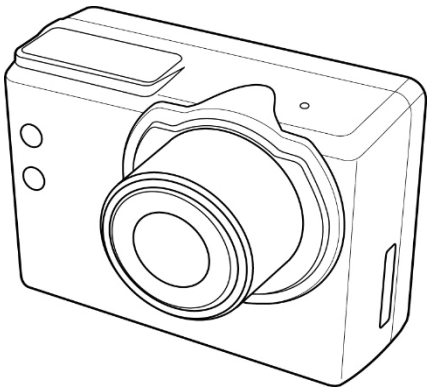
HD Action Camera



DVSD03 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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All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, manual or otherwise, without the prior written permission of the manufacturer.

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 2 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.

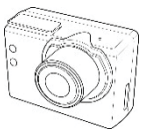
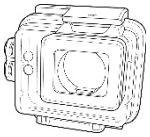
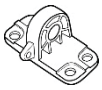
1.2 Features

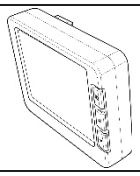
The camera offers a variety of features and functions including:

- Full HD 1080p (60fps)
- H.264 Video Clip
- 145° Wide Angle Lens
- Burst, Self Timer, Lapse
- 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.

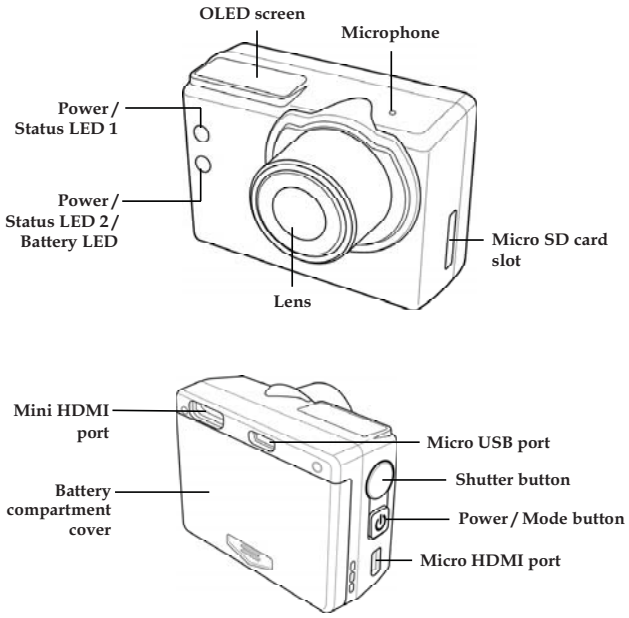
 Camera	 Waterproof Case	Waterproof Housing Backdoor
Vented Housing Backdoor	Flat Adhesive Socket	Curved Adhesive Socket
Swivel Mount	 Swivel Mount Adapter	Li-ion Battery
Micro USB Cable	Secure Tether	USB Adapter (optional)

		
Detachable Panel (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



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**, **Wi-Fi**, **Delete** and **Setup** mode. • In **Setup** 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 **Setup** mode, press to select an item.

1.4.3 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 Blinking	Battery is charging
	Off	Full charge

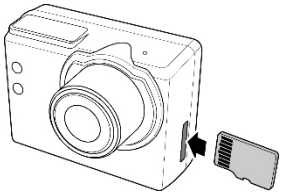
2 Getting Started

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.

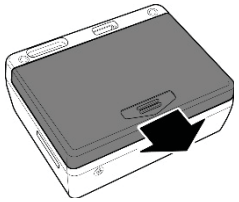
2.1.1 Removing the Micro SD card

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.

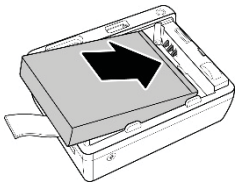
2.2 Installing the Battery

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

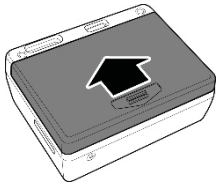
1. Push down the battery compartment cover to open it.



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.



