

≡ ACTION CAMERA ≡≡≡



User Manual

Before using the product, please read this manual carefully and keep it properly for future reference when necessary



WATERPROOF SPORTS ACTION CAMERA

Instruction Manual

INTRODUCTION

Congratulations on the purchase of your new waterproof sports action camera!

This product is quite small and delicate with wonderful waterproof humanity design. With a multipurpose clamp, it can help you achieve omnidirectional video /monitoring under many kinds of conditions.

This manual contains important safety and operating information. Please read all the information carefully before you use the device to avoid accidents and keep it for future reference.

IMPORTANT SAFETY PRECAUTIONS

- **Safety Warnings:** To use this camera safely, please read and follow the instructions carefully before using it.
- No naked flames sources, such as candles, should be placed over or near the product.
- Keep the camera clean and never store it next to a heat source or in dirty, humid wet places.
- Press the camera's buttons gently. Pressing them too hard can damage the camera.
- Do not subject the product to harsh impacts. Do not drop the appliance. This may result in damage to the product.
- Do not attempt to dismantle or repair this unit by yourself, there are no user-serviceable parts inside. Refer servicing to qualified service personnel only.
- Do not allow your camera to be submerged in water without waterproof cover in place, as water entering the product may cause major damage.
- We will not be responsible for any memory loss caused by product damage, repairs or other reasons. Please operate the unit correctly as stated in this manual.
- Disconnect the appliance from the PC or AC adaptor before cleaning.
- In order to prevent program failure, never disconnect the camera suddenly from a PC during file transfers.
- Use a slightly dampened lint-free cloth to clean this appliance. Do not dismantle the camera or use liquid cleaners or aerosol cleaners to clean the appliance. Only use a slightly damp, lint-free cloth to clean the camera.

- The supplier or retailer accepts no liability for lost, corrupted or damaged data. It remains the responsibility of the user to ensure that they perform consistent data backups during the use of this product.
- AC Adaptor is intended for indoor use only.
- The use of controls, adjustments, or procedures other than those specified herein may result in exposure to shock and/or electrical or mechanical hazards.
- The use of an accessory that is not recommended by manufacturer may cause fire, electric shock, or injury.
- Before inserting or removing the card, make sure your hands, the camera, and the card are completely dry.
- This camera is equipped to be waterproof, dust-proof and shockproof. Damage caused from misuse, abuse or failure to properly maintain the camera is not covered by the limited warranty.
- The camera is operable up to a water depth of 20m for 180 minutes. Take care when using the camera outdoors. Do not use this appliance under water depth 20m.
- Do not directly subject the camera to flowing water such as tap water.
- Do not use in hot springs.
- Use the camera in the recommended operating water temperature range of 10°C to 40°C.
- Depending on use conditions and circumstances, no guarantee is made regarding damage to, malfunction of, or the waterproof performance of this camera.
- As for dust-proof/shock-proof performance, there is no guarantee that the camera will not become scratched or dented.

- Sometimes waterproof performance is lost if the camera is subjected to a strong shock such as from being dropped.

Notes before using the camera under/near water

- Make sure that no foreign matter such as sand, hair, or dirt gets inside the waterproof cover. Even a small amount of foreign matter may lead to water entering the camera.
- Confirm that the sealing gasket and its mating surfaces have not become scratched. Even a small scratch may lead to water entering the camera. If the sealing gasket becomes scratched, replace it with a new one.
- If dirt or sand gets on the sealing gasket or its mating surfaces, wipe the area with a soft cloth that will not leave behind any fibres. Do not use a sharp-pointed implement to prevent the sealing gasket and its mating surfaces from becoming scratched.

IMPORTANT

- **Don't open the waterproof cover under water.**
- **Close waterproof cover properly for best water sealing.**
- Do not open/close the waterproof cover with wet or sandy hands or near water. There is a risk this will lead to sand or water getting inside.
- Before opening the cover, perform the procedure described in "Cleaning after using the camera under/near water".
- Open the cover with the camera completely dry.
- Always confirm that the waterproof cover has been securely installed.

Notes on using the camera under/near water

- To keep the camera waterproof, tightly close the waterproof cover.
- Do not subject the camera to shock such as from jumping into water.
- Do not open and close the waterproof cover while under/near water.
- Do not open the cover when hands are wet.
- This camera does not float and sinks in water, secure it with the strap to prevent the camera from sinking.
- Faint, white, circular spots may appear in underwater flash photos due to reflections off of floating objects. This is not a malfunction.
- If water drops or other foreign matter is present on the lens, you will be unable to record clear images.
- Waterproof integrity may be compromised if the camera is dropped.

