Contents

I. Safety Instructions

- Don't use the sport camera when any abnormal condition appears.
- User shall be responsible for the injury and damage caused by operation which is not taken according to the operation manual.
- Don't place the sport camera in a set environment. Always keep the sport camera dry.
- In thunderstorm day, don't touch the power plug when the power adapter is used. It may cause electric shock.
- Don't use the camera when foreign matters enter into the sport camera.
- Don't insert metal object or other foreign object into the access point of sport camera, such as MICRO SD memory card slot. The manufacturer will not undertake any losses causes by such

operation.

- Don't try to transform the sport camera.
- Don't use the sport camera in driving.
- Don't use cloth to cover or wrap the sport camera. Place the sport camera in a place with good ventilation.
- Unplug the power or take out the battery when the sport camera is not used for a long period.

II. Parts of Sport Camera

13

1	**Battery Door**	8	**Power Indicator**
2	**MICRO USB Interface /TV OUT**	9	**Charging Indicator**
3	**0.8" LCD Screen**	10	**Remote Receiver Module**
4	**Lens**	11	**WiFi On/ Off Key/ Menu Key**
5	**HDMI Interface**	12	**Capture Key/ OK Key**
6	**MICRO SD Card Slot**	13	**2.0" TFT Screen**
7	**On/ Off/ Mode Key**		

III. Technical Parameters

Video Resolution	4K(10FPS), 2K7(15FPS), 1080P(60FPS), 1080P(30FPS), 720P(120FPS), 720P(60FPS), 720P(Slow Motion), VGA(240FPS), VGA(Slow Motion)
Photo Resolution	20MP, 16MP, 12MP, 8MP, 4MP
Storage Media	External MICRO SD Card (1GB – 64GB)
File Format	JPG, MP4, MOV
Shooting Method	Movie: Loop Recording, Time-lapse Shooting, Interval Shooting Photo: Single Shot, Self-timer (2s ,10s), Continuous Capture (3, 5, 10, 30(Maximum 4MP), Pressing for Continuous
Digital Zooming	APP 4X Digital Zooming

White Balance	Auto, Daylight, Cloudy, Incandescent, Fluorescent
Exposure Control	Exposure Value (EV-2 to EV+2)
Light Sensitivity	Automatic Adjustment by the System, Max ISO1600
Computer	USB2.0
TFT Display	2.0" Color LCD Display; 0.8" Digital LCD Display
Power Management	3.7V Lithium Battery
Language	English, Simplified Chinese, French, Spanish, Italian, Portuguese, German, Russian, Japanese, Korean;
Automatic Off	OFF/ 1-3-5Min
Operation System	Windows XP/vistaor Above /Win7

Note: Parameters subject to change without notice. The final interpretation right belongs to the company.

IV. Application Description

1. Installation of lithium battery

a) Slide off the battery cover according to the arrow on it.
b) Put the battery correctly in the battery box.
c) Shut off the battery cover.

2. Installation of MICRO SD memory card

a) Face the reverse side of MICRO SD memory card to the lens and insert the card in SD card slot.
b) When MICRO SD memory card is taken out, push the card inward and take out the card.
c) High speed cards above Class 6 are recommended. Class 10 card is recommended when 4K/2K7 or Interval shooting, continuous shooting and other functions are used.

Notes:
- **It means the SD card has been installed or removed when a cracking sound is heard during inserting or removing process. The sport camera may not identify a non-standard configuration card or a card which is formatted on other device (such as a computer). Before using the camera, formatting of the card is suggested to be taken on the local sport camera.**

3. Sport camera On/Off

a) Long press the mode key of sport camera, and it will enter in working status.

b) If no operation is operated during the set time, the sport camera will be switched off automatically so as to save power.

c) Under ON status, long press the mode key and the sport camera is shut off.

4. Indicator description

a) When the power of sport camera is on, the green indicator is on. The indicator is flashing during the shooting process.

b) When USB wire is used to connect computer for charging under OFF status, the blue indicator is on. The indicator is off or flashing after the charging is completed.

