NESA

DVR-400AHD 4CH 1080P Mobile DVR Operation manual

CVBS / 720P / 1080P Camera Connection Guide

1. ☑ CH1~CH4 `AHD 720P~1080P` Camera `NTSC` & `PAL` System

2. ☑ CH1~CH4 `CVBS` Camera `NTSC` & `PAL` System

3. ☑ CH1~CH2 `AHD 720P` Camera `NTSC` & `PAL` System
   ☑ CH3~CH4 `CVBS` Camera `NTSC` & `PAL` System

4. ☑ CH1~CH2 `CVBS` Camera `NTSC` & `PAL` System
   ☑ CH3~CH4 `AHD 720P` Camera `NTSC` & `PAL` System

5. ☑ CH1~CH2 `AHD 720P` Camera `NTSC` & `PAL` System
   ☑ CH3~CH4 `AHD 1080P` Camera `NTSC` & `PAL` System

6. ☑ CH1~CH2 `AHD 1080P` Camera `NTSC` & `PAL` System
   ☑ CH3~CH4 `AHD 720P` Camera `NTSC` & `PAL` System

7. ☑ CH1~CH2 `AHD 1080P` Camera `NTSC` & `PAL` System
   ☑ CH3~CH4 `CVBS` Camera `NTSC` & `PAL` System

8. ☑ CH1~CH2 `CVBS` Camera `NTSC` & `PAL` System
   ☒ CH3~CH4 `AHD 1080P` Camera `NTSC` & `PAL` System

F.A.Q.:

1. Why the DVR just show 2 cameras when I connect 4 cameras with it?
A.: This DVR works with 4 different signal cameras. CH1+CH2 should be same camera, CH3+CH4 should be same camera too.

2. Why DVR can not start?
A.: when you connect DVR with a stable power source, please connect red and yellow power wire together with +12V, and then connect black wire with GND. And please lock on the DVR front panel.
When you install the DVR on car, please make sure, the power wires connect correct. Red connect with battery +12V, yellow connect with CAR ACC, black wire connect with battery GND.

3. Why my SD/HDD can not working after formatted by DVR.
A.: when you first time insert SD card/HDD into DVR, please wait DVR to format it automatically.

DVR will detect SD first, and then it will start formatting automatically after 15s. and then, DVR will reboot. (do not format sd/hdd manually when first time use)

4. When playback recorded files on player, the video is chopping, or slower, or faster, or has no sound.

A: Please contact supplier for the latest version of player. Or you need to change another computer with higher process. Because of the high quality video file cost a lot of computer CPU when playing back file.

5. When playback recorded files on TV/MONITOR, there has no sound.

A.: yes, recorded file playback on TV/MONITOR without sound. If you want to hear the sound, please playback on computer.

1. About DVR

It is a HD CAR DVR designed for taxies, buses, mini vans, trucks and ships surveillance. The highest resolution support 4CH 1080P, memory cost about 7GB-8GB per hour. DVR works with 2.0mp/960p/1.3mp AHD CAMERA and also analog cameras.

1.1 Front panel instruction

Interface	Name	Instruction
LED	PWR	LED light on as power normal
	RUN	working station indicator
	SD	Unavailable
	Net	Unavailable
USB	/	Connect mouse to control DVR
SD Slot	/	Insert SD card

1.2 Rear panel

Interface	Name	Instruction
Power	POWER	Power input interface, support DC 10-36V
AVOUT	Video output	CVBS signal output
AV1-4	AV1,AV2,AV3,AV4	Connect with Camera
VGA	VGA output	Support VGA video output.
I/O	IN1,IN2,IN3,IN4	High/low signal input to trigger recording or full screen
RS232	/	Unavailable
GPS	/	Unavailable
IR	/	Unavailable

Sweet tips:

Please use original SD card, we recommend you use brand Sandisk or Kinstone, class 10, high speed, support 1pcs max. 256GB SD card.

Micro SD with adapter are not workable with DVR

1.3 Power connection

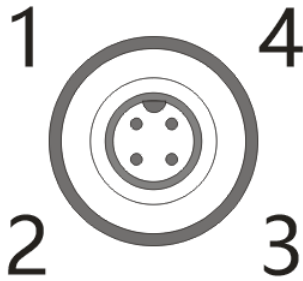**Red: Positive**

Black: Negative (GND)

Yellow: Ignition WIRE(ACC).

