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Precaution

Pls be well look through the following guidelines before you use this camera.

- Pls refer to manual instruction to operate the camera correctly. Illegal operation may cause damage to internal components.
- Do not fall or hit the camera, it may damage the internal components.
- Do not alter or dismantle the camera to avoid the damage to the camera.
- The temperature rise is normal when camera use for a long time.
- Do not touch the lens when recording which will affect the video quality.
- Please use "Class10" and above TF card to ensure machine work properly.

Camera Special Features:

Invert Mode

If need to invert camera while using,you can set "invert mode"
On,then it can rotate 180 degrees,characters and images on
screen are the same as a positive direction.

WiFi Function

It will be more convenient to operate the machine at a distance
of 15 meters by using mobile phone via WiFi connection.

High Speed Recording

The camera has 720P 120fps,VGA 240fps high speed recording.

Slow Motion

The video will be displayed in twice as slow as the video frame
(60fps video) or 4 times (120fps video).

Time Lapse

The camera will take pictures at a certain rate then make a video
consisted by pictures.Such as recording sunrises,sunsets,flowers
blooming etc.This function make short videos to record slow
process.

Capture Mode

Under recording press Mode button to take a picture.It not only
can be used by manually capture,but also can be set automatically,
which makes it become more convenient.

2.4G wireless remote control

Waterproof wrist remote controller

Diving mode

Video's color underwater will be the same as normal environment
when set "Diving mode" on.

Product Accessories

Pivot Arms(2pcs)

AC Charger

Bicycle Handlebar Mount

Helmet Curved Mount

Waterproof Case

Helmet Strap mount

User Manual

TV Out Cable(optional)

Buckle Basic Mount

1050mah Battery

Helmet Flat Mount

Tripod mount adapter

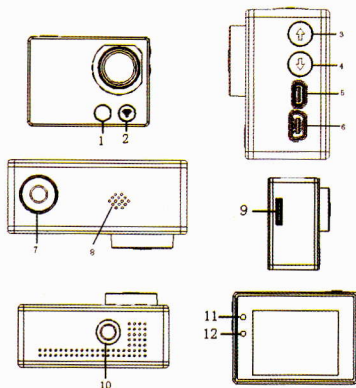
USB Cable

J-Hook Buckle

HDMI Out Cable(optional)



Camera Interface



1. WiFi indicator
2. Mode button/Wifi button
3. Up button
4. Down button
5. HDMI port
6. USB port

7. Power button
8. Speaker
9. TF card slot
10. 1/4" screw hole
11. Working indicator
12. Charging indicator

Button function

Power button:

Short press to turn on/off camera;
Under standby mode short press to start/stop the recording;
Under Picture mode short press to take a picture;
Under playback mode short press to start/pause playback;
Confirm menu setting and time setting.

Up button:

Under standby mode to zoom in;
Long press to enter/exit the menu;
In the Menu setting or Playback mode choose the last option or file;
Increase the digit in the time setting.

Down button:

Zoom out under standby mode;
Choose the next option or file in the Menu setting or Playback mode;
Decrease the digit in the time setting.

Mode button:

Short press to switch into Video/Picture/Playback Mode under standby mode ;
Long press to enter WiFi setting;
During recording short press to capture;
In time setting to switch Year/Month/Date/Time;
Start/stop capture when setting capture automatically.

Camera Operation

Power on/off

Power on: Short press Power button, screen shows start up picture, the blue working indicators will light up, camera enters standby mode.

Power off: When camera is on, long press Power button, screen shows the shutdown picture, the blue working indicators will be off, camera powers off.

Battery Charging

Connect camera with power charger via USB cable, the red light will light up. Once the battery is full, the red light will be off. If you want to charge faster, turn off the machine when charging.

Video mode

Video interface:

- 1.Record icon
- 2.Exposure Compensation
- 3.White Balance
- 4.Frame rate
- 5.Video resolution
- 6.Microphone
7. Remaining time of the memory card
- 8.Battery icon
- 9.Year /Month / Day/Time



Normal recording

Closing "seamless" in the video mode menu, Press Power button, camera starts recording till card is full. Press Power button again to stop recording.