5. Key function description

1) Power/MODE Key：

A. Long press the key to start the camera under off mode.

B. Short press the key to take mode switching under ON status.

C. Short press the key to take menu switching after entering into the menu.

D. Long press the key to switch off the camera.

2) Capture Key/OK Key：

A. Press the key to start or stop shooting under camera mode.

B. Press the key to take photos under photo mode.

C Press the key to play/ stop playing under playback mode.

D. Press the key to take OK setting after entering into the menu.

3) WIFI/MENU Key：

A. Short press the key to turn on/off the WIFI.

B. Long press the key as MENU to enter/ exit the menu.

C. Short press the key to page down after entering into the menu.

D. Short press the key to pause/continue shooting during the shooting process.

6. Introduction of Operation

The sport camera has three modes, i.e. camera, photo and playback. Press the Power/MODE key to switch in turn among three modes, camera, photo and playback. The camera mode is used to shoot and record video in MP4 or MOV format. The photo mode is used to take single photo. The playback mode is used to browse the captured photos

10

and MP4 or MOV files.

1) Camera. Start the sport camera to enter into default preview mode and the LCD enters into preview status. Long press WIFI/MENU key and enter into the menu to take various setting. The camera is default as camera shooting mode. Align the lens with a person or an object for shooting. Press the shooting key slightly and the sport camera is started to shoot. Shot time has been recorded on the display. Press the WIFI key to pause /continue shooting and press the capture key to stop shooting.

2) Photo. Start the sport camera to enter into default preview mode. Press Power/MODE key to switch to photo mode. Long press WIFI/MENU key to enter into the menu to take various setting. Align the lens with a person or an object for photo taking. Press the capture key slightly and one photo can be taken. (The camera is storing photo at the moment. Movement of sport camera may cause blurry of photo. The sport camera can be moved after the sport camera re-enters into preview

11

status.)

3) Playback. Start the sport camera to enter into default preview mode. Press Power/MODE key twice to switch to playback mode. Enter into video playback and photo selection interface, and press capture .OK key to enter into video playback. Enter into video playback and photo selection interface under playback mode, and short press WIFI/MENU key to select photo playback option. Press capture /OK key to enter into photo playback. After entering into video playback mode, short press WIFI/MENU key to select files for playback. Long press WIFI/MENU key to enter into playback menu and take file locking/ file deletion operation. Press capture/OK key to start video playing.

7. Menu Introduction

1) Camera Mode. Long press WIFI/MENU key to enter into the menu. At the title bar, two options, camera and setting, can be

viewed. Press the power /MODE key and it can switch between the two options. Press WIFI/MENU key to select sub-menu downward. Press capture/ OK key to enter into submenu setting. After entering into submenu, press the WIFI/MENU key to select downward. Press capture/ OK key to confirm setting and back to previous menu. Long press MENU key to exit the menu directly. Camera (Video) menu options include 5 options, i.e. video resolution, image stabilization, cyclic record, night frame lowering and white balance distance.

2) Photo Mode. Long press WIFI/MENU key to enter into the menu. At the title bar, two options, photo and setting, can be viewed. Press the power /MODE key and it can switch between the two options. Press WIFI/MENU key to select sub-menu downward. Press capture/ OK key to enter into submenu setting. After entering into submenu, press the WIFI/MENU key to select downward. Press capture/ OK key to confirm setting and back to previous menu. Press MENU key to exit the menu

directly. Camera (Video) menu options include 5 options, i.e. image size, photo mode, exposure, white balance, continuous capture.

3) Playback Mode. Long press WIFI/MENU key to enter into the menu. At the title bar, two options, playback and setting, can be viewed. Press the power /MODE key and it can switch between the two options. Press WIFI/MENU key to select sub-menu downward. Press capture/ OK key to enter into submenu setting. After entering into submenu, press the WIFI/MENU key to select downward. Press capture/ OK key to confirm setting and back to previous menu. Press MENU key to exit the menu directly. Playback menu includes two options: file locking and file deletion. (Note: It cannot enter into the menu to take operation when there is no video or photo in the card.)

