



1. Function

Thank you for choosing this camera. Please carefully read the manual before using, and keep it at a safe place for future reference.

The compilation of the manual refers to the latest information. The manual quotes captured screen displays and graphics, with the aim to introduce the digital camera through detailed and direct methods. Due to the differences of technical R&D and production batch, those captured screen displays and graphics indicated un the manual may be different from that of actual digital camera.

2. Precautions

TF high-speed card (multimedia memory card) at Classed4 or above is required for this cameras. We recommend use always original Class 10 cards to ensure the highest speed and quality during the date transmission.

Instructions for using the memory card

In case of a newly purchased memory card for the first time use, or date available in the
memory card unrecognized for the camera or image captured by other cameras, please
ensure to firstly format the memory card. You can use the format tool included in the

camera

- Before plugging in or out the memory card, please firstly disconnect power supply of the camera;
- After using for many times, performance of the memory card will be lowered. In case
 of lowered performance, a new memory card is needed to purchase;
- The memory card is a precise electronic device. Please don't bend it and keep it away from falling or heavy load;
- Don't keep the memory card in the environment with strong electromagnetic or magnetic field, like the place near speaker or receiver of TV;
- · Don't use or keep the memory card in environment with over high or low temperature;
- Keep the memory card clean and away from contacting liquid. In case of contacting liquid, please dry it with soft cloth;
- · In case of keeping the memory card idle, place it into the card sleeve;
- · Please note that the memory card will get hot after long-term use, and this is normal;
- Don't use the memory card having used on the other digital cameras. If to memory card on this camera, please firstly format it with the camera;
- · Don't use the memory card having formatted on other camera or card reader;
- In case of one of the followings with the memory card, the recorder date may be damaged:
 - Improper use of the memory card:
 - Disconnect power supply or take the memory card out during recording, deleting (formatting) or reading:
- You are recommended to backup important data on other media like soft disk, hard disk, CD.

Camera Maintenance

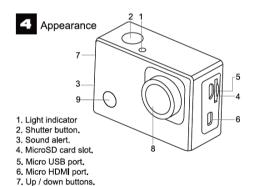
- Keep it in a dry and dark place for keeping idle;
- · Use proper protective cover to avoid lens and display scratched;
- · Keep the camera into a protection case to avoid scratches on the lens and screen;
- In case of cleaning the surface of camera lens, first blow the dust off the surface, use a cloth or paper available to optical equipment to wipe the lens gently. Use the professional camera cleanser to clean the lens. Do not use any organic solvent
- Do not touch the lens surface by fingers.

3. System requirements

When operating or using the digital camera, please take minimum system requirements for the computer of the camera into consideration. You are strongly recommended to use better computer equipment for operating the camera to achieve the optimized effect. The minimum system requirements are as below:

| System Requirements | | |
|---------------------|-------|---------------------------|
| Operating System | PCCAM | Microsoft Window |
| | | XP(SP3), Vista,7,8 Mac OS |
| | | X ver:10.8.0 or above |
| | | version |

| | MSDC | Microsoft Window 2000 ,XP, Vista,7,8 Mac OS X ver:10.0.0 or above version |
|-----------------------------|------|--|
| СРИ | | Intel Pentium of more than 1GHz or other CPU with equivalent performance |
| Internal Memory | | Larger than 1GB |
| Sound card and Display card | | The sound card and video card shall support DirectX8 or higher version |
| CD Driver | | Speed of 4 times or faster |
| Hard Disk | | Free space of more than 2GB |
| Others | | One standard USB1.1 or USB2.0 port |



9. POWER / Mode

8. Lens.

5. Removing the battery from the camera





1. Remove the battery door by placing your thumb.

2. Allow the door to pop out. Grasp the battery pull-tab and remove from the camera.

6 Start to use

1. Charge the built-in lithium battery

The camera is equipped with built-in 3.7V lithium battery. Please ensure power available for the camera and timely charge it in case of low battery.



Connect the camera to computer for charging under shutdown status. The charging indicator will be on when charging, and will be off when the battery is fully charged. Generally, the battery can be fully charged after about 4 hours.

Note: when the DV is on, it will not charge until the DV turn off.

2. How to use the memory card

- 2.1.Properly insert the TF card into the card holder as per the instructions indicated near the card holder.
- 2.2.To remove the TF card, press the end of memory card gently, the card will be ejected.



