4K ACTION CAMERA

USER MANUAL

INSTRUCTIONS

PREFACE

Thank you for purchasing the mini action DV high resolution camera. This well-designed product is very easy to carry and can help you record all of the exciting moments; whenever or wherever they occur.

This manual will explain how to use your camera as well as provide you with more detailed information concerning operations, installation, precautions, and technical specifications. Please read and retain it to get the most out of your purchase. We hope you enjoy your new camera and look forward to serving all of your action radiography needs in the future.

PRODUCT PICTURE

Install and remove the memory card:

1. For optimal performance, use micro SD cards with the speed rating of Class 10 or higher. Lower performance cards may limit the use of some features.
2. Please ensure that the memory card is inserted as shown on the diagram. Insert and press the card into this slot until it is fully seated.
3. To remove the memory card, press gently. When the card pops up, carefully pull the card until it is free of camera body.
4. The display screen will show a "no card" sign if a card is not present or it is incompatible with this camera.

WARNING:

1. Please ensure that the memory card is inserted with the correct orientation. Failure to do so may result in damage to the camera or card.
2. Once the card is inserted, the camera will detect and initialize for immediate use.
3. Be sure to backup all files stored on the card. "Shenzhen Gkuvision technology Company" is not responsible for any damage or loss.

PRODUCT FEATURES:

> The Mini Action DV, can be used any occasions to take photos or shoot high-definition video on demand
> HDMI high-definition video output
> 2 in. high-definition LCD screen
> High-definition camera with wide Angle
> Video specifications: h. 264 (MOV)
> Built-in microphone
> Support for high capacity memory card
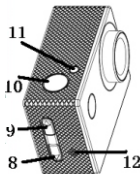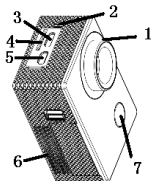> Capable of waterproof operation (IP68) with approved waterproof shell
> Built-in Wi-Fi

MEMORY CARD CAPACITY AND THE VIDEO RECORDING TIME (FOR REFERENCE)

TF card	(4K)15F	(1440P)30F	(1080P)60F	(720P)120F
64G	192min	440min	480min	640min
32G	96min	220min	240min	320min
16G	48min	110min	120min	160min
8G	24min	55min	70min	80min

Note:
Maximum video length and photo capacity may vary due to memory card, camera settings, and filming conditions.

CAMERA FEATURES:

1. Wide-angle lens
2. Microphones
3. USB Port
4. TF booth
5. High-definition display
6. Battery Port
7. "POWER" Button
8. "< -" Down Button
9. "+>"Up Button
10. "OK" Button
11. Indicator light
12. Speaker

BUTTON FUNCTION:

POWER Button: to start up/shut down/ switch mode
OK Button: to confirm
+ > Up Button: Open the menu screen. Once menu is open, used to scroll up.
< - Down Button: Turn WIFI on or off. On menu screen, use to scroll down.

CHARGING BATTERY:

This camera uses a removable, rechargeable lithium-ion battery pack. Please charge battery pack before first use. After the initial charge, the camera may be recharged as follows:
1) Connect the mini DV to a computer with the included USB cable

2) Connect the included USB cable to the charger connection, then insert the charger into a USB socket.

Note: The Red indicator LED will turn on while the battery is charging and will turn off once battery is fully charged.

1. When the battery is low, the mini action DV will turn off automatically. Recharge battery before further use.

2. When the battery charge is low, turn off wi-fi to increase performance and run-time, recharge the current battery, or replace depleted battery with a fully charged battery to continue use.

OPERATING INSTRUCTIONS:

1. Turn on the camera by pressing and holding the "POWER" button for a few seconds;

2. After turning on, the system will default to video camera mode, press the "OK" button to start the video. If the video is finished, then press "OK" button to stop recording., and it will save the file automatically;

3. Turn on the mini action DV by the pressing and holding the POWER button for a few seconds;

4. Turn the WIFI on by pressing "< -" button in camera mode. It will appear with the WIFI name of "iStarCam * * * * *", and the password is 1234567890.You can modify the WIFI password in the menu. Note: the display screen will not function while WIFI is turned on.

5. Turn the WIFI off by pressing "< -" button. This will reactivate the display screen as well.

6. Switch modes by pressing the "POWER" button. Camera Mode, Driving mode, Photo Mode, and Video Preview Mode are included.

7. AV out Settings:

Method 1: Press button"+>"(button up)for 5 seconds, it will enter into AV mode automatically,then Rebooting and the screen is black,AV out setting is OK.

Press button"+>"(button up)for 5 seconds, it will shut AV mode automatically.Then Rebooting and enter into LCD screen mode.

Method 2: Enter menu mode, choose open or close. If you choose open, turn off the camera and rebooting, then enter AV mode.
If you want to use other screen to see the menu, pls choose "turnoff button" on the other screen to shut AV out function, rebooting camera is OK.