Cleaning after using the camera under/near water

- Always clean the camera with water after use within 30 minutes, and do not open the waterproof cover before cleaning is finished. Sand or water may get inside places where it cannot be seen. If not rinsed, waterproof performance will be degraded.
- Allow the camera to sit in pure water poured into a cleaning bowl for more than 5 minutes. Then, gently keep the camera and press each button inside the water to clean away any salt, sand or other materials.
- After rinsing, wipe away water drops with a dry soft cloth. Allow the camera to dry completely in a shady location with good ventilation. Do not blow dry with a hair dryer, as there is a risk of deformation and/or degraded waterproof performance.

- The camera body may become discoloured if it comes in contact with sunscreen or suntan oil. If the camera does come in contact with sunscreen or suntan oil, quickly wipe it clean.
- Do not allow the camera to sit with salt water inside or on the surface. This may lead to corrosion or discoloration, and degradation of waterproof performance.
- If water has entered the camera, open the waterproof cover and remove the card carefully. Allow camera to air-dry for at least 24 hours and contact qualified service personnel.

Attention:

- We have done our best to produce a complete and accurate manual. However, we cannot ensure that there are no errors or omissions during the printing process.
 - We cannot take responsibility for any damages caused by unauthorised attempts to upgrade software or for any data corruption while the product is being repaired.
 - **Please Back Up Your Files!** We cannot be held liable for the loss of data caused by damaged products or damage due to unreadable memories or drives.
 - This device contains a built-in battery. Please observe the local regulations regarding the disposal of old equipment and battery.
 - This product is not intended for commercial use. Household use only.
- **Rinse by clean water after used and keep it dry for storage.**

PACKAGE CONTENTS

Please make sure the following items are included in package. If any item is damaged or missing, contact your dealer.



BRACKET MOUNT



Power Adaptor



Bag



AV Cable



USB Cable



Helmet Bracket



Manual

Note: Picture may be slightly different from the actual product and packaging shall be subject to change without further notice.

Notes on using the camera

Memory card back up

- In order to prevent program failure, never disconnect the camera suddenly from a PC during file transfers. Otherwise, the memory card may be damaged. Be sure to make a backup copy to protect your data.

Notes on recording/playback

- To ensure stable operations of the memory card, we recommend that you format the memory card being used with this camera for the first time. Note that formatting will erase all data recorded on the memory card. This data cannot be restored. Be sure to back-up any important data to a PC or other storage location.

- Before you start recording, make a trial recording to make sure that the camera is working correctly.
- Do not aim the camera at the sun or other bright light. It may cause the malfunction of the camera.
- Do not use the camera near a location that generates strong radio waves or emits radiation. Otherwise, the camera may not properly record or play back images.
- If moisture condensation occurs, remove it before using the camera.
- Do not beep or strike the camera. It may cause a malfunction and you may not be able to record images. Furthermore, the recording media may become unusable or image data may be damaged.

PRODUCT OVERVIEW

1. System requirements

To be able to download and play videos and photos to your PC, you will need the following minimum configuration:

Computer System Requirement for Windows XP

- Pentium III processing 667MHZ or above with Windows XP service pack 2
- 512 MB RAM, with 1 GB of free disk space
- 1024 x 768 Recommended screen resolution
- 256MB sound card and graphics card support DirectX8 or above
- USB port
- Windows Media Player 10 or higher

Computer System Requirement for Windows Vista

- Windows Vista
- 800MHz processor and 1GB of system memory
- Support for Super VGA graphics
- Available USB Interface
- Windows Media Player 10 or higher

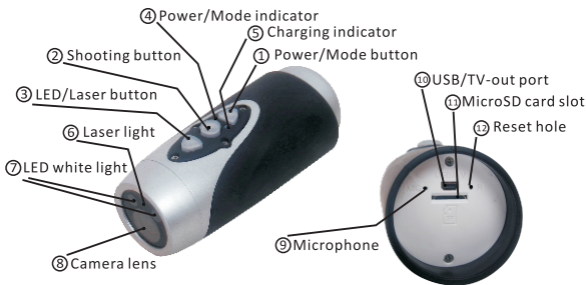
2. Main Features

- 1 Megapixel 1/4 HD CMOS Sensor
- 120° wide angle field of view
- 720P: 1280 x 720 pixels (16:9), 30fps