Note: The camera is not equipped with built-in memory. Please insert memory card before using. Before using the camera, it is a must to format the memory card on the camera.

3. Startup and shutdown

- 3.1 Startup: press the POWER key for 3 second, the camera will show startup screen and enters into POWER ON state:
- 3.2 Shutdown: press the POWER key for 3 second when the camera is under idle mode to shut down:
- 3.3 Auto shutdown: the camera will be shut down automatically when the camera is under idle mode for a certain time to save power. The default time for auto shutdown is 3 min.
- 3.4 Shutdown under low power: when the battery is under low power, the LCD will indicate
- ""\[\infty\]". Please charge the battery timely. When the screen display "low battery", the camera will be shutdown automatically.

4. Function modes switching

The camera has 4 modes: recording mode, photo mode, movement mode and playback mode. Press the Mode key to switch the modes after starting up.

- · Recording mode: video can be recorded;
- · Photo mode: for taking photos;
- · Movement mode: Special for videos in movement;
- . Playback mode: for playing back the current video/photo from the SD Card.

5 Indicators

- 5.1 BUSY indicator: when the camera is working (e.g. recording, photographing, etc.), the indicator will light;
- 5.2 Charging indicator: in shutdown state, the lightened indicator means the user is charging the camera.

6. Photo/recording/vehicle-mounted/mode

It enters automatically into recording mode.

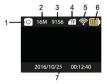
Press shutter to start recording, and press shutter again to stop recording.

Press mode key to photo mode.

Press mode key to movement mode.

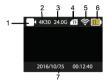
Press shutter to start recording, and press shutter again to stop recording.

6.1 Screen display in photo mode



- 1 Photo Mode
- 2. Resolution.
- Photos available.
- 4. Micro SD card
- 5. WIFI
- 6. Battery
- b. Battery
- 7. Date and time.

6.2 Screen display in recording mode



- 1. Recording mode.
- 2.Resolution and fps.
- 3.Storage available.
- 4. Micro SD card.
- 5. WIFI.
- 6.Battery
- Date and time.

Note: when using the 4k, FHD size or HD vide, you must use the TF high-speed card at class 4 or avobe. We recommend use always class 10 cards

6.3 Screen display in movement mode



- . movement mode
- 2. resolution and fps.
- 3. Storage available.
- 4. Micro SD card.
- 5. WIFI.
- Battery.
- 7. Date and time.

7.Playback mode

Turn on the camera, you can press the mode key to enter playback mode. You can press the up/down key to choose the photo or video you want to play, then press the shutter key

to enter preview.

Press mode key to enter playback mode to browse photo/video, play the video recorded by this camera.

Play movie: press the shutter key to start/pause play video, press the Up/Down key to restart quickly/ fast forward playback, press the power key to stop play video.



8.Menu setting mode

8.1 menu display

Press mode key until enter in options display. Here you can select the different options to configure your recording or photo.



Recording and photo menu:





8.2 System Configuration menu

After opening the menu by pressing power key, press mode key to switch over to setting main menu. Press up/down key to select menu, and after that to press shutter key for confirming to enter the submenu. In the submenu, press up or down key to select menu, and press shutter to confirm. After returning to the main menu, go to the "X" icon to return to main menu.

System menu mode:



8.3 setting data and time

Press mode key to open the menu, press mode key again until arrive to the grain icon and press shutter to enter. Press up/down key to select "date and time" and then press shutter to enter.

In setting window, press mode key to select items(date/time) to be adjusted, and then press up key or down key to make adjustment, press shutter key for conformation at completion of adjustment or press power key to cancel setting and exit. Finally, press power key to exit from setting mode





8.4 Time-lapse mode settings

To configure the camera into time-lapse mode, enter in setting menu and then select photo settings. Enter in time-lapse submenu and adjust the shutting time for each photo. Keep in mind that in PAL-DV mode, to get 1 second in video you will need take 24 photos; and in HD mode 30 photos.

To configure photo's resolution, return to previous mode (photo) and enter in resolution's submenu. To start taking pictures, enter in photo mode, put the camera in position and press shutter key. Please, notice that to get a good time-lapse you shouldn't move the camera.



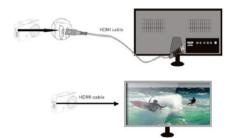


Once you will get all pictures, import them in your video editor software as "frame sequence". Depending of the software that you will use, you should import the pictures in a special way; please, check your software's manual to know how to do it. Maybe you'll have to rename the photo files to allow your software identify them correctly.

