

# SmartCam

## User Manual

Please read the user manual clearly for avoiding any wrong operation, current manual is not the newest and not complete, please contact us if any query.

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# Main Features

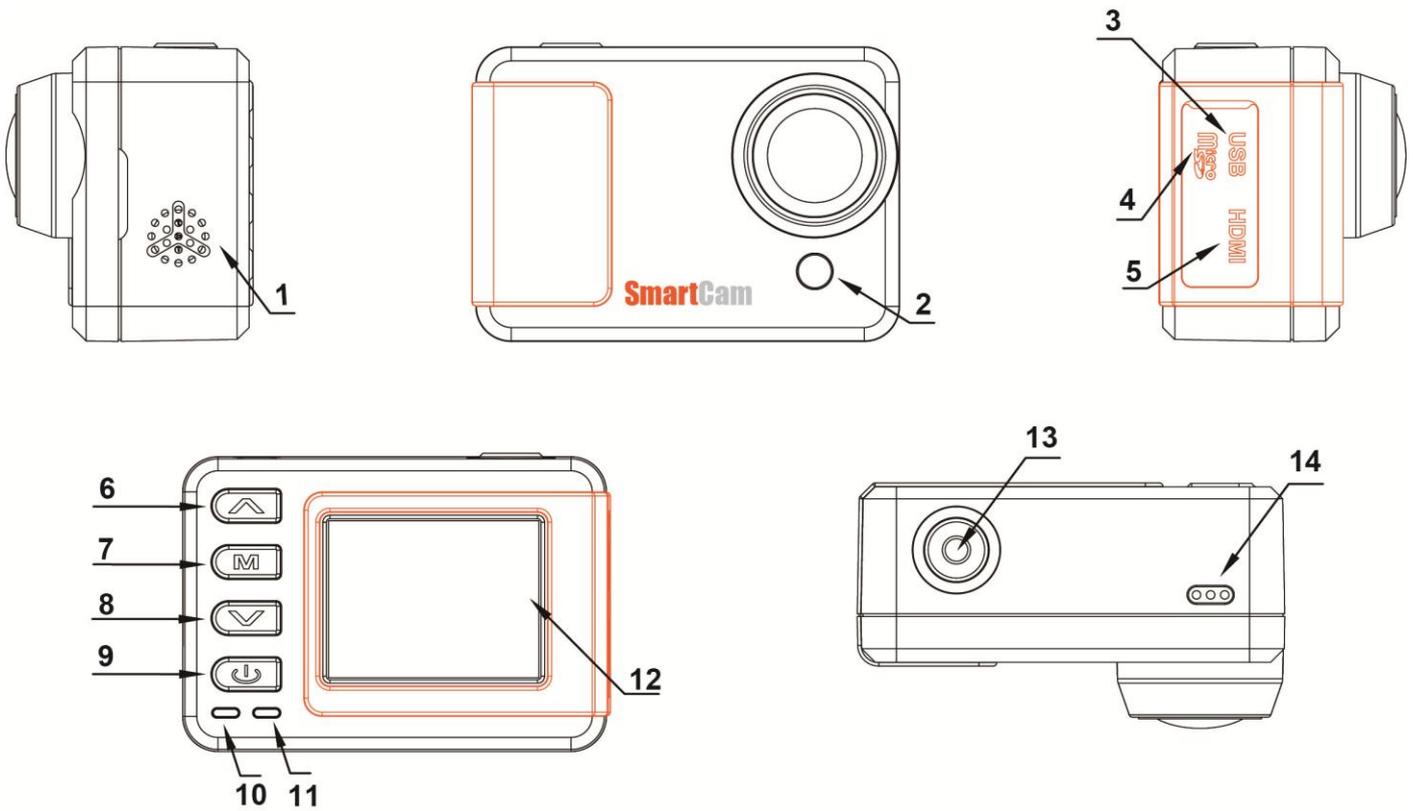
- 480 x 240 , 1.5" TFT LCD Screen Display
- 14MP HD CMOS Image Sensor
- 150° Super Wide angle under 720P; 118° under 1080P
- Full HD 1080P H.264 Video compression to MP4 format
- Waterproof, shockproof, support 50M depth diving
- Wireless RF remote controller
- Support Multi-mode video record and picture shot
- Built in WIFI, real-time video display and setting
- Optional Video resolution

16 : 9 FULL HD 1920 x 1080p	30FPS
4 : 3 FULL HD 1280 x 960p	30FPS
16 : 9 FULL HD 1280 x 720p	60FPS
16 : 9 FULL HD 1280 x 720p	30FPS
16 : 9 WVGA 848 x 480	60FPS

- Optional Picture resolution : 14MP/12MP/8MP
- Audio & Video playback
- Support 1GB~32GB SDHC TF Storage card
- USB2.0 for data transfer and power charge
- HDMI & RCA Video output

# Install & Use

## Camera Body Instruction



- |                           |                            |
|---------------------------|----------------------------|
| 1. Speaker                | 9. Power / Picture Shot    |
| 2. REC & Remote Indicator | 10. Power charge indicator |
| 3. USB Port               | 11. REC / Power Indicator  |
| 4. TF card slot           | 12. 1.5" TFT LCD           |
| 5. HDMI Port              | 13. REC/REC Indicator      |
| 6. Up key                 | 14. MIC                    |
| 7. Menu                   |                            |
| 8. Down Key               |                            |

## Remote Controller (Optional)

-  REC button
-  Power button
-  Picture Shot



- ① Press and hold the  button for 3 seconds to Power on the remote controller ( or Power off ), the green indicator will turn on if powered on.
- ② Single press the  button to power on the camera, the green indicator on remote will flash if camera was powered up successfully, single press the POWER button again to turn off the camera.
- ③ Start video record. Press the  button to start the video record, the indicator will turn on the flash beside, press again to stop and video will be saved automatically, indicator will turn off at the same time.
- ④ Picture Shot. Single press  button to take a picture, the indicator beside will flash once in every successfully shot.

*Note: Here has a indicator beside every button, if the indicator was not display or flash as the instruction above, then that means the distance exceeded or the camera was not successfully controlled by the remote.*

- ⑤ Open the Remote Mode of camera.  
Press & hold the **UP** button 2 seconds on the camera to enter the Remote Mode, big blue indicator of camera will turn on.  
Press & Hold the **UP** button 2 seconds to exit the Remote Mode after power off the camera, green indicator will turn off.

