



M394QHD-GPS

9" HD Digital LCD Monitor

Installation & User Manual



Please read all instructions before using the product, and keep the manual for future reference. The product may differ from the manual description according to upgrades. S/W version or performance, may be altered without notice.

FEATURES

- 9" Digital Monitor with built-in recorder
- Supports preview and playback
- Supports 4 HD camera inputs
- Supports split-view display mode
- Multiple video formats available
- Micro SD Card (max: 4x128G)
- Built in G-Sensor and GPS (External Antenna)
- 5 alarm inputs with display image, delay and priority adjustable
- ACC Function
- Multiple recording modes
- Multiple Languages
- Adjustable Parking Lines
- Menu Lock Function
- Touchscreen
- Auto backlight
- Short Circuit protection function

SPECIFICATIONS

LCD Size	9"
Resolution	1024 x 3(RGB) x 600
Outer Dimension	235mm (W) x 160mm (H) x 40mm (T)
Brightness	600 cd/m ²
Viewing Angle	U: 85° / D: 85°, R/L: 85°
Recording Time	More than 220 hours @ 1080P, 4X128G
Operating Temperature	-20 ~ +70°C, RH 90%
Storage Temperature	-30 ~ +80°C, RH 90%
Power Consumption	Max 32W
Input Voltage	10-32V
Video Inputs	4 camera video; Impedance: 75 ohm
Audio Inputs	4 camera audio; Impedance: 4.7k ohm
Video Recording File	Micro SD Card (max: 4X128G)
Video Recording File Layout	MSV/AVI
Loudspeaker	1W/8Ω
Compressed Format	H.264

ACCESSORIES



Base Support Bracket



Remote Control



Sun Shield



Angle Adjustment Screws



U-Support Bracket



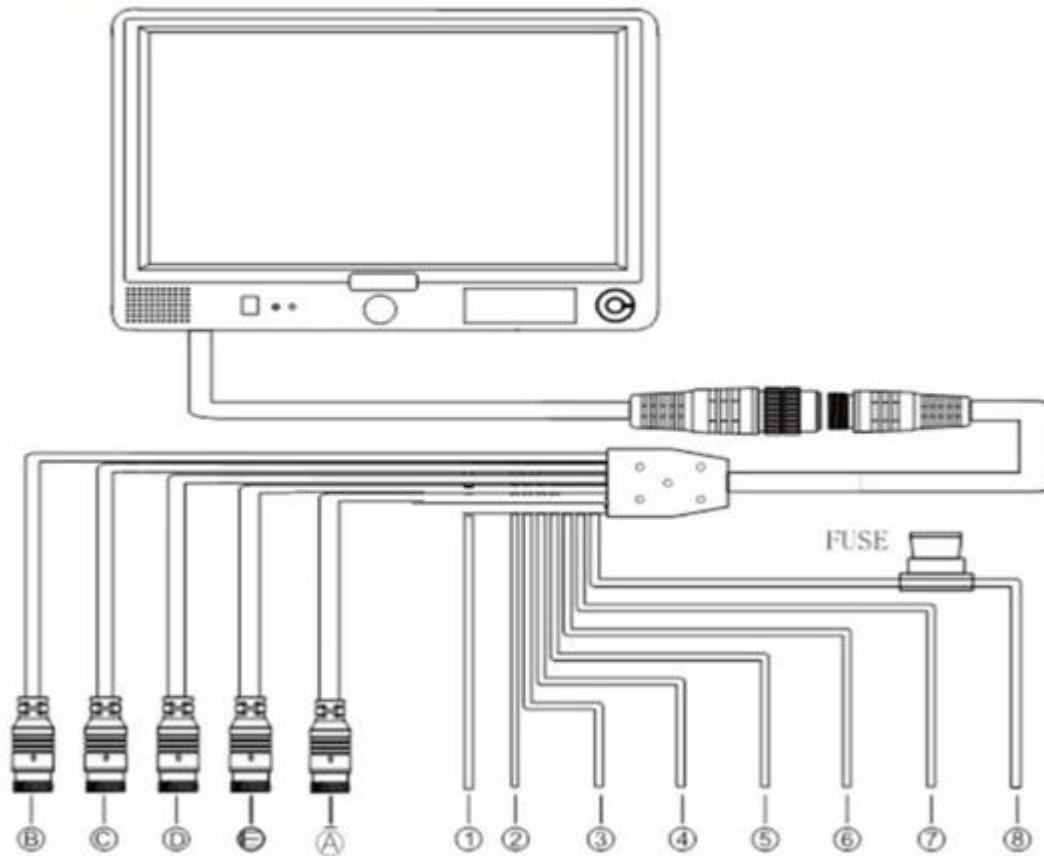
AV & Power Supply Cable

PARTS IDENTIFICATION



- ① Remote Receiver
- ② LDR
- ③ Reserved Now
- ④ Power Key
- ⑤ Lock
- ⑥ Micro SD Slot
- ⑦ Insert Direction
- ⑧ Slot Number
- ⑨ Sketch of slots & Micro SD card direction

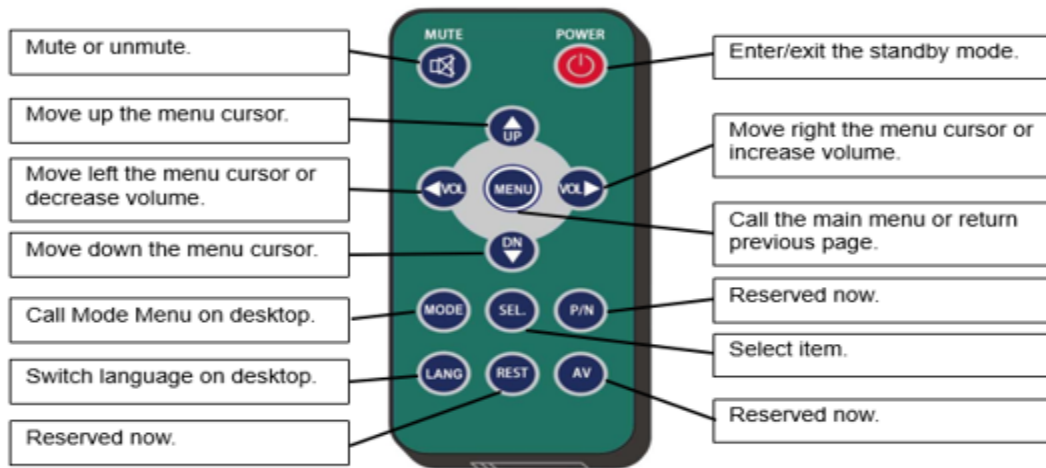
CONNECTIONS



- Ⓐ Black 5P: USB Output, along with USB to CVBS conversion cable for CVBS output
- Ⓑ White 4P Male for Camera 1
- Ⓒ Blue 4P Male for Camera 2
- Ⓓ Green 4P Male for Camera 3
- Ⓔ Brown 4P Male for Camera 4

