HD Mobile SD Card DVR

User Manual





WARNING

RISK OF ELECTRONIC SHOCK
DO NOT OPEN



To prevent electric shock and risk of fire hazards: Do NOT use other than the specified power source.

WARNING: TO REDUCE THE RISK OF ELECTRONIC SHOCK, DO NOT REMOVE COVER(OR BACK), NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Important notice:

1. Please read over all cautions.
2. Please keep this manual for reference in the future.
3. Please notice all warning information.
4. Please strictly follow the instructions in this manual while operating.
5. Please NEVER put this device under the place which is easily poured by water.
6. Please do NOT use abrasive chemicals, cleaning solvents or strong detergents to clean the device. Wipe the device with a soft and dry cloth.
7. Please do NOT get the gate of airiness heat exchange closed.
8. Please leave the device far away from hot and high temperature environment.
9. Install the device with the accessories coming with it.
10. Please take care when moving the device, make sure of security, and avoid being damaged by dropping from high place.
11. Call for qualified maintenance man to repair when needed.
12. The device can only be installed horizontally. Installed vertically or out of the horizontal could hurt person or damage the device or/and its parts.

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1.Features:

This is a smallest HD 1080P 2 Channel SD DVR, with the most powerful functions in China market here now, it can work in vehicles and other ranges. It works with CVBS and AHD 5.0MP, avi format and save videos in SD cards. You can use 4 modes on records: Power-up, Manual, Motion Detection, Scheduled Record; You can also take JPEG photos with audio playback, fast-forward, pause, HDMI 1080p output, and normal analog CVBS video output, password login, etc.

New HD Audio Video Encoding and decoding technology

- H.264 High Profile(Level 4.1) compression, high resolution, full real-time recording, AVI format
- G711 audio compression, Audio and video synchronization
- AHD max 5.0MP(2592X1944)camera input.
- 2 Channel for different camera video input
- 2 Channel HD video, audio synchronal record

Intelligent Power Support

- Stable working in 10V to 32V, suitable for 12-24V vehicles
- Built-in supper electric capacity, which can effectively avoid power-off protection.
- DVR can output stable 12V power for each camera, and power short-circuit protection.
- Vehicle ignition control the power ON/OFF of the unit, also the system can work in power delayed recording by the ignition.

Multi Record Modes

- Auto Record when power is ON
- Timer Record
- Manual Record
- Motion Detection Record

SD Card Hot Insert/Remove Support

- You can insert/remove the SD card when it is not recording or under playback mode

Support Universal 3rd Party Media Players

Video files can be playback by the media players below:

- VLC media player(version 1.0.0 above)
- Storm media(version 2009 above)
- Winamp(version 5.531 above)
- Media player in Windows Vista or Win7

2.Parts

2.1Front Part

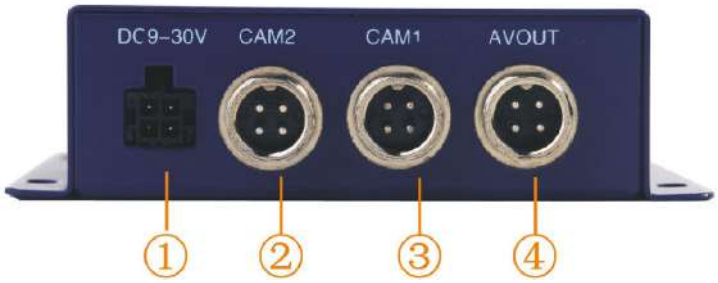


①： Record indicator
②： Working indicator
③： IR receiver
④： SD card lock
⑤： SD1 slot
⑥： SD2 slot
⑦： HDMI port
⑧： SD card slot cover

Indicators when recording and normal working:

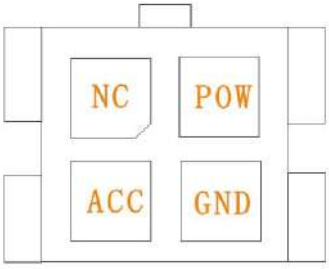
	Status	Means
Record Indicator	Flashing/Not-Flashing	Recording/Not Recording
Working Indicator	Stable ON	Normal Working

