



Multi-purposes HD DVR

# 用户说明书

USER MANUAL 用户説明書/Руководстволользователя

# 1 Brief Introduction of Multi-Purposes HD DVR

This is a trendy and fashionable design Multi-Purposes HD DVR. It can be used as Car Black Box, Sport DVR and a 12 Mega Pixel digital camera that supports 1080p video recording. It uses latest H.264 compression technology and can be played directly on TV through HDMI connection. With a wide range of accessories, customers can record HD 1080p video during driving, cycling, skiing, hiking or snorkeling. It comes with an optional and detachable GPS module to keep track of your route, speed and location. It is the smallest HD DVR with remote control available in the market.

### 1.1 PC System Requirements

The PC system needs to meet the following requirements:

- · Windows Vista/XP/Win 7 operating system
- Intel Pentium 4 2.8GHz CPU or above (recommended 3GHz)
- · At least 512 MB RAM or above (recommended 1GB)
- · Standard USB2.0 port or above
- · At least 64MB video card or above

#### 1.2 Features and functions

- HD Car Black Box, auto continuous and seamless recording when starting the car 12 Mega Pixel digital camera
- · Outdoor/Extreme sport DVR (cycling, skiing, hiking and snorkeling etc)
- · HDMI HD Audio-Video output
- · USB Hard disk
- 4x digital zoom (720p30 camera mode)
- · Multi-scene white balance compensation
- · Exposure compensation
- · Built-in Microphone and speaker
- · High capacity Lithium ion battery

## 1.3 Multi-Purposes HD DVR appearance and feature icons

Be familiar with the buttons and operations according to the following pictures.

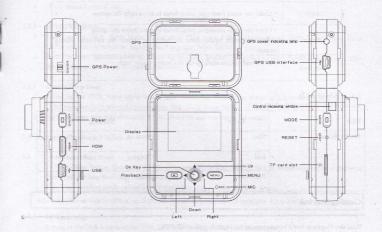


Table of Descriptions of each button

Name	Functions
Power	Press this button to power ON/OFF
Menu	Press down to display OSD main menu.
Mode	Press down to switch DV, camera and AV mode
Ok Key	Under the camera Playback mode, press down to check all the photos. Press again to play a slide automatically; press again back to manual operation.     Under the DV Playback mode, press down to select video files to play.
Up	Under the menu catalogue, press down to move up the option.  Under the Playback mode, press the button to stop recording. Press again to

introduction.	continue
Left	Under the menu catalogue, press down to move left the option.
Right	Under the menu catalogue, press down to move right the option.
Down	Under the menu catalogue, press down to move down the option.  Under the camera mode, press the button to choose the self-timer option function.
Play back	In DV and camera mode, press this button to play back

#### 1.4 About LED

The table below explains the DVR LED

LED	Color	Meaning
Power/ Record	Blue	Power on
128 Constant and the second	Red	Charging
	Red Yellow	GPS

# **Getting Started**

Read this chapter to know how to operate the Multi-Purposes HD DVR.

## 2.1 Inserting a TF card

Inserting a TF card into the DVR provides more space to store videos, images or other files Please use high-speed TF card meeting the specification of SDHC. (CLASS 4 or above)

#### 2.2 Charging the battery

The battery can be charged separately by a standard 5V2A battery charger.

#### 2.3 Turning on DVR

Press Power button to turn ON/ OFF. Or plug into the car charging port.

#### 2.4 Switch Mode

There are 3 modes including Record, Camera and Tape. Press MODE button to switch.

# 2.5 Before the operation

Before using the DVR, it is necessary to do some basic settings such as Date and Time, Language and Beep Tone.

## 2.5.1 Setting Date and Time

- Power on the DVR. Press Menu button first. Then press Left/ Right button to select Setting item. Press Up/Down button to select the highlighting Date/ Time. Press OK key to enter.
- Press Up/Down button to highlight every word.
- 3. Press Left/ Right button to adjust value. Press Ok key to save the setting.
- Press Menu button to quit.

#### 2.5.2 Setting Language

- Power on the DVR. Press Menu button first. Then press Left/ Right button to select Setting item. Press Up/Down button to select the highlighting Language. Press OK key to enter.
- Press Up/Down button to select the following language: English, Simplified Chinese, Traditional Chinese. After the selection, press Ok key to confirm the setting.