- ① Single white wire to positive power wire of Camera 1
- ② Single blue wire to positive power wire of Camera 2
- ③ Single green wire to positive power wire of Camera 3
- ④ Single brown wire to positive power wire of Camera 4
- ⑤ Single yellow wire to positive power wire of Camera Split
- ⑥ Single orange wire to vehicle ACC
- ⑦ Single black wire to GND
- ⑧ Single red wire to power wire of DC: 10-32V

MENU OPERATION



1. MUTE

- Mute or unmute the monitor

2. POWER

- Enter or exit the standby mode

3. VOL ▷

- Open the volume adjustment menu
- Move the right menu cursor

4. VOL ◁

- Open the volume adjustment menu
- Move the left menu cursor

5. UP ▲

- Move the menu cursor up

6. DOWN ▼

- Move the menu cursor down

7. MENU

- Go to the main menu

8. MODE

- Go to Mode Menu on desktop

9. LANG

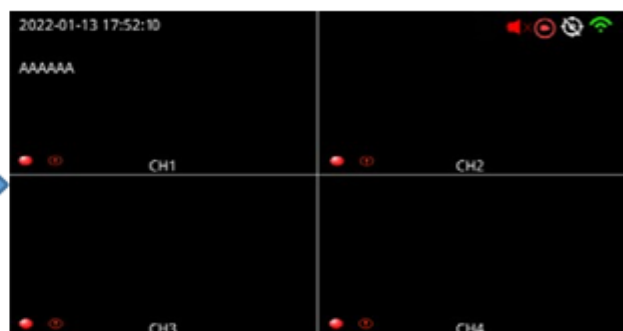
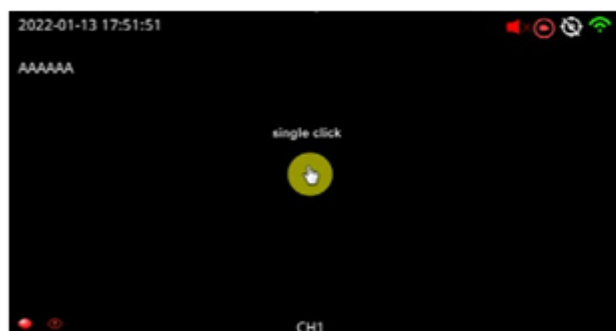
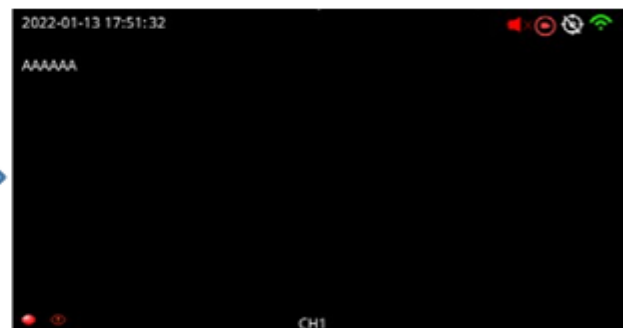
- Switch to different languages on desktop

10. SEL

- Select item

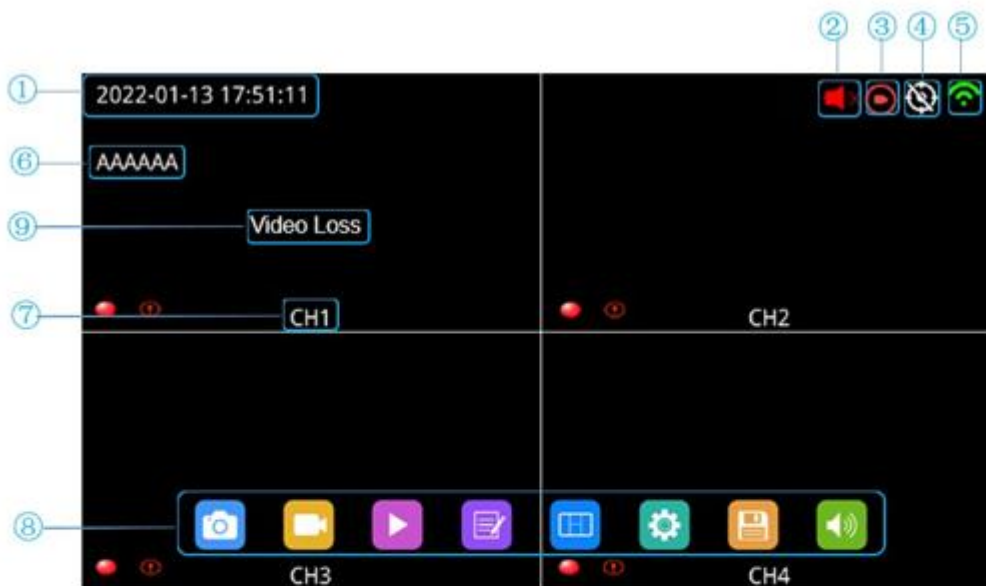
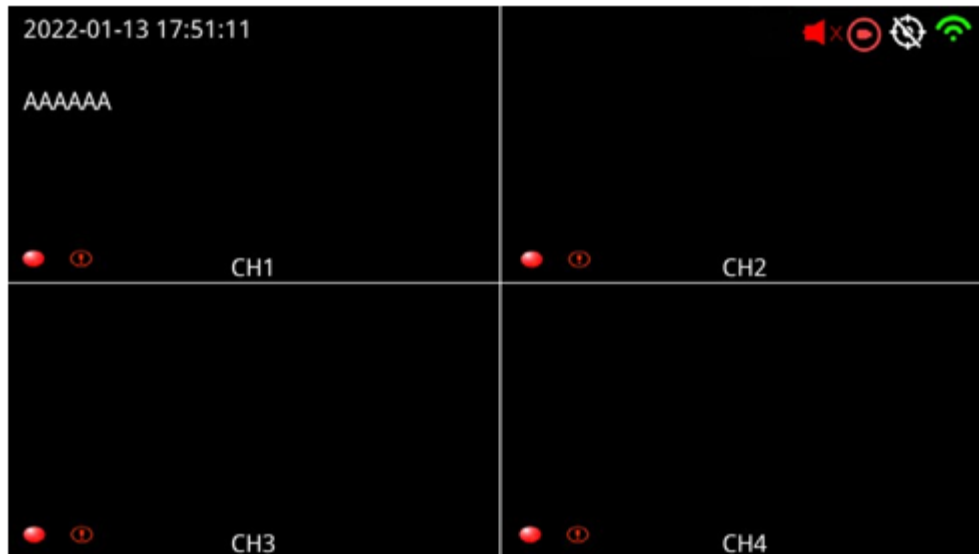
TOUCH SCREEN FUNCTION

▶ When the display shows a split mode and hides the menu, double clicking on one channel will switch to the single screen of that channel. Click again to return to the original split screen. Other menu operation, please refer to the corresponding sections.