2.2 Back Part



①： Power input
②： Camera 2 input
③： Camera 1 input
④：Video output to monitor

Interface Instruction:



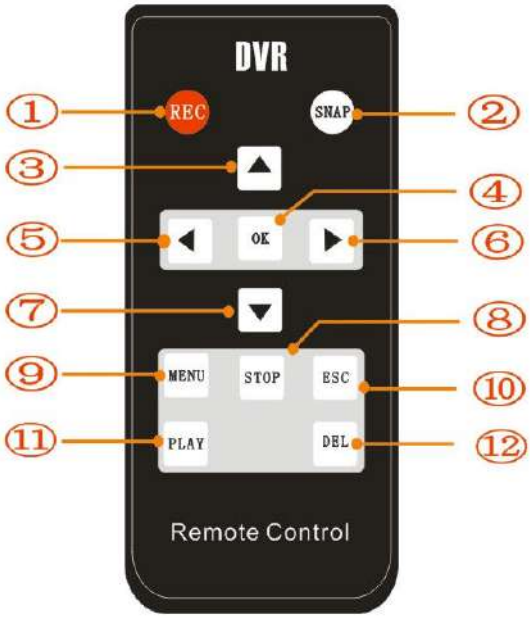
NC： Null
POW：Power input
ACC： ACC input(connected to vehicle ignition, or connect with POWER cable, but it won't have Delayed Record if you connect this way)
GND：GND Input

Aviation connector:



①：Video Input
②：12V Output
③：GND
④：Audio Input

2.3Remote Control



Buttons

1. Record
2. Snapshot
3. UP
4. Confirm
5. LEFT
6. RIGHT
7. DOWN
8. Stop Record/Play
9. Menu
10. Back
11. Play
12. Delete

Press MENU to enter into the menu, UP/DOWN/LEFT/RIGHT to select the sub-menu and options, press OK to confirm your selection; ESC to cancel your selection or exit the menu; if there is no OK/NO shows up when you change any options, press ESC and it will ask if you want to save changes.

3.How to Use SD Card

1)Install SD Card

Please use original brand of SD cards, Class 10 is recommended.





Note**: Use the key to open the lock of the slot and you need to insert the SD card inside the port and when you hear the sound, it means SD card is inserted corrrectly.**

2) Connect cameras



Connect the cameras by the aviation connector according to the photo above

3)Power connection:



Power cable: Red cable to power positive, black cable to power negative; yellow cable to vehicle ignition. You can also put a fuse between the red cable to power positive.
Note: fuse should be connected to power positive part directly.

Note:

1. DVR should use DC power
2. DVR works only in 10V-32V
3. DVR power cable should be connected to vehicle battery directly.
4. DVR power is less than 5W.
5. Fuse should be installed to the side of battery.

4) Connect monitor

Cvbs Monitor:

AV output cable: red to video output, white to audio output, red for power output. This output cable is for normal CVBS output.

Hdmi Monitor:

You can link the front panel to the HDMI HD interface.

5) Format SD card

Press <MENU>, go to“STORAGE SETUP” and select “Format selected disk”, and then press<OK>to format the SD card;

NOTE: we recommend to format SD card the first time when you use the DVR.



6) Start Record

Press **REC** to start recording; if the system is under POWER-UP record mode, then it will start recording automatically when you exit the menu.

