

FULL HD SPORTS CAMERA

User Manual

Contents

Precaution

Camera Special Features

Camera Interface

Button Function

Camera Operation

Power on/off

Battery Charging

Video Mode

Normal Recording

Loop Recording

Picture Mode

Playback Mode

Menu Setting

Connect HDMI

Playback on PC

Technical specification

Precaution

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

- Please 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 Micro SD card to ensure camera work properly.

Camera Special Features:

Invert Mode

Should you need to invert camera while using, set "invert mode" in the menu to "On", the camera will be now rotated 180 degrees.

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 high speed recording.

Waterproof

The camera can be waterproof to 10M without case.

Time Lapse

Camera will capture a single frame once in a while, and system will make a film with very high playing speed, you could use this mode to record some special activities, things change, or event which happens in a long time. Such as recording sunrises, sunsets, flowers blooming etc.

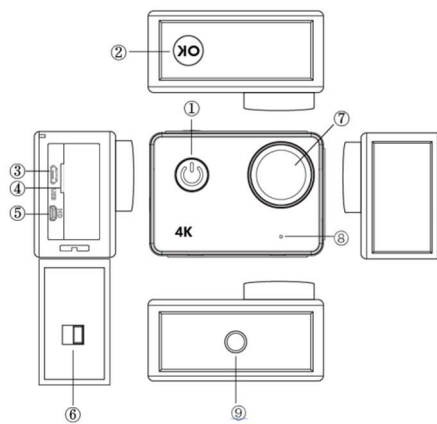
Capture Mode

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.

Capacitive Touch Screen

2inch Capacitive touch screen make the operation more convenient.

Camera Interface



- 1) Power Button
- 2) OK Button
- 3) USB Port
- 4) TF Card Slot
- 5) HDMI Port
- 6) The lock of battery cover
- 7) Lens
- 8) Microphone
- 9) Copper Nut

Button Function

Power button:

Short press to turn on camera; Long press to turn off camera;

During recording short press to capture;

When connect to HDTV, short press to choose the next option or file;

In standby mode, short press to switch between Video mode and picture mode.

OK button:

In standby mode, short press to start/stop the video recording;

In Picture mode, short press to take a picture;

In Playback mode, short press to start/pause playback;

In standby mode, long press to enter/exit WiFi mode;

When connect to HDTV, short press to start/pause playback, long press to switch from Playback mode to real time monitor.

Note:

When use the camera underwater, please set the "Touch Panel Function" to OFF, otherwise the touch screen will be operated accidentally by the press of water.

After set the "Touch Panel Function" to OFF, if you want to activate the function, please restart the camera.

Camera Operation

Power on/off

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

Power off: When camera is on, long press power button to switch the camera off, the blue working indicator will be 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. Turn off the camera when charging to charge battery faster.

Video Mode

Video interface:


1. Icon of record mode
2. Start/Stop recording
3. Menu of video mode
4. WiFi Icon
5. Video resolution
6. Recording time
7. Motion detection icon
8. Loop recording icon
9. EV value
10. Memory card icon
11. Battery
- 12, 13. Date and Time




Normal recording

Set “Loop recording” to Off in the video mode menu, Press OK button, camera starts recording till card is full. Press OK button again to stop recording.

Loop recording(refer to menu setting)

Under standby mode, press OK button or touch  icon to start recording, the blue indicator will flash. When the video recorded up to the time you set (3 minute/5 minutes/10minutes), 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 OK button again or touch  icon to stop recording.

Picture Mode

Picture interface:

1. Icon of picture mode
2. Take a picture
3. Menu of Picture mode
4. Picture size
5. Remain photos of Memory card
6. Picture quality
7. EV Value
8. White balance
9. ISO
10. Memory card icon
11. Battery
- 12,13. Date and Time



Camera default setting is Video mode. In standby mode, press power button to enter picture mode, or touch  icon to enter the interface of mode selection, touch  icon to enter picture mode, aim at the object you want to shoot and press OK button or touch  icon, camera will save pictures automatically.

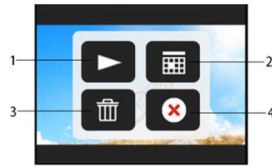
Capture function

Press power button to take a picture under video recording, the picture will be saved automatically.

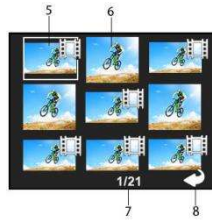
Playback Mode

1. Playback
2. Preview of Sudoku
3. Delete
4. Exit
5. Video file
6. Picture file
7. File number / total number of files
8. Return

Four Icon

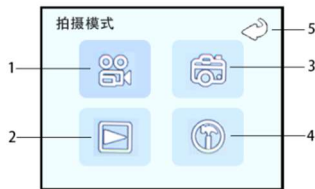


Sudoku






In Playback mode, double touch anywhere of the screen to enter the interface of Four Icon. In the interface of file Preview, slide around to choose the file you want.

