HD DVR USERS' Manual



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- · Preface

Thank you for purchasing HD DVR. This manual will introduce how to use HD DVR correctly, and provide its information in detail at the same time which contains operation, installation notes and technical specifications etc. Please read this manual carefully before using. We hope the product could meet your requirement and long term service to you.

二 · Summary

HD is a DVR, which can record high-definition and resolution max 1920 x1080P 30fps (HD) HD video. It adopts SD card as memory which is small volume and power saving. Comparing with traditional DVR, Except for HD DVR can record more meticulous and perfect image, which can be output HD TV to play, also

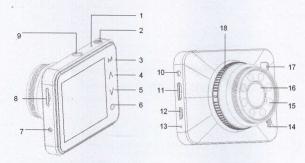
it got more wide view angle. Use HD and enjoy real HD image life. !

Ξ · Feature

- > 1080P 30fps or 720P 60fps HD image;
- > 3.0M CMOS · Interpolation (12megapixels);
- > High wide dynamic light automatic adjustment function
- Low illumination automatic weak light compensation to get clear video effect in weak light environment.
- > Original infrared night parking monitoring mode (Optional)
- > Independent audio codec chip to achieve high fidelity audio effect.
- Superstrong infrared night vision function and the infrared can reach 5-8 M without light source.
- > With the white balance compensation function in a variety of setting.
- Built-in gravity sensor module to be forced to save the accident process and not be deleted. (Optional)
- > Motion detecting function
- > High capacity rechargeable Lithium ion battery.
- > With close focus shooting function.
- > 2.7" low temperature resistant TFT 4: 3 display
- > 4X Digital zoom;
- > With exposure compensation adjustment function. ;
- > Built-in microphone/speaker.;
- > Support max 32G high volume SDHC card;
- > HD TV output interface: HDMI signal output, with max 1920X1080 resolution. .

> External GPS , recording car speed , driving locus (Optional)

四·Structure



1 · Structure Introduction

reset 2-on/off 3- MENU 4-UP 5-Down 6-MODE 7-Screws- 8-TF card Slot 9
-Support Joint 10-AV output 11-HDMI output 12-USB socket 13-MIC 14-Spea
ker 15-Infrared lamp 16-Camera Lens 17-LED lamp 18-Selector Switch for in
frared lamp and filter(3 Options, Left-Natural light mode, Middle-Infrared
mode with turn-on infrared lamp, Right- Infrared mode only) o

1- Introduction:

1 . Battery Indicator



2 · Battery charging

Using USB cable to connect charger and DVR, the DVR will enter into charging status. It can be charged by the USB socket of computer as well.

 $\mbox{$\frac{\lambda}{\alpha}$}$ Warm Prompt: In order to improve the charging efficiency, please charge in the shutdown state. The full charging time is 3 to 4 hours.

3 · Inserting and Removing Memory Card

- a) Insert SD card into the slot according to the indicated orientation
- b) Gently press SD card, then remove it after pop up .

☆ Warm Prompt:

- i. Please be sure SD card switch is unlocked before using;
- Please be sure SD card is in correct orientation. A wrong inserting orientation can cause to damage DVR and SD card.
- iii. Please use High-Speed SD card conformed to SHDC with C4 or C6 mark
- iv. If SD card is incompatible with this DVR, perhaps the DVR can not read the card. Please format the SD card by the DVR to solve this problem. •

4 · Keys Operation

- a) On/Off: Short press to turn on, long press to turn off. Short press On/Off to start or stop recording in recording mode. Short press On/Off to start shooting in shooting mode. Short press On/Off to start playing in the playback mode.
- Up, Down: Zoom in and out function in shooting and recording mode.
 Select function in the function menu.
- c) MENU: Call up/quit the function menu.
- MODE: Switch for recording/shooting/playback mode. Enter function in the function menu.

5. Turn on/off

Short press **On/Off** to turn on in the shutdown state. Long press **On/Off** 3 seconds to turn off in the startup state.

6. Recording

a The DVR will enter into recording mode holding status directly (The recording mark will appear in the top right corner). Short press On/Off to start recording, then short press On/Off again to stop recording.

b \circ Press M to enter into sub function menu "Video", then press M again to Setup. Select function using UP and DOWN in the function menu, and press MODE to enter. The function operation in submenu is similar with menu, and press MODE to return after selection.

7 · Shooting

a. Short press **MODE** once to enter into shooting mode in recording mode with holding state, then short press **POWER** to shoot.

b . Press M to enter into shooting mode., then press again to Setup press

M again return back recording mode. Select function using UP or DOWN in the function menu, press "mode" to enter. submenu operation similar main menu, Press" Mode" to return back after finish selection.

8 · Playback

Press MODE twice to enter into playback mode in holding of recording state, and select image or video using UP or DOWN, then short press On/Off to start playback.

A, During playback, press UP to pause, press On/Off to continue.

b. During playback, press DOWN to shift between Forward and Back away.

9, Deleting Image or Video

Select image or video using UP or DOWN in playback mode, then press M to call out deletion function menu, press MODE and then press UP or DOWN again to select the single file or whole files to delete, press using UP or DOWN to confirm the Delete, finally press MODE to enter

10. Connecting PC

Short press **On/Off** to turn on in shutdown state, and after inserting USB, DVR will automatically connect PC.