4) Under any mode, long press the WIFI/MENU key to enter into the menu. Press power/MODE key to switch into setting menu. The setting menu includes 13 options, i.e. power saving mode,

image inverting, sound, date & time, language, TV output, power frequency, time delay shooting, time interval, date stamp, system, WIFI password, and formatting.

V. Detailed Description of All Menus

A. Introduction of Camera Mode Menu
Under camera mode, long press WIFI/MENU key to enter into the menu. Short press WIFI/MENU to execute downward selection and select required setting option. Press the capture/OK key to enter into submenu. Press WIFI/MENU to execute downward selection and select setting option required execution. Press the capture/OK key to confirm setting and back to previous menu.   It can take selection setting for following options.

1. Video resolution

Enter into "Video resolution" menu, and it can select following resolution for selection setting.

4K(10FPS), 2K7(15FPS), 1080P(60FPS), 1080P(30FPS), 720P (120FPS), 720P(60FPS), 720P(Slow Motion), VGA(240FPS), VGA (Slow Motion)

2. Image stabilization

Image stabilization can switch on/off image stabilization function. Image stabilization function can ease fuzzy phenomenon effectively caused by hand shaking in shooting or shaking of camera body.

3. Cyclic Record

Cyclic record can select off or 1 min /3min/5min cyclic video recording. Start the cyclic recording and press the capture key. The camera will take automatically cyclic recording according to the set time.

4. Night frame lowering   Image stabilization can switch on/off night frame lowering function. Night frame lowering function can lower the frame rate, improve light sensitivity and improve the night shooting

16

effect.

5. White balance

Enter into "white balance" menu and it can set light source of "automatic, daylight, cloudy, incandescent lamp, and fluorescent". Under different light source, different color can be displayed according to the color temperature.

B. Photo mode

i. Introduction of photo menu

Under photo mode, long press WIFI/MENU key to enter into the menu. Short press WIFI/MENU to execute downward selection and select required setting option. Press the capture/OK key to enter into submenu. Press WIFI/MENU to execute downward selection and select setting option required execution. Press the capture/OK key to confirm setting and back to previous menu.   It can take selection setting for following options.

1．Image size

Enter into "Image Size" and it can set the size of photo. The larger the image size is, the larger the storage capacity of file is. The sport camera can set the following sizes.
20MP(5152*3864); 16MP(4640*3480); 12MP(4000*3000)
8MP(3264*2448); 4MP(2304*1728)

2. Photo mode
Enter into the photo mode and it has 4 options, i.e. off, self-timer 2s, self-timer10s and self-timer10s with two continuous captures. After the self-timer mode, the sport camera will take a photo automatically with a delay of 2/10s after pressing the capture key.

3. Exposure
Enter into the exposure setting menu and it can take setting compensation for the exposure value according to the environmental lightness. It can select EV-2.0, EV-1.7 EV-1.3, EV-1.0,EV-0.7, EV-0.3, EV-0.0, EV+0.3, EV+0.7, EV+1.0, EV+1.3, EV+1.7, EV+2.0.

18

4. White balance

Enter into "white balance" menu and it can set light source of automatic, daylight, cloudy, incandescent lamp, and fluorescent. Under different light source, different color can be displayed according to the color temperature.

5. Continuous captures

Enter into continuous captures menu and it has 6 options, i.e. off, 3 continuous captures, 5, 8, 10 and 30 by pressing. After starting the continuous captures, it will take 3/ 5/ 8/ 30(Maximum 4MP) photos or continuous captures according to the setting.

C. Playback mode

Under playback mode, long press WIFI/MENU key to enter into the menu. Short press WIFI/MENU to execute downward selection and select required setting option. Press the capture/OK key to enter into submenu. Press WIFI/MENU to execute downward selection and select setting option required execution. Press the capture/OK

key to confirm setting and back to previous menu.   It can take selection setting for following options.