Menu Setting



1. Video Mode 2. Picture Mode 3. Playback Mode 4. Menu Setting 5. Return

In standby mode, touch  icon to enter the interface of mode selection, touch  icon to return to Video Mode.

Each mode has the corresponding menu. Touch  icon to enter menu setting.

Video menu:

Resolution: UHD24fps/QHD30fps/FHD60fps/FHD30fps/HD120fps/HD60fps
 HD30fps VGA240fps

Loop recording: Off/3 Minutes/5 Minutes/10 Minutes

HDR : Off/On

EV: +2.0, +1.7, +1.3, +1.0, +0.7, +0.3, +0.0, -0.3, -0.7, -1.0, -1.3, -1.7, -2.0

Motion detection: Off/On

Record Audio: Off/On

Date Stamp: Off/On

Time-lapse Record: 1 Sec, 5 Seconds, 10 Seconds, 30 Sec, 1 Minute, 5 Minutes, 10 Minutes, 30 Minutes, 1 Hour, 2 Hour, 3 Hour, 1 Day

Image Rotation: Off/On

Picture Menu:

Self Timer: Off, 2S Timer, 5S Timer, 10S Timer

Resolution : 20M, 16M, 12M, 10M, 8M, 5M, 3M, VGA

Burst : Single, Burst 3, Burst 5

Quality: Fine, Normal, Economy

Sharpness: Strong, Normal, Soft

White Balance: Auto, Daylight, Cloudy, Tungsten, Fluorescent

Anti-Shaking: Off/On
Quick Review: Off, 2 Seconds, 5 Seconds
Date Stamp: Date, Date/Time
ISO: Auto, 100, 200, 400, 800, 1600
EV : +2.0, +1.7, +1.3, +1.0, +0.7, +0.3, +0.0, -0.3, -0.7, -1.0, -1.3, -1.7, -2.0
HDR: Off/On
Metering: Average, Center-Weighted, Spot
Scene: Auto, Portrait, Landscape


Playback Menu:

Lock Current: Lock/Unlock
Erase Current: OK/NO
Lock All: OK/NO
Unlock All: OK/NO
Erase All: OK/NO

System Menu:

WiFi: Off/On
Touch Panel Function: On/Off
Time Setting:
Auto Power Off: Off, 1 Minute, 2 Minutes, 3 Minutes, 5 Minutes, 10 Minutes
Language: English/French/Spanish/Portuguese/German/Italian/Simplified Chinese/
Traditional Chinese/Russian/Japanese
Frequency: 50HZ/60HZ
Format: OK/NO
Return menu setting to defaults: OK/NO
VER: V2.1_20170509
Screen Save: Off, 1Minute, 3 Minutes, 5 Minutes, 10 Minutes

Install and use WIFI

- Search "MioCam" in Google Play or IOS APP store to download WIFI APP.
- Install the APP in your smart phone.
- Long press OK Button to active WiFi, camera's screen will display "SSID: SDV_660 PWA2: 12345678"
- Find "SDV_660" in the WIFI list of smart phone, enter password (Default password is 12345678) to connect it.
- Find the APP  in smart phone, then you can control camera via smart phone.
- Long press OK Button of camera to exit WIFI setting.

Note:

- The effective distance is influenced by environment. The decrease of the WIFI signal and operation delay are normal.
- The "Power Saving Mode" in mobile should be set to "Off".
- The "Keep WIFI on during sleep" in the mobile should be set to "Always".

Connect HDMI

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

Playback on PC

Connect camera to PC via USB cable, screen will display:“Mass Storage” and “PC Camera”.

Mass Storage: Find Novatek file folder in removable disc, there are two file folder: Movie and Photo.

PCCAM: Camera will be worked as PCCAM.

Technical specification

Dimension	65x46x28.5cm
Weight	76g (Not Include battery)
Sensor	Panasonic 16Mega Cmos
Lens	7G IR, F=2.5, f=3.0mm, wide angle 160degree UHD24 (2880*2160) QHD30 (2560*1440)
Resolution	1080P60/30 720P120/60/30 VGA240
Picture Size	20M 16M 12M 10M 8M 5M 3M VGA
Video File format	MP4 H.264
Picture File format	JPG
Memory card	Micro SD card, support up to 128GB
USB	USB2.0
Screen	2inch capacitive touch screen
Loop recording	Support
HDMI Output	Support
White Balance	Support
WiFi Remote Control	Support
PC Cam	Support
Audio	Built-in Microphone/speaker
Battery	Replaceable Li-ion battery 1050mAh/3.7V 3.885Wh
Time Lapse	Support
Language	English/French/Spanish/Portuguese/German/Italian/ Simplified Chinese/ Traditional Chinese/ Russian/ Japanese
Waterproof	10m without case

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

WARNING:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a 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, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, 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 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 Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada . Son fonctionnement est soumis aux deux conditions suivantes :

- (1) Ce dispositif ne peut causer d'interférences ; et
- (2) Ce dispositif doit accepter toute interférence , y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.