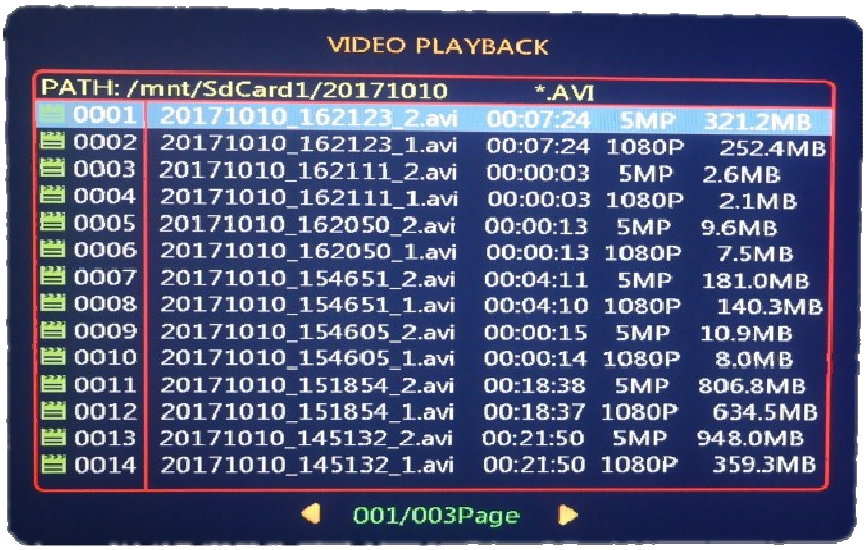


4.General Operation

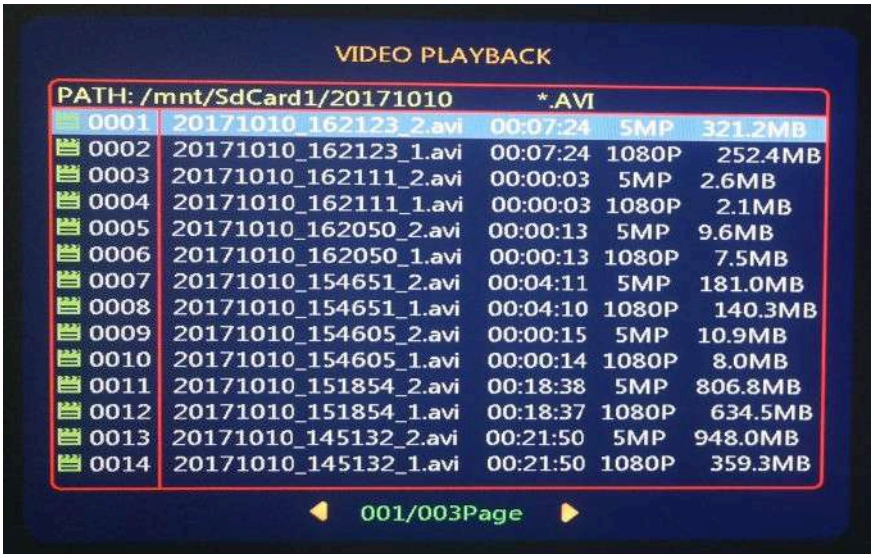
4.1Playback



Press **MENU** to enter into main menu, and use **UP/DOWN** to select the sub-menu options.



Select the <PLAY AVI>, and press OK to go to video list, use UP/DOWN to choose the files, you can press DEL to delete all files.



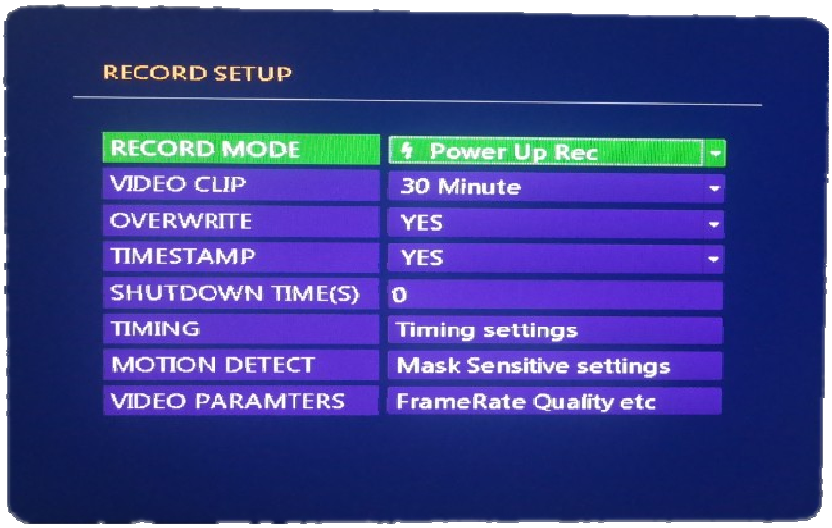
The files name stands for date of the file, 20171010 means the date, _1 means channel 1, _2 means channel 2; and then it is the video length, resolution and file size.