Tips: For testing in with a stable power source, RED+YELLOW connect with positive, and BLACK connect with negative will start DVR.

NOTES：

1）Please verify battery voltage before connecting with battery. DVR support 8V-36V power input. DVR will be damaged if power input over 36V.

2）After connecting the cables, ensure that power cables are insulated to prevent short circuiting and burning out the battery.

3）The Yellow cable must be connected to the vehicle ignition cable, otherwise the device will not be able to execute the delayed shutdown and the final moment of the video will be lost.

4）Note: Connection to the vehicle's engine must be connected directly to the positive anode of the battery. Do Not Use bond strap for grounding as it will produce negative pulses that would interfere the device's normal operation. The negative pole of the power code must be Φ1.5mm and above.

1.4 Video cable: pins instruction

1	**Video**
2	**Audio**
3	**GND**
4	**12V**

1.5 Remote control instruction

Keys	Function
Startup/power off	Power off/on DVR
LOGIN	Login into main menu
0-9 number keys	Type numbers into system, menu or login password
⊞ and Digit keys1,2,3,4	Switch between 1-channel and 4-channel version. Press it, show 4-channel. Press digit key 1,2,3,4, can separately switch to CH1,CH2,CH3,CH4
"＋" and "－" key	Adjust digit when plus or deduct
INFO	Check all DVR status and dvr info
▲,▼,◄,►	Direction key, move up,down,left and right
"ENTER"	Choose and save settings
RETURN	Return to last menu or previous steps
Cancel	Delete or cancel the data you typed into MENU.
PREV	REW for playback recording, 4 grades: 2X，4X，8X,16X
► （PLAY/Pause）	Start playback video Press it one time to pause the video playback durning playing back video.
NEXT	FAST FORWARD for playback recording, 4 grades: 2X，4X，8X，16X
Record ●	Start manual recording key
Stop ■	Stop playing

2   DVR operation

2.1 Login

After login, below is main menu

2.2 System set up

Instruction:

1. Set up time and date here. Also car plate number.

2. DVR has one working mode only, it start and stop working by car start or stop too.

3. Delay function: when you enable Delay Power function, you are setting up DVR power off delay time after car stopped.

4. After set up the data, press "Save" to save and exit.

2.2 Display

Camera Mode： Support PAL and NTSC mode. If it different as your camera modes, the video will have problem.

Marker: it is rear driving line set up. When you set it open, once you set one channel in full screen, the rear driving line will appear.

Camera set up: It is set up input camera type. For example, if you are using 1080p camera with dvr channel 1(front), it should be set in 1080P too. The DVR support CH1+CH2 in same mode, and CH3+CH4 in same mode. For example, if CH1 is 1080P camera, CH2 should be same too.

2.3 Record Set up

File time set up, 15/30/45/60 minutes per recording.

Resl.: recording resolution. No matter you connect 1080P or 720P Camera, all recording saved in D1 resolution(704x576).