MENU

► Before logging in, press the [MENU] button on the remote control or click on the bottom area of the touch screen, and the LCD screen will display the menu interface. To access the detail contents of the menu, you need to log in first. After logging in, you will have access to all configurations



1. System time
2. Mute icon (appears when device is muted)
3. Record icon
4. GPS icon: flickers when connecting, long lit when connected
5. WLAN icon
6. Lincense plate number
7. Channel name
8. Menu zone: click to show the menu icon
9. Video loss warning

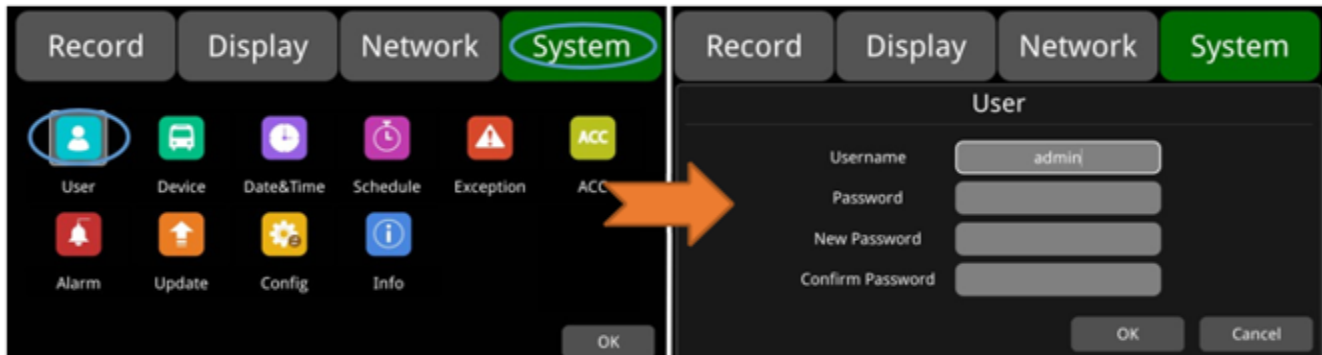
MENU LOCK



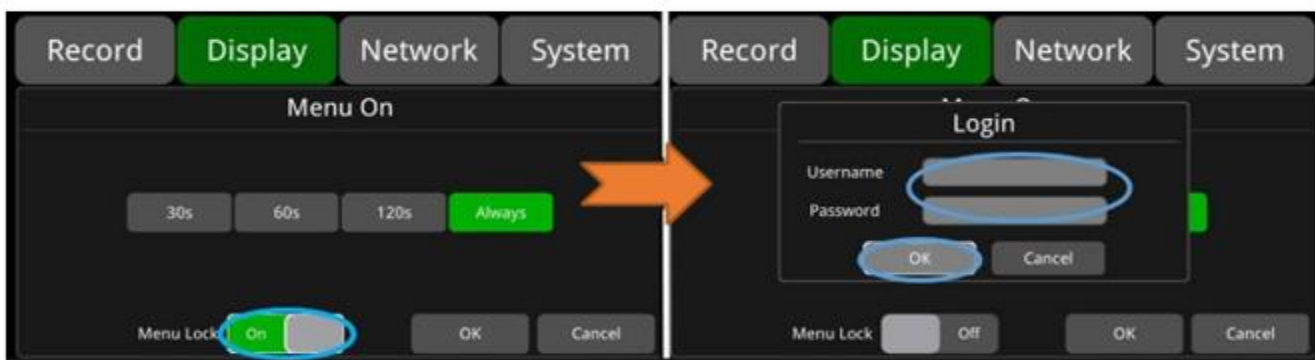
- Two types of menu access: administrator access and guest access
- User permission list

	Administrator	Guest
Username	admin	guest
Default Password	123	321
Menu Access	all	Only snapshot, play, display mode, and volume menu

- Username cannot be changed, but the password can. Guests do not have access to the settings menu, so password change is unavailable (For changing passwords, please refer to the following instructions)

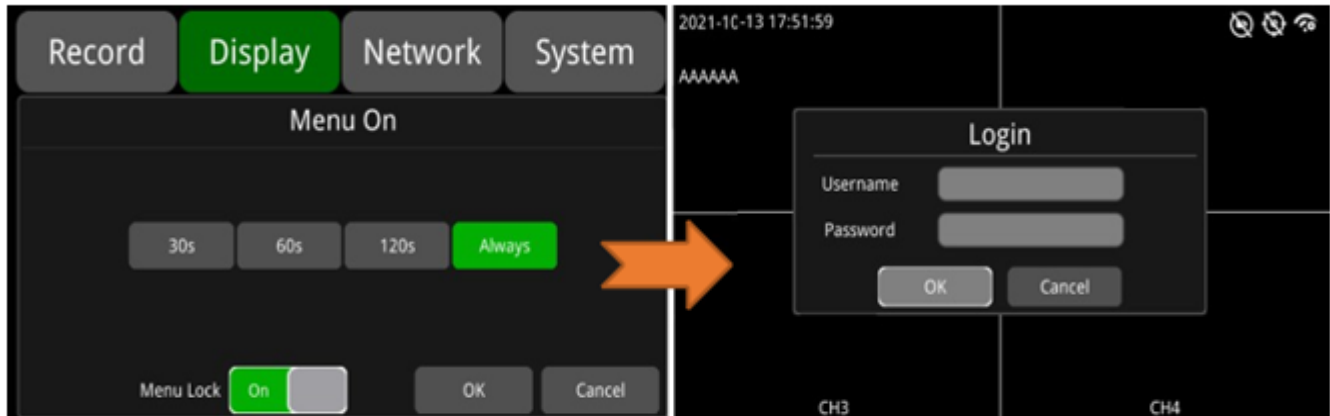


- User admin and password are required to change the menu lock status. Below figure shows how to change the menu lock status from "on" to "off"

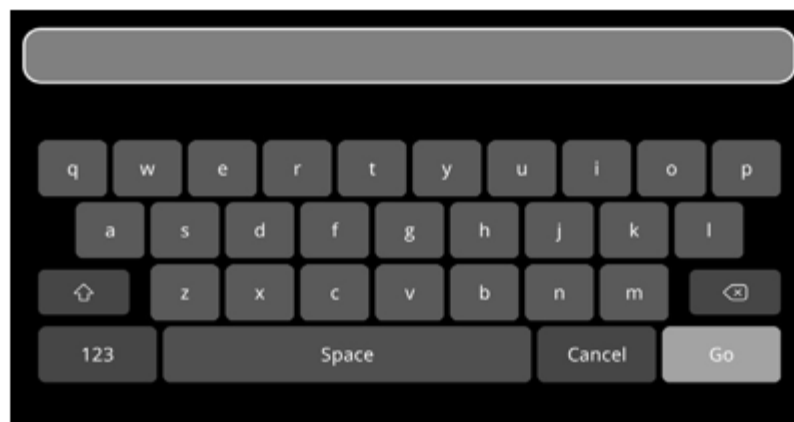


MENU LOCK CONTINUED...

