

RD32 *Spearhead*

30M
Water
Resistant

SPORTS HD MINI DV



User manual

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

Preface

Thank you for purchasing RD32, HD Digital waterproof video camera. This product is quite small and delicate with wonderful waterproof humanity design. With a multipurpose stand, it can help you achieve omni-directional video / monitoring under all kinds of outdoor conditions.

The User's Manual will instruct in detail how to use and install the product and provide detailed information regarding to use, operation, installation notes and technical specifications etc. Before using the product, please read this manual carefully and keep it properly. We hope that this product can meet your demands and provide a long-term service for you!

Product Assurance

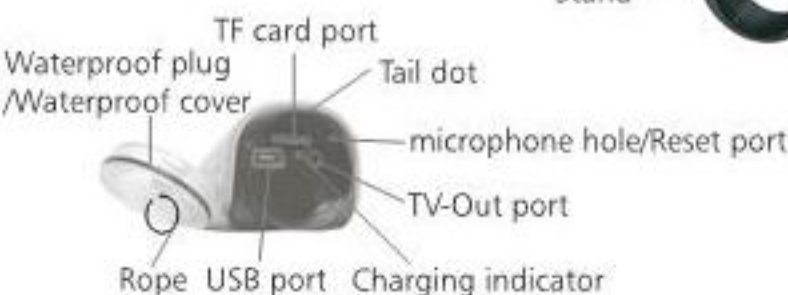
Certificated by FCC & CE etc. authoritative institutions, this product shall be in line with the recommended index and provide safe assurance when being used by users.

Product Overview

As an underwater activity fan, you are always impressed by the beautiful scene in the sea or lakes, then are you still looking for a companion that can help you record your unforgettable experiences?

Try our RD32. It is specially designed for diving. Water-proof feature makes it possible to take photos and record videos under water up to 30 meters. With high-definition camera lens and low light level sensitivity, you will never miss any chance to enjoy the beautiful view of the deep blue ocean with such a good underwater companion.

Product Structures



Product features

- > The product not only has dynamic appearance and elegant lines, but also has a waterproof function. It can work underwater 30 meters. It will be the best choice for your outdoor sports and diving.
- > Professional monitor design, with motion-detect function. Once connect to the monitor, it will become a professional security camera
- > Advanced vibration effect, makes mode transfer more convenient, easier to operate
- > 120 degree wide-angle, HD camera lens, let you shoot more freely.
- > Selectable Motion-detect video recording time setting: 10 seconds, 1 minute, 5 minutes, 10 minutes
- > In motion-detect mode, users are free to choose whether to use loop recording & coverage function
- > Three major selectable video quality: superior, standard, economic
- > Video resolution: 1280*720p AVI, 30fps
- > Two kinds of fill-in light mode: LED infrared light and LED white light (alternative), work in different light environment
- > Built-in high capacity li-battery lasting video recording for 3 h.
- > 2GB mini TF card (optional), support up to 32 GB
- > PC camera function, makes your network life more colourful
- > TV-out function, easy to share more funs
- > USB2.0 high-speed device, data transmission freely

Installation (With Pictures)

RD32 Can use handheld directly, also can be installed on the bracket to use, as the picture below shows:

1. Remove the back cover: you can energise to remove the back cover



2. Installtion of RD32



Use back clip together with stand



Install to stand

Power

This product shall adopt the power certified by authority.



U.S. Power Certification



Australia Power Certification



European Union
Power Certification



Germany Power Certification



China Power Certification PSE
Japan Power Certification



China Power Certification PSE
Japan Power Certification



UK Power Certification

Notes: During the service of power, rising of surface temperature is a normal phenomenon. If portable power supply is needed, please remove power source from the outlet.

Packaging & Accessories

Accessories:



Adaptor (Euro / US / UK
/ AUST Standardized Charger)



User Manual



Base stand



CD



USB cable



AV cable

Optional Accessory:



TF Card



bag



bandages



multi-functional bracket

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

Functional specification

1. Starting up

- > Insert TF Card, press power key for 2 seconds, blue LED will be always on, then open your hand. When the product stops to vibrate, which indicates that it turns on and enters into Standby mode.
- > Cause the difference of the capacity and data storage for the TF Card, the camera need a few seconds to ready, so please wait for the prompt of the vibrates.
- > For the product video resolution is HD 720P, please use the brand high-speed TF card to avoid the recording effect reducing or inoperation.

