Welcome:
Dear user, Thanks for purchasing this product. This manual offers to you more detailed instructions and information.

Safety Notice:
1. If a digital video camera (or abnormal taste), or the camera is hot, give out strange sound, at the any abnormality state, please don't use the digital video camera
2. The abnormity caused because of no operating according to the manual, take charge by user.
3. Please don't put this video camera in the moist environment, keep the video camera dry.
4. During thunder, if you use the power adapter, please don't touch the plug may let you get an electric shock.
5. If there is an eye winker in the digital video camera, please don't use the digital video camera.
6. Please don't insert metal thing or other things in the video camera but SD card, manufacturers are not responsible for this trouble.
7. Please don't try to redo the digital video camera.
8. Please don't operate the digital video camera when you are driving.
9. Please don't use the wet cloth to cover or wrap up the digital video camera or power adapter, please keep the digital video camera in ventilate place.
10. Please don't make the digital video camera strike with hard thing.
11. Please don't move the digital video camera while turning on the power.
   (When you are using the power adapter). Please pull out the line connected in front of moving the digital video camera.
12. The normal function of the product may be disturbed by strong electro-magnetic interference. If so, simply rest the product to resume normal operation by following the instruction manual. In case the function could not resume, please use the product in other location.

Getting to know the camera

1. CHARGER LED
2. Mode Button
3. Up Button
4. OK Button
5. Face Detect / Right Button
6. Down/Self-Timer Button
7. Flash / Left Button
8. Menu Button
9. TFT Display Screen
10. T-Zoom in Button
11. W-Zoom out Button
12. Shutter Button
13. Speaker
14. Power Button
15. USB Port
16. SD/MMC Socket
17. TV OUT Plug
18. Focal Length Button
19. Lens Ring
20. Lens
21. Flash Strobe
22. Battery Cover
23. Battery Cover Switch
24. Microphone

Button functions
T/W Button: zoom in / zoom out
OK: Confirm/enter
Up: Toggle resolution (Camera Mode)
Down: Toggle capture mode
Left: Toggle flash/back-forward, Toggle resolution (Video Record Mode)
Right: Face detect on/off or fast-forward

Getting started

Loading battery
1. Slide the battery cover switch to open the battery cover.
2. According to the indication, put in an enclosed lithium battery.
3. Close the battery cover.

Using SD/MMC card (optional)
In addition to the built-in memory, your camera can also store data on SD/MMC card. To insert a memory card, gently push the card until the card reaches the bottom of the slot. When a card is successfully inserted, you will see the storage icon showing on the LCD, the built-in memory will be disabled. To remove the SD card, gently push the card and it will pop up, then pull the card out of the slot.

Charge battery using seat charger
1. According to the indication, put in a lithium battery, pull out the plug.
2. Plug the charger to an electrical outlet, and the charge will start. The LED indicates red light during charging. When the battery is fully charged, the LED light will turn green.

**Charging battery using PC**

1. Power on your computer. Connect one end of the USB cable to the computer.
2. Connect the other end of the USB cable to the camera, and the charge will start to take place, the charge light (in the camera) indicates red during charging. When the battery is fully charged, the charge light (in the camera) will go out.

**Note:** Please power off the camera during charging!

**Powering the camera on and off**

1. Press the Power button for one second, the video camera will turn on.
2. Press the Power button for seconds, the video camera will be turned off.

**Note:** The camera will be automatically shut-down due to “Auto Off” setting.

If you don’t use the video camera for a long period of time, please remove the battery.

**Switching mode**

The camera provides five modes to use. After powering on the camera, press the Mode button to select a mode you want to enter. If you want to switch mode afterwards, press the Mode button again.

1. **Video Record Mode** – record videos
2. **Camera Mode** – take pictures
3. **Voice Recorder** – record voice clips
4. **Music Player** – play MP3 music
5. **Playback Mode** – view movies, pictures and listen to record voice

**Basic operations**

1. **Video Record Mode:**
   1. Turn on the video camera; the video icon will show on the top left corner of the on-screen-display.
   2. When at the time of idle state, TFT screen shows the related icon for mode indicator, recording time, white balance, battery status and so on. If you insert a memory card, the monitor will also show the memory card status.
   3. While shooting the video, you can move the T/W button to capture the subjects.
   4. Press the Shutter key to start recording.
   5. To stop recording, press the Shutter key again.