- ▶ When the menu lock status is "on", we need to enter the username admin and password to access the "Record", "Play", "Log", "Settings", "Disk" and other menus. Username guest and password will only allow access to the "Play" menu. "Layer switching" and "volume adjustment" are open without the need to input any information. When the menu lock status is "off", no username and password are needed to enter all menu setting






KEYBOARD INSTRUCTIONS



	Uppercase / Lowercase Switch		Exit without saving configuration
	Exit after saving configuration		Delete input characters
	Switch to numbers		Switch to English
	Switch to special characters		

SPECIAL KEYS

	Snapshot Button: Click this button or press SEL to snapshot a photo and save the screen image as a JPEG image
	Manual Recording Button: Click this button, or select it and then press the SEL button to close or open the recording
	Video Playback Button: Click this button, or select it and press the SEL button. The system will enter the recording calendar. The prompt dialog box will display "Unable to record in play-back mode! Continue?". Press "OK" to proceed. If the date mark in the calendar interface is green, it means there's video files or pictures saved on that day. Press this icon to enter the video/picture file list, select the video file or the picture want to check, and then press the "Play" button. You can select one or more videos/pictures at a time. Multiple videos/pictures can be played in sequence and can switch to the next or previous video/picture. The specific operation will be shown in the below.

CALENDAR INTERFACE



2021-10-15 09:39:37
AAAAA

Notice
Unable to record in play-back mode!
Continue?

OK Cancel

CH3 CH4

2021 Oct.

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

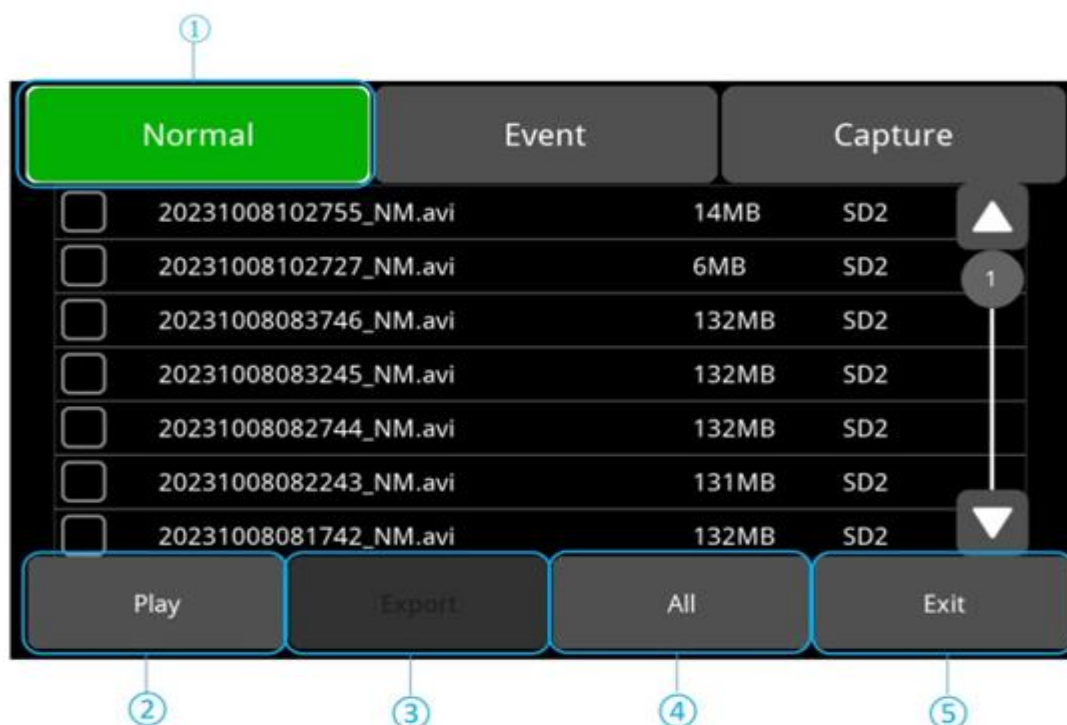
Click the recording date in green to select file



Switch Months



Switch Years



Normal Event Capture

<input type="checkbox"/>	20231008102755_NM.avi	14MB	SD2
<input type="checkbox"/>	20231008102727_NM.avi	6MB	SD2
<input type="checkbox"/>	20231008083746_NM.avi	132MB	SD2
<input type="checkbox"/>	20231008083245_NM.avi	132MB	SD2
<input type="checkbox"/>	20231008082744_NM.avi	132MB	SD2
<input type="checkbox"/>	20231008082243_NM.avi	131MB	SD2
<input type="checkbox"/>	20231008081742_NM.avi	132MB	SD2

Play Export All Exit

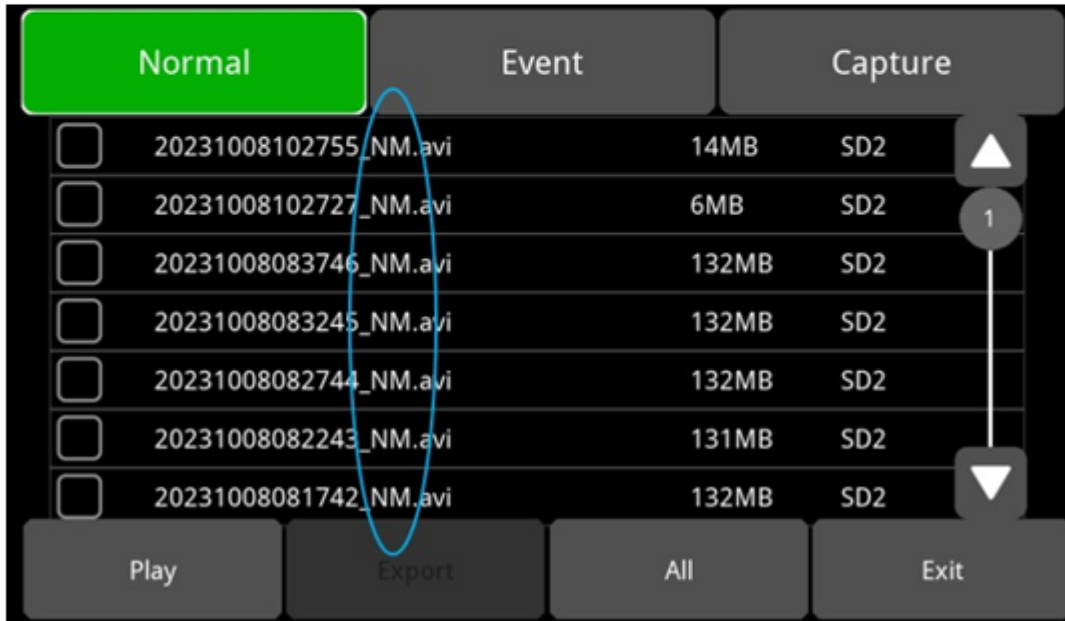
CALENDAR INTERFACE CONTINUED...