Format: AVI

- Resolution: 5 mega pixel in JPEG format
 - Built-in high quality microphone
 - Integrated 2pcs white LED lights for night time vision
 - Built-in one laser for a better positioning
 - MicroSD/MicroSDHC with minimum class6 up to 32GB (not included)
 - USB2.0 (for data connection and battery charging)
- AV/composite
- Built-in 1000mAH rechargeable Li-Polymer Battery
 - High quality PC rubberized finishing
 - Depth up to 20meter (IP X8 standard)
 - 99 x 44 x 44 mm
 - Approx. 87g

3. Identifying parts



1	Power/Mode button	7	LED white light
2	Shooting button	8	Camera lens
3	LED/Laser button	9	Microphone
4	Power/Mode indicator	10	USB/TV-out port
5	Charging indicator	11	MicroSD card slot
6	Laser light	12	Reset hole

4. Inserting/removing a memory card (not included)

Follow the instructions below to insert/remove the TF card (micro SD card) into/from the camera.

1. Turn off the camera first before inserting/removing the memory card.
2. Open the waterproof cover.
3. Insert the TF card (micro SD card) carefully into the TF card (micro SD card) slot in the correct direction until it clicks into place.

4. To remove the card, press and release it, then pull it out slowly.

5. Close the cover firmly.

Note: A card can only be inserted one way, forcing it may cause damage. Inserting or removing a card while the camera is on may damage the video or photo, the card, or the camera.

The memory card must be formatted before using.

5. Charging the battery

1. The unit has a built-in rechargeable battery. Fully charge the built-in battery before using it for the first time. It takes about 4 hours to fully charge the battery.

2. Insert the small plug of the supplied USB cable into the Mini USB slot on camera and the large plug into the supplied AC adaptor firmly, and then insert the adaptor into an available AC 100-240V~50Hz wall outlet. The charging indicator will light yellow while charging. It will go off when the battery is fully charged. Disconnect the unit after full charged.

Warning: Only connect the adaptor to an available AC 100-240V~50Hz wall outlet to avoid the risk of fire or electric shock. Only use the supplied adaptor. Failure to do so may cause a fire or damage the camera.

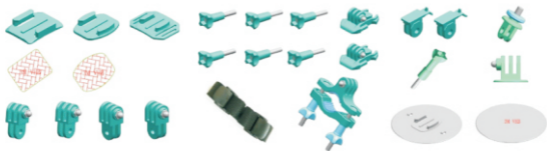
6. Time & Date Stamp

The unit supports time & date stamp, when use it first time or no operation for a long time, please set up correct time and date before using, please refer to system settings.

7. Options accessories for usage

Contents including:

- a. 1 Straight helmet bracket with 3M sticker
- b. 1 Curve helmet bracket with 3M sticker
- c. 1 Handlebar mount with two long screws
- d. 1 Curve helmet/wrist bracket with strap
- e. 4 Connection brackets
- f. 6 short connecting screws
- g. 2 camera connecting rods
- h. 1/4 screw
- i. 1/4 nut
- j. Surfboard sucker with 3M sticker



USING YOUR CAMERA

1. Turning on the camera

Long press Power button till Blue LED indicator is switched on. After the product beeps, it indicates that the camera is turned on and ready to record.

Note: The Blue LED indicator flashes quickly while turning on without TF Card inserted firmly.

2. Turning off the camera

Long press Power button, the blue light flashes 3 times and goes out. The camera beeps twice and then turns off.

Auto Power off

Your camera will be turned off automatically such as:

- When the memory of TF Card is full and the loop recording function is deactivated.
- When the built-in battery power is low or exhausted.
- When left in idle for more than 3 minutes.

Note: The camera will beep once or twice after a button is pressed. It indicates that the function is activated. Please wait few seconds every time till the camera is beep before pressing other buttons.

3. Selecting record mode

When you turn on the camera, it's ready to record. Press Mode button repeatedly will enter into below operating modes:

- **Video recording mode:** Blue LED indicator lights up and stays on.
- **Photo taking mode:** Red LED indicator lights up and stays on.

Note: The camera will beep once after a button is pressed. It indicates that the function is activated.

4. Video Recording

After the unit turns on, unit enters into video recording standby mode, short press the shooting button and the camera will beep once. The Blue indicator flashes and the camera starts video recording.

Press the shooting button again to stop recording and save your video as an AVI/video file on the memory card. The camera will beep once and Blue indicator will light up and stay on.