Note: Select the first line of the list "PATH:/mnt/SdCard1/", press LEFT/RIGHT to choose playback SD1/SD2::

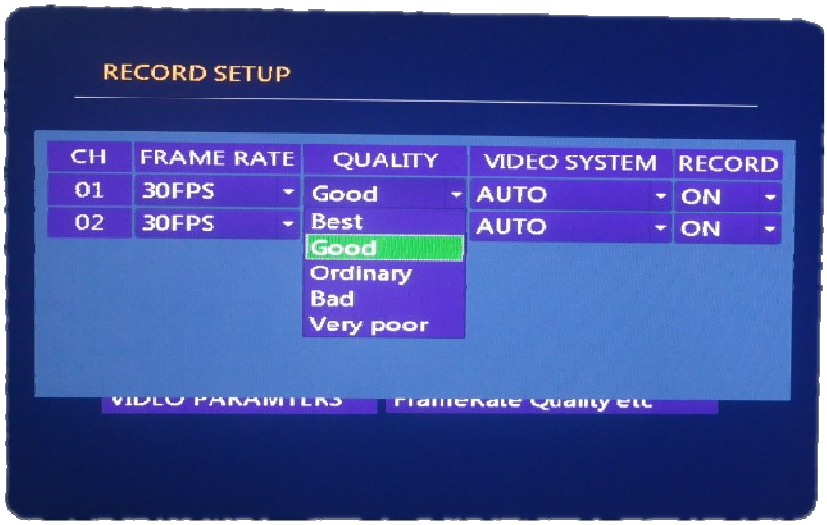
SD1: "PATH:/mnt/SdCard1/"

SD2: "PATH:/mnt/SdCard2/"

4.2 Image Quality & Frame



Press MENU to <RECORD SETUP>, and then <VIDEO PARAMTERS>, press OK to go to:



You can set the data for 2 channels separately:

Frame：1FPS - 30FPS, the more frame value you choose, the more files size it will make, but the more smooth video image it will make too.

Image Quality： 5 levels，Very Good, Good, Normal, Bad, Low you can set the image quality according to your recording use and requirements..

Video format: support AUTO and other 14 different type of video input; when you set AUTO, DVR will automatically recognize the video type of the camera.

Record: ON to turn on the record of this channel; OFF to stop record for this channel.

4.3 Record Modes



POWER-UP Record: auto start recording when power is ON

Manual-Record: press OK and stop for the recording

Scheduled Record: starts recording according to the time table

Motion Detection: starts recording when there is any movement in front of the camera