**OSD display-recoding video**

![OSD display-recoding video](image_url)
Video Menu
When use video mode, press the Menu button to enter setup menu, press down/up button to switch the setup function, then press OK key to enter sub-menu, after entering sub-menu, press the up/down button to select and press the OK key to confirm and back to setup menu. After setup completed, press the Menu button again back to video mode.

Resolution
Divided into 1280 × 720P, D1, VGA and QVGA, press the up/down button to select, press the OK key to confirm. (High resolution means better image quality, but a larger resolution will occupy more memory storage space, will cause shorter video recording time)

Exposure
+2.0 ~ -2.0 press the up/down button to make the selection, press the OK key to confirm.
Manually adjust the exposure to gain better effect when the preview image appears too bright or too dark. A positive value indicates the image will be brighter than usual; while a negative value makes the image dimmer.

White Balance
Divided into the following 5 options, press the up/down button to make the selection, press the OK key to enter.
- Auto: The camera automatically adjusts white balance.
- Daylight: This setting is suitable for outdoor recording in daylight environment.
- Cloudy: This setting is suitable for recording in cloudy weather or shady environments.
- Tungsten: This setting is suitable for indoor recording with incandescent lamp lighting, or environments with low color temperature.
- Fluorescent: This setting is suitable for indoor recording in fluorescent lamp lighting, or environments with high color temperature.

Setup Mode
In Video Mode/Camera Mode/Playback Mode, press the Menu button, then press right button to enter setup menu, press down button to switch setup function, press OK key to enter sub-menu, after entering sub-menu, use the up/down to select, press OK key to enter. After setup completed, press the Menu button again to exit setup mode.

Menu items in setup mode

<table>
<thead>
<tr>
<th>Item</th>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>Yes/No</td>
<td>Format the storage medium. Note that your all files stored in the medium will be gone.</td>
</tr>
<tr>
<td>Date/Time</td>
<td>Date Format</td>
<td>Set Date and Time format, Set date and time.</td>
</tr>
<tr>
<td></td>
<td>Time Format</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set Date/Time</td>
<td></td>
</tr>
<tr>
<td>Auto Power</td>
<td>1Min/3Min/Off</td>
<td>Set how long the camera will automatically shut down when staying inactive. Setting to [Off] will make the camera stay powered on until it runs out of power.</td>
</tr>
<tr>
<td>Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beep Sound</td>
<td>On/Off</td>
<td>Toggle beep sound on/off</td>
</tr>
<tr>
<td>Frequency</td>
<td>50Hz/60Hz</td>
<td>Set flicker frequency to 50Hz or 60Hz. See table below for more details.</td>
</tr>
<tr>
<td>Language</td>
<td>Setting Language</td>
<td>Set the OSD (on screen display) language.</td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Logo Display</td>
<td>On/Off</td>
<td>Select Yes or No option to decide if you want a certain screen when turning the camera on.</td>
</tr>
<tr>
<td>Default Setting</td>
<td>Yes/No</td>
<td>Restore factory defaults. Note that your current settings will be overridden.</td>
</tr>
<tr>
<td>LCD Brightness</td>
<td>1–8</td>
<td>Set LCD brightness.</td>
</tr>
<tr>
<td>TV Mode</td>
<td>NTSC</td>
<td>This option is suitable for America, Taiwan, Japan and Korea areas.</td>
</tr>
<tr>
<td></td>
<td>PAL</td>
<td>This option is suitable for Germany, England, Italy, Netherlands, China, Japan, and Hong Kong.</td>
</tr>
<tr>
<td>version</td>
<td></td>
<td>Indicate the version of the DV</td>
</tr>
</tbody>
</table>

Flicker table:

<table>
<thead>
<tr>
<th>Region</th>
<th>England</th>
<th>Germany</th>
<th>France</th>
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</thead>
<tbody>
<tr>
<td>Setting</td>
<td>50Hz</td>
<td>50Hz</td>
<td>50Hz</td>
</tr>
<tr>
<td>Region</td>
<td>Portugal</td>
<td>America</td>
<td>Taiwan</td>
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<tr>
<td>Setting</td>
<td>50Hz</td>
<td>60Hz</td>
<td>60Hz</td>
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<table>
<thead>
<tr>
<th>Italy</th>
<th>Spain</th>
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<th>Russia</th>
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<tr>
<td>50Hz</td>
<td>50Hz</td>
<td>50Hz</td>
<td>50Hz</td>
</tr>
<tr>
<td>China</td>
<td>Japan</td>
<td>Korea</td>
<td>Thailand</td>
</tr>
<tr>
<td>50Hz</td>
<td>50/60Hz</td>
<td>60Hz</td>
<td>50Hz</td>
</tr>
</tbody>
</table>

2. **Camera Mode**

1. Turn on the camera, and press the Mode button to enter camera mode.
2. When at the time of idle state, TFT screen shows the related icon for mode indicator, the number of pictures can be captured, White Balance, and battery life and so on. If you insert a memory card, the monitor will also show the memory card status.
3. Press the Shutter key to take picture.
4. Before shooting, you can press the T/W button to capture the subjects.

**OSD display-camera mode**

- **Mode icon**
- **Picture size**
- **Flashlight mode**
- **Quality mode**
- **Number of pictures**
- **White balance**
- **Exposure**
- **Focus mode**
- **Battery life**
- **Storage icon**

**Camera Menu**

When use camera mode, press the Menu button to enter set up menu, press down button to switch the set up function, then press OK key to enter sub-menu, after entering sub-menu, press the up/down button to select and press the OK key to confirm and back to set up menu. After set up completed, press the Menu button again back to camera mode.

**Self Timer**

Divided into Off/5 Seconds/10 Seconds.

- Off: Disable the self timer.
- 5 Seconds: 5 seconds delay after pressing the Shutter button to take a picture.
- 10 Seconds: 10 seconds delay after pressing the Shutter button to take a picture.
Flash Mode
Divided into Auto/Force On/Red Eye Reduction/Force Off.
- Auto: flash only when needed.
- Force On: flash is always on.
- Red Eye Reduction: prevent the flash causes red eye.
- Force Off: flash is turned off.
Please make the selection depends on the shooting environment; otherwise, you can just simply select Auto.

Resolution
Divided into 12M, 8M, 5M, 3M, 1M five options, press the up/down button to select, press the OK key to enter.
High resolution means better image quality, but it will also occupy more memory storage space.

Quality
Divided into Super Fine/Fine/Normal.
Higher quality means better image quality, but will also occupy more memory storage space.

Exposure
+2.0 ~ -2.0 press the up/down button to make the selection.
Manually adjust the exposure to gain better effect when the preview image appears too bright or too dark. A positive value indicates the image will be brighter than usual; while a negative value makes the image dimmer.

White Balance
Please refer to the white balance section under video mode.

Date Stamp
Divided into Off / Date & Date / Time, after selecting the function, the date can be shown on/off in the right hand bottom corner.

Face detect
Divided into Off / Face detect / Smile detect. If set as face detect, the picture-frame will follow the face moving; if set as smile detect, when the camera recognize smile will take photo automatically.

Night Scene
Divided into ON/OFF, Please make the selection depends on the shooting environment.
Note: Please turn night scene off in outdoor strong light environment, otherwise may cause overexposed!

3. Voice Recorder Mode
1. Press the Mode button to enter Voice Recorder mode, the TFT screen will shows:

2. Press the Shutter key to start recording, press the Shutter key again to stop recording. The available recording time will display on the LCD.

4. Music Player
1. Power on the camera, press the Mode button to enter music player mode.
2. Press the OK button to play, and press it again to pause.
3. Press the up/down button to select the songs, and press the left/right button to adjust the volume.