Note: The blue indicator flashes quickly when turns on without TF Card. Please turn off and insert TF card again.

2. Mode transfer

When it turns on, press the mode transfer key short, it will circle in 4 modes:

- Mode1: Manual video recording standby mode, blue indicator will be constantly on
- Mode2: Manual photo taking standby mode, red indicator will be constantly on
- Mode3: Motion-detect video recoding standby mode, blue and yellow indicator are(motion-detect start) constantly on together.
- Mode4: Motion-detect photo taking, red and yellow (mothion-detect) indicator are constantly on together.

Note:

- 1、 The camera will shake once after press the key which indicates that the key is in effect, if the status indicator is not changed immediately, please don't press it again, the camera is saving data. It is a normal situation, please have a little patience
- 2、 When it is transfered to other modes from motion-detect mode, the reaction will be faster if you shut out the lens.

3. Video Recording

In the manual video recording mode, press the execute key shortly, the camera will shake once, and blue indicator flashes slowly and the camera begins to record video. Press the key again, the camera will shake once and blue indicator will be constantly on, stop to record.

Note :

- 1、 The unit can last video recording for 20 minutes every time and save the video automatically, and then records next video.
- 2、 Please open the waterproof plug for better recording effect when not use it underwater.
- 3、 When the TF Card was fully loaded, battery used up or stop operated for 3 minutes, it will shut down automatically.

4. Photo Taking

In the manual photo taking standby mode, press the execute key, then please keep the camera still until it vibrates, a photo has been taken after vibration stops.

Note:

- 1、The red indicator will go out when it is taking photo, please keep it still for better photographing quality!
- 2、When the TF Card was fully loaded, battery used up or stop operated for 3 minutes, it will shut down automatically.

5. Motion-detect video recording

- > When it is transferred to motion-detect video recording mode, the camera will enter into intelligent video recording mode. When the camera captures mobile objects, it will record video for 10 seconds and save the video automatically, then it record next video and loop recording.
- > Motion-detect recording loop coverage: when the TF Card is fully loaded, will delete the former videos or photos automatically to acquire the space to store new videos. If the function is closed, the camera will power off automatically when the storage space is fully loaded.
- > Lasting time of video recording and motion-detect recording loop coverage function can be amended by the system settings, please refer to the system setup instruction.

Note:

- 1、When not use underwater, please open the waterproof plug for better recording effect.
- 2、When the TF Card was fully loaded (the loop coverage function closed) , battery used up or stop operated for 3 minutes, it will shut down automatically.
- 3、Enter into this mode 3 minutes later, LED light will turn off, the camera is still at work, press any key to instruct.

6. Motion-detect photo taking

- > When it is transferred to motion-detect video recording mode, the camera will enter into intelligent photo-taking mode. When the camera captures mobile objects, it will take a photo automatically.
- > Motion-detect photo taking loop coverage: when the TF Card is fully loaded, it will delete the old videos or photos automatically to acquire the space to store the new photos. If the function is closed, the camera will power off automatically when the storage space is fully loaded.

Note:

- 1、When the TF Card was fully loaded (the loop coverage function closed) , battery used up or stop operated for 3 minutes, it will shut down automatically.
- 2、Enter into this mode 3 minutes later, LED light will turn off, the camera is still at work, press any key to instruct.

7. Turn on the led light

- > The camera provides two kinds of led mode: LED white light and LED infrared light. Please turn on it as below:

Short press "Led light key" in the state of any mode (except TV-out playback mode), the led light will circle in 3 modes, please choose it on your own will

Mode1: Turn on the LED white light, it can record colour video in the dark.

Mode2: Turn on LED infrared light, the video will be in black and white in the dark circumstance. Cause the infrared lamp was invisible and hidden, so it can be used for surveillance.

Mode3: Turn off all the LED light

Note: Press and hold down the led light "🔊" to turn off all the led functions. The camera will shake when it is operated successfully.