4.4 Schedule Record

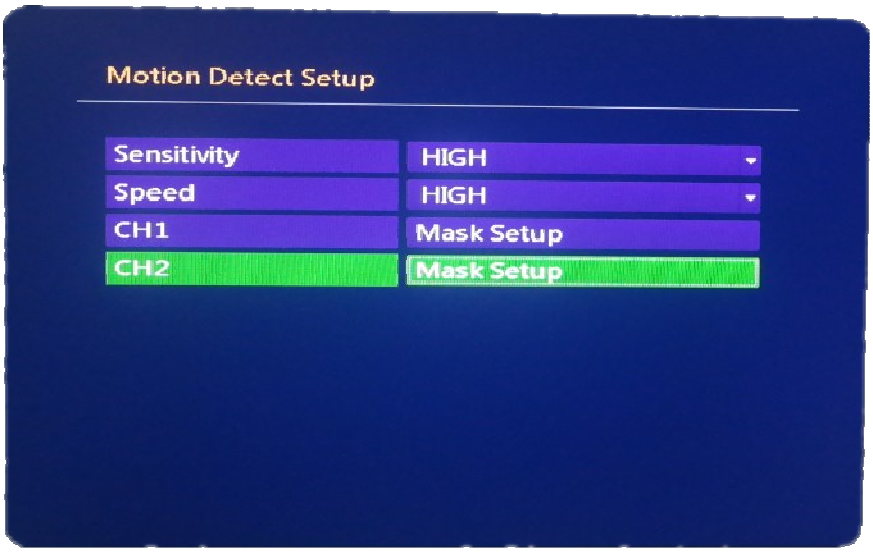


There are 3 periods available for this mode, you can set the different periods to start and stop recording.



You can choose to record by weekday, when you select the DAY, it records, otherwise it won't record that DAY.

4.5 Motion Detection



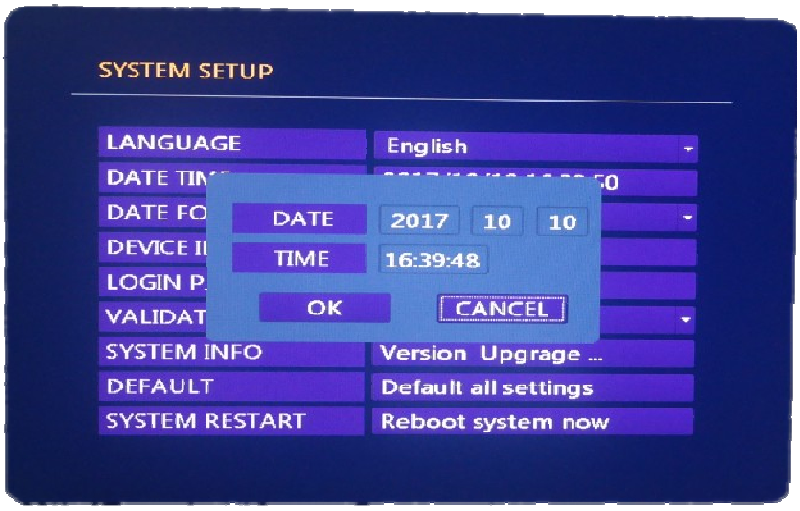
Sensitivity: HIGH, MIDDLE, LOW to set according to the conditions.

Speed: HIGH, MIDDLE, LOW, to set the speed of the change, if the subject is moving fast into the view of the camera, it starts record; if it moves really slowly into the view of camera, it don't trigger the recording very sensitively.

Coverage Area: set the 2 channel separately as bellowing. The blue selected grids are the area that you don't need to trigger motion detection, you can use the UP/DOWN to select, and press OK to confirm this grid.

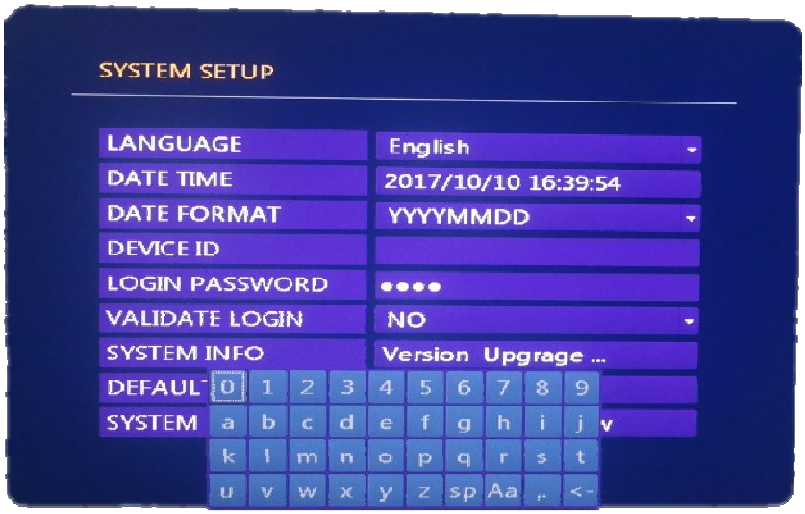


4.6 System Time



Set the time: go to menu-<SYSTEM SETUP> -> <DATE TIME> and save it after you set.
Set the format of the date: go to menu, <SYSTEM SETUP> -> <DATE FORMAT>