Mirror: set up this channel view direction vertical or horizontal.
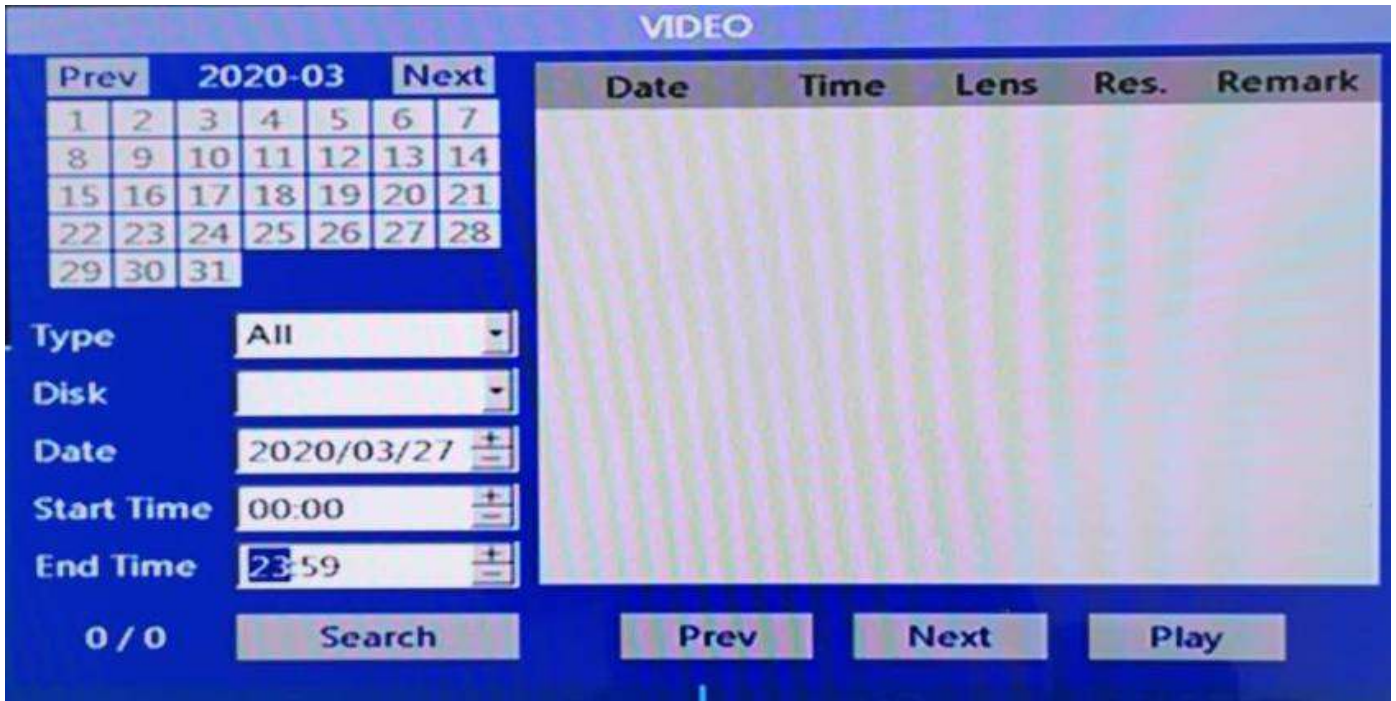
2.4 Alarm input signal set up

There has 4 alarm input channel can be set up.

1. Name: There are several different conditions you can choose as the camera position or action during car running.

2. Trigger DVR by High/Low level

    High level: signal higher than 4V.

    Low level: signal lower than 4V.

3. Delay: It is set up alarm off delay time. Value 0-9 seconds optional. After you set up this,if alarm signal disappeared after the time you set, DVR will confirm the alarm signal completely off.