1. File locking

Enter into the file locking menu and it has 3 options, i.e. locking/unlocking single, locking all and unlocking all. After file locking is set, the file will be protected and cannot be deleted.

2. File deletion

Enter into "Deletion" menu and it has 2 options, i.e. deleting single and deleting all.   After capture/Ok key is pressed, deletion confirmation option will be popped up. Locked files cannot be deleted. It will prompt the file has been protected when taking deletion.

Warn: The file cannot be recovered once it is deleted. Please use the function with caution.

D Introduction of setting menu

Under any mode, long press WIFI/MENU key to enter into the menu

and press power/MODE key to switch into setting menu. Short press WIFI/MENU to execute downward selection and select required setting option. Press the capture/OK key to enter into submenu. Press WIFI/MENU to execute downward selection and select setting option required execution. Press the capture/OK key to confirm setting and back to previous menu. It can take selection setting for following options.

1. Power saving mode

Enter into the power saving mode, and it has 4 options, i.e. off, 1min, 3 min and 5min. After the power saving mode is started, the camera will be switched off automatically after achieving the time set for power saving mode when there is no operation. After the power saving mode is set, the display will be off to save power when the set time is achieved.

2. Image inverting

Enter into the image inverting menu, and it can switch on/off image inverting setting.

3. Sound

Enter into "sound" menu and it can set the key button as "on /off" and the volume. Press WIFI/MENU to select the option for setting. Press power /MODE key to take switching. Press the capture/OK key to confirm setting and exit the menu.

4. Date& time

Enter into "date/time" menu and it can set the date, time and date format. Press power/MODE key to select the option for setting. Short press the WIFI/MENU key to take setting. Press the capture/OK key to confirm setting and exit the menu.

5. Language

Enter into the language setting and it can select English, Simplified Chinese, French, Spanish, Italian, Portuguese, German, Russian, Japanese and Korean,

6. TV output

Enter into TV output menu and it can set NTSC/PAL mode to enter into TV or off. After TV cable is connected, select corresponding system according to the local TV system and press capture/OK key to enter into TV. After confirming entering into TV, the TV-OUT terminal of camera will output TV signal. Main LCD display will be

22

switched off. After TV is connected, TV can be turned off in the TV displayed menu to recover LCD display. (Corresponding data line can be configured to connect with aerial host for aerial shooting.)

7 Power frequency

Enter into "frequency" menu and it can set the frequency as 50Hz and 60Hz. Corresponding setting can be set according to the light source frequency used in different countries. (Incorrect light source frequency setting may cause frequency stripe on previewed and shot photos and videos.)

8 Time delay shooting

Enter into time delay shooting menu, and it has 8 options, i.e. off, 1s, 3s, 5s, 10s, 30s and 1min.

After time delay shooting is started under photo mode and capture key is pressed to start shooting, it will take a photo after the set delay time is achieved, and it will continue cycling within the set interval until the interval time is out.

After time delay shooting is started under camera mode and capture key

is pressed to start shooting, it will clip one frame of image after the set delay time is achieved, and it will continue cycling within the set interval until the interval time is out. The camera will integrate the clipped images into a video.

9. Time interval

After entering into the time interval menu, it can select 6 options, i.e. unlimited, 5min, 15min, 20 min, 30 min and 60 min as the time length in time delay shooting.

10. Date stamp

Enter into "date stamp" menu and it can set the date label on/off. The function is invalid when it is set off.

11. System

Enter into "system" menu, it has 3 options, i.e. Restore Factory Defaults , system information and card information. It can restore the factory defaults and check the system information and card information.

12.WI-FI password

Enter into "**WI-FI password"** menu，it can set the WIFI password. It is

default as 1234567890. Short press WIFI/MENU menu downward to select the digits for setting. Press power/MODE key to enter into following digit setting. Press the capture/OK key to confirm setting and exit the menu.

13. Formatting

Enter into "formatting" menu and it formats the memory of sport camera according to the prompt. (If MICRO SD card is inserted, the MICRO SD card is formatted.) After being formatted, all memory (MICRO SD card) files are lost.