8. Turn off and automatic turn off

In the standby mode, press and hold down the "power key" for two seconds, the blue light flashes 3 times and goes out, and then release your hand. At the mean time the camera shakes for twice, and then turn off the camera.

Note: The camera will turn off automatically when the TF Card is fully loaded (the loop coverage function closed), the battery is used up, the AV cable is disconnected, or there is no operation after 3 minutes, the red&blue light will flashing alternately when you turn off the camera.

9. Down load a video and removeable disk.

- > Please turn off the camera first, then connect it with computer.
- > The camera turns on automatically, and a removeable disk will appear in "my computer", you can view the pictures or videos in the removeable disk "DCIM/100DSCIM", and you can also copy these files to your computer.
- > When it is connected with USB1.1 port on computer, please copy the video to your computer desktop, and then replay it to avoid ragged playback.

Note: in the state of this mode, you can short press the "led light 🗣️" to turn on the light, can be used as a USB table lamp.

10. PC camera function

- > Install the CD driver software at the computer.
- > Turn on the camera, after the vibration stoped, please connect it with the computer, at that time, a "camera" icon will be appeared in "my computer", it enters into PC camera function.
- > Using the "third-party" applications software can also view real-time video of PC camera and save real-time video into the local computer, e.g. Amcap etc.

Note : in the state of this mode, you can turn on the white light or infrared light for a better image effect.

11. Charging

- > Put the matched AC adaptor into socket, then connect with camera for li-battery recharging. The red indicator turns on when charging, it turns off after the battery is full charged. The charging time is about 3 hours.
- > To avoid the charge time be longer, it is proposed to charge with the adapter, and the computer charging is not recommended.

Note: After connect with charger, camera will turn off automatically after 3 minutes, it's still charging after turns off.

12. Taking video when charging

Put the AC adaptor into socket, then connect with camera, the camera will turn on automatically and enter into the standby mode. The red light will constantly on indicating it's charging. In the mean time, each function is still available for operating.

Note: when the camera turns off automatically, if you want to use it again, disconnect the camera from the adaptor for about 5 seconds and then connect it again, the camera will restart

13. TV-out function

- > Please connect the plug of 2.5' AV cable with the camera's TV-OUT port, the yellow plug connect with TV video input port(yellow), white plug connect with TV audio input port(white). Please set the signal input according to the user manual of TV.
- > Turn on camera, after few seconds, the red and blue light turn on at the same time, the last photo or video will be appeared on the TV. The interface is shown as picture 1.

picture 1



TV Video&
Audio Playback_Video



TV Video&
Audio Playback_Photo

- > Manually play: by pressing 'up button' or 'down button' for browsing, when video camera icon appears on the top right corner, it indicates the file is video, press 'confirm button' to play the video. Please set the TV volume in order to get proper sound effect.
- > Auto play: short press 'confirm button' into auto play mode, when it plays the pictures, it will stay for 5 seconds then change to another one, when it plays the video, it will be replayed directly.
- > Stop auto play: during auto play mode, short press 'confirm button' to stop auto play
- > Stop TV-OUT: Please press the 'power key' for long to turn off the camera.

Note: When play a large video file, need to wait a few seconds to a minutes, it's a normal phenomenon.

14. Motion detect monitor mode

- > Connect the yellow plug with the TV video input port (yellow) white plug connect with TV audio input port (white). Please set the signal input refer to TV user manual.
- > Turn on the camera, short press "Mode button" into motion detect video recording mode (yellow and blue light will hold on together)
- > Please connect the plug of 2.5' AV cable with the camera's TV-OUT, after few seconds, the video will be appeared on the TV. Refer to picture2, in the meantime the camera will enter into the state of intelligent video recording. When object moves before the camera, the camera will start to record a 10 seconds video file, and so the cycle.

picture2



Motion-detect recording standby



Motion-detect Recording

- > Short press "Mode button", camera will change to motion detect monitor photo taking mode (yellow and red light will hold on together). Show as picture 3. When object moves before the camera, it will start to take a photo automatically, and so the cycle.

picture 3



Motion-detect photo-taking standby

- > Motion detect loop recording: when TF card is full, the camera will delete old video or photo to get new space recording new videos or photos. If turn off loop recording function, the camera will turn off automatically when there is no enough space to record.
- > Video recording time and turn on/off loop recording function can be changed by system setting, please refer system setting instruct.
- > Stop motion detect monitor mode: Please press the "power key" to turn off the camera

Note:

1. During the recording, short press "Mode button" can change video and photo mode. Please obstruct the lens

when change the mode, the reaction will be fast

- If the camera doesn't use underwater, can open back cover to get better recording voice.
- Enter into this mode 3 minutes later, LED light will turn off, the camera is still at work, press any key to instruct.