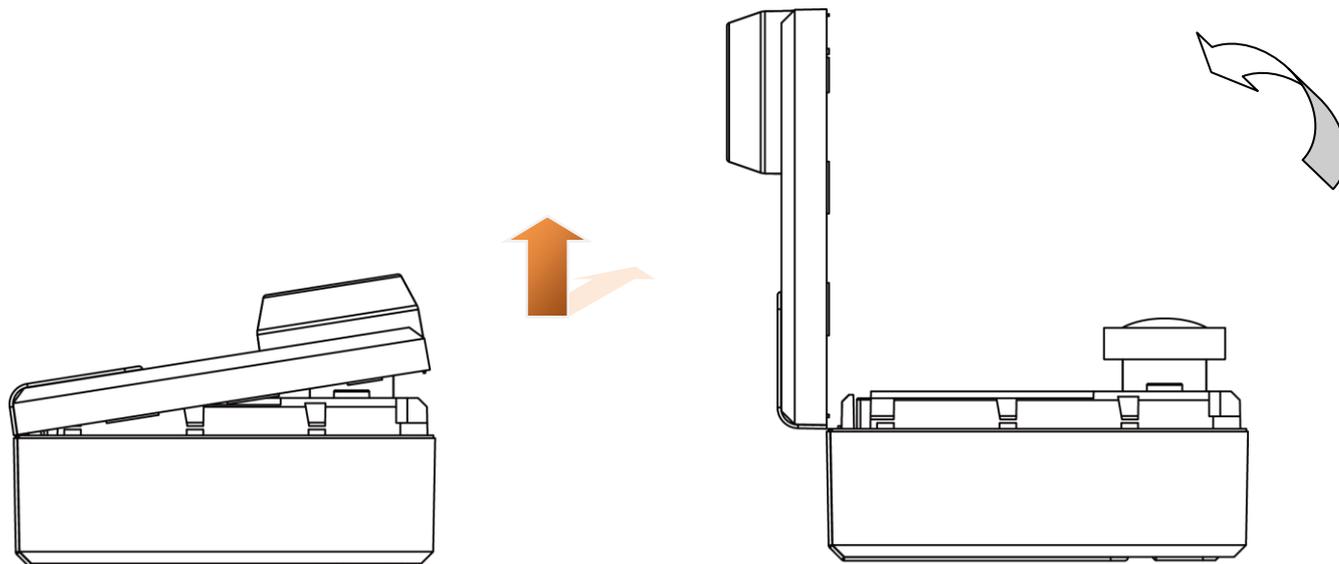


**Charge the Remote Controller:** Place the remote controller to the offered base charger, another USB side to DC 5V, red indicator will turn on beside the POWER button, and will power off after full charged.

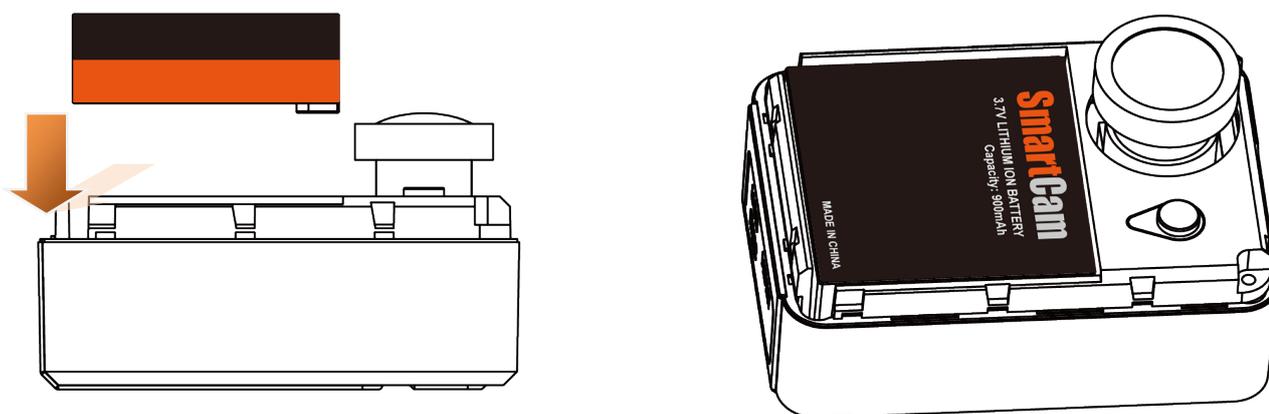
## Install the battery

Please install the battery correctly according to pictures below:

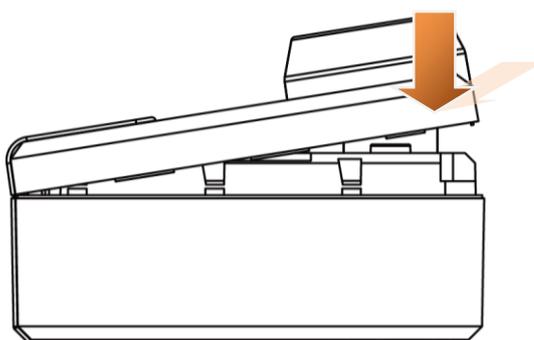
Open the face battery cover



Place the battery ( Character side up )

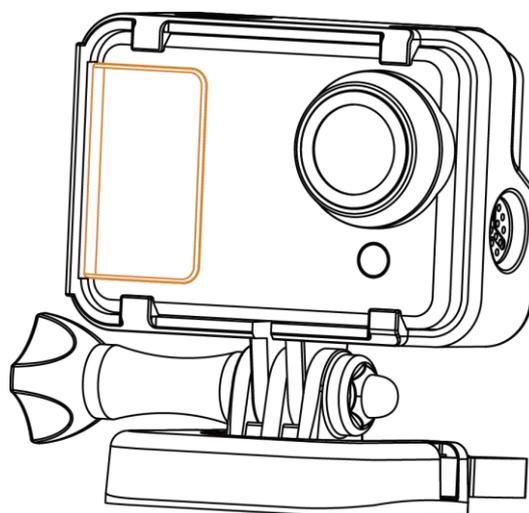
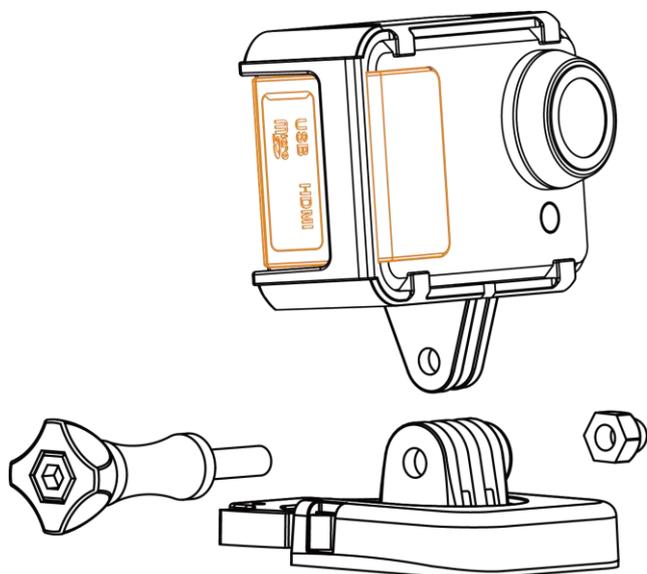
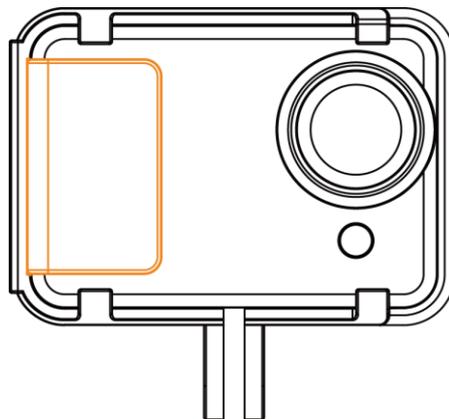
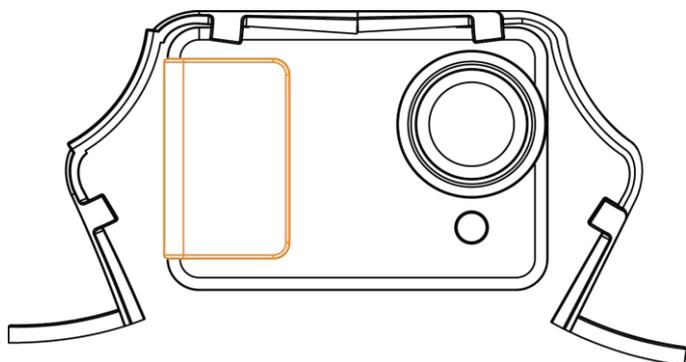