Warn: Please use this function with caution.

VI. WIFI Function Description

1. APP application acquiring and installation (Support Android system and Apple system)

A) Search "AMK-icam" in "Google Play" under Android system to acquire installation program and install the application according to the prompts.

B) Search "AMK-icam" in APP Store under Apple system to acquire installation program and install the application according to the prompt.

2. Application description of WIFI function on/off

1) After AMK-icam is installed on a mobile photo or an ipad with Android system (provided by dealer or on the internet), the AMK-icam icon will be displayed on the screen.

2) Insert a card in the camera and start the camera. Press Wi-Fi key to switch on Wi-Fi and the Wi-Fi indicator on the side of camera will be on. Related WIFI information will be displayed on the screen.

3) Start the Wi-Fi on an Android mobile phone or an ipad and search wireless APP signal name iDVXXXXXXXX. Connect with it until the system displays successful connection. Password is required for the first connection with Wi-Fi. The default password is 1234567890.

4) Click the application icon on an Android mobile phone or an ipad. Preview screen of camera transmitting can be viewed directly on the Android mobile phone or ipad (as in the following figure). Then, take corresponding operation.

APP 预览界面

1. Battery icon   2.WIFI   3.Zooming bar 4.Captured photo preview
5. Captured key 6 Camera mode   7.Photo mode 8.Time delay shooting
9. Setting   10Resolution   11Mode icon   12White balance
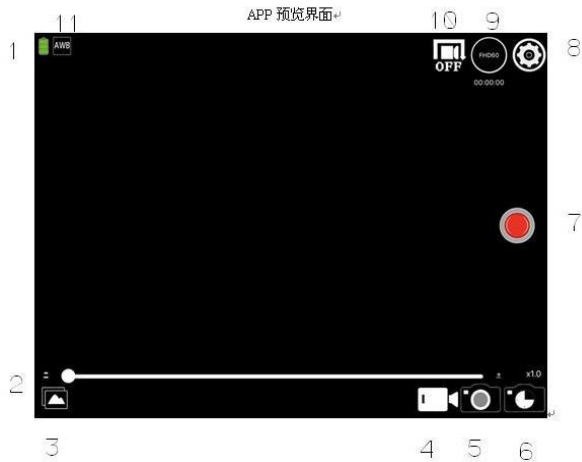
3. Application of Apple system

1. After AMK-icam is installed on a mobile photo or an ipad with Apple system (provided by dealer or on the internet), the AMK-icam icon will be displayed on the screen.

2. Insert a card in the camera and start the camera. Press Wi-Fi key to switch on Wi-Fi. Wi-Fi signal icon will be   displayed on the screen at the moment.

3. Start the Wi-Fi on an Android mobile phone or an ipad with Apple system and search wireless APP signal name iDVXXXXXXXX. Connect with it until the system displays successful connection. Password is required for the first connection with Wi-Fi. The default password is 1234567890.

4. Click the application icon on an Android mobile phone or an ipad. Preview screen of camera transmitting can be viewed directly on the Android mobile phone or ipad (as in the following figure). Then, take corresponding operation.

APP 预览界面

1. Camera battery icon   **2.Zooming bar**
3. Shot file   **4.Camera mode**
5. Photo mode   **6.Time delay shooting**
7. Capture key   **8.Setting**
9. Resolution   **10.Mode icon**
11. White balance

30

VII. Other Functions Description

1. Remote shooting function

Face the infrared emission port of remote watch to the remote receiving window of camera. Press the capture key on the remote watch and a photo will be captured. Press the camera key and the camera mode is switched to automatically. It starts automatic shooting. Press the camera key again and it stops shooting.

2.HDMI connection

Use HDMI cable (optional) to connect the camera line with an HDTV. Set the input signal source of HDTV as HDMI. Press the power key to start the camera. The images of camera can be viewed on HDTV.

Note: Before accessing/pulling out the HDMI cable, please stop video recording, video playing and Wi-Fi connection.

