Please read this user manual carefully and thoroughly before any attempt to install and operate this product and retain it for your future reference.
CATALOG

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INTRODUCTION

Thank you for purchasing DVR which has the unique, ultra-small and delicate design. It can be used in many recording situations. DVR rings more convenience, safety and funs to your daily life.

Approval Information:

All our products meet the requirements of approval FCC or CE, and are granted the FCC or CE certification. They are authorized to bear FCC or CE mark.

FCC:

This product 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.

CE:

This product complies with standards including Low Voltage Device Directive 73/23/EEC; EMC Directive 89/336/EEC and R&TTE Directive1999/5/EC. It passed the subject tests by the authority concerned and is authorized to bear CE mark.

OVERVIEW

Along with the improvement of people’s living standard and the development of picture compression and memory technology, the digital video memory has been a part of our daily life. DVR a high-tech product, just meets a plenty of needs of people and market. It possesses a series of advanced functions including digital photography, voice memory, sound trigger recording, high speed USB data transferring and USB charging.

EU Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Attention

The electromagnetic fields at the specific frequencies may influence the picture of the recorder. Be sure to read the following before using the recorder and the mini camera.

Trial recording

Before you record one-time events, you may want to make a trial recording to make sure that the recorder and the camera are working correctly.

Notes on image data compatibility

Playback of moving images recorded with your recorder on other equipment and playback of moving images recorded or edited with other equipment on your recorded are not guaranteed.

Do not shake or strike the recorder

In addition to malfunctions and inability to record moving images, this may render the SD card unusable of image data breakdown, damage or loss may occur.

LCD screen and mini camera

Be careful when placing the camera near a window or outdoors. Exposing the LCD screen or the lens of camera to direct sunlight for long period may cause malfunctions.

Back up recommendation

To avoid the potential risk of data loss always copy data to a disk.
*Overview*

Main Device

1. Function knob
2. Video output
3. Earphone jack
4. Camera connector
5. Working indicator
6. Power switch/Delete/Capture
7. Record indicator
8. TFT LCD

9. Esc / Quit / Cancel
10. Play/Record/Confirm
11. UP
12. USB jack
13. Micro-SD slot
14. Down
15. Volume
16. Microphone
Remote control

Remote control only can works when main DVR is power on.

Available distance is about 30 meters without block outside; Available distance is about 8 meters inside the room.
Power Charger:
Please read the manual carefully before use the power charger.

1. Put the battery into the charger. (Up-side with label)

2. Connect DVR unit with power charger by USB cable. (*Shown as Fig Above*)

3. Insert the power charger into the power outlet;

4. During power charging, the red indicator of the power charger and DVR will continuous lighting on;

5. After the power full charged, the indicator of the power charger and DVR will turn off, green indicator turn on at the same time.

Make sure the battery and power charge working as long as possible.

- The electronic release can not surpass a week, excessive power charge will reduce the battery working life;
- If set the battery for free long time, it will gradual losing the power and please charge it again before next time use.
- Please disconnect the power if the main device is free.
- The battery can not be used in deviant range.

For the first time usage, charge the battery at least 12 hours. Make sure the power is off when charging battery.
BASIC OPERATION

Install the battery:
Pull down the cover according the picture shows below, open the battery back cover.

Shown as Fig below:
The 4 golden female pins of the battery should be full touched with the male pins in the battery house.

Close the cover after install the battery well.

Battery using time information form:

<table>
<thead>
<tr>
<th>Capability</th>
<th>Charging time</th>
<th>Standby time</th>
<th>Playing time</th>
<th>Recording time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300mAh</td>
<td>Approx : 4 hours</td>
<td>Approx : 2 hours and 19 minutes</td>
<td>Approx : 4 hours</td>
<td>Approx one hour and 43 minutes</td>
</tr>
</tbody>
</table>
Connect With the Camera:

1. Open the rubber cover of the camera connector on the main unit, insert the camera cable into the special slot on the main unit.
2. Power on the main unit, turn to the record mode by the “Function Knob”.