Close the battery cover

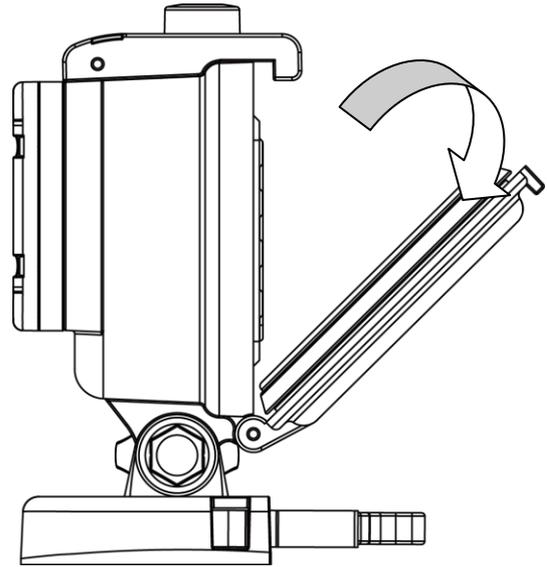
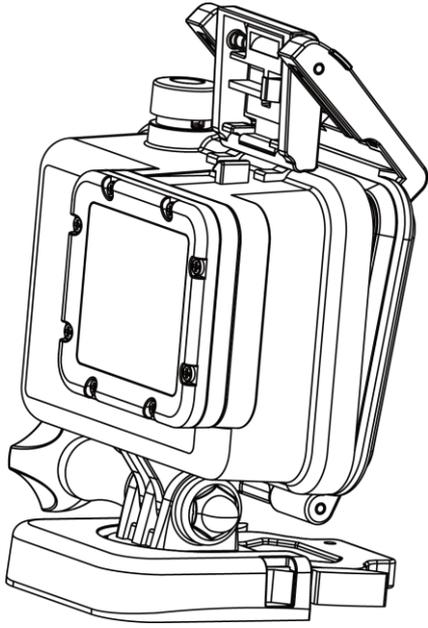


## Install the Mount

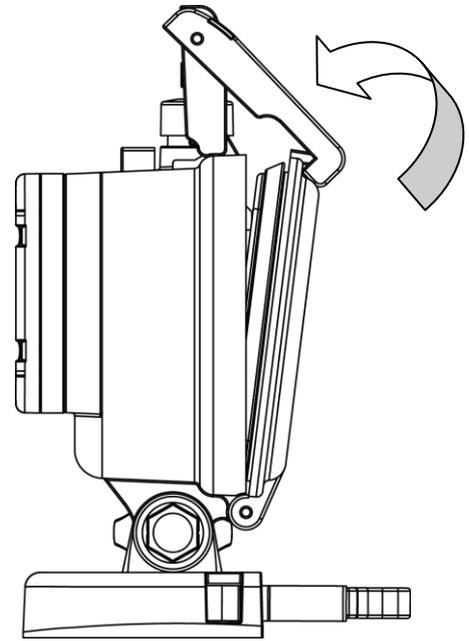
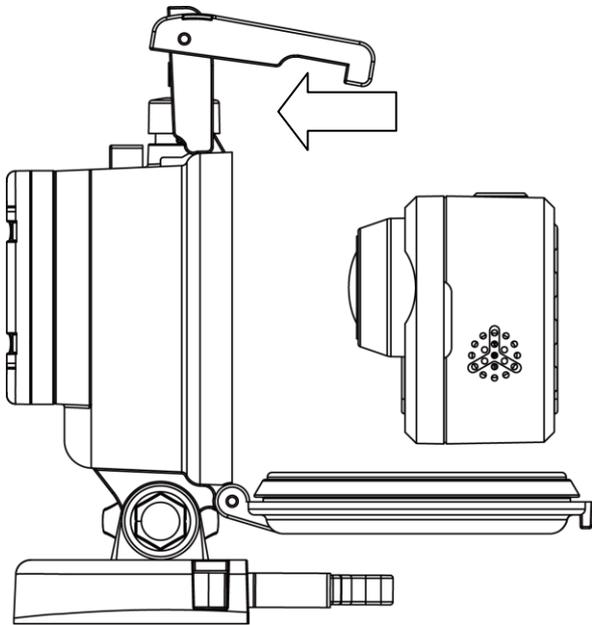
Pull the both arms towards to outside like below, place the camera into it.



## Install the Waterproof case



Close the back door



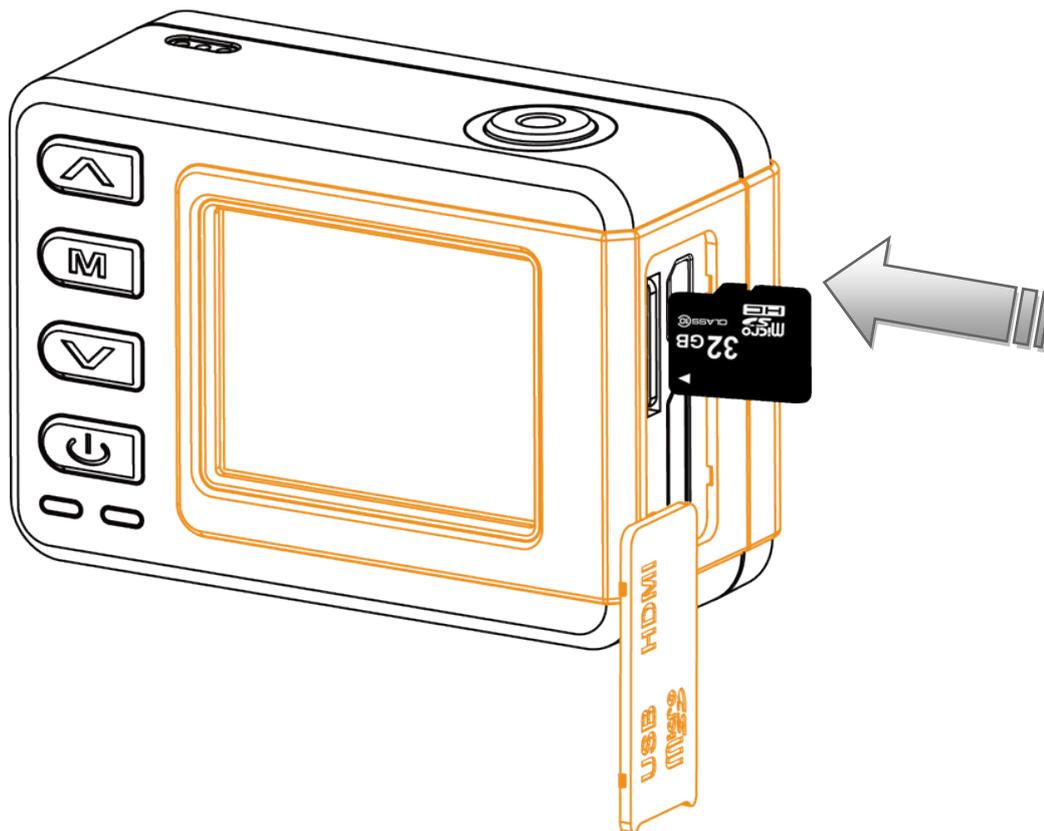
### Note:

Power on the camera first and then place into the waterproof case, or use the remote to power on the camera.