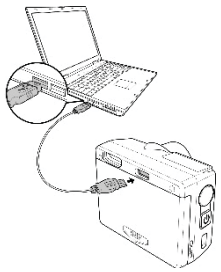
2.2.1 Removing the battery

1. Open the battery compartment cover.
2. Pull the ribbon to remove the battery.

2.3 Charging the Battery

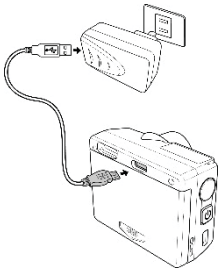
You can charge the battery using the micro USB cable that came with the camera. Follow the steps below to charge the battery.

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:

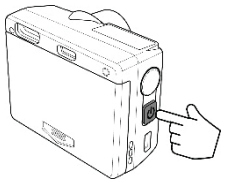
- The battery LED blinks red. After a full charge, the LED turns off.
- Approximate charging time is 240 minutes with a USB connection. Actual charging time depends on current battery capacity and charging conditions.
- You may also use the supplied AC adapter to charge your camera battery.



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

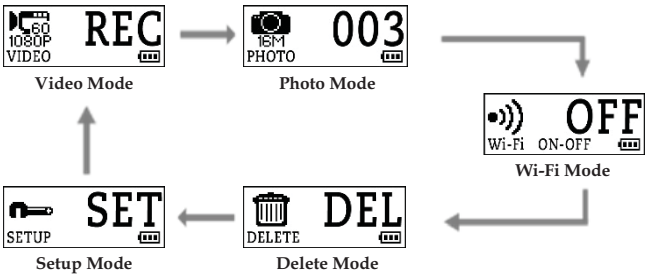
When the camera is turned on, the OLED screen displays the following information:

1	Current Mode		Displays the current mode of the camera.
		Video mode	Use this mode to record videos. The icon also indicates the current video recording settings.
		Photo mode	Use this mode to capture photos. The icon also indicates the current capture settings.
		Wi-Fi mode	Select to connect the camera to a smartphone using Wi-Fi connection. With this feature, videos and photos recorded from the camera can be viewed on the smartphone.
		Delete mode	Use this mode to delete one or all files stored in the memory card.
		Setup mode	Use this mode to adjust the settings of your camera.

2	Recording Status /Number of Files/Wi-Fi Connection status	• In Video mode, this indicates the recording status. • In Photo mode, this indicates the total number of files. • In Wi-Fi mode, this indicates the Wi-Fi connection status.
3	Battery	Indicates the battery capacity.

2.6 Changing Modes

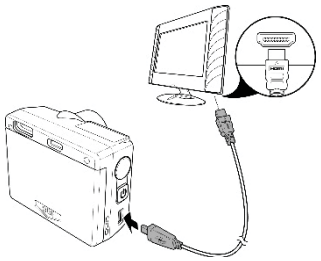
Press the **Mode** button repeatedly to switch modes.



Video Mode **Photo Mode** **Wi-Fi Mode** **Setup Mode** **Delete Mode**

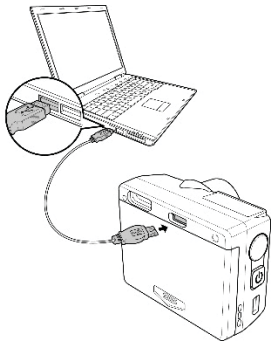
2.7 Connecting to TV (Mini HDMI Cable)

You can also connect the camera to a TV using the mini HDMI cable (optional).



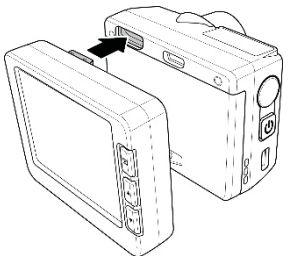
2.8 Connecting to PC (Micro USB Cable)

Connect the camera to a computer with the micro USB cable provided as shown.



2.9 Connecting to Detachable Panel (Mini HDMI)

Connect the camera to a detachable panel via the mini HDMI connection as shown. Using this panel, you can view photos and play video clips directly on this camera.



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 **Video** mode.

- **Note:** Make sure you have properly installed the micro SD card (Class 6 or above) before recording a video.

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

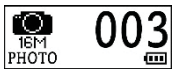
3. Press the **Shutter** button to stop recording.