5. **Playback Mode**
Press mode button to enter playback mode, you can view movies, pictures and listen to record voice.

**View Movies**
1. Press the left/right button to choose the video and press the OK key to play, press it again to pause.
2. While playing movie, press the right/left button to fast-forward or back-forward.
3. Press the up/down button to adjust the volume.

**View Pictures**
1. Press the left/right button to shift between pictures.
2. While playing picture, you can press the T/W button to zoom in or out the picture.

**Listen to Record Voice**
1. Press the left/right to select the recording, then press OK key to play, press it again to pause.
2. Press the up/down to adjust the volume.

While in playback mode, press Menu button to enter the setup menu, press the down button to select press the OK key to enter sub-menu, after entering sub-menu, press up/down to select and press the OK key to confirm and back to set up menu. After setup completed, press the Menu button again back to playback mode.

**Delete One**
Press the OK key to enter, and then Yes or No options will show up. If you decide to delete the picture, press Yes; otherwise, press No button to cancel the delete function, press the Menu button to back to previous page.

**Delete All**
Press the OK key to enter, and then Yes or No options will show up. If you decide to delete all the pictures, press Yes; otherwise, press No button to cancel the delete function, press the Menu button to back to previous page.

**Slide Show**
Press the OK key to enter, can display all the pictures in the camera automatically.

**Protect**
Divided into Lock One/Lock All/Unlock One/Unlock All four options, use the up/down button to select, and then press [OK] to enter.
(This function is set for preventing the videos from being deleted by accident; the user can lock or unlock the files.)

**USB Mode**
**Connecting the camera to computer**
1. Turn on your computer and then connect the accessory USB cable to the USB port.
2. Connect the other end of the USB cable to your camera and then power on the camera.
3. The screen will show two icons:
3-1 Mass Storage (USB hard disc), press the OK button to enter; and then the “Remove Disc” will appear on “My Computer”. Click it to copy the files from the camera storage to your computer.
3-2 PC Camera, press the OK button to enter; the computer can recognize and install software automatically, and the camera can act as lens.

Connecting the camera to TV
Note: TV systems differ for different regions. You may need to adjust the [TV System] setting to display normally.

Connecting your camera and TV via the accessory AV cable for real-time display. You can display your video clips, still pictures, and audio recordings directly on your TV, sharing them with your friends and family.
1. Power on your TV and switch the TV to AV mode.
2. Connect the audio and video ends of the AV cable to the [Video/Audio] ports on the TV.
3. Power on the camera.
4. Connect the other end of the AV cable to the [TV Out] on your camera.
5. Select [TV Mode] on the pop-up menu, press the OK to confirm.

Troubleshooting
◆ How to adjust the focus if the image is not clear?
Please move the “Focal length Switch” on the circumference of the lens to the proper position (Normal/Macro)

◆ How to take a picture?
Please adjust the focus properly at first, then press the shutter button, the screen will show up a “funnel” marking, please do not move camera until the “funnel” disappear, a clear picture could be taken easily.

◆ The flashlight does not working?
The flashlight will not work when the electricity of the battery is low, or the flash mode is off.

◆ The digital camera does not response while operating and the buttons do not work?
Please check if the battery has been properly installed or change the battery with full electricity.

<table>
<thead>
<tr>
<th>Specification</th>
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<tbody>
<tr>
<td>Product Type</td>
</tr>
<tr>
<td>Image Sensor</td>
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<tr>
<td>Image Size</td>
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<td>Video Resolution</td>
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<td>Storage</td>
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<tr>
<td>Lens</td>
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<tr>
<td>Focus Range</td>
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<td>LCD Display</td>
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<td>TFT LCD Rotate</td>
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<tr>
<td>Digital Zoom</td>
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<tr>
<td>Exposure Value</td>
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<td>White Balance</td>
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<tr>
<td>Feature</td>
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<td>-------------------------</td>
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<td>Flash Mode</td>
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<td>Microphone</td>
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<td>Speaker</td>
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Specifications subject to change without notice.