Single press **REC** button to stop/start video record.

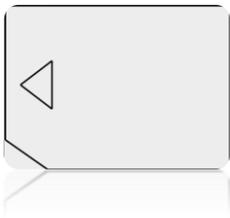
## Install the Memory card

a. Please install the memory card correctly as picture below:



b. Camera does not built in storage, support 1~32GB SDHC TF card.

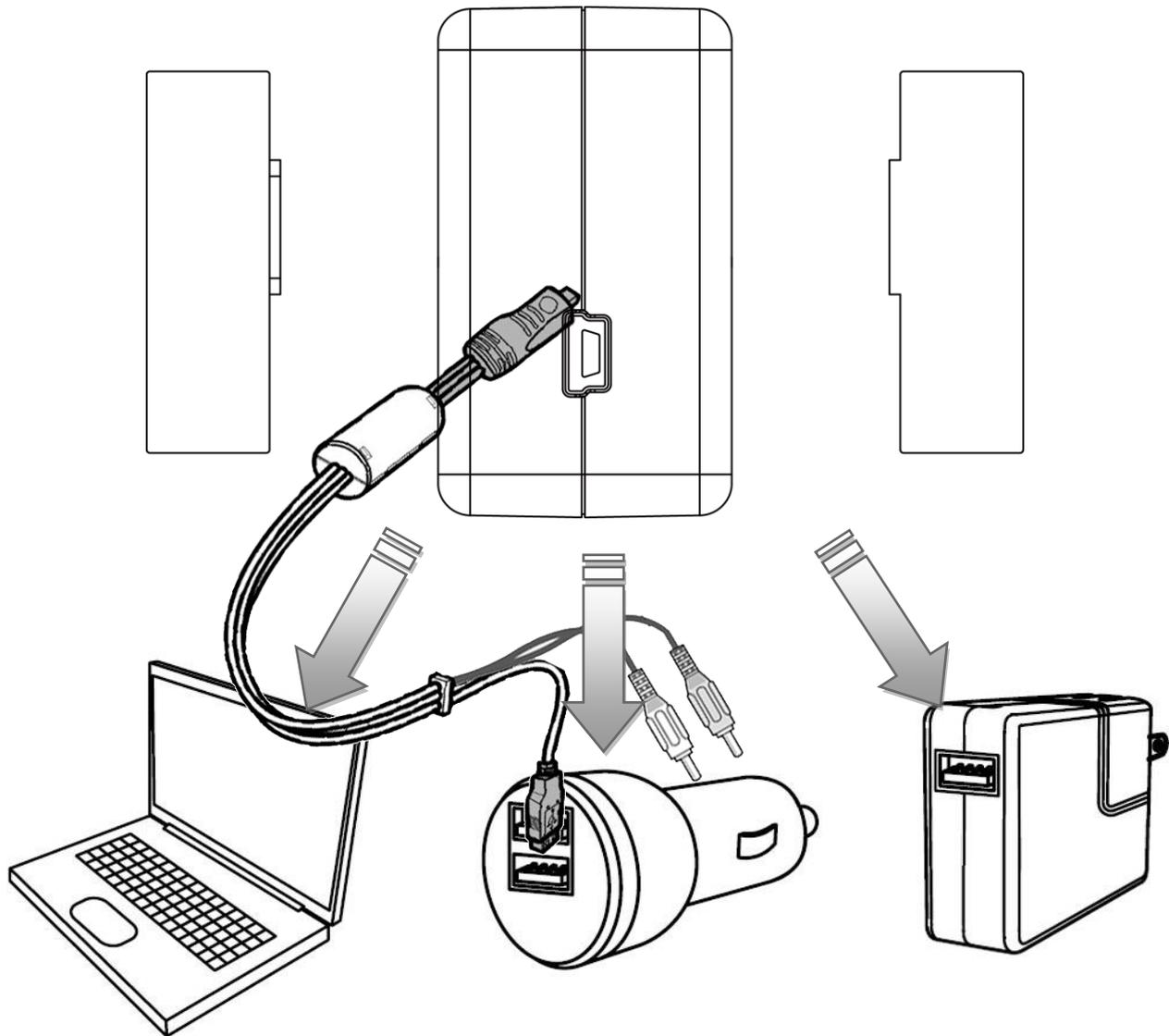
c. Available storage volume could be seen on the screen.

	No memory card icon displayed on the screen if valid TF card detected.
	The corner will show the icon if valid TF card detected, and volume numbers will display

### Note:

Please format the storage card before using for regular work.

## Power charge



- ① Put the battery into the camera, use the offered USB cable connect with 3rd party 5V charger or PC to do the power charge.
- ② The red LED indicator of charger will turn on if power connected, means in normal charging.
- ③ LED indicator will turn OFF if fully charged.
- ④ Put the battery into the charger. use a dedicated USB cable connect with 3rd party 5V charger or PC to do the power charge.

## Battery fully charging time and usage time

Fully charging time	Standby time	Recording time
Approximately 2 Hours	Approximately 3.5 Hours	Approximately 110 minutes

## Battery Icon

	Full power		75% power
	35% power		Low power

### Note:

- a ,Please do not keep the battery in the camera if long time aside.
- b ,Please do not use up the power completely.
- c ,Please fully charge the battery on first time use, it will help to extend the battery life.

## Record & Capture

- ① Press **Power** button to turn on the camera, press **REC** button to start video record, when the red icon displayed on the left corner of screen, that means the camera is doing normally record.



- ② Camera could start video record immediately if Wi-Fi turned OFF, but if Wi-Fi turned ON, camera will only available to start video record after Wi-Fi boot up completely, more details please check the Wi-Fi setting page.
- ③ Press **POWER** button to turn on the camera, press **POWER** button again to start taking picture. If here has record icon on the screen, that means camera under recording state, means not if no such icon.



Camera is not available to take picture if placed in the waterproof case, please use the remote controller to do this.

Remote to take picture or record video, please check the Remote Controller instruction.

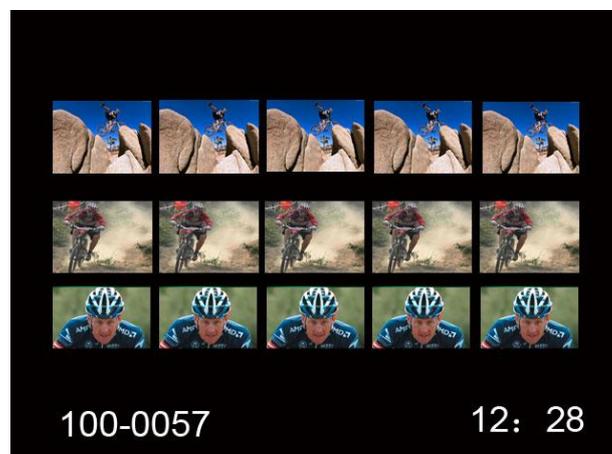
Picture taking function is not effected whatever the Wi-Fi is opened or not.