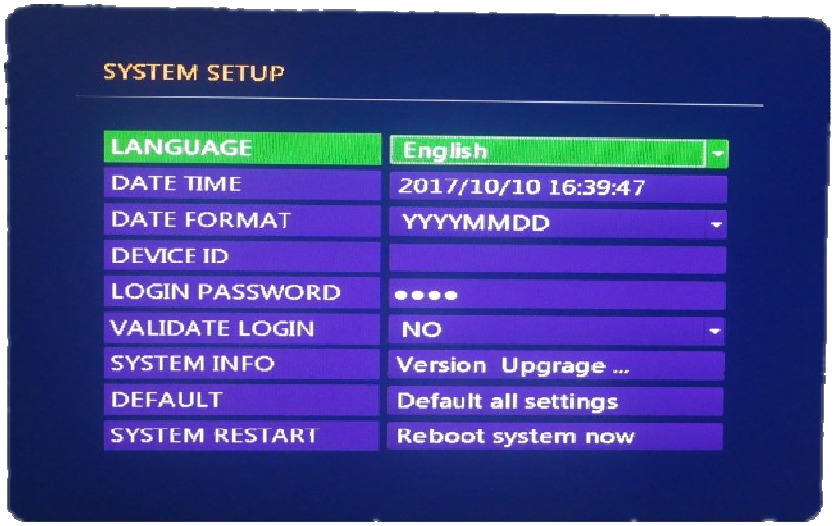
4.7 Login Password



1. Password set: Menu-<SYSTEM SETUP> -><LOGIN PASSWORD> to set 4 digits login password

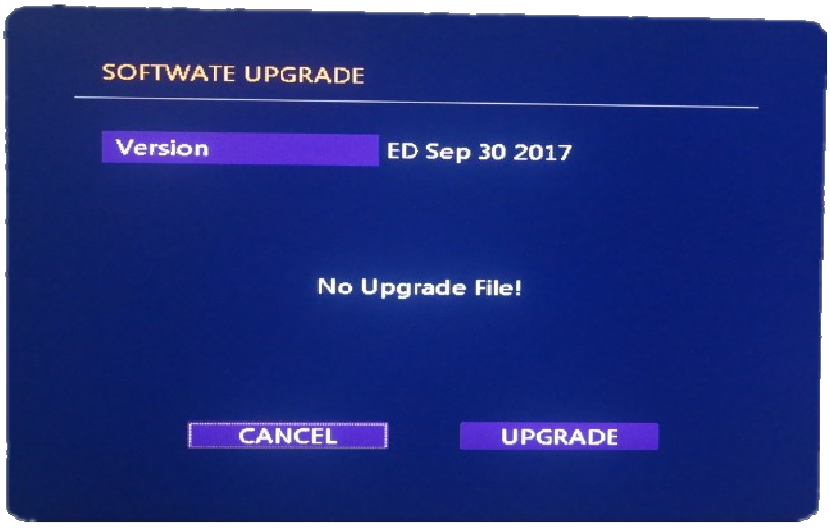
2. Login check-in: go to menu, <SYSTEM SETUP> -><VALIDATE LOGIN> and turn it ON to use this function.

4.8 Default Setting



Go to menu, -> <SYSTEM SETUP> -><DEFAULT>, DVR will restart after you set it.

4.9 Firmware Upgrade



Steps：

1. Copy the firmware to the root of the SD card(we sugguest you format the SD card first, make sure the card is empty), the firmware is a file called UpdatePack-xxxxx(X stands for the date and time), and you need to un-zip the firmware, so that you can find it in the card.