#### 2.5.3 Setting Beep Tone.

- Power on the DVR. Press Menu button first. Then press Left/ Right button to select Setting item. Press the Up/Down button to select the highlighting Beep Tone. Press OK key to enter.
- 2. Press Up/Down button to choose OFF/ ON. Press Ok key to confirm the setting.

## 2.6 Record/Playback a video

# 2.6.1 Loop recording mode

- Press Menu button, then press Up/Down to enter Recording Setting, then to select loop mode or different Time Zone for loop recording. Press OK key to enter.
- 2. In loop recording mode, recording will start when plug in to car charging system

Attention: when in loop recording mode, the device will be power off automatically if it doesn't link the car charger.

#### 2.6.2 GPS tracking

- 1. Plug in the GPS module to the DVR, satellite searching will be start automatically
- 2. When GPS signal is located, will be showed on the display.
- 3. When taking picture in Camera mode, location will be recorded automatically

#### 2.6.3 Camera mode

- 1. Press Menu button first, then press Up/Down key to select Manual
- 2. Press Up/Down to select DV+ AV or Recording mode (mute recording), press OK key to confirm

## 6.4 Recording a video file

- 1. Power on the DVR the default mode is DV mode.
- 2. Select a view with the LED monitor.
- 3. Press OK to confirm recording.
- 4. Press OK again to stop recording.
- 5. The video file is automatically saved with the only file name.

#### Attention

- 1. Maximum length of each recorded video file is 3.66G When it reaches the maximum, the recording is automatically split and saved as another file.
- 2. With higher resolution, the file is bigger and recording time length is shorter.

The preview ratio captured on the LCD screen varies because of different video resolution settings. See the table below:

Video Resolution

Preview 16:9 Ratio Taking pictures and focusing

1080P30 720P30 WVGAP60 WVGAP30





4: 3 Ratio

4: 3 Ratio

VGA QVGA





## 2.6.5 Playing your video files

- 1. Under the Record mode, press the Playback button to display the latest files on the LCD screen.
- Use the four Move buttons to scroll the video files. Press Ok key to select the video. Press Ok key again to play back the video file.
- 3. When playing back, Press Ok key to pause.
- 4. When watching the video file, move Zoom button Up/ Down to adjust the volume.
- 5. Press Left/ Right button to Slow/ Fast forward
- 6. Press Mode button back to Record mode.

# 2.7 Take /Review a picture

## 2.7.1 Taking a still picture

- 1. Power on the DVR. Press Mode button to shift to Camera mode.
- 2. Select a view with the LED monitor.
- 3. Press the Ok key to capture the image.
- 4. The picture is automatically saved with the only file name.

# 2.7.2 Reviewing the pictures

- 1. Under the Camera mode, press Playback button to display the latest pictures on the LCD screen.
- 2. Use the four Move buttons to scroll the pictures. Press Ok key to select the picture.
- 3. Move rightward the Zoom button to enlarge the picture.
- 4. Press Ok key to automatically play the pictures as slideshow.
- 5. Press Playback button to the thumbnail interface. Press again back to camera mode.

# 2.8 Connecting PC

Connect the DVR to your computer with the USB cable included.

# 2.9 Connecting the DVR to HD TV

Use HDMI cable to connect to HD TV for 1080P video play back.

Attention: When connected to HDTV, camera, recording and taping are not available!

# 3 Operating DVR

## 3.1Record and tape mode

This mode is for recording a video file or taping. The files are saved into TF card.

# 3.1.1 Record and tape mode

## Record Mode:

About the indication of each icon and symbol, see the table below.

23	Video mode		Battery
**	LED Light	ISO 800	Exposure
	Rocording		Digital Zoom
•	TF card	N	Scene
	Metering mode		Color effects
*	White balance	<b>Z</b> +	Exposure shift
720P30	Resolution	2008/01/01 01: 07AM	Date and Time
00 : 28 : 39	Recording time		Loop recording
Q	Mute	110	GPS

#### Tape mode:

About the indication of each icon and symbol, see the table below

REC	Таре	<b>⊗</b> 1	Tape mode
	Battery	2008/01/01 01: 30AM	Date and Time

## 3.1.2 Zooming

The optical magnification of the DVR is 4x digital zooming. (1440 x 1080P Record mode).