3.2 Taking Photos

Note: Make sure you have properly installed the memory card before capturing a photo.

- **Note:** Make sure you have properly installed the micro SD card (Class 6 or above) before capturing a photo.

1. Turn on the camera.
2. Press the **Mode** button to switch to **Photo** mode.



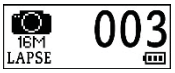
3. Press the **Shutter** button to capture a photo.

3.2.1 Lapse Shooting

This feature allows you to continuously capture photos with one press of the **Shutter** button at the preset interval time (1/3/5/10/30/60 seconds). Shooting only stops when the **Shutter** button is pressed again. 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). You can use this feature to record videos such as evolution of a construction project, weather changes, or flower blossom.

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. Press the **Shutter** button again to stop capturing photos.

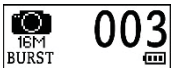


3.2.2 Burst Shooting

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 **SELF TIMER** mode, see *Self-Timer* on page 32 for more information.

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

3.3 Wi-Fi

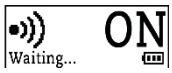
This menu allows you to connect your camera to a smartphone using Wi-Fi connection and view the videos and photos recorded from your camera on the smartphone.

Note:

- Before using this feature, download the **ActionCamUp** app from AppStore (iOS) or Google Play (Android OS) on your smartphone.
- Make sure you have properly installed the micro SD card (Class 6 or above) before recording a video.
- The **ActionCamUp** app (installed on your smartphone) does not support video playback streaming.
- When Wi-Fi function is enabled, you cannot use the RF function to take photos or record videos.

1. Press the **Mode** button repeatedly to change to **Wi-Fi** mode.

2. Press the **Shutter** button to toggle Wi-Fi **ON** or **OFF**.
3. Once the "**Waiting…**" appears on the screen and the LED flashes, this indicates Wi-Fi connection is established.



4. On your smartphone, enable Wi-Fi connection, then search and connect to the Wi-Fi network **DVSD03_XXXXXX**.
5. When prompted for a password, enter the default password "1234567890".

6. Use the **ActionCamUp** 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 repeatedly to scroll through the delete options.

	To delete the last captured video or photo.
	To delete all files in the micro SD card.
	To exit the **DELETE** menu.

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

4 Adjusting the Settings

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

1	**Camera Menu**		Select **CAMERA SETUP** to adjust capture settings.
	60 1080P	Video Resolution	Select to select the video resolution.
	NORMAL	Photo Mode	Select to set the photo mode.
	16M	Photo Resolution	Select to select the image resolution.
	FLIP	Sensor Flip	Select to turn sensor flip on or off.
		Exit	Select to close the **CAMERA SETUP** menu and return to the previous menu screen.
2	**SYSTEM Menu 1**		Select **SETUP SYS. 1** to adjust the display and OSD settings.

		LED Light	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 the 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 **SETUP SYS. 1** menu and return to the previous menu screen.
3	**SYSTEM Menu 2**		Select **SETUP SYS. 2** to adjust basic camera settings.
		Date/Time	Select to set the camera date and time.
		RF Pairing	Select to pair with the RF remote control.
		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 Wi-Fi password.
	Version No.	Select to view the firmware version.
	Exit	Select to close the **SETUP SYS. 2** menu and return to the previous menu screen.

4.1 Video Resolution

When a video is recorded, the video file is automatically saved in the memory card. The camera supports several 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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Shutter** button to enter the **CAMERA SETUP** menu.

4. Press the **Shutter** button to enter the **VIDEO RESOLUTION** submenu.
5. Press the **Mode** button repeatedly to scroll through the resolution options.

60 1080P	16:9, 1080P (1920x1080, 60fps)
30 1080P	16:9, 1080P (1920x1080, 30fps)

120 720P	16:9, 720P (1280x720, 120fps)
60 720P	16:9, 720P (1280x720, 60fps)
30 720P	16:9, 720P (1280x720, 30fps)
240 480P	16:9, 480P (848x480, 240fps)
60 480P	16:9, 480P (848x480, 60fps)
30 480P	16:9, 480P (848x480, 30fps)

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

7. To exit the **CAMERA SETUP** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

8. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

Note: The FOV of every resolution is different.