## Media Playback

Press **MENU** button to enter the main menu, use **< & >** button to select the video folder like below:



Press **REC** button to enter the folder, the video files display like below:



Use **< & >** to select the video, press **REC** button to confirm, press **REC** button again to play the video.



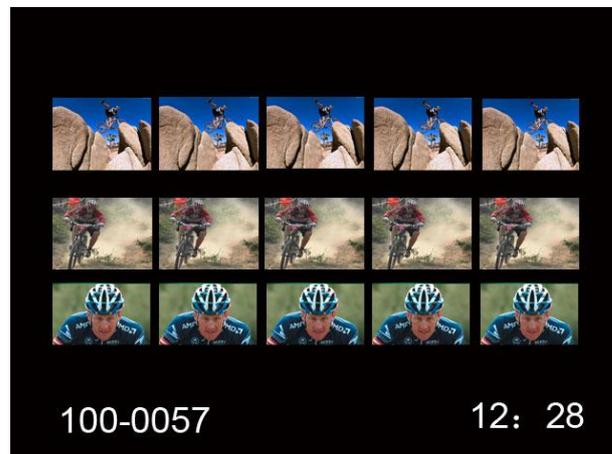
About how to delete the files, please turn to page 16.

## Picture playback

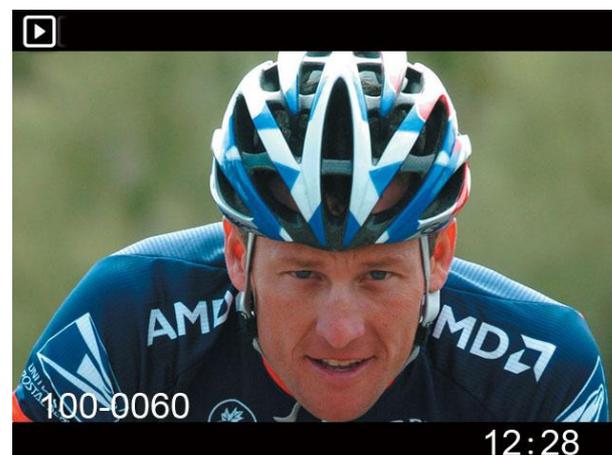
Press **MENU** button to enter the main menu, use **< & >** button to select the picture folder like below.



Press **REC** button to enter the folder, the picture files display like below:

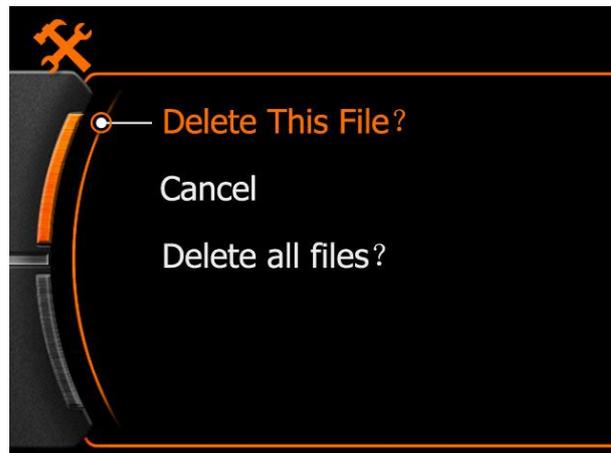


Use **< & >** to select the picture, press **REC** button to confirm, press **REC** button again to play the picture.



## Delete Files

Under playback or browse mode, press and hold the **MENU** button for 2 seconds, the delete option menu will appear.



Use **< & >** button to select suitable option, press **REC** button to confirm.



**Yes** : Confirm to delete

**Cancel** : Drop current operation

Press REC button to confirm the operation.

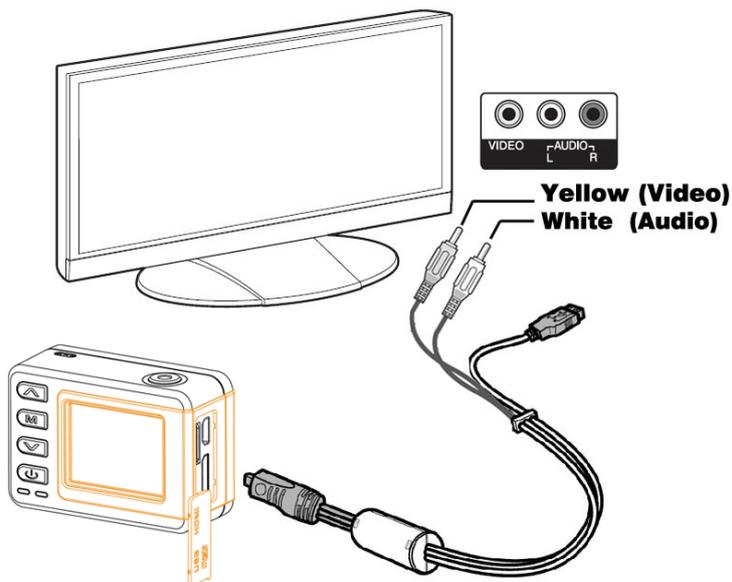
### Note:

Please think carefully before use this function, files can not be recovered after deleted, advise to back up files in computer in advance.

## Connect with TV

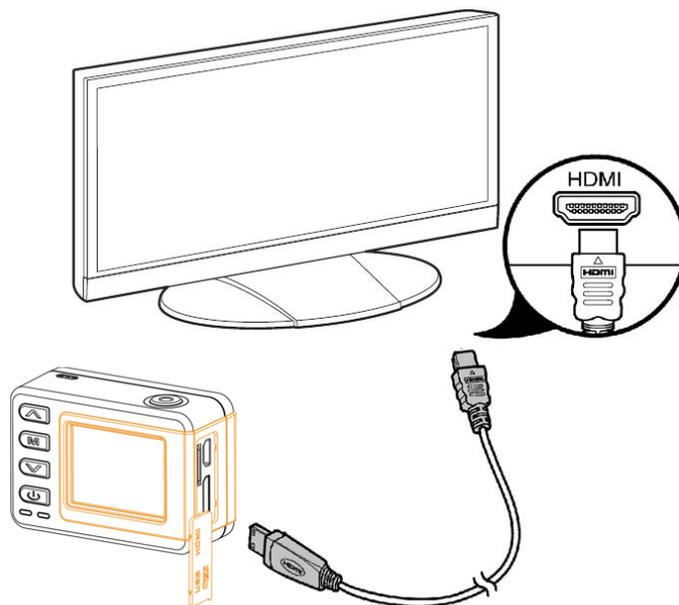
### A , USB&RCA cable connect with TV

Insert the USB side to camera, insert the RCA head to TV ( Yellow-video; White-Audio), like below:



### B , HDMI cable connect with TV

Insert the Micro-HDMI head to camera, insert the standard HDMI head to TV, like picture below:

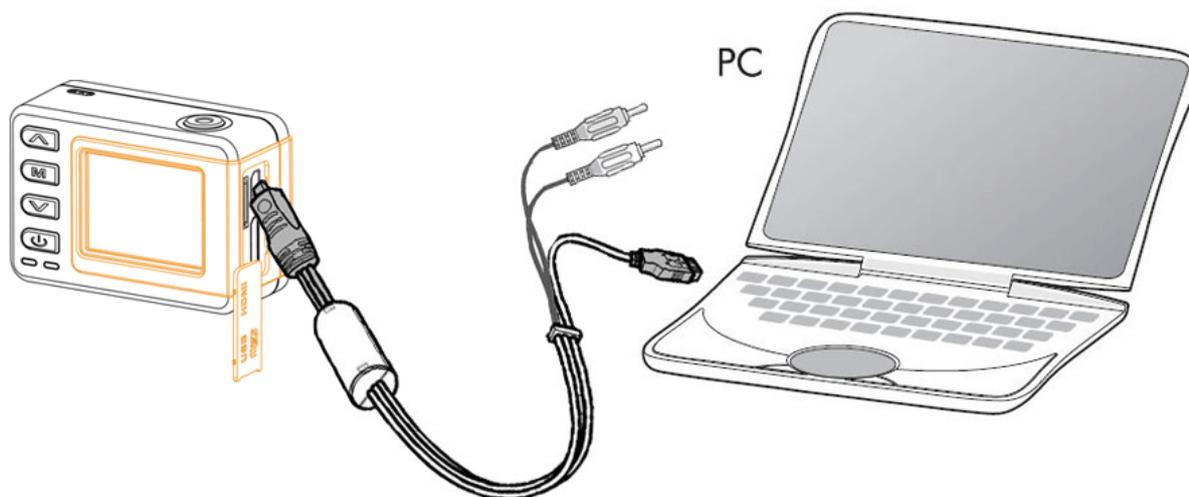


### Note:

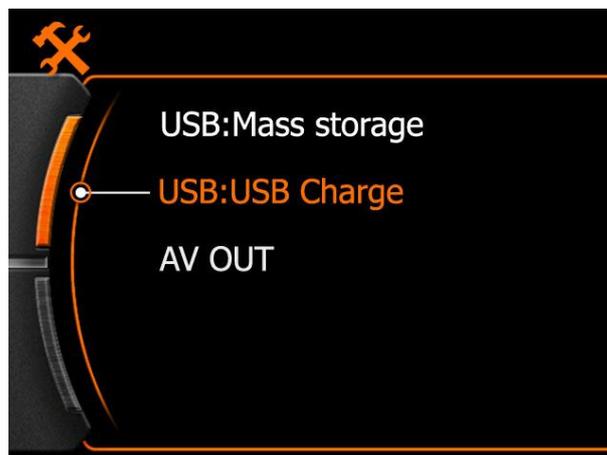
*The video output resolution is 1080P when play the recorded video clip, the real-time output resolution is 480i.*

## Connect with PC

Camera connect with computer by USB cable, could browse the files in camera or charge the power.



Power ON the camera after connect it with the computer by USB cable, the screen will display connecting graphic like below:



Please choose the suitable option according to need.

**USB : Mass storage**      Read the media in the SD card

**USB:USB Charge**      Charging the camera via the USB

**AV OUT**                  USB RCA video output

# System Icons

## Booting Picture



## Icons

1080P/30	Video size and FPS		REC icon
28000M	Available storage		Picture taking mode
00 : 33 : 24	Recorded time		Burst
2010/09/21	Date		TF Card
16 : 18	Time		Battery
	Wi-Fi OFF		Wi-Fi ON

## Main Menu



## Icons



Video folder



Picture folder



REC setting



System Setting

# System Setting

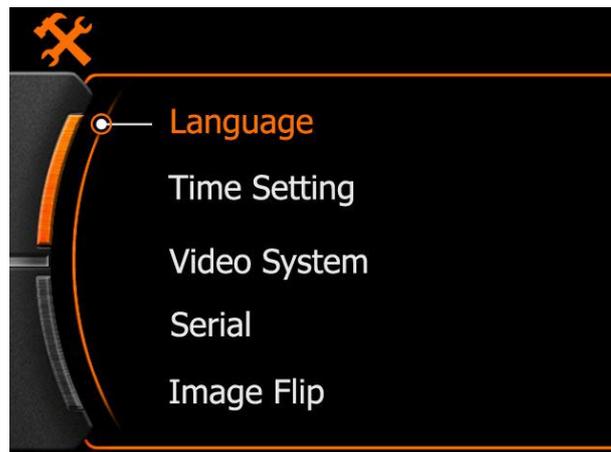
## Fast Setting

Press & Hold the **POWER** button 2 seconds to turn on the camera, press **MENU** to enter the main menu, use **< & >** button to select "System Setting" and press **REC** button to confirm & enter.



### 1 , Language Setting

Press **REC** button to enter language setting, use **< & >** button to select, press **REC** button to confirm and save the setting.



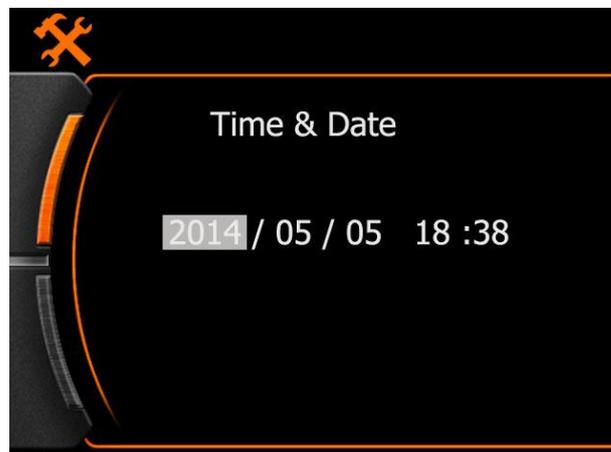
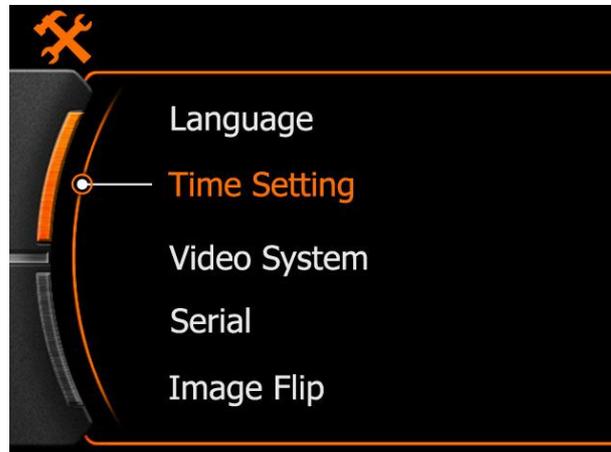
Here has 9 kinds of language in system, please make choice according to need.

## Date & Time

Use < & > button to select and press **REC** button to enter.

Grey background means changeable, use < & > button to change numbers, press **REC** button to confirm and turn to next option.

Press **MENU** to save and quit after finish the setting.



## **Frequency**

Auto : Auto system

50Hz : Suitable for country & area that got power frequency at 50Hz

60Hz : Suitable for country & area that got power frequency at 60Hz

## **Auto Power OFF**

OFF : Turn OFF this feature

5 Minutes : Camera will power OFF automatically after 5 minutes if without any operation

10 Minutes : Camera will power OFF automatically after 10 minutes if without any operation.

## **Auto Screen OFF**

OFF : Turn OFF this feature

1 Minute : The camera screen will turn OFF automatically after 1 minute if without any operation.

5 Minutes : The camera screen will turn OFF automatically after 5 minutes if without any operation.

## **MIC Volume**

Default receiving sensitivity is 60% , optional between 60% ~ 100%.