9.Connecting to HDTV

9.1 Connect the DV to HDTV via HDMI cable (optional)

If you need to transfer the image and audio to an HDTV for playback, insert the com end of the HDMl cable to the DV, and the other end (output) to the HD input of the HDTV, as shown in the following figure:



When the camera is connected with the HDTV successfully, the camera display is synchronizing with HDTV display.

Note: before connecting or removing the HDMI cable, please stop video recording and disconnect WI-FI first.

10. Connect to PC

10.1 When the camera is connected with the computer and entering removable disk mode, there will be a removable disk added in the window of "my computer". The photo or video file may be stored in the catalogue of "DCIMICAR, JPG, VIDEO" in the removable disk. You may enter this catalogue to copy files on to hard disk of your computer.

Note: during file downloading, it is prohibited to disconnect USB connection, and plugging out the memory card when USB connected is also prohibited to avoid loss of data

10.2 in U-disk mode (MSDC mode), press the shutter key to switch to web cam mode (PCCAM) the LCD will display: PCCAM.

Now you can start the web cam through application. To return to U-disk mode (MSDC mode), press the power key again.

Note: Driver is not required for web cam mode (PCCAM mode) on Windows XP(SP3) version or above

11.APP (Support Android and ISO)

11.1. How to install an APP

- 1. Search for "XDV"in Google play (for Android QS) to find the APP and install it according to the instruction.
- 2. Search for "XDV" in APP Store (for IOS) to find the APP and install it according to the instruction.

11.2 Android APP

1. Install "XDV"APP (provided by dealer or via internet) on smartphone or tablet. When

installation completes, the LCD will display icon:



2. Insert the TF card and turn on the DV. Enter in menu and turn on WIFI:





3. Enable WI-FI on smartphone or tablet and search for wireless AP signal "X10000 XXXX", then connect it to DV, until the system displays "Connected successfully".

Note: the first time connecting to DV, you need to enter password "66666666".







4. Click the icon in the App list of the smartphone or tablet to open it. Now you can preview the image sent by the DV on the phone or tablet and start some operating. The operation interface on terminal is shown in above-right position figure.





This app shows in the main display 3 options: video, photo and movement. In the bottom side you can see other 3 options: main display, gallery and options

In "options mode" you will be able to configure the camera presets before recording. As in right position image.

Note: the app XDV has not been developed by Phoenix Technologies, so that we are not responsible of the operating, neither of the compatibility with all devices. We are not also responsible of updates.

11.3. IOS APP

1. Install " XDV" APP (provided by dealer or via internet) on iOS phone or tablet. When

installation completes, the LCD will display icon

- 2.Enable Wi-Fi on iOS phone or table and search for wireless AP signal "X10000_XXXXX", then connect it to DV, until the system displays "Connected successfully".
- 3.Click the icon in the APP list of the iOS phone or tablet to open it. Now you can preview the image sent by the DV on the phone or tablet and start some operating.

7. Technical parameters

| 7. reclinical parameters | | | |
|--------------------------|--|--|--|
| Image sensor | SONY 179 | | |
| Function mode | Recording, movement, photo, playback | | |
| LCD screen | 2.0" LCD Screen | | |
| Picture | 16M(4608*3456) 12M(4000*3000), 8M(3264*2448). 5M(2560*1920), | | |
| resolution | 2M(1600*1200) | | |
| Video | 4K(3840*2160 30fps), 2.7K(30fps), FHD(1920*1080 30fps), | | |
| resolution | FHD(1920*1080 60fps) HD(1280*720 30fps) HD(1280*720 30fps) | | |
| | HD(1280*720 60fps) HD(1280*720 120fps) | | |
| Storage | TF Card (Maximum supporting 64GB) | | |
| medium | | | |
| File format | JPEG H.264(MOV) | | |
| Recording time | Maximum 29 minutes-video | | |
| USB Port | USB2.0 | | |
| Power supply | Built- in3.7V rechargeable lithium battery | | |
| Menu | English/ Spanish | | |
| language | | | |
| Power save | 1min/3min/5min/OFF | | |
| Operation | Windows XP/ Vista/7/8,Mac 10.8 | | |
| system | | | |
| requirements | | | |
| Dimensions | 61*41*30mm | | |
| | | | |

Warning Statement

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.

Any 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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.