SETTING MENU

1. Camera mode setting:
Press the "POWER" button to switch to the camera mode and press "+ >" button to enter the menu. Click the "OK" button to confirm. Exit the current setting by pressing the "POWER" button. Choose from the following operation settings:
1) Video size: 4k15fps, 2.7 k 15fps, 1440p30fps, 1080p (60 FPS), 720 (120 FPS), VGA (240 FPS
2) Viewing Angle: high (170 degrees), medium (155 degrees), and low (135 degrees)
3) Recording: turn on or off the recording options
4) Distortion correction: turn on or off the distortion correction. As distortion is typically caused by wide viewing angles, the distortion correction will automatically reduce viewing angle to minimize distortion.
5) Stabilization: turn on or off the electronic image stabilization function
6) Inversion mode: turn inversion mode on or off. Inversion mode will rotate the video or picture by 180 degrees
7) Slow motion: turn on or off the slow motion
8) White balance: Choose from automatic, daylight, cloudy, fluorescent lamp, or incandescent lamp settings
9) Power saving mode: turning on the power saving mode will reduce battery consumption by turning off the LCD display automatically. Options are 1, 3 or 5 minutes. The default setting is 1 minute.
10) Date and time: press the "+>" button for a few seconds to switch to the month/date

Settings.You can also turn Wi-Fi on to update the time automatically

11) Language: You can choose English, simplified Chinese, traditional Chinese, French, Spanish, Italian, German and Russian. English is the default setting.

12) Time-lapse video: You may choose 3, 5, 10, 30 seconds, or 1 minute. This setting will compress the display time of the video according to the selected interval. For example, a setting of 30 seconds will display 30 seconds of for each 1 second of play time.

13) Time intervals: Used to set video file length. Each video file can be set to record to 5, 10, 15, 20, 30 or 60 minute increments.

14) Date stamp: Setting to include a date-time stamp. Choose "on" to include stamp, "off" to remove time stamp from videos.

15) System: You can choose to restore factory settings. Check the system version number and the TF card capacity information.

16) WIFI - Password: You can change the WIFI connection password.

17) Formatting: You can format the TF card

2. Driving mode setting:

Press the "POWER" button to switch to Driving Mode and press "+ >" button to enter the menu. Click the "OK" button to confirm. Exit the current setting by pressing the "POWER" button. Choose from the following operation settings:

1) Video size: 4k15fps, 2.7 k 15fps, 1440p30fps, 1080p (60 FPS), 720 (120 FPS), VGA (240 FPS)

2) Viewing Angle: high (170 degrees), medium (155 degrees), and low (135 degrees)

3) Recording: turn on or off the recording options

4) Distortion correction: turn on or off the distortion correction. As distortion is typically caused by wide viewing angles, the distortion correction will automatically reduce viewing angle to minimize distortion.

5) Stabilization: turn on or off the electronic image stabilization function

6) Inversion mode: turn inversion mode on or off. Inversion mode will rotate the video or

picture by 180 degrees

7) Slow motion: turn on or off the slow motion

8) White balance: Choose from automatic, daylight, cloudy, fluorescent lamp, or incandescent lamp settings

9) Power saving mode: turning on the power saving mode will reduce battery consumption by turning off the LCD display automatically. Options are 1, 3 or 5 minutes. The default setting is 1 minute.

10) Date and time: press the "+>" button for a few seconds to switch to the month/date Settings. You can also turn Wi-Fi on to update the time automatically

11) Language: You can choose English, simplified Chinese, traditional Chinese, French, Spanish, Italian, German and Russian. English is the default setting.

12) Time-lapse video: You may choose 3, 5, 10, 30 seconds, or 1 minute. This setting will compress the display time of the video according to the selected interval. For example, a setting of 30 seconds will display 30 seconds of for each 1 second of play time.

13) Time intervals: Used to set video file length. Each video file can be set to record to 5, 10, 15, 20, 30 or 60 minute increments.

14) Date stamp: Setting to include a date-time stamp. Choose "on" to include stamp, "off" to remove time stamp from videos.

15) System: You can choose to restore factory settings. Check the system version number and the TF card capacity information.

16) WIFI - Password: You can change the WIFI connection password.

17) Formatting: You can format the TF card

3. Photo Mode Setting:
Press the "POWER" button to switch to the camera mode and press "+ >" button to enter the menu. Click the "OK" button to confirm, and exit the current setting with pressing "POWER" button. Here are operation settings:

1) Video size: 4k15fps, 2.7 k 15fps, 1440p30fps, 1080p (60 FPS), 720 (120 FPS), VGA (240

FPS

2) Viewing Angle: high (170 degrees), medium (155 degrees), and low (135 degrees)

3) Recording: turn on or off the recording options

4) Distortion correction: turn on or off the distortion correction. As distortion is typically caused by wide viewing angles, the distortion correction will automatically reduce viewing angle to minimize distortion.

5) Shooting mode: You can choose to take 2 photos in a row by selecting the continuous shooting mode. You can choose to delay each photo by 2 or 10 seconds

6) Photo shoot: Choose from 3, 5, or 10 continuous shooting mode selections

7) Power saving mode: turning on the power saving mode will reduce battery consumption by turning off the LCD display automatically. Options are 1, 3 or 5 minutes. The default setting is 1 minute.