1. Open the rubber cover of the camera connector on the main unit, then insert the transfer cable into the special slot on the main unit.
2. Connect the color A/V cables with other video device.
3. Power on the main unit and turn to the recording mode by the knob.
Start Recording

① Turn to Setting mode by the knob, set the record mode: one-key record, motion record and time-setting record.
② Turn to the recording mode by the knob, the screen will display the caught picture by the camera.
③ Press [●/▶] start recording, and the screen will appear an icon ●REC.
④ Press “ESC” stop the recording, and then the ●REC icon will disappear.
⑤ press [ RECORD]start picture capture

● Once-Operation recording mode: Continuous recording and storage the video per 30 minutes;
● Motion recording mode: It will continuous recording if movement sensed, 30 minutes longest for each part, if movement is not sensed, recording will stop after 15 Secs.
● Timing recording mode: Start recording according to the time you setted, 30 minutes of each video file.
● Audio recording mode: The audio file will not storage in partial.

Attention:
The mein unit has the vibrate notice while low power and no video signal.
1. While the camera did not connect with the main unit correctly, the main unit will vibrate because of no signal, please check the connection carefully.
2. While the power is not enough, the main unit will continuous vibrate 3 times, at the same time stop recording.
Connect with TV:

1. Connect the video cable with the AV slot of the TV. (Show As Fig.):

2. Power on the main unit and TV, check and play the files in the SD card or only monitor.

The default signal output mode is PAL, if the system in your local place is NTSC, please enter setting menu and select the correct output system. More details please consider page 32.
Connect with Computer:

① Connect the USB and MINI USB with computer and the main unit separately.

② After connect with computer, pv912 will display “USB Connect”, recharge indicator always on.

Note:
Connect with computer at power on states, can not operate as it is External Hard Drive. Connect with computer at power off states, can do any operation as it is recharging.
③ Open “my computer” to check if there has the removable hard disk, called “NO_NAME”.

Picture details:

④ Open the video files in the folders.
⑤ Check the video files in the folders, and play it by the default media player in your computer.

Attention:
Connect the main unit with PC under power off state, it is power charge mode, red indicator flash at the same time, files in the storage can not be read. Connect the main unit under power on state, the computer will read the files in the storage automatically and power charging at the same time.
*Function Modes*

**Booting Picture:**

![Booting Picture](image)

**Record Interface:**

![Record Interface](image)

**Recording Mode:**

1. Recording symbol
2. Current time
3. Video files
4. Record time
5. Card icon (if memory card available)
6. Available memory
7. Battery capacity
8. Current time
9. Picture quality of recording
10. Record content
11. Circular record
Record interface:

Select the audio source and press [●/▶] confirm, then the screen will display the rest time of storage.

Press [●/▶] start recording
Multi-media folders:

Use [ ◀◀ ] or [ ◀▶ ] to select the folder and press [ ◀▶/ ◀◀ ] confirm and enter.

Video folder:

As picture above: ”20091012” means the folder that built in 12\textsuperscript{th} Oct of 2009. One folder for every day.

Video files:

As picture above: ”223118.AVI” means the video file that built in 22:31:18, 30 minutes in a file of each part.
Video play:
Use [◄] and [►] select the video for playing and press [●/●] start play or pause.

Use [◄] and [►] select forward/backward mode and press [●/●] to play or pause.

Notice: Here has 4 speed level of forward and backward. × 2、× 4/× 8/× 20
Audio folders:
Use [⏪] or [⏩] to select the folder and press [●/●] confirm and enter.

For the audio files that already exist, please use [⏪] and [⏩] to select the content and press [●/●] confirm and playing.

Playing interface:

Press [⏪] and [⏩] button to play other audio content.
Picture folders:

Press [◀] or [▶] to select picture folder, press [●/▲] confirm and enter.

Press [◀] or [▶] to choose the picture, press [●/▲] playing it.

Picture Display:

Press [◀] or [▶] to browse other pictures.