2. Enter into <MAIN MENU> -> <SYSTEM SETUP> -><SYSTEM INFO>, and then you can see the upgrade, press OK to update.

3. The upgrade process will last for about 3 minutes and please make sure NOT cut the power while it is upgrading, otherwise the system will be damaged and the only way is return to our factory for update.

4.10 Display Setting



HDMI output: use the HDMI according to your need, it supports 800X600， 1024X768，1280X1024，1366X768，1440X900，1280X720， 1920X1080.

Note: the system supports CVBS and HDMI output as the same time, and the image output from CVBS is compressed based on HDMI, so if you set the resolution very high for HDMI, then the resolution for CVBS will be very small, including the fonts and menu text. When it detects no HDMI input, the system will auto adjust to 800*600 to adapt with CVBS; if you want to use HDMI as output, you need to connect to HDMI display first and then turn on the DVR.

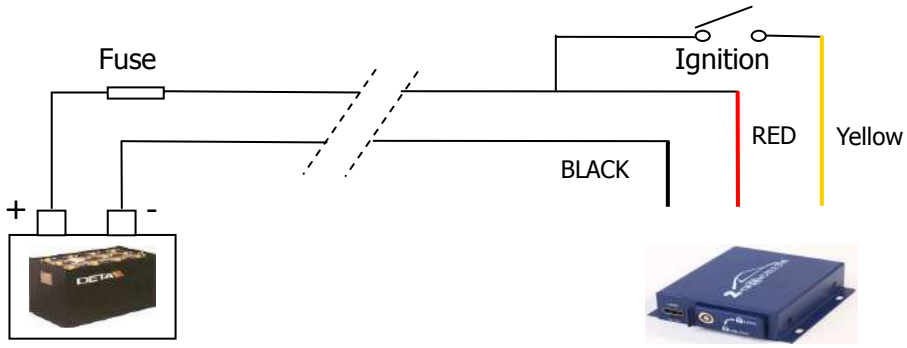
Channel Display Mode:
Dual channel-when the DVR turn on, it shows 2channel images by default.
Channel 1 mode: when the DVR turns on, it shows CH1 in full screen by default
Channel 2 mode: when the DVR turns on, it shows CH2 in full screen by default

Chanenl Full Screen Mode:
Left-Right Mode: the image of CH1 CH2 will be displayed in middle of the screen, image not distorted.
Left-Right Extend Mode: the image of CH1 CH2 will be displayed in the middle of the screen, but it will take up the full screen, so the image of each channel is distorted.
UP-DOWN Extend Mode: the image of CH1 CH2 will be displayed UP and DOWN of the screen, but it will take up the full screen, so the image of each channel is distorted.

CVBS System: set the type for CVBS output

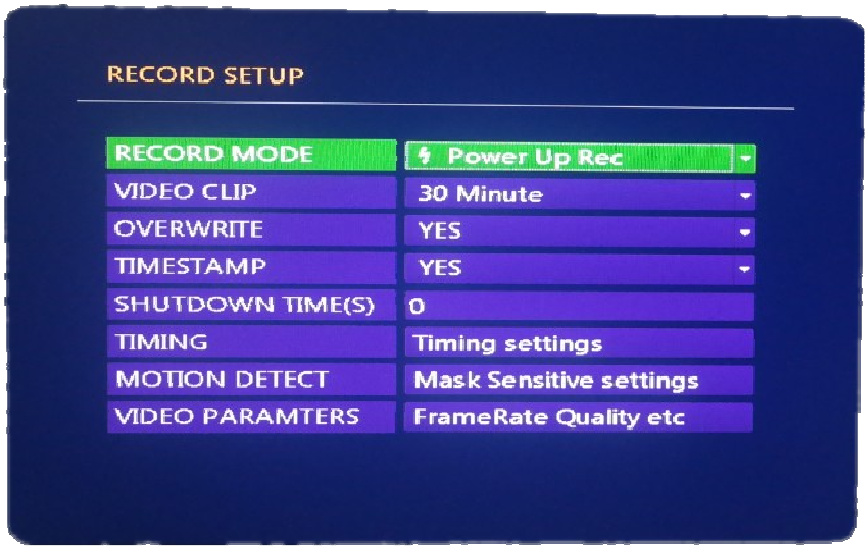
4.11Power（1）vehicle ignition to the power cables

1) Yellow cable from the DVR connected to the ignition of vehicle, RED to the positive of the battery, and BLACK to the negative of the battery.



