Precaution

Pls be well look through the following guidelines before you use this DVR.

- Pls refer to manual instruction to operate the camera correctly. Illegal operation may cause damage to internal components.
- Do not fall or hit the camera, it may damage the internal components.
- Do not alter or dismantle the camera, to avoid the damage to the camera.
- The temperature rise is normal when DVR in use for a long time
- Do not touch the lens when recording which will affect the video quality.

Special Features:

G-Sensor

Camera will save videos as undeletable files when gravity acceleration, any accident happens. It can be set "off", "Low sensitivity", "Medium sensitivity", "High sensitivity" in Video Menu.

Image Rotation function

Its default is "OFF". Once set it to "ON" in the system menu, the icons and image in the screen is inverted, you need to rotate the camera 180 degree to make the image upright.

SOS function

Under recording mode, press UP button momentarily to activate SOS function, the current video will be saved as undeletable file.

Auto power on/off

When connect to vehicle igniter, the camera will power on and start recording automatically; when the igniter off, the camera will off and save videos.

Silent Video Recording

Under recording mode, press DOWN button momentarily to off microphone. Do not worry about your secret talk.

WDR function

When it is overexposure or underexposure, WDR makes the image clearer.

• GPS

When set GPS option "ON" in the menu and input GPS, when the camera get the signal, the green GPS icon light up in the screen.

Plate number input

Two input methods: English letters and digits. Press Mode button to switch input language.

Press UP/DOWN button to select the English letters or digits, press OK button to confirm, then press Menu button to exit.

Accessories

- 1. Bike bracket
- 2. Universal bracket
- 3. Pedestal bracket
- 4. Helmet mount
- 5. Base mount
- 6. Base bracket
- 7. Elastic band
- 8. 3M pads

- 9. Nylon belt buckle
- 10. AC charger
- 11. USB cable
- 12. HDMI cable
- 13. Remote controller
- 14. Waterproof case
- 15. GPS module (Option)

































Camera Interface







- 1. Lens
- 2. LCD screen
- 3. Browse button
- 4. Menu button
- 5. UP button
- 6. Down Button
- 7. Reset button
- 8. Microphone
- 9. Working indicator
- 10. IR Remote control Receiver
- 11. Charging indicator
- 12. Screw port
- 13. Speaker
- 14. Power button
- 15. Mode button
- 16. REC/Confirm button

Button Function

Deposit button: Short press to turn on camera, long press to turn off camera

MENU Menu button: Short press it once to enter menu setting; press it twice to switch Mode menu and System menu.

▲ Up button: Under standby mode, zoom in the image;

Under video mode, short press to activate SOS recording Select the last file under menu setting/playback mode.

Down button: Under standby mode, Zoom out the image;

Select the next file under menu setting/ playback mode; Under video mode, short press to disable the microphone

 REC/Confirm button: Start/Stop recording; to take pictures; to confirm menu setting; Under playback mode press it to start/stop playback.

MODE Mode button: to switch Video mode/Photo mode/Playback mode

Browse button: to enter Playback mode

RESET Reset button: Press it to restart DVR once its system is dead.

Basic Operation

1. Power on/off

Power on: Short press ${}^{\mbox{\bf b}}$ button, you hear beep sound, the blue working indicator will light up, camera enters standby mode.

Power off: Long press $\, \dot{\mathbf{b}} \,$ button, you hear beep sound, the blue working indicator will be off.

Note: When connected to Car Charger, DVR will turn on automatically when the car ignites; will turn off when the car stalls.

2. Battery charging

When charging, the charging indicator is red; when charged full, the red indicator will be off.

3. Video Mode Normal recording

Under standby mode, press button to start recording, the blue indicator will

flash.

Press button again to stop recording. The remaining recording time is on the left corner of LCD screen.

Loop recording (refer to menu setting)

Under standby mode, press button to start recording, the blue indicator will flash. When the video recorded up to the time you set (say 3 minutes or 5 minutes), camera will save the footage automatically and continue recording.

When TF card is full, it will overwrite the first footage by time sequence and continue recording.

Press button again to stop recording, the remaining recording time is on the left corner of LCD screen.

4. Picture Mode

Under standby mode, long press MENU button to enter picture mode, aim at the object you want to shoot and press button, camera will save the picture automatically.