11 · System Settings

In holding of recording state, Press MENU to enter into the sub function menu mode, and select function using UP or DOWN, press MODE to enter, and revise the content of the function menu using UP or DOWN key, then press MODE to confirm

System settings function menu includes:

- 1, Recording resolution;
- 2, Cycle recording time
- 3, Date stamp Off/On:
- 4, AE Bias:
 - 5. Mic off/on:
 - 6, LED illumination Off/On:
- 7, Motion detecting Off/On:
- 8, Gravity -Sensor sensitiveness grade;
- 9. System Volume;
- 10, Language.
- 11. Light frequency: Be used for selecting light frequency. For user in Taiwan, it should be 60Hz. If a wrong frequency is selected, the image will appear horizontal stripes interference;
- 12. TV output port;

- Date/Time: Set up Year/Month/Date/Hour/Minute using UP or DOWN, then press MODE to enter and enter into the next setting item;
- 14. Automatic Panel off time;
- 15, Automatic delay power off time;
- 16, SD card Formatting:
- 17, Resetting system:
- 18. Version
- 19 · Automatic on/off after power supply
- 20 · Automatic recording after power supply
- 21 · White balance (AWB) ;
- 22 · (WDR) Automatic Adjustment

12 · Video output

There are two video output methods: AV and HDMI

- I. AV OUTPUT: Use a AV cable to connect the AV port of DVR and Audio and Video input port on TV. Please notice that the video connector is yellow, and the audio connector is red/white.
- HDMI OUTPUT: HDMI port can provide max 1080P (1920x1080) resolution image output. Use a HDMI cable to connect the HDMI port on DVR and the HDMI port on TV.



☆ Warm Prompt:

TV need be set up to enter AV or HDMI state correctly. Please reference TV manual.

Set as open on MOTION DETECTIONN in the function menu, and return to recording mode, then short press On/Off to start recording. If there isn't moving objects in front of the camera, the recording process will auto stop after 10 seconds. When the camera detects any moving objects, the recording process will auto start.

14, Gravity Sensor

Set as open on G-SENSOR in the function menu, and return to recording mode, the Gravity Sensor mark appear open state in the top left corner. The function can auto lock to save the accident video when accident occurs. The file in G-SENSOR state will be saved in the EMERGENCY folder. It is auto cycle recording which can't be deleted in the folder.

15 · Infrared Night Vision(optional)

When external environment very lack of light, DVR can not record with satisfied effect in Day mode, you can adjust **Selector Switch for infrared lamp and filter** to Night mode (Middle), and press **MODE** to switch to infrared mode, DVR will record with good night vision effect.

16 · Parking Mode (Option)

Open infrared night function, and press MODE to adjust to Parking Mode. Rotate camera lens to car inside with a right angle, and short press On/Off to start to record.

Warm Prompt: To save the precious memory space, the Parking mode defaults

640*480 pixels to record, and we suggest to opening motion detection function.

五、Technical Parameters

USB Port	USB2. 0
AV-OUT Port	NTSC、PAL
HDMI Port	HDMI V1.3
Battery	High capacity polymer rechargeable battery 3.7V/350mA
Power supply	DC-5V
Working humidity and temperature	80%, -20°C to 60°C
Size and Weight	Size: 80x59x9mm Weight: approx 90g(includes battery)

 $Note: This \ product \ reserves \ the \ right \ to \ change \ design \ and \ specifications \ without \ notice$

7. FAQ

Problem description	Solution
Shooting and recording don't work.	Check if there is enough space in SD card, or SD card is locked.
It automatically stops during recording.	Due to large information of HD DVR, please use high speed SD card compatible with SDHC. There is C4 or C6 mark on the high speed SD card.
Appear File Error during playing image and recording.	Because the file was damaged when it was saved in SD card. We suggest to formatting the SD card by DVR.
No image to appear in the HD TV screen.	Confirm if AV or HDMI cable connect correctly, and TV with a correct setting for AV or HDMI.
Video or image is hazy.	It dues to dirty lens. Please check if there is dirty or fingerprint. Use lens paper to clean lens before

	recording or shooting.	
Video or image is fuzzy.	There are far focus and near focus functions in the DVR. The near focus range is from 20cm to 50cm. The far focus range is beyond 50cm. Please adjust far focus and near focus functions.	
Image of sky or water scene is very dark.	It dues to high contrast scene. The high contrast scene can seriously impact automatic exposure function of the DVR. In this condition, it needs to use exposure compensation function to correct exposure value of the DVR.	
Under a cloudy day or indoor lighting, the color does not appear perfect.	Please set up white balance function according to exact scene.	
Flash light cannot be enabled.	Under the low battery condition, the flash light cannot be enabled.	
Keys are insensitive.	Under the low battery condition, the touch keys cannot work normally. Please charge at first.	
There is horizontal stripes interference in images.	It dues to a wrong light frequency setting. For user in Taiwan, it should be $60\mbox{Hz}.$	