## **Format**

Cancel : Cancel current operation

Yes : Format the SD card

## **Reset**

Cancel : Cancel current operation

Yes : Go back to the default factory setting

## **Serial**

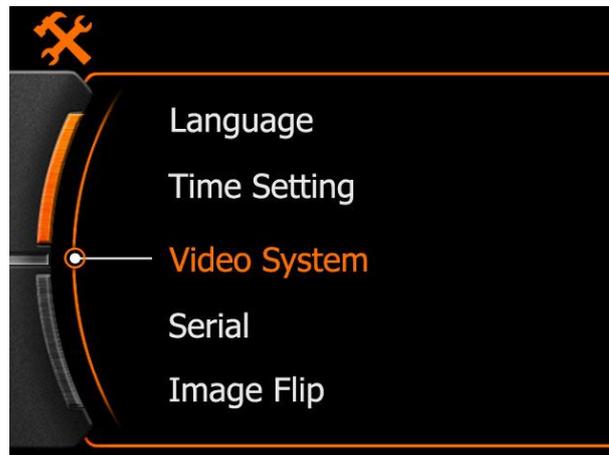
Reset : The file name will restart from "FILE0001"

Serial: The file name No.will continue from the last No.

## Video System

Use < & > button to select, press **REC** button to enter.

Use < & > button to select suitable system.



Press **REC** button to confirm choice, and the camera will reboot and back to this setting menu automatically.

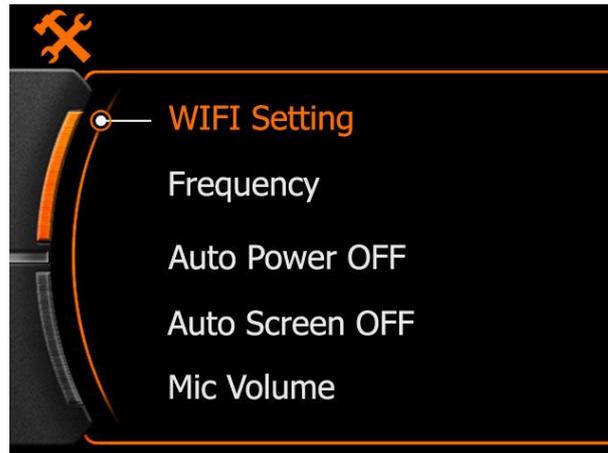
*Note:*

*The frame rates are different in different system, consult below:*

Resolution	NTSC/FPS	PAL/FPS
1920x1080p 16:9	30fps	25 fps
1280x960 4:3	30 fps	25 fps
1280x720 16:9	60 fps	50 fps
1280x720 16:9	30 fps	25 fps
848x480 16:9	60 fps	50 fps

## Wi-Fi

Use < & > button to select the Wi-Fi setting, press **REC** button to confirm & enter. ( Default is ON).



Use < & > to select ON, press REC button to save, camera will reboot automatically.

Pair the mobile phone with camera by Wi-Fi , turn on the Wi-Fi.

Android phone: Setting-WLAN-Search Smartcam-connect , Password : 00000000

Apple phone: Setting-Wi-Fi-Search Smartcam-connect , Password: 00000000

After connected successfully, then quit this and open the APP that install in the tablet or mobile phone.

Could preview the pictures that captured by camera, control to take picture or record video, and change the camera settings.

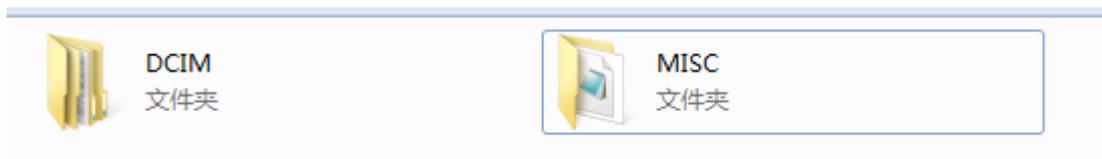
Note:

Wi-Fi OFF : Mobile phone APP will not available to connect the camera.

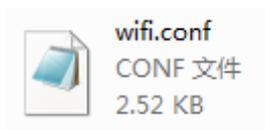
Wi-Fi ON : After the camera boot or reboot, should wait 30 seconds till the Wi-Fi booted completely , only then the camera will available to record video.

## Create Camera Wi-Fi Name

Open the TF card storage and will found 2 folders like below, open the MISC folder.



Open the “ wifi.conf” file by notepad and we could modify the parameters in it.



Found the “ **SoftAP configuration** “ field, and change the WIFI name and password.

```
##### SoftAP configuration #####  
# SSID (1 ~ 32 characters)  
AP_SSID=SmartCam Camera Wi-Fi Name  
# IP address  
LOCAL_IP=192.168.100.1  
# IP subnet mask  
LOCAL_NETMASK=255.255.255.0  
# IP pool starting address of DHCP server  
DHCP_IP_START=192.168.100.2  
# IP pool end address of DHCP server  
DHCP_IP_END=192.168.100.6  
# Wifi channel number, set 0 to use Auto Channel Selection  
AP_CHANNEL=0  
# Maximum number of stations allowed in station table  
AP_MAXSTA=5  
# If you say yes here, all WPA/WEP settings will be ignored  
AP_PUBLIC=no Wi-Fi Password  
# WPA Passphrase (8 ~ 63 characters)  
AP_PASSWD=00000000 相机 WIFI 连接密码，可在这里修改  
  

```

### Note:

*This is the system file and please make sure all operations are done strictly according to instruction above, Highly recommend to back up this file in advance.*

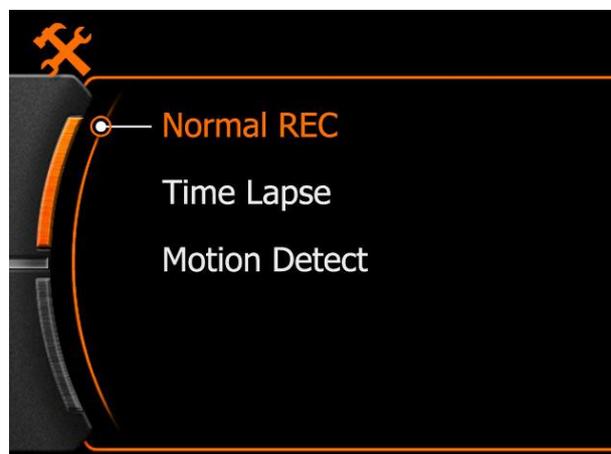
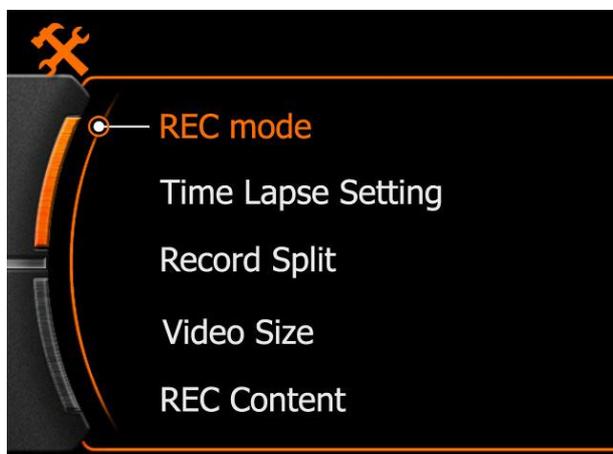
## REC Mode:

Press **MENU** to enter system menu, press **REC** button to confirm and enter video setting.