15. system parameter setting

> Please refer to TV- OUT operation into TV-OUT mode. Long press "confirm button", TV will show the picture 4.

> Button function: short press "confirm button" choose or quit different setting, short press "up" as up button, short press "down" as down button, long press "confirm button" save and quit the setting.

picture 4



Enter into System setting

> setting items:

- quality: fine, standard, economy

Introductions: set the quality of the video, the consume of the insert storage will increased with high quality.

Note: Please use the brand high-speed TF Card, to avoid the video pause when you record the video!

- MD capture time: 10 seconds, 1 minute, 5 minutes, 10 minutes

Illuminate: Setting motion detect video recording time, it will save the recording video when reach this time.

- MD auto delete: on/off

Illuminate: Setting loop recording function. When TF card is full under the motion detect mode, the camera will delete old file automatically to start new recording. If turn off this function, the camera will turn off when TF card is full.

- Input time:

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

below:

> Short press "confirm button" into further menu, choose "setting", then short press "confirm button" into below photos:

> short press "up" as up button, short press "down" as down button, short press "confirm button" change to another setting.

> After finish setting, long press "confirm button" save and quit the setting.



Time setting Step1



Time setting Step2



Time setting Step3

5. Light frequency: 60Hz , 50Hz

Illuminate: Setting light frequency according to electricity frequency to cancel the flash under the lamp.

6. Video output format: NTSC、PAL

Illuminate: When use TV-OUT function, choose the right video formation will show the right color on TV

7. Language: English/Simple chinese

8. Resetting system: Cancel/Execute

Illuminate: If you want to reset the system, choose "Execute", and short press "OK".



System reset step1



System reset step2

Note: System time won't be reseted.

16. System time setting

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

Method 1: Setting by TV, please refer to system parameter setting.

Method 2: Setting by computer

1. Turn off the camera;
2. Connect with computer by USB cable;
3. Open U-disk
4. Create a new "time.txt" file.
5. Input the numbers from the head, such as "2010.10.25 15:43:56"(there is a space between date and time) ,safely exit the movable disk.
Then turns on the power, the system time will be updated.

Note: When the battery unused for long time and the battery used up, the system time will be restore back to the factory defaults.

17. Reset the system

Camera maybe can't use normally cause the outside influence, such as ESD etc. Please use a pin to press the pin hole, then the camera will shut down, you can restart to use.

Parameters

Effective pixels	5.0 Mega CMOS SENSOR
Photo format	JPG 2560*1920
Video format	AVI HD 1280* 720
Frames	30fps
MD time setting	10sec、 1min、 5 min、 10 min
MD loop coverage	Support turn on and off
Video quality setting	Superior、 Standard、 economic
Shooting angle	120 degree wide-angle
Minimum illumination	1LUX
Illuminant frequency set	60Hz、 50Hz
Video output format	NTSC、 PAL
Vibrating alert	Support
Battery capacity	3.7V/ 900mAh
Power consumption	Below 1W
Continuous video recording time	About 3 hours(led light closed)
AC Adaptor spec	DC5V 500mA
Charge time	About 3 hours
USB interface	USB2.0 High Speed
Memory type	Micro SD Card (TF card)
Memory card	1GB-32GB
Waterproof depth	30 meters
Weight	75g
Product dimensions	90*41*36mm

Notes: The above-said parameters may be changed with upgrading or updating, if there is any changes, they shall be subject to the actual items.

System

1. Operation system: Microsoft Windows2000/XP/VISTA/WIN 7
2. CPU : Intel Pentium III processing 667MHZ or equivalent CPU
3. 256MB sound card and graphics card support DircetX8 or more advanced version. More than a multiple drive, a standard USB1.1 or USB2.0 interface, 1GB or more free disk space.