▶ Recording List Interface (1)

- ① Two recording types: Normal and Event. Capture saved image for snapshot
- ② Play: Play selected video file
- ③ Export: Export the selected video file to USB (Currently not supported)
- ④ All: Select all files on that page
- ⑤ Exit: Exit the screen

▶ Recording List Interface (2)

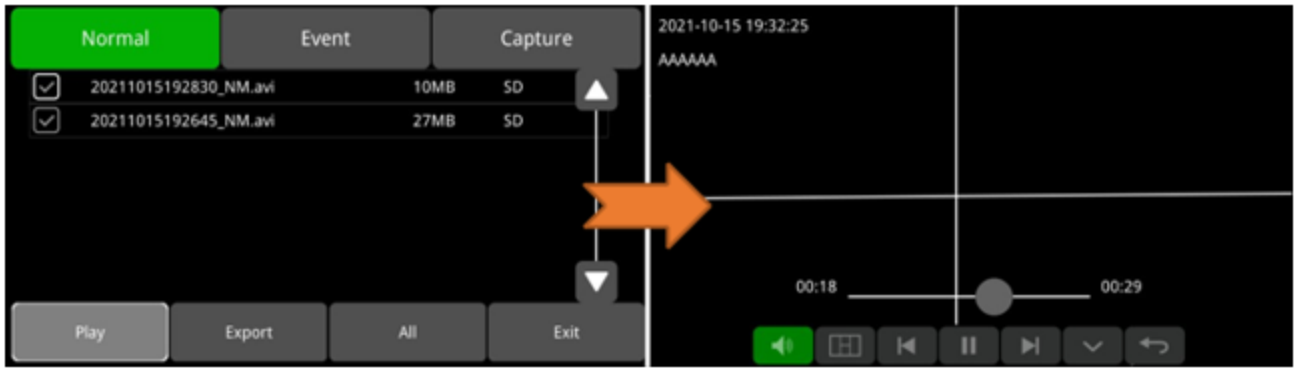
- The file name contains abbreviation for the recording type, which can help identify the recording type









→ Abbreviations for the recording types are as follows:

NM	Normal recording / Manual recording	TI	Timer Recording
GS	G-Sensor alarm recording (simple mode)	SP	Overspeed alarm recording (speed source is GPS)
A1	Alarm 1 Recording	A2	Alarm 2 Recording
A3	Alarm 3 Recording	A4	Alarm 4 Recording
A5	Alarm 5 Recording	SS	Snapshot Picture (capture interface)

PLAYBACK INTERFACE

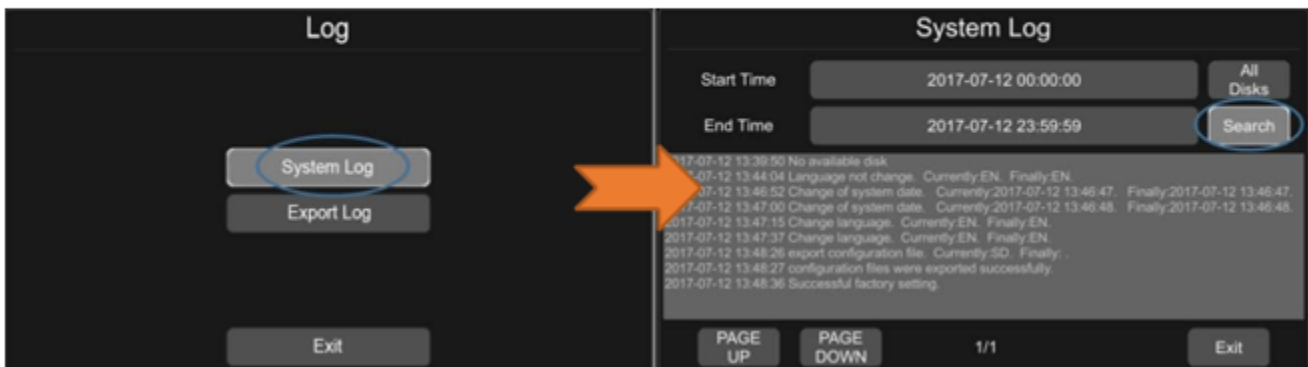


	Volume adjust button (Only for the video playback interface)
	Click the video playback split mode button to switch the split screen to single screen or single screen to segmentation mode (Only the video playback interface has it)
	Play the previous or the next video / Check the previous or the next picture
	Pause or resume playback (Only for the video playback interface)
	Click to hide or show the playback menu
	Exit Playback

LOG



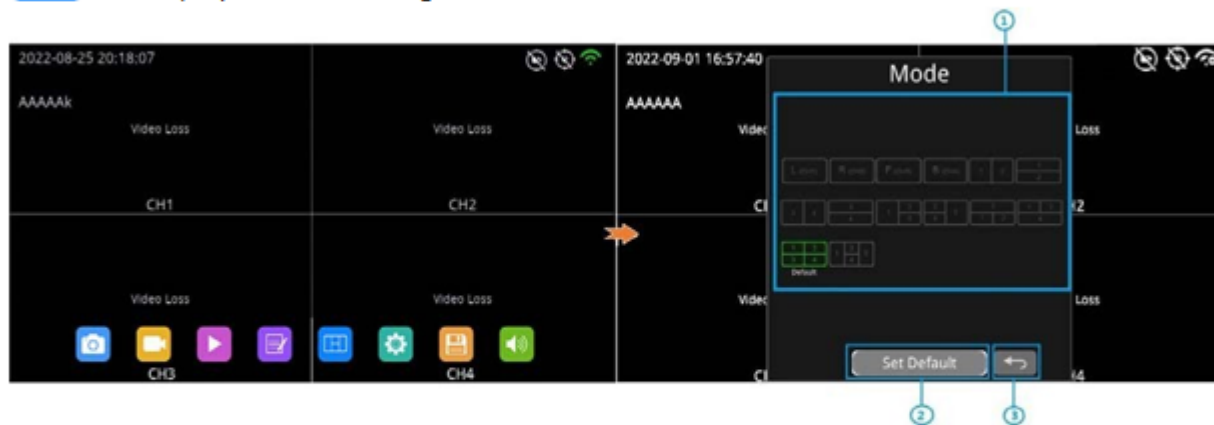
System Log Button: Click this button, or select it and press SEL to enter the log interface to query or export system logs



DISPLAY MODE SWITCH



Display Mode Button: Click this button, or select it and press the SEL button to enter the display mode switching interface.

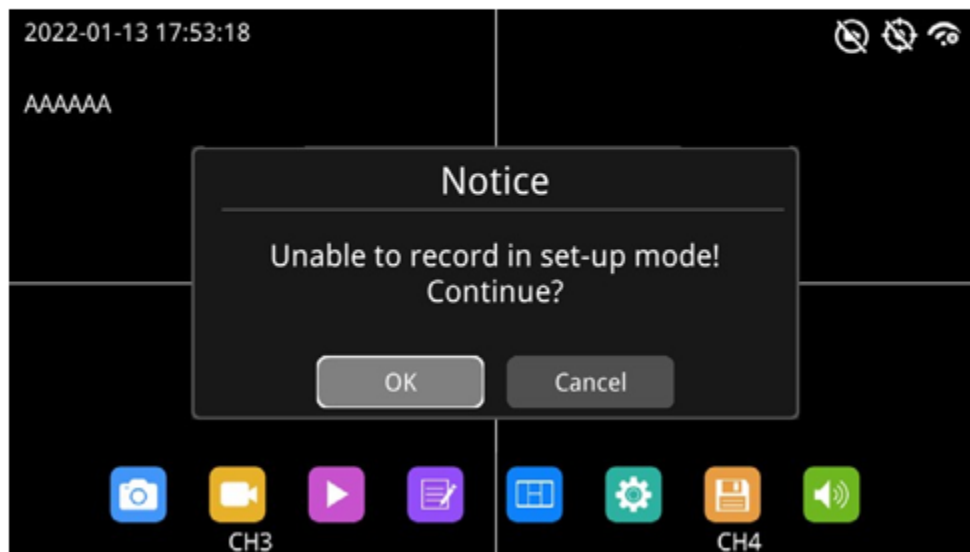


- ① Mode Selecting
- ② Press this button to set the currently selected mode to the default mode
- ③ Click to exit