4. Preview: DVR switch to full screen by the alarm channel.
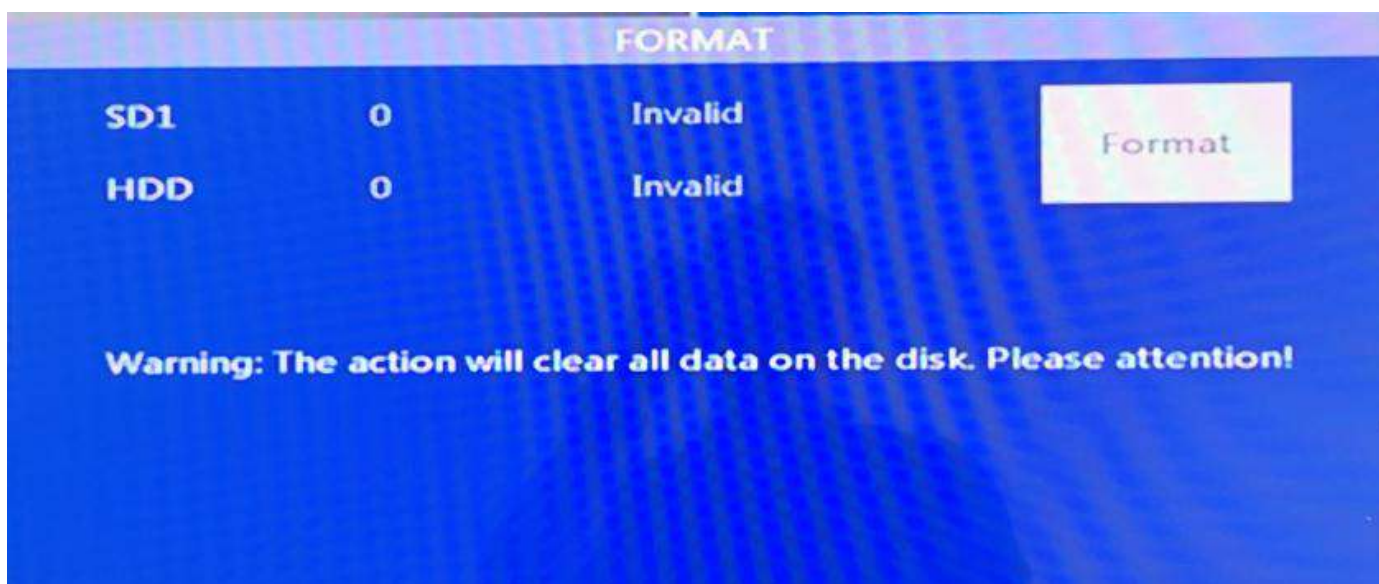

5. Prior: Value 0-5 optional

2.5 Video

Instruction：

1． Prev.（upon left corner） and Next: press these 2 icons to switch to previous or next month.

2． Type: Search record video type. You can search "alarm" video by here

3． Disk: Select the disk you want to search the video.

4． Date: set the date you want to search.

5． Start time: set start recording time to search.

6． End time: set stop recording time to search.

7． Search: after you set up rules, click it to search the files.

8． Prev.(at bottom): turn to the last page

9． Next. : Turn to the next page

10． Play: After you select the file, press Play key to start playback. (No audio)
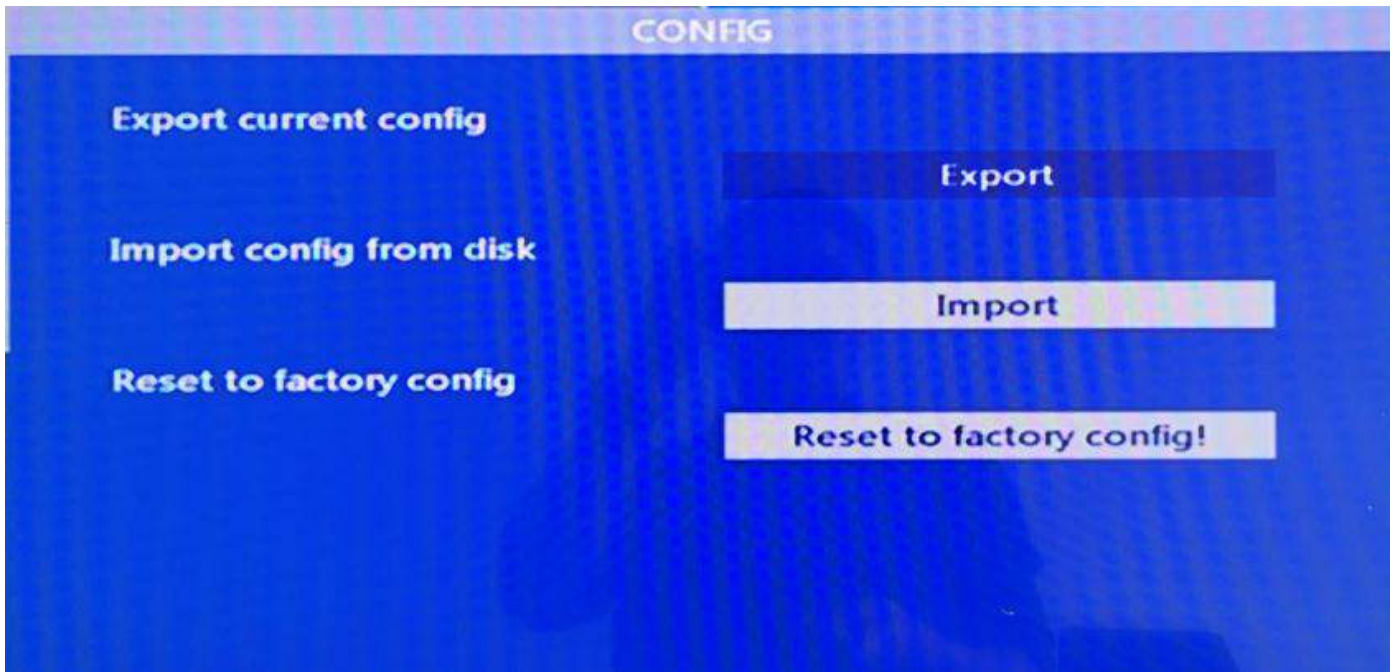
2.6 Tools

2.6.1 Disk

Format: After DVR read disk, click format to clear all data in disk.