Notes:

- The unit can last video recording for 20 minutes every time and save the video automatically, and then records next video clip.
- To ensure waterproofing, the microphone of the camera is sealed inside the case. This camera is made primarily for shooting video and not designed for recording voice with the waterproof cover attached.
- To activate sound recording, you should open the waterproof cover. But it would not be a good idea to do this when you are shooting outside in an area where any dust or water could enter your camera.
- Never open the waterproof cover when use it underwater
- The recorded file will be named "PICTXXXX.AVI" where XXXX corresponds to the numerical sequence in which the recording was made. The video clips will be saved automatically to the folder: DCIM/100DSCIM.

5. Photo shooting

After the unit turns on, switch the Mode switch to photo taking mode, red indicator will be constantly on. Short press shooting button, red indicator will flash once and camera beeps once, that means a photo taken and saved.

Notes:

- Do not shake the camera during taking photo.
- Unit would automatically turn off in the condition of SD card is full and battery is empty or not operation for 3minutes.

6. Turn on the LED and laser light

The camera provides two high brightness white LED lights and one laser light to allow you to record in dark places. Operation as below;

Mode 1: The laser light would light up for 30 seconds for the purpose of positioning the object, and then laser light will go out.

Mode 2: The LED lights keep on for the purpose of video recording and photo- taking and strength the color quality in the dark place condition.

Note: You can long press the LED/Laser button to turn off the lamps directly.

7. Flashlight and laser positioning function

The unit has the single flashlight and laser positioning function. When this single function works, the DV system would come to the state of turning off, it would help to get more longer time for the usage. The way to operate as below details:

> Long press LED/laser light button, flashlight is lit up, short press LED&laser light button, unit will circle in below 4 modes:

Mode 1: Torch state: Flashlight is lit up and can be working up to 10h.

Mode 2: The laser light is on for positioning purpose.

Mode 3: The LED lights keep quickly flash in a high frequency to save energy.

Mode 4: Laser light flashes slowly for intermittent laser positioning.

Notes:

- When in the single flashlight/laser positioning function, it is common condition if there is no vibration after press button.
- In any mode, long press LED&laser light button and all lights will go out.

8. Connecting to a PC

The unit can be connected to the computer by using the supplied USB cable as mass storage device and transfer video and photo files for storage.

- Open the waterproof cover and turn on the camera.
- Plug the small end of the USB cable into the mini USB port on the camera. And connect the large end to an available USB port on your computer.
- The indicator turns on automatically.
- From the Windows desktop, double click on “My Computer”. The first time you connect the device to the computer you will have to wait a few seconds until computer recognizes the device.
- Look for a new “removable disk” icon. This “removable disk” is actually the memory card in your camera. Typically, the camera will be assigned drive letter “e” or higher.
- Double click on the removable disk and locate the DCIM folder.
- Double click on the 100DSCIM folder to find the recorded video and photo clips.
- You can Copy & Paste or Drag-N-Drop video and photo files to a folder on your computer.

Notes:

- We suggest that you save your files to your computers as soon as possible after recording. You may use a card reader/writer that plugs into your computer's USB slot also.
- If you try to connect your camera to the computer with the USB cable while the camera is recording, your camera will crash. This could cause memory card corruption and loss of your video and photo files.
- The camera can be used as a USB table lamp by turning on the white LED light when it is connected to PC.

9. Operating the camera when charging

Connect the AC adaptor with the camera, the charging indicator will light yellow. The camera can be used in charging mode.

Note: When connected with a PC, it can be also charged and used as a removable disk, but couldn't be used as a camera.

10. TV-out function

The Camera supports TV out function. This function can only be used with an external TV set or monitor. Please follow up below steps to playback and view your recorded videos and photos on TV.

- Turn on both Camera and TV.
- Ensure that your TV is set to correct AV input mode. See NTSC & PAL details in below Setup setting section for switching between different international TV systems.

- Open the waterproof cover and plug the AV cable into 2.5mm AV OUT port on your camera. Connect the White cable to the Audio input jack and the Yellow cable to the Video input jack on TV set.
- Once it is connected correctly, blue indicator lights up, short press Power button, purple indicator lights up, that means unit enters into playback mode.
- Short press Shooting button to pause or resume playback.
- Long press Power button to quit playback mode
- Short press Power button to previous menu.
- Short press LED/Laser button to next menu.

SYSTEM SETTINGS

You can set your preferences in your camera to suit your needs. Please follow up below steps to enter into System settings menu.

- Connect your Camera to the TV with the supplied AV cable.
- Turn on the Camera and TV.
- Long press Shooting button to enter into &quit Setting menu.
- Short press Shooting button to select & quit setting items.
- Short press Power button to upward correct setting items.
- Short press LED/Laser button to downward correct setting items.