Seamless recording(refer to menu setting)

Under standby mode, press Power button to start recording, the blue indicator will flash. When the video recorded up to the time you set (1 minute/3 minutes/5minutes), camera will save the footage automatically and continue recording.

When TF card is full, camera will overwrite the first footage by time sequence and continue recording. Press Power button again to stop recording, the remaining recording time is on the LCD screen.

Notes:

- Under 4k resolution mode, the "Seamless" must be set to Off.
- Wifi, zoom function and time lapse can not work in 4K resolution.
- Please set "capture timing" off if you need to set "seamless and time lapse" in the menu.

Picture Mode

Picture interface:

- 10.Picture icon
- 11.Exposure Compensation
- 12.White balance
- 13.Picture size
- 14.Remain photos
- 15.Battery icon
- 16.Year /Month/Day/Time



Camera default setting is Video mode. Under standby mode, press Mode button to enter picture mode, aim at the object you want to shoot and press Power button, camera will save the picture automatically.

Capture function

- 1.Capture manually: Press mode button to take a picture under recording when "Capture timing" in system menu is off.
- 2.Capture automatically: when "Capture timing" in system menu is set "5s/10s/15s/30s/60s", the machine will capture and save automatically under normal recording. Press mode button to start and stop capture.

Note:

- 4k resolution doesn't support capture function.
- Camera could not support capture function when "time lapse" and "slow motion" is on.
- Please set "capture timing" off if you need to set "seamless/time lapse/slow motion" in the menu.

Playback Mode

- 1.Playback icon
- 2.File number / total number of files
- 3.Select the file you want to play
- 4.File Preview
- 5.File length
- 6.7.Date stamp



In standby mode, press the Mode button to switch to Playback mode, press UP/Down button to select the video / picture you need, press the power button to Preview / playback. Press the Power button to stop playing.

Menu Setting

In standby mode, long press Up button to enter the menu mode, then press the Mode button can switch mode menu and System menu. Press the Down button to page down, press the Up button to page up, press the Power button to confirm. Long press the Up button to exit the menu.

Video mode/Picture mode/Playback mode each have two menus: Mode menu and System menu. All systems are same.

Video Menu:

Movie Size: 4k 10fps/1440p 30fps/1080p 60fps/1080p 50fps/
1080p 30fps/1080p 25fps/720p 120fps/720P 60fps/
720p 50fps/720p 30fps/720p 25fps/VGA 240fps

Video quality: super fine / fine / normal

Seamless : OFF / 1 minute / 3 minutes / 5 minutes

Slow Motion: Off / Auto

Time Lapse: Off / 0.5sec / 1sec / 3sec / 5sec / 10sec / 30sec / 1min

White Balance: Auto / Daylight / Cloudy / Tungsten / Fluor

Diving mode: Off / On

Exposure: -2.0 -1.0 +0.0 +1.0 +2.0

Motion detect: OFF / ON

Date stamp: Off / Date / Date & Time

Picture menu:

Resolution: 20M / 12M / 8M / 5M / 3M

White Balance: Auto / Daylight / Cloudy / Tungsten / Fluor H

Exposure: -2.0 -1.0 +0.0 +1.0 +2.0

Timer shot: Off / 2s / 10s / 30s / 60s / Double

Periodical Snap: Off / 0.5s / 1s / 2s / 3s

Photo Burst: off / 3 photos / 5 photos / 10 photos

Date Stamp: Off / Date / Date & Time

Playback mode menu:

Please select File type!