Note: JPG format picture, 640×480 resolution.
Delete files:

Enter video folder, choose the file that you want to delete, short press “Power” button till the delete menu appear.

Press [ ◀ ] or [ ► ] to choose “ALL/CURRENT”. Press [ ●/● ] confirm or choose “Cancel” menu quit operation.

Use [ ◀ ] or [ ► ] to choose “YES” or “NO”. Press [ ●/● ] confirm delete or cancel this operation.

**ALL:** Delete all data

**CURRENT:** Delete the file that selectd

**CANCEL:** Cancel the delete operation
**Function setting:**
Select the setting function by the knob, use [⏪]and [⏩]to select the content you need.

**Record setting:**
Use [⏪] and [⏩] to select “REC setting” menu, press [●/▶] confirm and enter.

**RECORDING MODE**

Press [●/▶] enter Recording Mode, use [⏪] and [⏩] to select the recording mode.

Press [●/▶] to confirm and press “ESC” quit.
VIDEO DISPLAY RESOLUTION

Use [◄] and [►] to select “Resolution”,

Press [●/■] confirm and enter.

Use [◄] and [►] to select the suitable resolution, press [●/■] confirm and quit.
VIDEO DISPLAY QUALITY
Use [◀] and [▶] to select “Quality” menu.

Press [●/▶] confirm and enter.

Use [◀] and [▶] to select the suitable resolution, press [●/▶] confirm and quit.

Storage memory information form:

<table>
<thead>
<tr>
<th>Quality Resolution</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Battery time</th>
</tr>
</thead>
<tbody>
<tr>
<td>720x576</td>
<td>≤45MB</td>
<td>≤36MB</td>
<td>≤20MB</td>
<td>Approx. 1 hour and 40 minutes</td>
</tr>
<tr>
<td>720x480</td>
<td>≤43MB</td>
<td>≤33MB</td>
<td>≤18MB</td>
<td>Approx. 1 hour and 30 minutes</td>
</tr>
<tr>
<td>640x480</td>
<td>≤39MB</td>
<td>≤27MB</td>
<td>≤16MB</td>
<td>Approx. 1 hour and 32 minutes</td>
</tr>
<tr>
<td>320x240</td>
<td>≤12.4MB</td>
<td>≤9.8MB</td>
<td>≤8.3MB</td>
<td>Approx. 1 hour and 50 minutes</td>
</tr>
</tbody>
</table>
RECORDING CONTENT

Use [ ◄ ►] and [ ▶ ▼] to select “Recording Content” menu.

Use [ ◄ ►] and [ ▶ ▼] to select the record details, “Video & Audio” means record the video with sound, “Video” means record the video only and no sound, press [◄ ►] confirm. The Microphone option will appear on the screen after quit this operation.

Use [ ◄ ►] and [ ▶ ▼] to select the internal or external Microphone. Press [◄ ►] confirm and press “ESC” quit.

Press [◄ ►] start recording.

Note:
The standard Button Camera without Microphone, you need to select “internal microphone” setting if you want to record the video with sound. (There has a built in microphone in the main unit)
If you have using another camera with built in microphone, then please select the “External microphone” setting.
TIME DISPLAY
Use [ backButton ] and [ forward ] to select Time Display menu and press [ confirm ] confirm and enter.

Use [ backButton ] and [ forward ] to select “Yes” (display time) or “No” according to your need.

Press [ confirm ] confirm and quit.

Remark:
The video stamp shows current time and how long it costs only after you select “YES”.
AUTOMATIC COVER

Use [◄] and [ ►] to select “Automatic Cover” menu and press [●/►] confirm and enter.

Use [◄] and [ ►] to select “Yes” (Automatic Cover) or “No” according to your need.

*Automatic cover function: While open the function, the system will delete the earliest files after the memory is full for continuous recording.

Press [●/►] confirm and quit.
Select Memory

Use [➡️] and [➡️] to select “Storage” menu.