Item	Options	Description
Quality	1280*720,720*480, 640*480	Set up different video resolution
Rec.Time	5Min, 10Min,20Min	Set the loop recording duration.
Auto Del	ON,OFF	Activate or deactivate the looprecording function
Date Input	Off,Set	Set the Date and time
Time Stamp	Off,Date&Time	Activate or deactivate the time and date stamp.
Light Freq	60Hz,50Hz	Select the frequency setting thatbest suits the electricityfrequency
TV Output	NTSC,PAL	Choose the setting (NTSC, PAL) for your TV region.
Language	English,Francais, Deutsch,Italiano, Espanol,Portugues, Chinese Traditional, Simple Chinese, Japanese	Set menu language
Sys.Reset	Cancel,Shooting	Returning settings to theirfactory default.
Version	Version**, Build On****	Viewing the software versionand date

SETUP

11. System time setting

If the time stamp is wrong, please setting as below:

Method 1: Setting from TV

• You can set the date and time from TV. Please refer to the SYSTEM SETTINGS section for details.

Method 2: Setting from PC

1. Turn on the camera.

2. Connect it to computer by using the supplied USB cable.

3. Open the mass storage device.

4. Create a new "time.txt" file in mass storage device as below.

• If you want to set the date & time and want to activate the time stamp on photos and video clip. Please input real date, time character strings and Y as per below format: 2011.03.22 20:00:00 Y

• If you want to set the date & time but don't want to activate the time stamp on photos and video clip, please input real date, time character strings and N as per below format: 2011.03.22 20:00:00 N

5. Save "time.txt" file and safely exit the removable disk.

6. Then turns on the power, the system time will be updated.

Notes:

• Set is as "Year Month Date Hour Minute Second Y or N"

• The time character strings in the above-mentioned format is the time value you want to set up.

• Pay attention to the spaces between date and time, time and stamp switch (Y/N).

12. Reset the system

If the camera has malfunctioned, it may be caused by electrostatic discharge such as ESD etc. In this situation, use a paper clip to gently press the Reset button to reset the camera and try again.

TROUBLESHOOTING

Please check the followings in case your camera does not perform as expected. Do not attempt to repair the camera yourself, under any circumstances.

The Camera will not turn on

- Ensure that the battery is charged.
- If it's wet inside, open the waterproof cover and remove the card. Do not turn on the camera and let it dry for at least 24 hours.
- Reset the camera and try again.

The Camera turns off automatically

- When the battery is low or exhausted, the camera will turn off automatically. Try connecting to AC adaptor for charging.
- If the memory of TF Card is full, the camera will turn off automatically. Please transfer video clips and photos to your computer or activate the loop recording function.

Videos and photos are choppy or jumpy when played on a computer

- Ensure that the computer system requirements are met.
- Ensure AVI format Video clip and photo can be played on your computer.
- Try to use a Class 6 or higher TF Card.

Videos and photos do not displayed on TV

- Ensure that the supplied AV Cable is properly connected.
- Ensure that the TV is set to the correct input mode.
- Ensure that TV Output signal (NTSC or PAL) is set correctly.

The camera does not record videos and take photos

- The Memory or card is full. Transfer video clips and photos to your computer or activate the loop recording function.
- The Memory card is not formatted correctly. Format the memory card again or use a new card.

Corrupt or unusable card

- Transfer videos and photos to your computer and format (erase) the card. Try to use a Class 6 or higher TF Card.
- Memory of card is full, or unrecognized file. Transfer videos and photos to your computer or use a new card.

Camera will not turn off

- Once malfunction occurs, reset the camera and try again.

SPECIFICATIONS

SENSOR	1 Megapixel 1/4 HD CMOS Sensor
LENS	120° wide angle field of view
VIDEO	720P: 1280 x 720 pixels (16:9), 30fps
	Format: AVI
PHOTO	Resolution: 5 mega pixel in JPEG format
AUDIO	Built-in high quality microphone
LED	Integrated 2pcs white LED lights for night time vision
LASER	Built-in one laser for a better positioning
STORAGE	MicroSD/MicroSDHC with minimum class6 up to 32GB (not included)
CONNECT	USB2.0 (for data connection and battery charging)
	AV/composite
POWER	Built-in 1000mAH rechargeable Li-Polymer Battery
HOUSING	High quality PC rubberized finishing
WATERPROOF	Depth up to 20meter (IP X8 standard)
DIMENSIONS	99 x 44 x 44 mm
WEIGHT	Approx. 87g

Note: As a result of continual improvements, the design and specifications of the product within may differ slightly to the unit illustrated on the packaging.