VIDEO

JPG

Protect: Single / Protect All / Unprotect All

Delete: Single / All

System menu:

Sounds: Beep (on / off) / Volume (0/1/2/3) Voice Rec (H/M/L /off)

Power Frequency: 50Hz / 60Hz / Auto

Power Save: Off / 1 min / 3 min / 5 min

Date & Time: 21/09/2015 13:38 Year / Month / Day

Language: English / Traditional Chinese / Simplified Chinese /

German / French / Spanish / Russian/Italian/Thai/Japanese/ Deutsch

Invert Mode: OFF / ON

WiFi Password: 1234567890

Time Zones: -12-11-10-9-8 -7-6-5-4-3-2-1 +0 +1 +2 +3 +4 +5 +6 +7
+8 +9 +10 +11 +12

TV Out: Yes / No

Remote Pair: Off / On

Format: Yes / No

Capture timing: Off / 5s / 10s / 15s / 30s / 60s

System: Factory Reset / System Info / Card Info

Remote Control Description

There are two buttons on the remote controller, press the video button to start/stop the recording. Press the picture button to take pictures under picture mode or capture under video mode.

Matching the remote control:

Set "Remote Pair" in the menu to On, keep pressing the two buttons on the remote control, you can see blue light of Remote control flashing, release the two buttons after 3 seconds. press the power button of the camera to exit the Remote Pair and return to preview mode, take video or pictures via the remote control. If you can operate it is successful, if not, please repeat above operation. Please keep the camera and remote control within 1M when matching.

Install and use WiFi

1. Scan the QR code on the gift box to download the APP.
2. Install the APP in your smart phone.
3. Set the WiFi password in the Menu. (Default password is 1234567890).
4. Long press Mode Button to Open WiFi function.
5. Find "customer" in the WiFi list of smart phone, enter the password to connect it.
6. When smart phone connect to the camera, camera screen will display "customer", WiFi indicator will light. If fail, WiFi indicator will keep flashing.
7. Find the APP in smart phone, then you can control the camera via the smart phone.
8. Press power button again to exit the WiFi setting.

Notes:

- Before you open WiFi function, please insert TF card into camera, Otherwise WiFi can not be opened.
- The effective distance is influenced by environment. The decrease of the WiFi signal and operation delay are normal circumstance during use.
- The "Power Saving Mode" in mobile should be set to "Off".
- The "Keep Wi-Fi on during sleep" in the mobile should be set to "Always".

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Connect HDMI

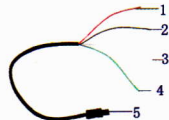
Connect camera to HDMI-TV via HDMI cable, all operations can be displayed on high definition HDMI-TV screen.

Note: 20 megapixels pictures don't support playback on HDMI-TV.

Connect TV

Connect camera to TV via TV cable, set menu "TV mode" to Yes, press Power button to confirm, then all operations can be displayed in TV screen.

1. The positive pole of the power 5v
2. The negative pole of the power
3. Video output
4. Unavailable
5. USB port



Playback on PC

Connect camera to PC and open camera, screen will display: "MSDC", "PCCAM", "Working". Press Up button or Down button to choose the option, press Power button to confirm.

MSDC: Enter the MSDC to check the files.

PCCAM: Camera will be worked as PCCAM.

Working: Camera can be used Normally and be powered by the PC.

Technical specification

Dimension	60*45*25mm (Not include lens)
Sensor	Sony IMX078 12.4 Mega Cmos Sensor
Lens	170 degree (7G+IR F=2.5 f=3.0mm)
Image size	20M / 12M / 8M / 5M / 3M

Resolution	3840*2160@10fps 1920*1440@30fps 1920*1080@60/50/30/25fps 1280*720@120/60/50/30/25fps 640*480@240fps
Screen	Hd 2 inch screen
Time lapse	support
Slow motion	support
Diving mode	support
PC CAM	support
Snapshot	support
Digital Zoom	8X
Wifi frequency	2.4GHz-2.4835GHz
Wifi distance	15M in open space
Waterproof	50 meters in waterproof case
Remote controller frequency	2.4GHz
Remote Controller	waterproof to 3m, control to 10m
Audio	built-in Microphone/speaker
Battery	Replaceable Li-ion battery 1050mAh/ 3.7V 3.885Wh
loop recording	Optional 1/3/5 minutes
File Format	MOV H.264/JPG
Memory card	4GB to 32GB (Micro SD Card Class6 Above)
HDMI output	Real time output
USB port	USB 2.0 high-speed interface

Notice: The manufacturer however reserves the right to amend the specifications according to market demand without notice.