Press [●/▶] confirm and enter.

Use[⬅️] and [➡️] to select “Memory” or “Micro SD” menu, press [●/▶] confirm and quit.
**Time and Date setting**

Use [◄ ►] and [▼ ▲] to select “Date Time” setting.

Press [●/◄] confirm and enter.

**Date display form setting:**

Use [◄ ►] and [▼ ▲] to select “Date Format” menu and press [●/◄] confirm and enter.

Use [◄ ►] and [▼ ▲] to select the suitable form, then press [●/◄] confirm and quit.
Date setting:
Use \[ \downarrow \uparrow \] and \[ \rightarrow \leftarrow \] to select the “Date Setting” menu, press \[ \bullet / \boldsymbol{\cdot} \] confirm and enter.

Use \[ \bullet / \boldsymbol{\cdot} \] to select the setting content, use \[ \downarrow \uparrow \] and \[ \rightarrow \leftarrow \] to do the setting, then press “ESC” save the setting and quit.

Time setting:
Use \[ \downarrow \uparrow \] and \[ \rightarrow \leftarrow \] to select “Time Setting” Menu, press \[ \bullet / \boldsymbol{\cdot} \] confirm and enter.

Use \[ \bullet / \boldsymbol{\cdot} \] to select the setting content, use \[ \downarrow \uparrow \] and \[ \rightarrow \leftarrow \] to do the setting, press “ESC” save and quit.
**Language Setting:**

Use [◄] and [►] to select “language” menu, then press [●/ ●] confirm and enter.

Use [◄] and [►] to select the suitable language, then press [●/ ●] save and quit.

**Video output:**

Use [◄] and [►] to select “Video Output” menu, then press [●/ ●] confirm and enter.

Use [◄] and [►] to select the local TV system, PAL or NTSC, then press [●/ ●] confirm and quit.
Power saving mode:
Automatic power off mode
Use [◀▶] and [►◄] to select “Power Saving” menu, then press [●/●] confirm and enter.

Use [◀▶] and [►◄] to select the setting “Power Off”, then press [●/●] confirm and enter.

The default setting is “Never” power off automatically, please use [◀▶] and [►◄] change the time according to your need.

5Mins means power off automatically after 5 minutes;
10Mins means power off automatically after 10 minutes;
20Mins means power off automatically after 20 minutes;

Press [●/●] confirm and press “ESC” confirm and quit.

After power off, we need to press the power switch button to restart it.
LCD Off automatically:

Use [◀] and [▶] to select “LCD Off” menu, then press [●/●] confirm and enter.

The default setting is “Never” LCD off, press use [◀] and [▶] to select the suitable time according to your need.

1Mins means LCD off after 1 minute;
5Mins means LCD off after 5 minutes;

Press [●/●] to confirm and press “ESC” to quit the setting menu.
You can restart the display of the screen after LCD off. The LCD will turn off again after the setting time.
Vibrate notice setting:

Use [←] and [→] to select “Vibrate” setting, then press [●/▶] confirm and enter.

Use [←] and [→] to select “On” or “Off”, press [●/▶] confirm and quit

Select “On” menu: The main unit will vibrate while no video signal or lower power.
Key press sound setting:

Use [◄] and [►] to select “Key-press sound” menu, then press [●/▶] confirm and enter.

Select Off: close the sound while operating the main unit.
Brightness setting:

Use [◄] and [►] to select “Brightness” menu, then press [●/●] confirm and enter.

Use [◄] and [►] to select increase or decrease the brightness according to our need, then press [●/●] confirm and quit. Different brightness will effect the using time of the battery.
Format the memory card:

Use [◄] and [►] to select “Format” Menu, then press [●/►] confirm and enter.

Use [◄] and [►] to select “Yes” or “No” according to our need.

**YES:** Format the default memory card. After press [●/►] the system will format the memory.

**NO:** Without any operation and quit.

*The data won’t restore once you format the memory, suggest backup the data before do the format operation.*
Firmware update:

Release the updating firmware file, as picture below:

Copy the released firmware under the root director of SD card, the name usually like ***.run.elf format. Then insert the SD card into the slot of main unit.