SYSTEM SETTING



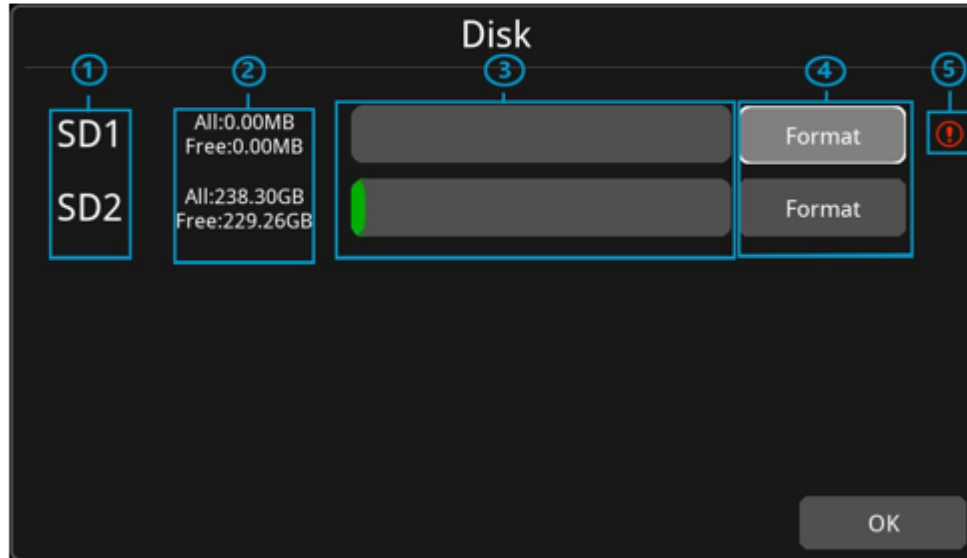
System Settings Button: Click this button, or select it and press the SEL button to enter the settings menu. The prompt dialog box will display "Unable to record in set-up mode! Continue?". Press "OK" to enter.



DISK MANAGEMENT



Disk Management Button: Click this button, or select it and press the SEL button to view the status of the storage device. If no storage device is inserted, a prompt of "No Disk Available" will appear.



- ① Disk Type
- ② Disk Capacity
 - All: Total capacity of the storage device
 - Free: The rest available storage
 - If all displays 0.00MB, it means that the monitor cannot access such disks
- ③ Desk Capacity Bar
 - Green displays the size of all recording files in the "normal" list
 - Yellow displays the size of all other files except for the above ones
- ④ Press this button to format the SD card
 - The prompt dialog box will display "SD1 card data will be deleted! Continue?". Press "OK" to start formatting the disk
 - If the disk cannot be formatted, please check if it is damaged
- ⑤ Exit: Exit the screen
 - Normally, all new disks need to be formatted before use

VOLUME



Volume Adjustment: On a scale of 0-10, default is 10

Function	Min.	Max	Default
Volume	0	10	10

RECORD SETTING



Power-On Recording: If this option is set on, the system will start recording after powering on, and this function is set on by default.

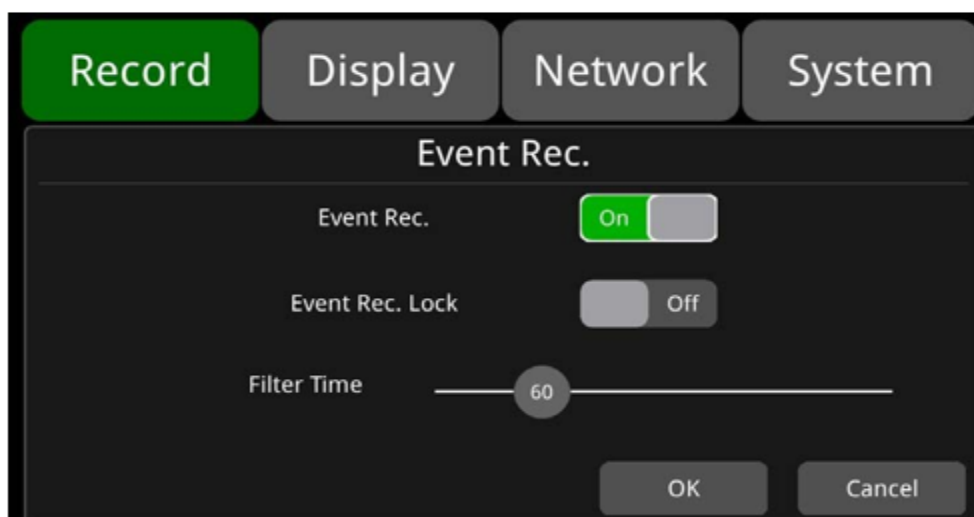


Cyclic Recording: If Cyclic Recording is set on, the new video file will overwrite the previous video files when the disk is full. Otherwise, recording will stop when the disk is full. This function is on by default and will soon overwrite recording files

RECORD SETTING CONTINUED...

Event Rec. Setup

Event Recording: Types of event recording include acceleration sensor triggered alarms and 1-5 triggered alarms. If event recording is on and the alarm parameters are set, the event recording will be triggered when the event occurs. If event recording is off, even if the event occurs, it will not trigger recording. The feature is set on by default.



Event Recording Lock: When it is off, and when 20% of the disk storage is used by event recording, the new event recording will start overwriting the earliest recording file. When set on, recording overwrite will only cover normal recordings, not event recordings. Default setting is off.

Filter Time: Time Filtering, as shown in the figure above, if the same alarm is triggered continuously, an alarm message is generated every 60 seconds, and every 60 seconds there will be a detection to confirm whether a new alarm recording is generated. The minimum filtering time is 1sec, maximum 300secs. Default value is 60secs.

Record Channel Setup

Recording Channel: Select the recording channel. The selected channel will be recording the normal videos.

Event Duration 5s 10s 15s

Event Duration: When event recording is on, its file length can be set as 5s, 10s, and 15s. 10s is default settings.

File Length 5 min 10 min 15 min

File Length: The length of AVI format video files can be set as 5min, 10min, and 15min. The default recording file length for AVI format is 5min.

G-force Sensitivity Off Low High

G-Sensor Sensitivity: When the acceleration or gyroscope of the G-Sensor reaches the preset sensitivity value, G-Sensor recording will be triggered. If G-Sensor triggered recording is off, event recording will not be triggered. G-Sensor sensitivity can be set to two levels, low / high.

File Type AVI MSV

File Type: Set video format. Currently only AVI format is available.

Record Audio Setup

Record Audio: Set the recording audio of the channel. When the recording channel is selected, the audio of the channel will be recorded in the recording file. If this channel is not selected, there is no audio in the recording of this channel.

VIDEO QUALITY

Video
Quality

Setup

Record

Display

Network

System

Video Quality

Main stream

JPG

Resolution

AUTO

Bitrate

AUTO

Framerate

25fps

OK

Cancel

Main Stream is for video storage, while JPG is for WLAN streaming.