Attention: All data will be delete and can not get back after disk formatted.
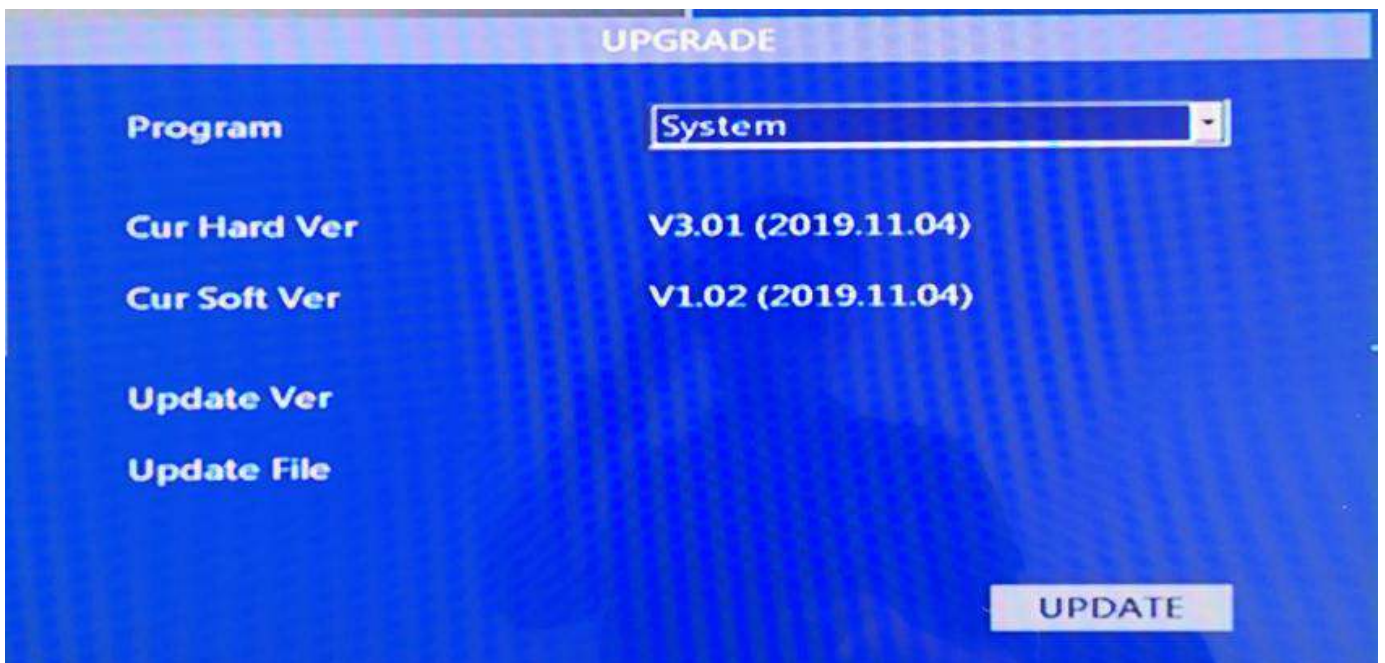
2.6.2　Config

Export: Export DVR current settings to disk.

Import: Import a config. File from disk for fast set up DVR.

Restore to factory config: All DVR data will reset to default.

2.6.3 Upgrade- DVR will detect update file automatically.

Update DVR firmware here. (Please contact seller for update details)

2.6.4 Logo

Users customize private logo on start screen when DVR power up.