Resolution	Resolution	Field of view
1080p30	1080p * 30F	133°
1080p60	1080p * 60F	132°
720p30	720P * 30F	132°
720p60	720P * 60F	132°
720p120	720P * 120F	131°
WVGA	480P * 30F	132°
WVGA	480P * 60F	132°
WVGA	480P * 240F	131°

4.2 Photo Mode

This menu allows you to change the capture mode into lapse, burst or self-timer mode.

4.2.1 Lapse

This menu allows you to select the interval options when capturing photos using Lapse mode.

Do the following to select the shooting interval:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Shutter** button to enter the **CAMERA SETUP** menu.

4. Press the **Mode** button repeatedly to highlight **PHOTO MODE**.
5. Press the **Shutter** button to enter **PHOTO MODE**.
6. Press the **Mode** button repeatedly to highlight **LAPSE**.

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

8. Press the **Mode** button repeatedly to scroll through the lapse options: **1 SEC**, **3 SEC**, **5 SEC**, **10 SEC**, **30 SEC**, and **60 SEC**.

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

10. To exit the **CAMERA SETUP** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

11. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.2.2 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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Shutter** button to enter the **CAMERA SETUP** menu.

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

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

6. Press the **Mode** button repeatedly 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 the **CAMERA SETUP** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

11. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.2.3 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 self-timer:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Shutter** button to enter the **CAMERA SETUP** 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 **SELF TIMER**.

7. Press the **Shutter** button to enter **SELF TIMER**.
8. Press the **Mode** button repeatedly to scroll through the self-timer options: **3 SEC**, **5 SEC**, and **10 SEC**.

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

10. To exit the **CAMERA SETUP** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

11. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.3 Photo 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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Shutter** button to enter the **CAMERA SETUP** menu.

4. Press the **Mode** button repeatedly to select **PHOTO RESOLUTION**.
5. Press the **Shutter** button to enter the **PHOTO RESOLUTION** submenu.
9. Press the **Mode** button repeatedly to scroll through the image resolution options: **16M, 12M**, **8M**, and **5M**.

6. Press the **Shutter** button to confirm.
7. To exit the **CAMERA SETUP** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

8. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

Note: The FOV of every resolution is different.

Resolution	Resolution	Field of view
Still image 16M	4608 x 3456	146°
Still image 12M	4000 x 3000	140°
Still image 8M	3264 x 2448	132°
Still image 5M	2592 x 1944	145°

4.4 Sensor Flip

This menu allows you to set the sensor flip to **FLIP** or **NORMAL**.

Do the following to set sensor flip:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Shutter** button to enter the **CAMERA SETUP** menu.

4. Press the **Mode** button repeatedly to select **SENSOR FLIP**.
5. Press the **Shutter** button to enter the **SENSOR FLIP** submenu.
6. Press the **Mode** button repeatedly to scroll through the options: **FLIP** and **NORMAL**.

7. Press the **Shutter** button to confirm.
8. To exit the **CAMERA SETUP** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

9. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5 System Menu 1

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

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.

4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Mode** button repeatedly to scroll through the submenu options.
6. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

7. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5.1 LED Light

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

Do the following to enable or disable this feature:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.
4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Shutter** button to enter the **LED LIGHT** submenu.

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

7. Press the **Shutter** button to confirm.
8. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

9. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5.2 OSD Flip

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

Do the following to set the OLED screen orientation:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.
4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Mode** button repeatedly to highlight **OSD FLIP**.
6. Press the **Shutter** button to enter the **OSD FLIP** submenu.

7. Press the **Mode** button to select (NORMAL) or (FLIP).

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5.3 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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.
4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Mode** button repeatedly to highlight **OSD BRIGHTNESS**.
6. Press the **Shutter** button to enter the **OSD BRIGHTNESS** submenu.

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

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5.4 Beep

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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.
4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Mode** button repeatedly to highlight **BEEP**.
6. Press the **Shutter** button to enter the **BEEP** submenu.

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

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5.5 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 or disable this feature:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.
4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Mode** button repeatedly to highlight **DATE STAMP**.
6. Press the **Shutter** button to enter the **DATE STAMP** submenu.