Default settings of Main Stream and JPG are as follows:

	Main Stream	JPG
Resolution	AUTO	NONE
Bitrate	AUTO	NONE
Framerate	25fps	LOW

① Five resolution options available for main stream: 1080P, 720P, D1(PAL), D1(NTSC), AUTO. The higher the resolution, the better video quality, and the larger the video file. All factors should be considered during configuration.

► In the "Resolution" option, "AUTO" is defined as follows:

	MAIN STREAM
AUTO	The monitor will indentify camera format and record videos of that format

② There are 8 levels of bitrate available in the mainstream menu: 4Mbps, 2Mbps, 1Mbps, 512Kbps, 256Kbps, 128Kbps, 64Kbps, **AUTO**. The higher the bitrate, the clearer the image, and the larger the recording files. All factors should be considered during configuration.

► In the "Bitrate" option, "AUTO" is defined as follows:

	MAIN STREAM
AUTO	If a 1080p camera is connected, the bitrate is 4Mbps. Likewise, 2Mbps for a 720p camera, 1Mbps for a D1 camera.

VIDEO QUALITY CONTINUED...

③ There are 8 levels of framerate available in the mainstream menu: 30fps, 28fps, 25fps, 20fps, 15fps, 14fps, 10fps, 5fps. The higher the framerate, the smoother the image, and the larger the recording files. All factors should be considered during configuration

SD Capacity	Video Quality	File Length
2TB	4 x 1080P / 4Mbps	≈298h
	4 x 720P / 2Mbps	≈596h
	4 x D1 / 1Mbps	≈1193h
	1 x 1080P / 4Mbps	≈2387h
	1 x 720P / 2Mbps	≈2400h
	1 x D1 / 1Mbps	≈4772h
512GB	4 x 1080P / 4Mbps	≈75h
	4 x 720P / 2Mbps	≈149h
	4 x D1 / 1Mbps	≈298h
	1 x 1080P / 4Mbps	≈298h
	1 x 720P / 2Mbps	≈596h
	1 x D1 / 1Mbps	≈1193h

④ Four options for JPG framerate: Excellent, High, Mid, Low. Definitions are as follows:

Excellent	The speed at which images are uploaded to a webpage is unlimited (the fastest), thus rendering the smoothest image effect.
High	Upload Speed: 1sec for 1 image
Medium	Upload Speed: 3sec for 1 image
Low	Upload Speed: 5sec for 1 image

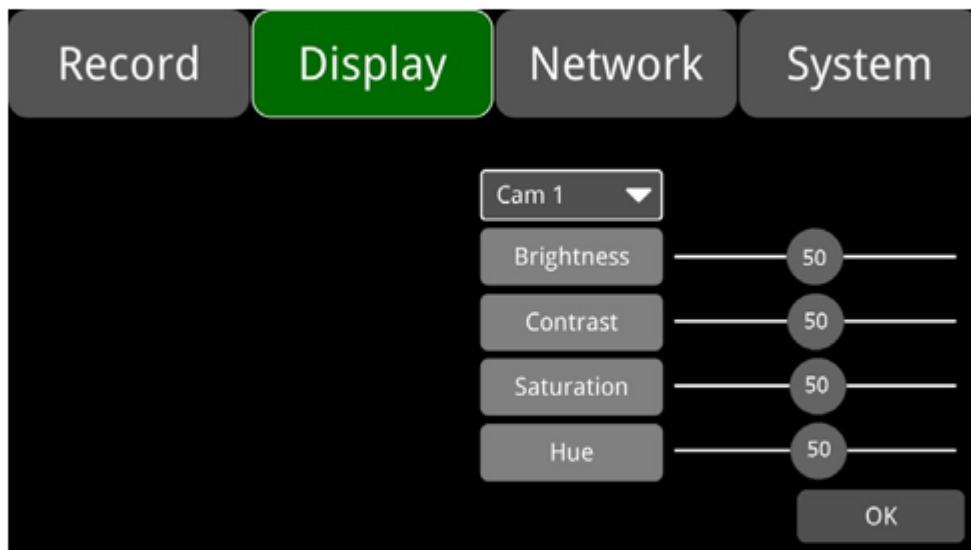
DISPLAY



CAMERA DISPLAY SETTING



Camera parameter setting for each corresponding channel includes brightness, contrast, saturation and hue. The default values of brightness, contrast, saturation and hue of all channels are shown in the figure below. To change the value, drag the bar to left or right to decrease or increase.

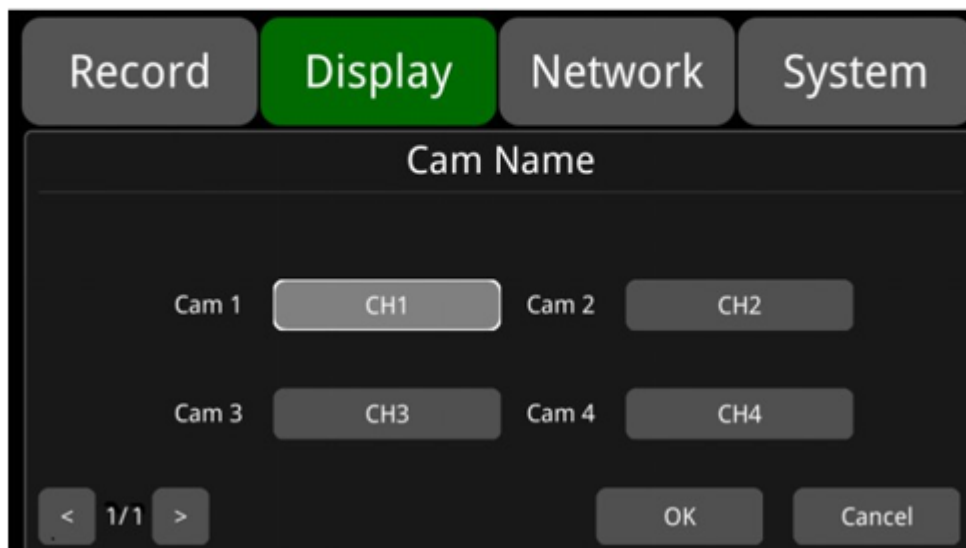


Camera Display	Min.	Max.	Default
Brightness	0	99	50
Contrast	0	99	50
Saturation	0	99	50
Hue	0	99	50

CAMERA NAME SETTING



Camera Names are displayed at the bottom of each channel. Touch the "Display → Camera Name → Cam" on the menu, a keyboard will pop up to input a new camera name. Maximum 8 characters can be entered and the camera name must NOT be blank. The default configuration is shown below.



SYSTEM LANGUAGE SETTING



Menu Languages: Currently only English, Russian, and Chinese are available. The default language is English.



AUDIO OUT



Audio Out: Select the audio output channel in multi-display mode. The default configuration is shown below. **If Audio Mix is on, there's audio output from all channels.**



OSD DISPLAY



Time, Camera name, License number and Speed can be selected whether or not to be displayed. If selecting on, the information will be shown in the live and the playback video. The default configuration is shown below.

