly to change to **SET** mode.

2.   Press the **Shutter** button to enter **SET** mode.

3.   Press the **Mode** button to highlight **SYS MENU2**.

4.   Press the **Shutter** button to enter **SYS MENU2**.

5.   Press the **Mode** button repeatedly to highlight **DEFAULT**.

6.   Press the **Shutter** button to enter **DEFAULT**.

7.   Press the **Mode** button to select **OK**.

8.   Press the **Shutter** button to confirm.

9.   To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

10.   Press the **Shutter** button to exit **SYS MENU2**.

11.   To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

12. Press the **Shutter** button to exit **SET** mode.

4.6.6 WiFi Password

This menu allows you to change the WiFi password.

Do the following to change the password.

1. Press the **Mode** button repeatedly to change to **SET** mode.

2. Press the **Shutter** button to enter **SET** mode.

3. Press the **Mode** button to highlight **SYS MENU2**.

4. Press the **Shutter** button to enter **SYS MENU2**.

5. Press the **Mode** button repeatedly to highlight **WIFI PASSWORD**.

6. Press the **Shutter** button to enter **WIFI PASSWORD**.

7. Change the password.

*   Press the **Shutter** button repeatedly to change the value.

*   Press the **Mode** button to switch to next field.

8. When done, press the **Mode** button repeatedly to highlight **OK**.

9. Press the **Shutter** button to confirm.

10. To exit **SYS MENU2**, press the **Mode** button repeatedly until the **EXIT** screen appears.

11. Press the **Shutter** button to exit **SYS MENU2**.

12. To exit **SET** mode, press the **Mode** button repeatedly until the **EXIT** screen appears.

13. Press the **Shutter** button to exit **SET** mode.

5   Using the Accessories

The camera comes with rugged accessories for all your sporting needs.

5.1 Waterproof Case

The waterproof case allows you to take underwater shots or use it with the surface mount.

1.   Release the case lock and flip open the waterproof case.
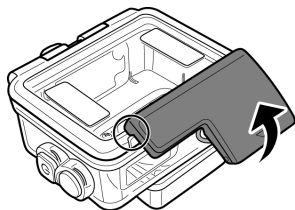
2.   Install the camera inside the waterproof case.

3.   Secure the waterproof case lock.
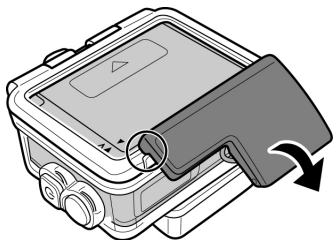
5.2 Assembling the Camera Accessories

Lock the swivel T tip to the adhesive socket to adjoin the accessories.
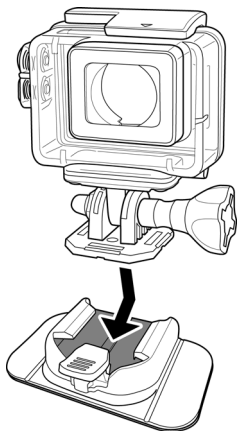
Tips on attaching adhesive mounts

- Apply to clean surfaces - wax, dust, and oily essence free.

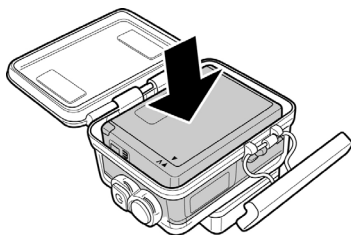- Attach the mount at room temperature.

- Mount only on smooth surfaces. To obtain optimum adhesion, firmly press into place when installing the mount.

- It is highly recommended to attach the mount a minimum of 24 hours before its initial usage.

Appendix

Specifications

General	
OLED Screen Display	0.68"
Storage (Memory)	Micro SD, up to 32GB SDHC Class 6
Image Quality	Optics: Ultra-sharp F/no=2.4, f=2.4mm Focus range: 0.4m ~ infinity Field of view: Wide
Video	1080p (16:9): 30fps 960p (4:3): 30 fps 720p (16:9): 60, 30 fps WVGA (16:9): 60, 30 fps VGA: 90 fps Time lapse: 3, 5, 10, 30, 60 seconds Video format: H.264 (AVI)
Still Image	Resolution: 16MP, 5MP, 3MP, 2MP Burst: 3, 5, 10 Self-timer: 2, 5, 10 seconds Interval shooting: 3, 5, 10, 30, 60 seconds Photo format: JPEG (exif 2.2)
White Balance	Auto
Looping Video	Yes
Average Record Time	Video (1080p30): about 90 minutes, Photo (16MP): about 250 photos

General

Auto Power Off	1, 3, 5, 10, 30, 60 minutes
Inputs/Outputs	Micro USB, Mini HDMI
Battery	1130mAh rechargeable Li-ion
Dimensions	39.0 (H) x 54.3 (W) x 21 (D) mm (without lens)
Weight	Approx. 46±3g (without waterproof case)

Troubleshooting

Problem	Possible Cause	Solution
The battery LED is flashing red.	The battery is almost used up.	Replace with a new battery or charge the battery.
Nothing happens when the **Shutter** button is pressed.	The Micro SD card is full. You cannot take photos or record videos at this point.	Transfer the Micro SD card files to the computer or delete the files in the Micro SD card.
Nothing happens when the **Shutter** button is pressed. "000" appears on the screen.	The Micro SD card may have compatibility issues.	Format the Micro SD card first using the camera (Delete menu). If it still does not work, format the Micro SD card using the PC.
Nothing happens when the **Shutter** button is pressed. "000" appears on the screen.	The Micro SD card is not inserted.	Insert the Micro SD card.

FCC Statement

Modifications not approved by the party responsible for compliance could void user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for 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. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off.

The user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Trademarks and licenses

SDHC Logo is a trademark of SD-3C, L

This device has been tested and meets the FCC RF exposure guidelines. The maximum SAR value reported is 0.915 w/kg.

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.