Battery or Power adapter

DVR



2) go to <MAIN MENU> -<SHUTDOWN TIME(S)>, then press OK, it shows the seconds of the delayed record time, you can put 0-9999 seconds for the delay time for recording, press OK again to save and exit. When you set a time for delay record, the DVR starts when ignition is ON; when ignition is OFF, DVR still working for the time you set and the after that it will shut down automatically.

6.Specifications:

Item	Data	Description
System	Language	Simple Chinese/English
	Interface	Image menu
	Encryption	Admin password
Video	Video input	1/2 Channel composite input(AHD) 1.0V， p-p，impendence 75Ω，BNC
	Video output	1 Channel composite output, 1.0V， p-p，impendence 75Ω，BNC
	Video display	1/2 channel in 1 screen
	Resolution & AHD Standard	CVBS (720X576) AHD 720P (1280X720) AHD 1080P (1920X1080) AHD 3.0MP not realtime/ AHD 3.0MP realtime (2048X1536) AHD 4.0MP not realtime/ AHD 4.0MP realtime (2560X1440) AHD 5.0MP not realtime/ AHD 5.0MP realtime (2592X1944)
Audio	Audio input	1/2 channel audio input，impendence 47KΩ，RCA
	Audio output	1 channel audio output，impendence 10K，RCA
	Record mode	Audio video Synchronous recording
	Audio compression	G711
Image and storage	Image compression	H.264 High Profile，运动自适应动态码流 auto adapt to dynamic bit stream
	video bitrate	D1: 200Kbps ~ 10Mbps，5 levels of image quality for options
	Audio bitrate	8KB/s(after compression)
	storage	Dual SD slot
Record	AVI audio video sync file output	
3rd party media	VLC media player, storm media, WINAMP	
Update	SD card upgrade	
Power	Input	DC：+10V ~ +32V
	Output	+12V@1.5A
	Power	**Less than 5W**
Temp	Working Temp	-10℃ ~ +60℃
Dimension	10CM（W）×2.8CM（H）×11.2CM（L）	

FAQ

1) Q: Why is the device power indicator light is OFF, the monitor no image?

A: First check whether the power is connected, the supply voltage is sufficient, need more than 10V or more stable voltage at least to provide 3A current power supply, then check if ACC (yellow line) come in with voltage.

2) Q: the screen says "no disk", how to do?

A: First check the SD card or USB hard drive connection is good or not, if the connection is good, and then see if this SD card or hard drive is a new card, if it is necessary to format it in the PC, if it still cannot solve the problem, please send the SD card or hard drive to manufacturers or check with our services personnel.

3) Q: DVR output no image after connecting the camera

A: first check the input video signal source is connected, and then see if the camera format is supported by the format of the DVR, the DVR does not support TVI CVI format camera input, and can not enter more than 5 million AHD camera or no picture.

4) Q: Why is the TV (CVBS) display on the menu and the font is very small?

A: If you connect an HDMI monitor and set the HDMI output resolution is very high, then the TV display the menu text will be very small, the solution is disconnect the HDMI display, and restart the boot DVR; or you can set lower for the HDMI output resolution.

5) Q: Why is the HDMI monitor set up 1920X1080 and output is 800X600 instead?

A: You need to connect to a HDMI monitor, and then open the DVR power supply, you can get output 1920X1080;, because the DVR will check and if it doesn't recognize the HDMI monitor is connected, then it will automatically set the HDMI output to 800X600 resolution to adapt to CVBS display.

Packing List:

Item	Decription	Quantity
1	SD DVR	1 pc
2	Keys	2 pcs
3	Aviation to BNC cable	1 pc
4	Power cable	1 pc
5	Remote control	1 pc