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

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.5.6 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 power off option:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.1**.
4. Press the **Shutter** button to enter the **SETUP SYS.1** menu.
5. Press the **Mode** button repeatedly to highlight **AUTO POWER OFF**.
6. Press the **Shutter** button to enter the **AUTO POWER OFF** submenu.

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

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.1** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.6 System Menu 2

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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.

4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to scroll through the submenu options.
6. Press the **Shutter** button to confirm.
7. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

8. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.6.1 Date and Time

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

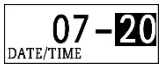
Do the following to set the camera date and time:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Shutter** button to enter the **DATE/ TIME** submenu.

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, and then press the **Mode** button to go to the minute field.

11. Press the **Shutter** button repeatedly to adjust the minute value, then press the **Mode** button to save the setting.

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

13. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

14. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.6.2 RF Pairing

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.

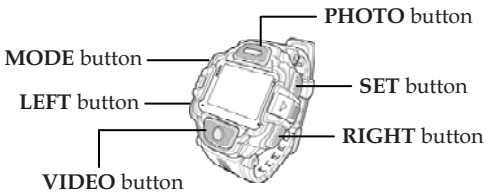
- **Note:** When Wi-Fi function is enabled, you cannot use the RF function to take photos or record videos.

Using Wrist Strap Remote Control (RCWD01)

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **RF PAIRING**.
6. Press the **Shutter** button to enter the **RF PAIRING** submenu.

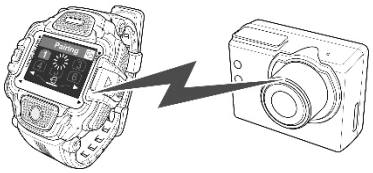
7. Press the **Mode** button to select (SCANNING).
8. The camera RF antenna is enabled and ready to be paired with the RF wrist strap remote control.

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.



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. On your camera, to exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

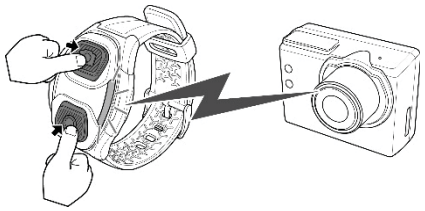
14. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

Using Wrist Strap Remote Control (RCW5K8)

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **RF PAIRING**.
6. Press the **Shutter** button to enter the **RF PAIRING** submenu.

7. Press the **Mode** button to select (SCANNING).
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 both the video and photo buttons to process pairing. When the red LED on the RF wrist strap remote control flash once, this indicates the pairing is complete.



10. On your camera, to exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

11. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.6.3 Frequency

This menu allows you to change the camera frequency.

Do the following to set the camera frequency:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **FREQUENCY**.
6. Press the **Shutter** button to enter the **FREQUENCY** submenu.

7. Press the **Mode** button to select: **50 Hz** or **60 Hz**.
8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **FORMAT**.
6. Press the **Shutter** button to enter the **FORMAT** submenu.

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

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

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 **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **DEFAULT**.
6. Press the **Shutter** button to enter the **DEFAULT** submenu.

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

8. Press the **Shutter** button to confirm.
9. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

10. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.6.6 Wi-Fi Password

This menu allows you to change the Wi-Fi password.

Do the following to change the password:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **WIFI PASSWORD**.
6. Press the **Shutter** button to enter the **WIFI PASSWORD** submenu.

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 (EXIT).

9. Press the **Shutter** button to confirm.
10. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

11. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

4.6.7 Version Number

This menu allows you to view the current firmware version.

Do the following to view the firmware version:

1. Press the **Mode** button repeatedly to change to **SETUP** mode.
2. Press the **Shutter** button to enter the **SETUP** mode.
3. Press the **Mode** button repeatedly to select **SETUP SYS.2**.
4. Press the **Shutter** button to enter the **SETUP SYS.2** menu.
5. Press the **Mode** button repeatedly to highlight **VERSION NO.**.
6. Press the **Shutter** button to enter the **VERSION NO.** submenu.