Move the Zoom button right to zoom in the screen.

Move the Zoom button left to zoom out the screen

#### 3.2 Camera Mode

Use Camera mode to take a still picture. The pictures are saved into TF card.

About the indication of each icon and symbol, see the table below.

	Camera mode		Battery
罴	LED Light	TSO 800	Exposure
2008/01/01 01: 30AM	Date and Time	1	TF Card
	Digital Zoom	N A	Scene
	Metering mode		Color effects
*	White balance	Z+	Exposure shift
1375	Remaining No. of pictures	3M .	Picture Pixels

#### 3.3 Play back mode

Using Play back mode to display all the video files saved in the DVR.

#### Record mode:

About the indication of each icon and symbol, see the table below

1280 720	Resolution	30 P	Frame Number
	Battery		Play/ Pause

#### 3.4 Picture playback mode

Using Picture playback mode to display all the images saved in the DVR.

#### 3.4.1 Picture playback icon

About the indication of each icon and symbol, see the table below

2592 1944	Resolution	ISO Auto	Exposure	

#### Thumbnails

Under the camera or record mode, press Play back button to display the thumbnails of images.

- 1. Power on the DVR and make sure that it is in Camera or Record mode.
- 2. Press Play back button. There is 6 thumbnail images or video files on the LCD screen.
- Press the four Move button to select the next highlighting image or video file. Press Ok key to display the image or playback video files or tape recording in full-screen mode.
- 4. Press Playback button to shift back Index mode.

#### 3.5 USB mode

You can use USB mode to connect with the host PC.

When the DVR is connected with the host PC, it appears as a removable disk in the Windows explorer.

Remark: the device must be set "recording setting" to Manual to read the TF card as USB drive.

# 4 Menu Operations

Read this chapter to know how to configure the setup and fine-tune the functions

## 4.1 Video menu

Under the record mode, press Menu button to display the video items menu.

#### 4.1.1. White Balance

This item is for correction in different colors under different light conditions. When the white balance is set as Auto, the DVR compensates different light conditions automatically.

- 1. Power on the DVR and make sure that it is under Record mode
- 2. Press Menu button, use four Move button to highlight White Balance item. Press Ok key to display sub-menu.
- Use Up/Down button to choose among Auto, Tungsten, D4000, D5000, Daylight, Cloudy and Fluorescent. Press
  Ok key to confirm the setting.
- 4. Press Menu button again to quit.

#### 4.1.2 Video resolution

Use Resolution item to set record resolution. The larger screen, the more storage space is occupied.

- 1. Power on the DVR and make sure that it is under Record mode.
- 2. Press Menu button, use four Move button to highlight Image Resolution item. Press Ok key to display sub-menu.
- 3. Use Up/Down button to select 1080P30 (1920 x 1080P), 1080P30-2(1440 x 1080P), 720P30(1280 x x720P). Press Ok key to confirm the setting.
- 4. Press Menu button again to quit.

#### 4.1.3. Color Effect

This DVR can record several color effect including Standard Color, Brown, Film, Black/White and Bright.

- 1. Power on the DVR and make sure that it is under Record mode.
- 2. Press Menu button, use four Move button to highlight Color Effect item. Press Ok key to display sub-menu.

- Press Up/Down button to select Off (Standard color), Brown, Film, Black/White and Bright. Press Ok key to confirm the setting.
- 4. Press Menu button again to quit.

## 4.2 Record/Camera playback menu

Use Playback menu to manage the files saved in TF card.

#### 4.2.1 Deletion

Use this item to delete files

- Power on the DVR and make sure that it is under Record mode. Press Playback button, then press Menu button
  to display video files in Thumbnail Image Menu.
- 2. Press Menu button, use Left/Right Move button to select NO/YES/ALL items.

If you delete one picture at one time, thumbnail screen will be displayed again. Use four Move button to find which picture to delete, and press Menu button to delete.

#### 4.2.2 Protection

Use this function to lock the files in case they are accidentally deleted.