3. Photo/video downloading

For WIN2000 system and above, U disc function can be used to download the shot photos and videos by connecting with USB line directly. For system before WIN 2000, driving software shall be installed before using. Using USB data to connect it to the computer, and power on the camera, there will be USB options on the screen, press capture key to enter into mobile hard disk mode to download.

4. Camera (PC Camera) function

Download and install a driver. Using USB data to connect it to the computer, and power on the camera, there will be USB options on the

32

screen, press wifi button to select PC camera mode and press capture key to choose PC camera mode. Then open My Computer on the computer desktop. An USB video device will be appeared after a while. Open it and image can be viewed.

VIII. Maintenance and Safety

The sport camera and accessories shall be maintained often.

1. Sport camera

1) Keeping the lens clean is conducive to take a clear photo within the most possible focus. Use dry and soft gauze to clean the lens and fingerprint and dust on the LCD lightly.

2) Use dry and clean cloth to wipe the surface of sport camera. Don't use coarse cloth or abrasive of cleaners, which will damage the external surface of sport camera.

3) Don't place sport camera under sunlight or in a very warm environment for a long period (such as tool bag and luggage, etc).

4) If the sport camera shall be moved to another warm environment, wait for several minutes before using, so that the sport camera can be adjusted to the temperature of current environment.

2. Battery
Only battery in good condition can be used. Don't place battery with leakage, corrosion and expansion in the sport camera.

3. Memory card
To avoid deleting the data in the card or damaging the card, don't expose it in an environment with high temperature, moisture and static electricity.

Safety Precautions
To avoid the danger of electric shock, don't disassemble the sport camera or repair the sport camera by oneself.

The sport camera shall be kept dry. It may cause malfunction of sport camera when it is exposed in too wet environment.

When moisture enters into the sport camera, stop using it immediately. Make sure the sport camera is completely dry in air before reusing.

IX Troubleshooting

The sport camera cannot be on or the function has no response.	
Possible Causes	Troubleshooting
The sport camera is off.	Press the power key to restart the camera.
Battery installation is incorrect.	Re-install the battery correctly.
Battery is exhaust.	Charge the battery.

Battery is invalid for coldness.	The battery may be cold. Warm the battery before using.
Moisture condensation is existed inside of sport camera.	Switch on the power after the sport camera is dry.
Sport camera is connected with a computer.	When the camera is connected with a computer, it cannot be operated.

Moisture condensation: when it is cold outside, moisture in the air is cooled rapidly and is condensed into water drop.

It cannot take shooting when pressing the shutter key.	
Possible Causes	Troubleshooting
The power of sport camera is off.	Press the power key to power on sport camera.
Activity image shot just now is being written in the card.	Wait for the prompt sound of shooting completion.

The card is full.	Eliminate the undesired images or insert into a new card. Before eliminating the image, download the important images on a computer.
The battery is exhaust when taking a photo or writing in a card. (The battery icon is flashing.)	Charge the battery.
Something wrong with the card.	Re-format or replace the card.

LCD display is not clear.	
Possible Causes	Troubleshooting

| Object for shooting is too close or the lens of sport camera is dirty. | Adjust the distance with the object or clean the lens. |
| LCD display is exposed under direct sunlight. | Use hand to shade the sunlight. |

Image cannot be displayed on the LCD.	
Possible Causes	Troubleshooting
The power of sport camera is	Press the power key to start the
The sport camera is in shooting process and entering into power saving mode.	Press "photo preview" key to switch back to playback mode.

TV mode is started.	Shut off TV mode or restart the camera, so as to recover to LCD display mode.

Image is too bright.	
Possible Causes	Troubleshooting
Object for shooting is extremely bright.	Change the white balance mode of sport camera or change the facing position of sport camera to the object.
Exposure setting is too high.	Adjust the exposure value.

Image shot indoor is unnatural.	
Possible Causes	Troubleshooting

| Indoor lighting affects the color of image. | Set the white balance according to the lighting. |
| White balance/scene setting is wrong. | Adjust the white balance/scene according to the light source. |