7. The firmware version appears on the screen. Press the **Shutter** button to exit the submenu.

8. To exit the **SETUP SYS.2** menu, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

9. To exit the **SETUP** mode, press the **Mode** button repeatedly until the **EXIT** screen appears. Then press the **Shutter** button to confirm.

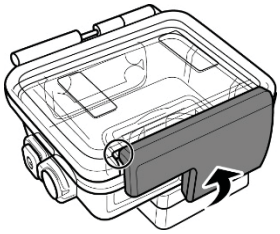
5 Using the Accessories

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

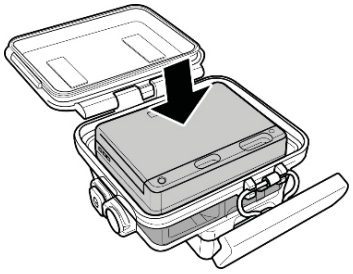
5.1 Waterproof Case

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

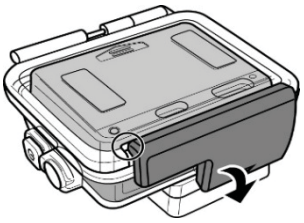
1. Release the case lock and flip open the waterproof case.



2. Install the camera inside the waterproof case.

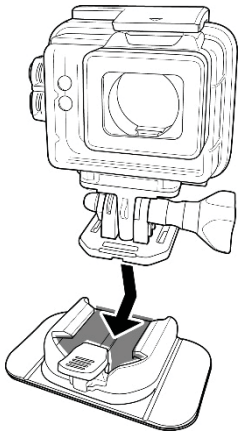


3. Secure the waterproof case lock.



5.2 Assembling the Camera Accessories

Lock the swivel T tip to the adhesive socket to adjoin the accessories.



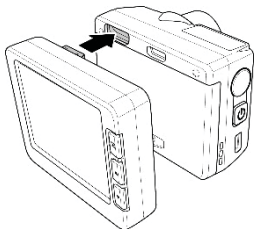
Tips on attaching adhesive mounts

- 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.

5.3 Detachable Panel

Using this panel, you can view photos and play video clips directly on this camera.

1. Connect the camera to a detachable panel via the mini HDMI connection as shown.



2. Press the **Mode** button repeatedly to change to **PLAYBACK** mode.

3. Press the **Shutter** button to enter the **PLAYBACK** mode.

4. Press the ▼ or ▲ button to select the desired photo or video to view.

- To start the video playback, press the ▶ button. Press the ▶ button again to stop.

Appendix

Specifications

General	
OLED Screen Display	0.83”
Storage (Memory)	Micro SD, up to 32GB SDHC Class 6
Image Quality	Optics: Ultra-sharp F/no=2.8, f=3.34mm Focus range: 0.75m ~ infinity Field of view: Ultra Wide, Wide, Narrow
Video	1080p (16:9): 60fps, 30fps (Ultra Wide, Wide, Narrow) 720p (16:9): 120, 60, 30 fps WVGA (16:9): 240, 60, 30 fps Time lapse: 1, 3, 5, 10, 30, 60 seconds Video format: H.264 (mp4)
Still Image	Resolution: 16MP, 12MP, 8MP, 5MP Burst: 3, 5, 10 Self-timer: 3, 5, 10 seconds Photo format: JPEG (exif 2.2), DCF
White Balance	Auto
Average Record Time	Video (1080p30): about 90 minutes, Photo (16MP): about 250 photos
Auto Power Off	1, 3, 10 minutes
Inputs/Outputs	Micro USB, Micro HDMI, Mini HDMI
Battery	1130mAh rechargeable Li-ion

General	
Dimensions	54.8 (H) x 42.2 (W) x 36.2 (D) mm (without lens)
Weight	Approx. 74±3g (without waterproof case)

Troubleshoo**ting**

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.

This device complies with Part 15 of the FCC rules standard. 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.

Thedevice is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (U.S.A.).
These requirements set a SAR limit of 2.0 W/kg, averaged over one gram of tissue.
The FCC highest SAR values reported under this standard during Product certification for use at the body (0 mm gap) is 0.951 W/kg.

Trademarks and licenses

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