- Power on the DVR and make sure that it is under Record mode. Press Playback button, then press Menu button
  to display video files Thumbnail Image Menu.
- Use four Move button to find what files to protect. Press Ok key button to switch to Playback mode. Press Menu button again, use Up/Down Move button to select which one to protect. Press Ok key button to quit. The files with are protected.

Attention: To unlock the files, repeat the steps above. After being unlocked, no files are with

3. Press Menu button again to quit.

#### 4.2.3 AutoPlay

This DVR can AutoPlay and automatically replay all the videos in order.

- Power on the DVR and make sure that it is under Record mode. Press Playback button, then press Playback button to enter Thumbnail Image Menu. Press Ok key to select files and then press Menu button to display Playback Video menu.
- Use Up/Down move button to select the item Play ALL. Then press Ok key. In the Playback mode, all the videos
  are displayed automatically.
- Under the video file Thumbnail Image menu, press Ok key button to select the file needed, LCD screen will play
  it in full screen. Press Menu button to display Deletion menu, use Up/Down Move button to choose Delete One,
  Protect files or Delete All
- 4. Press Ok key to stop Playback

#### 4.3 Camera mode

Under the Camera mode, press Menu button to display camera item menu.

#### 4.3.1 White Balance

This item is for correction in different colors under different light conditions.

- . Power on the DVR and make sure that it is under Camera mode.
- 2. Press Menu button, use four Move button to highlight White Balance item. Press Ok key to display sub-menu.
- Use Up/Down button to choose among Auto, Tungsten, D4000, D5000, Daylight, Cloudy and Fluorescent. Press Ok key to confirm the setting.
- Press Menu button again to quit.

#### 4.3.2 Image Resolution

Use Resolution item to set image resolution. The larger screen, the more details and the more storage space is occupied.

- 1. Power on the DVR and make sure that it is under Camera mode.
- Press Menu button, use four Move button to highlight Image Resolution item. Press Ok key to display sub-menu.
- Use Up/Down button to select 3M, 5M, 8M or 16M (some models), Press Ok key to confirm the setting.
- 4. Press Menu button again to quit.

#### 4.3.3 Color Effect

This DVR can record several color effect including Standard Color, Brown, Film, Black/White and Bright

- 1. Power on the DVR and make sure that it is under Camera mode.
- 2. Press Menu button, use four Move button to highlight Color Effect item. Press Ok key to display sub-menu.
- Press Up/Down button to select Off (Standard color), Brown, Film, Black/White and Bright. Press Ok key to confirm the setting.
- 4. Press Menu button again to quit.

#### 4.3.4 Self-Timer

Use Self-Timer function to take a picture of vourself.

- 1. Power on the DVR and make sure that it is under Camera mode.
- 2. Press Menu button, use four Move button to highlight Self-Timer item. Press Ok key to display sub-menu
- 3. Press Up/Down button to select Self-Timer function. Press Ok key to confirm the setting.
- 4. Press Menu button again to quit.

#### 4.4 System menu

System Menu is used to set other functions of the DVR.

#### 4.4.1 Auto Off

This function allows the camera to automatically power off after some idle time to save energy

- 1. Turn on the DVR. Press Menu button to enter system menu.
- 2. Use four Move button to highlight Auto Off item. Press Ok key to display sub-menu.
- 3. Use Up/ Down Move button to select ON/ OFF, 1 min, 3 min, 5 mins. Press Ok key to confirm the setting.

Attention: when in loop recording mode, the device will be power off automatically if it doesn't link the car charger.

#### 4.4.2 TV-Out Format

Use the TV option to set the TV-out format of your area.

- 1. Power on the DVR. Press Menu button to enter system menu.
- 2. Use four Move button to highlight TV-out Format option. Press Ok key to display sub-menu.
- 3. Use Up/ Down Move button to select NTSC or PAL. Press Ok key to confirm the setting.

#### 4.4.3 Format

Use this function to Format the storage medium. Note that all the data stored in the medium will be gone.

- Power on the DVR. Press Menu button to enter system menu.
- 2. Use four Move button to highlight Format option. Press Ok key to enter selection mode.
- 3. Use Left/Right button to select No/Yes. Press Ok key to confirm.
- 4. The medium is formatted.

# 4.4.4 Restore factory defaults

This function will restore all the settings to the factory defaults.