Enter the setting menu, use [ ][ ] and [ ] to select “Factory Setting” menu, press [ ]

To start updating.

*Please do not do any operation while updating, it will power off automatically after the process finished, that also means the update already finished successfully.*
Factory Setting

Use [←] and [→] to select recover or not. Press [●/▶] to confirm and quite. Select yes will recover to factory setting.
Memory capacity information:

Enter the setting menu, use [◀] and [▶] to select “Memory info” menu, and then press [●/▶] to check.

Firmware version:

Use [◀] and [▶] to select "Version" menu, press [●/▶] to confirm and check the firmware version.
**Accessories**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main unit</td>
<td>1</td>
</tr>
<tr>
<td>CCD camera</td>
<td>1</td>
</tr>
<tr>
<td>Battery</td>
<td>1</td>
</tr>
<tr>
<td>Power charger</td>
<td>1</td>
</tr>
<tr>
<td>6Pin AV input cable</td>
<td>1</td>
</tr>
<tr>
<td>AV output cable</td>
<td>1</td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>USB cable</td>
<td>x 1</td>
</tr>
<tr>
<td>Disc</td>
<td>x 1</td>
</tr>
<tr>
<td>Wireless remote controller (Optional)</td>
<td>x 1</td>
</tr>
<tr>
<td>Protective pack</td>
<td>x 1</td>
</tr>
<tr>
<td>Cycle stand</td>
<td>x 4</td>
</tr>
</tbody>
</table>
**Parameters**

<table>
<thead>
<tr>
<th>HDVR</th>
<th>DVR</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD</td>
<td>2.5inch TFT LCD 960×240</td>
</tr>
<tr>
<td>Video system</td>
<td>PAL/NTSC</td>
</tr>
<tr>
<td>Video resolution</td>
<td>D1 720×576@25 fps  D1 720×480@30 fps</td>
</tr>
<tr>
<td>Frame rate</td>
<td>VGA 640×480@30fps  QVGA 320×240@30fps</td>
</tr>
<tr>
<td>Video format</td>
<td>AVI (MPEG-4)</td>
</tr>
<tr>
<td>Audio format</td>
<td>MP3</td>
</tr>
<tr>
<td>Built-in flash memory</td>
<td>128MB~2G(optional)</td>
</tr>
<tr>
<td>Memory compatibility</td>
<td>Micro SD Card 256MB~16GB</td>
</tr>
<tr>
<td>USB Jack</td>
<td>High-speed USB 2.0</td>
</tr>
<tr>
<td>AV In Jack</td>
<td>6 Pin Aviation plug</td>
</tr>
<tr>
<td>AV Output Jack</td>
<td>3 rings with 2.5mm</td>
</tr>
<tr>
<td>Earphone jack</td>
<td>3 rings with 3.5mm</td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>-0°C-60°C</td>
</tr>
<tr>
<td>Operation Humidity</td>
<td>15-85%RH</td>
</tr>
<tr>
<td>Power supply</td>
<td>DC 5V 1000mAh</td>
</tr>
<tr>
<td>Battery</td>
<td>Li-ion battery 1300mAh</td>
</tr>
<tr>
<td>OS supported</td>
<td>2000/XP/Vista 32</td>
</tr>
<tr>
<td>Language</td>
<td>Chinese/English</td>
</tr>
</tbody>
</table>

**Camera**

<table>
<thead>
<tr>
<th>CD520</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging sensor type</td>
</tr>
<tr>
<td>TV System</td>
</tr>
<tr>
<td>Horizontal definition</td>
</tr>
<tr>
<td>Minimum Illumination</td>
</tr>
<tr>
<td>Dimensions</td>
</tr>
<tr>
<td>Power supply</td>
</tr>
</tbody>
</table>
We will not inform you if there is any modification for user manual in future.