5. Zoom in/out

Under standby or picture mode, press ▲/▼ button to zoom in/out the image.

6. Playback Mode

Under standby mode, long press button to enter playback mode, and press

▲/▼ button to select the video/picture, then press button to play back.

Under playback mode, press ▲/▼ button to forward/backward playback videos.

7. Menu Setting

Under video/photo/playback mode, short press MENU button to enter relative video/photo/playback menu.

Press ▲/▼ button to set menu, then press • button to confirm setting

Short press MENU button to exit.

Video mode/Picture mode/Playback mode each has two menus: Mode menu and

System menu.

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Video Menu:

Resolution: 1920*1080P 30/ 1280*720P 60/1280*720P 30 /640*480P 30

Loop recording: Off/3 minutes/5 minutes

WDR: Off/On

Exposure: +2.0 +5/3 +4/3 +1.0 +2/3 +1/3 +0.0 -1/3 -2/3 -1.0 -4/3

Exposure: -5/3 -2.0

Record Audio: Off/On

Date stamp; Off/On

Gravity sensing: Off/Low sensitivity/Medium sensitivity/High sensitivity

GPS: Off/On

Plate Number Input: Off/On

Photo Menu:

Capture mode: Single/2S Timer/5S Timer/10S Timer

Resolution: 12M 4032X3024/8M 3264X2448/5M 2592X1944/3M 2048X1536

Sequence: Off/On

Quality: Fine/Normal/Economy

Sharpness: Strong/Normal/Soft

White Balance: Auto/Daylight/Cloudy/Tungsten/Fluorescent

Color: Color/Black & White/Sepia

ISO: Auto/100/200/400

Exposure: +2.0 +1.0 +0.0 -1.0 -2.0

Anti-shake: Off/On

Date Stamp: Off/Date/Date &Time

Playback Menu:

Delete: Delete current/Delete All

Protect: Lock current/Unlock current/Lock All/Unlock All

Slide Show: 2 seconds/5 seconds/8 seconds

System Menu:

Date/Time: 2013/07/18/10/21/06 YY/MM/DD

Beep sound: Off/On

Language:English/Deutsch/French/Spanish/Italiano/Portugese/Chinese(simplified)/

Chinese(traditional)/Japanese/Russian

Frequency: 50Hz/60Hz

Image rotation: Off/On Format: Cancel/OK

Screen Saver: Off/30 seconds/1 minutes/2 minutes

Delayed shutdown: Off/5 seconds/10 seconds/30 seconds

Default setting: Cancel/OK

Version: AT90.20130913.V0.01

8. Remote controller

Mode button: to switch video/photo/playback mode REC button: under video mode, press REC button to start/stop recording; under photo mode, press it to take pictures; under playback mode, press it to playback videos/oictures.

9. Playback on HDTV

Connect the camera to HD TV with the HDMI cable, choose HDMI mode on TV. The camera screen will be off, all operations can be checked on TV.

10. Playback on PC

Connect camera to a PC via the USB cable, it will turn on automatically. LCD screen shows "Mass Storage", "PC Camera", "Video Record". "Mass storage" is for videos/pictures check on PC.

"PC Camera" is for webcam.
"Video Record" is for recording when connected to PC.

Technical specification

Resolution	1080P 1920*1080 30fps 720P 1280*720 30fps/60fps
(000)000	VGA 640*480 30fps
Image size	12Mega/8 Mega/5 Mega/3 Mega
Sensor	3M CMOS sensor
Screen	1.5 inch TFT screen, 270 degree rotation
View angle	170 degree
File format	MOV H.264/JPEG
Digital zoom	4X
Battery	Built in li-ion battery 1000mAh
Storage	Support Micro SD card to 32G(not included)
Cycle recording	seamlessly recording ,automatically overwrite function,
G-sensor	Support, built-in gravity sensor
Audio	Built-in Microphone/Speaker
Interface	USB2.0/HDMI/GPS
Time stamp	Support
Menu language	English/French/Italian/Russian/German/Japanese/Portugese/ Spanish/ Chinese(Simplified)/Chinese(traditional)
Remote control	Yes, IR remote controller
Current frequency	50Hz/60Hz
Waterproof	Waterproof up to 60 meters(with waterproof case)
Other functions	WDR function, Plate number input, SOS recording