- 1. Power on the DVR. Press Menu button to enter system menu.
- 2. Use four Move button to highlight Restore Factory Defaults. Press Ok key to enter selection mode.
- 3. Use Left/Right button to select No/Yes. Press Ok key to confirm.

## 4.4.5 Flicker Frequency

Use this function to set the flicker frequency in your area.

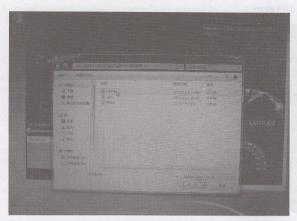
Set Flicker Frequency:

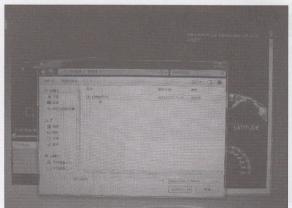
- 1. Power on the DVR. Press Menu button to enter system menu.
- 2. Use four Move button to highlight Flicker Frequency option. Press Ok key to display sub-menu.
- 3. Use Up/Down button to choose 60Hz or 50Hz. Press Ok key button to confirm.

# 5 GPS player

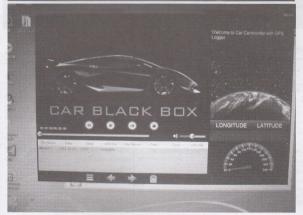














Question	Possible reasons	Solutions
Unable to turn on the DVR	Battery is improperly installed Low battery	Install the battery properly     Charge the battery
The DVR is suddenly turned off	Auto Off Function is On.     Low battery     3 when in loop recording mode, the device will be power off automatically if it doesn't link the car charger.	Turn on again DVR     Replace/charge the battery
Captured images are not saved into memory	Power is off before the images are saved.	When the battery indicator turns red, replace the battery instantly.
The DVR turns off when using the self-timer function.	Low battery	Replace/charge the battery
Poor image focusing	Scene beyond the focus range	Please select the Normal or Macro mode within effective focus range (See Section 3.1.2 Macro Function)
Memory card can not be	Memory card is protected.	Unlock the memory card.

used	Memory card contains non-DCF images from other cameras.	Format the memory card. Before formatting, make sure to backup files first.
All the buttons are invalid.	Short-circuit when connecting the DVR with other equipments.	Remove the battery first and then reinstall

# Accessories

1. Car mounting bracket

2. Bicycle mounting bracket 3. User manual

4. USB2.0 cable 5.GPS module (optional)

6. Water proof bracket (optional)

7. Mounting Clip (optional)

8. Car charger (optional)

9. CD driver

10. Remote control

11. HDMI cable (optional) 12. Battery charger (optional)

# Appendix

# Specifications

Image Sensor	1/2.5" CMOS 5.0Mega-pixel sensor	
Effective pixels	5.0 Mega-pixel	
External memory	SD card、SDHC card (class 4 or the high-speed card above)	
Sensitivity	Auto	
Color effects	Standard, tan, film, black, white, bright	
Lens	Fixed Focus	
Zoom range	Normal: 30cm or infinite distance	
	Close-up: 30cm	
Still images	Format: JPEG (EXIF2.2), DCF.DPOF	
	Image resolution: 3M . 5M . 8M (Software Interpolation) . 16M (Software Interpolation)	
	Quality: Auto	
Videos	Format: H.264 (MOV)	
	Resolution: 1920×1080 30fps, 1440×1080p 30fps, 1280×720 30fps	
	Quality: Auto	

Zoom .	Video: 4X Digital Zooming(1440x1080P30 Record mode) Car digital video recorder: 4X Digital Zooming Playback still image: Digital Zoom 8X (Maximum)		
Таре	Yes		
TFT Display	1.5" TFT (480×240 pixels)		
White Balance	Auto Tungsten Daylight		
	Cloudy Fill light Fluorescent		
Exposure compensation	-2.0EV~+2.0EV		
Self timer	Off, On, 3 seconds, 5 seconds, 10 seconds, 15 seconds, 20 seconds		
PC Interface	USB2.0 (High-speed)		
AV Output Format	NTSC/PAL		
Shutter	Electronic Shutter 1/16~1/10000 Second		
Auto Power Off	On/ Off, 1 minute, 3 minutes, 5 minutes		
Battery	Lithium ion battery		