8) Date and time: press the "+>" button for a few seconds to switch to the month/date Settings. You can also turn Wi-Fi on to update the time automatically

9) Language: You can choose English, simplified Chinese, traditional Chinese, French, Spanish, Italian, German and Russian. English is the default setting.

10) Time-lapse video: You may choose 3, 5, 10, 30 seconds, or 1 minute. This setting will compress the display time of the video according to the selected interval. For example, a setting of 30 seconds will display 30 seconds of for each 1 second of play time.

11) Time intervals: Used to set video file length. Each video file can be set to record to 5, 10, 15, 20, 30 or 60 minute increments.

12) Date stamp: Setting to include a date-time stamp. Choose "on" to include stamp, "off" to remove times tamp from videos.

13) System: You can choose to restore factory settings. Check the system version number and the TF card capacity information.

14) WIFI - Password: You can change the WIFI connection password.

15) Formatting: You can format the TF card

4. Video Preview Mode Setting:

Press the "POWER" button to switch to the camera mode and press "+ >" button to enter the menu. Click the "OK" button to confirm, and exit the current setting with pressing "POWER" button. Here are operation settings:

1) Videos: To preview videos, press the "+ >" or "< -" button to select the video. Choose OK button to play. And press the "+ >" button to lock or delete files.

2) Images: To preview photos, press the "+ >" or "< -" button to select the photo to preview. Press the "+ >" button to lock or delete files.

3) Driving file: To preview cameras video which were captured in driving mode. Press the "+ >" or "< -" button to select the video to preview. Choose OK button to play. And press the "+ >" button to lock or delete files.

FUNCTIONAL OPERATION:

Computer USB model

To access photos and videos directly on your computer, connect the camera via USB cable to your computer with the camera power on or off. This will put the camera to "U Disk" mode. If the camera power is on, the camera screen will display screen MSDC.

Wi-Fi wireless transmission (use mobile phones to control)

1. With the camera turned on, press the "< -" button to enter the WIFI model. Turn the phone WIFI on, find search for the WIFI access point name "iStarCam * * * * * *". Select and connect to this access point. When prompted, enter the initial password of "1234567890". Your smartphone will notify you when the connection is successful.

2. Turn on the corresponding APP on your phone - iStarCam, from which you can control your camera.

Note: You have to install iStarCam APP to control software

1) The signal, response time, and working distance may vary by model.

2) Please download and install iStarCam's tool software before using the Wi-Fi connection. Android mobile phones can download and install if through the Google play store; IPhone should use the App store.

3) To watch videos directly on your smart phone, download the video files to your mobile phone. If you experience issues playing these videos, download and install the MX PLAYER software from your smart phone providers' app store. Additional video software may also be available through Google Play or the Apple Store.

wifi link way

HDMI HIGH-DEFINITION TELEVISION OUTPUT

Use the HDMI high-definition television cable to connect the camera to your TV. The TV should be set to appropriate HDMI input mode. Press the "OK" button to choose the required file, and enjoy the time with your family and friends.

PRODUCT SPECIFICATIONS:

Function Items	Parameter Value	Function Items	Parameter Value
Video Resolution	4K15fps 2.7K15fps 1440P30fps 1080P60fps 720P120fps VGA240fps	Photo size	16M(4608*3456) 12M(4000*3000) 8M(3264*2448) 5M(2592*1944)
Photosensitive member	COMS wafer	Lens FOV	170 degree wide-angle
Supply voltage	4.2V lithium battery/ USB 5V	Working Temperature / Humidity	Minus 10 to 50 degrees Celsius / 30 % to 80%
Video Format	MOV(H.264)	Video compression	H.264.MJPG
Image Sensor	sony1600 megapixel , 1 / 2.3 "	Focal length range	12cm ~ infinity
Display Screen	2 inches LTPS TFT LC	TV output	NTSC/PAL
Fittings	USB2.0 / HDM	Memory	External : TF Card (up to 64G)
Battery	External Battery 1050mAh	USB	USB2.0 high-speed transmission
WIFI	Supported	AV signal	Supported
Size	59*41*24.5mm	Weight	Camera weight: 65g (including battery)

FREQUENTLY ASKED:

>Why will it not boot?
The most likely reason is a discharged battery, please recharge your camera and try again.

>Why can't I take new videos?
The memory card is likely full. Remove the current card replace it with one with enough space, or check to see that the memory card is installed correctly,and ensure the card is "high-speed" compatible

>Why is there no image being displayed on the high-definition TV screen?
Please confirm whether the television output terminal is completely inserted and that the TV cable is compatible with the camera. Also ensure that the TV is set to HDMI Input setting.

>Why is the video quality blurry?
Most often, blurry video is caused by dirt or oil on the camera lens. Use a soft cloth or microfiber screen towel to carefully clean the lens

>Why is the camera responding slowly?
If this occurs, ensure that the battery has sufficient charge, turn off the camera, remove and reinsert the battery, and restart the camera.