### 1. REC Mode

Press **REC** button to enter REC mode, use **< & >** button to select, press **REC** button to confirm and save the setting.



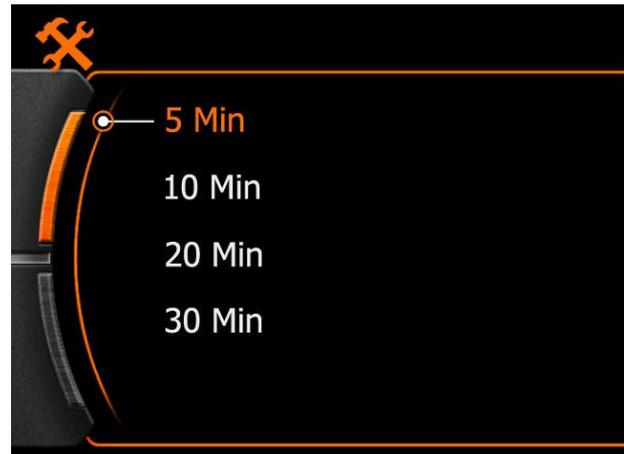
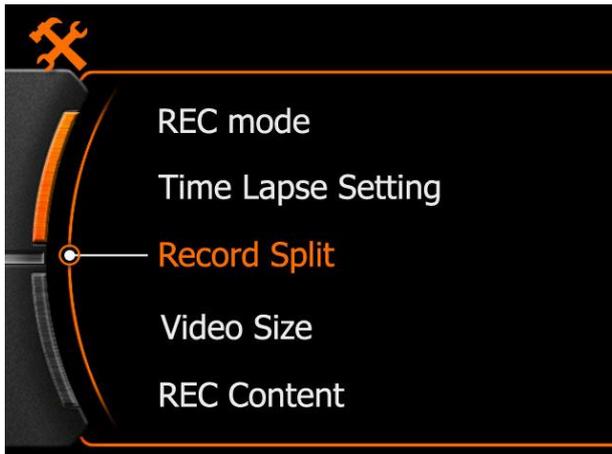
**Normal REC** : Press **REC** button on camera to start & stop video record

**Time Lapse** : Time Flies

**Motion Detect** : Start video record only when movement detected by the lens.

## 2. Record Split

Use < & > button to select, press **REC** button to confirm & enter, select “ record split” button to save and quit.



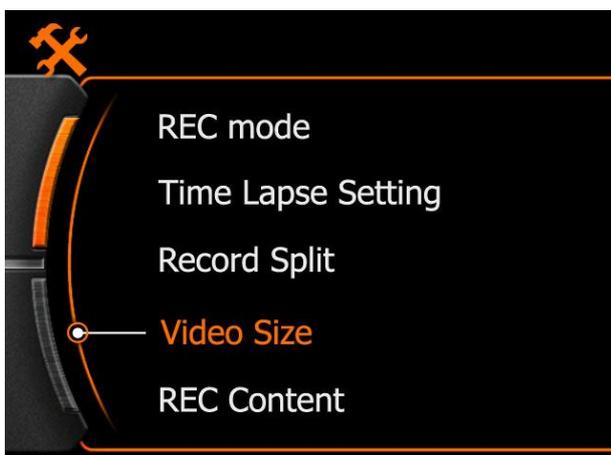
*Note:*

*5Min : Means 5 minutes per footage ; 30Min : Means 30 minutes per footage.*

*Camera will stop video record while card full.*

## 3. Video Size :

Use < & > button to select, press REC button to confirm & enter.



Select suitable video size, press **REC** button to save and quit.

## **Other Features**

### **REC Content**

Video & Audio : Normal video with sound

Video: If a mute video needed

### **Dual Streams**

OFF : System will not create thumbnail video file, only the original video read while browse via APP, the picture would be delay because the original video need big bandwidth.

ON : System will create a thumbnail small video file special for the real-time display on the cellphone & Tablet via the APP.

If Dual Steams opened, the Video Stamp will not work anymore and here without date & time displayed on the video.

### **Video Stamp & Photo Stamp**

This is a switch for display the Date & Time on the video or picture.

### **Photo Size :**

Optional 14MP / 12MP / 8MP

### **Self Timer :**

Delay 3 / 5 / 10 seconds to take a picture ( Burse Capture should be OFF )

### **Burse Capture**

Take 3 / 5 / 10 pictures in one second. ( Self Timer should be OFF )

# Specifications

Basic Spec	Built in Memory		32MB
	Memory Expand		Support 1G-32G SDHC Micro-SD
	LCD	Size	1.5 inch
		Resolution	480x240
	Chipset	DSP	( AMBARELLA ) A5L30
		MCU	( CHIPSIP ) DDR3 CT49248DD486C1
	Sensor	Size	1/2.3" 14MP
	Lens	Aperture	F2.8
		Angle	150°
		Construction	6G + 1MG
	Interface	Video output	HDMI/USB
		MIC	Built in
		Audio output	HDMI/USB
		Speaker	8Ω 0.5W built in
		USB	High speed USB2.0
	Battery	Type	Rechargeable Li-ion battery
		Volume	3.7V 900 MAH
Button		Record, menu, up / down / power	
Language		繁体中文、English、Russian、Spanish、Japanese Italian、Nederlandse、Deutsch、French	
Video	Available recording time	<b>110 Minutes</b>	
	Optional REC mode	Normal ,Motion detect, Time lapse	
	Video Resolution	1080P/30fps、960p/30fps、720p/60fps、480p/60fps	
	Video format	MP4 (H.264 MPEG4)	
	Time lapse time	Frame per 1 / 10 / 30 Seconds , OFF	
	Split video time length	5 / 10 / 20 /30 Minutes	

	Optional REC content	Video / Audio
Capture	Picture Size	14MP/10MP/8MP
	Picture mode	Single shot, burst , self-timer
	Burst	3 / 5 / 10 pieces , OFF
	Self-timer	3 / 5 / 10 seconds, OFF
Playback	Video	Loop playback
	Picture	Thumbnail, next, previous
Bidirectional Remote Controller	Frequency	433.92MHz
	Distance	10m
	Sensitivity	-105dBm(50Ω)
	Current & Voltage	20mA@3.7V
	Battery	300mA Li-ion battery
WIFI Spec	Wireless Protocol	IEEE 802.11 b/g/n
	Frequency	2.4GHz~2.4835GHz
	Wireless Mode	Direct
	Real-time video size	WQVGA
App	OS requirements	iOS 6.1or above, Android 4.0 or above
	Supported device	iPhone 4/4s, iPhone 5, iPhone 5s, iPod touch 4, iPod touch 5 (iPad3, iPad4, iPad mini Samsung Galaxy S3, S4, Note 2, Note 3, or similar mobile phone
	Functions	Real-time transfer, camera control, camera setting, album sync
Dimension	Camera size/weight	60x26x42mm
	Waterproof case	76x43x66mm
	Waterproof depth	50 meters

**Note: Camera will lost warranty if disassembled or fall into water.**

EAGLE EYE