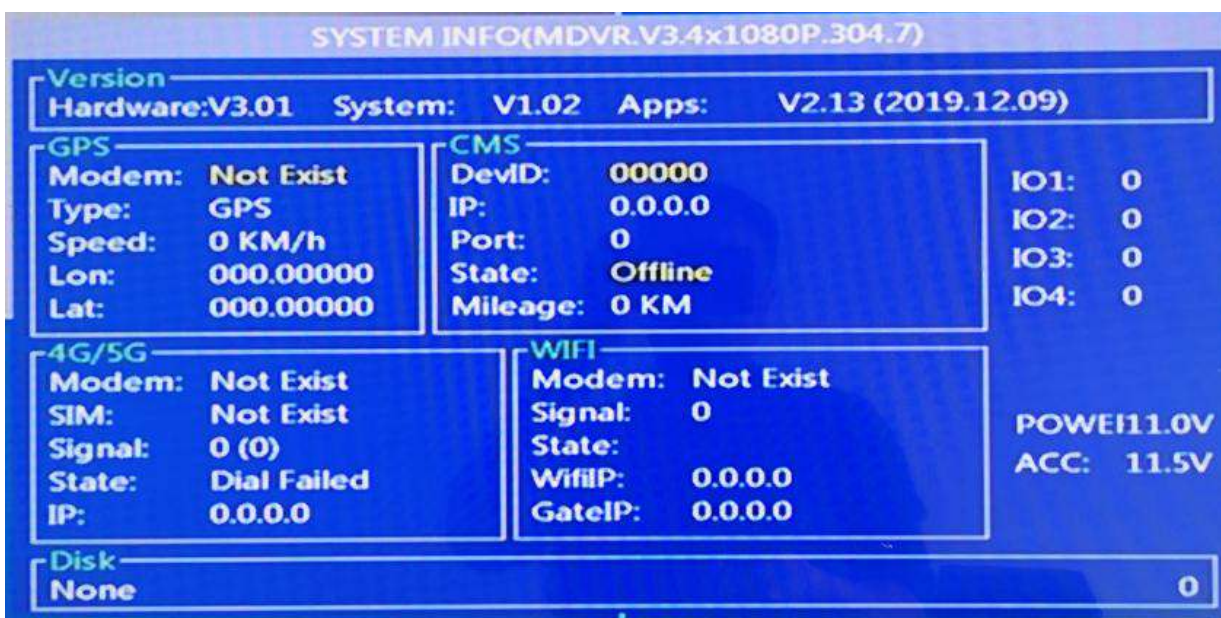The customize logo file should be 720x576, format PNG.

Instruction:

1. Copy the picture into SD card and insert to DVR.

2. Power on DVR, and enter menu here.

3. Click "custom" to show the new logo picture on screen and then press "update" to make new logo picture in DVR.

2.7 INFO

Press "info" key on remote controller to check DVR detail information

3.Playback on Player

You can find the player installation file from CD in packing box, or you can ask your supplier to get the latest version player.

DVR parameter:

Items	Parameters	Specifications
System	Language	Chinese/English/Russian
	Operation Menu	Graphical User interface（OSD menu）
	Password	Administrator Password
Video	Video input	4-CH video input 1.0Vp-p，75Ω
	Resolution	1080P: 1920X1080 720P: 1080x720 D1: 704X576 CIF: 352X288
	Video output	CVBS/VGA
	Frame	20f/s for each channel
	Video Signal	PAL/NTSC optional
	Video Compression	H.264 Main profile
Audio	Audio input	4-ch Audio input
	Audio output	1-ch Audio output
	Recording mode	Audio & Video sync Recording

Image processing & storage	Video format	1080P/720P/960H/D1/CIF Optional
	Video stream Standard	ISO14496-10
	Video bit rate	720P:　3mbps 960H:　1mbps D1:　　1mbps
	Audio Bit rate	8KB/s
	Storage	CLASS 10, 128GB SD
Alarm	Alarm input	3 inputs
Upgrade	/	Support

MDVR Electrical parameter

Items	Parameters	Specifications
Power input	10—36V	＋10V--＋36V, When long-term under 10V, or long-term over 36V, Auto power off, enter protected mode.
Power output	12V	12V(+/-0.2V)，Max:2A.
Vehicle key signal	≤4V	OFF
	≥5V	ON
Video input impedance	75Ω	75Ω for each video input impedance
Video output Volt	2Vp-p	Input 2Vp-p CVBS analog signal, reveal device input need 75Ω impedance to fit
I/O interface	4 inputs	High/Low level
	0 output	/
Memory	SD	Support 1pcs Max. 256GB SD memory
Operating Temp	-40℃-80℃	Under well-ventilated environment