Record Display Network System

OSD

Time On Off

Camera Name On Off

License No. On Off

Speed On Off

OK Cancel

MENU ON



Set the menu display duration. The default configuration is shown below.

Record Display Network System

Menu On

30s 60s 120s Always

Menu Lock On Off

OK Cancel

Menu lock: Menu on duration can be set to 30sec, 60sec, 120sec, and Always. When set to 30sec, 60sec, or 120sec, that is, after opening the menu, if there is no operation in 30sec, 60sec, or 120sec, the menu will be hidden. When it is set to always, the menu will always be open. Please be note that the recording will stop when menu is on. It is not suggested to set the duration to Always in order not to affect the recording.

On: When it is On, permission is required to enter the menu

Off: When it is Off, no permission is required to enter the menu

► Username "admin" and corresponding password are required to change the status of the menu lock

SPEED



Speed Setting: The overspeed info comes from GPS (Source). Speed unit is optional: Km/h or Mile/h; Overspeed threshold can be set by user. Duration is the overspeed alarm time. Speed means the current vehicle speed. If the Speed continues to exceed the Overspeed value for a time longer than Duration, the monitor will trigger an overspeed alarm recording.

- ▶ The alarm switch is to set the over-speed alarm recording status. If it is ON, the overspeed alarm recording will be triggered when there is an overspeed event. If it is OFF, the overspeed alarm recording will not be triggered.

Overspeed	Min.	Max.	Default
Km/h	0	200	120
Mile/h	0	125	75

GPS



GPS: When the GPS antenna is properly installed, the speed info will be recorded to the files. The menu provides GPS information including latitude, longitude, detectable satellites, and accessible satellites etc.

Mode: connected Used: 8 Visible: 13

Lat: 23.1224
Lon: 113.383
Alt: 29.2
Speed: 0.03
UTC: 2018-07-26 05:45:04

Mode: GPS connection status

Used: The number of available satellites

Visible: The number of searchable satellites

MIRROR



Horizontal and vertical flips of all channels are turned off by default.

Horizontal: when it is set to ON, the corresponding recording channel will flip horizontally; when it is set to OFF, there will be no flip. Below are setting steps



Vertical: When it is set to ON, the corresponding recording channel will flip vertically; when it is set to OFF, there will be no flip. Below are setting steps.

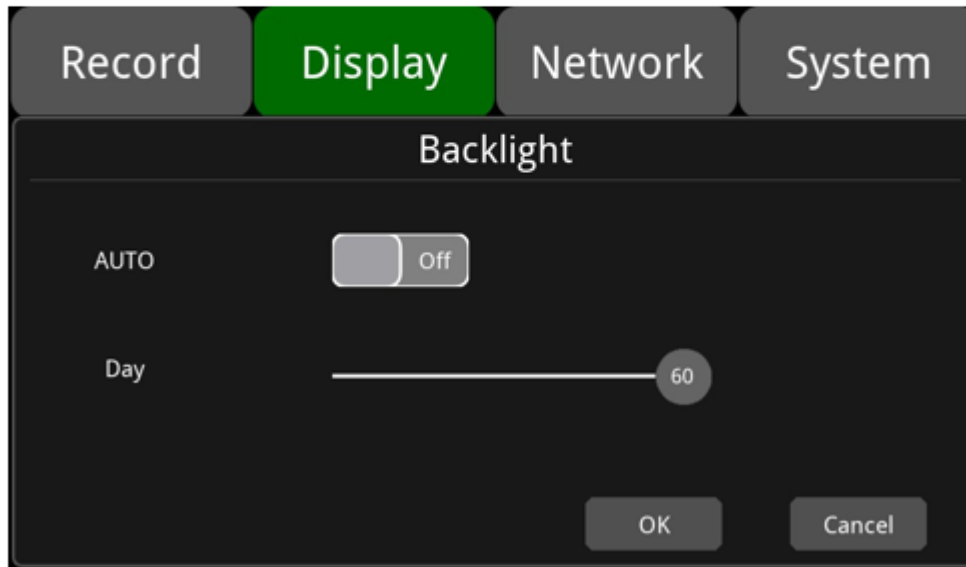


BACKLIGHT

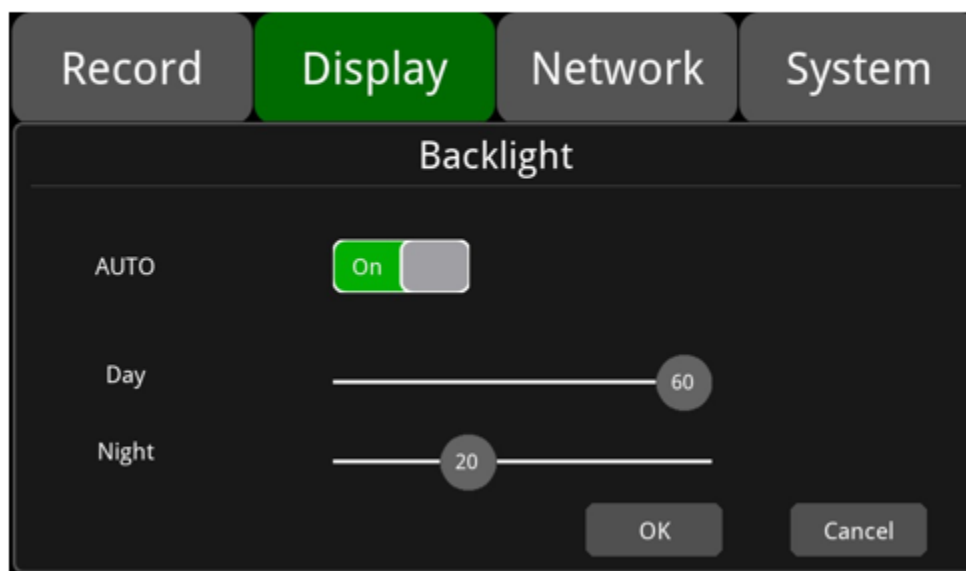


Backlight Adjustment: Adjust monitor backlight brightness

- ▶ When AUTO is set to OFF, only DAY backlight can be adjusted.



- ▶ When AUTO is set ON, both DAY and NIGHT backlight can be adjusted. The monitor will automatically adjust the backlight brightness based on the ambient light. When the environment is bright, the backlight of the monitor is set to DAY, and when it is dark, the backlight will be set to NIGHT.



WLAN NETWORK SETTING



Record Display **Network** System

WLAN

WLAN On Off DHCP On Off

SSID

IP

Mask

Gateway

OK

WLAN: ON/OFF status of WLAN

DHCP: Dynamic Host Configuration Protocol. Set On for dynamic IP and Off for static IP. Static IP requires input with IP address, mask and gateway

SSID: Click to view the available WLAN networks. Click on WLAN network and input the correct password to connect to WLAN

NETWORK STATUS



Network Status: Users can view information such as local wired network IP address, MAC address, WLAN network connection status, WLAN IP address, WLAN signal strength, etc. In addition, users can verify whether the network connection is successful

Record Display **Network** System

WLAN	On (asd123)
RSSI	A green Wi-Fi signal strength icon.
IP	192.168.2.105
Status	CONNECTED

OK

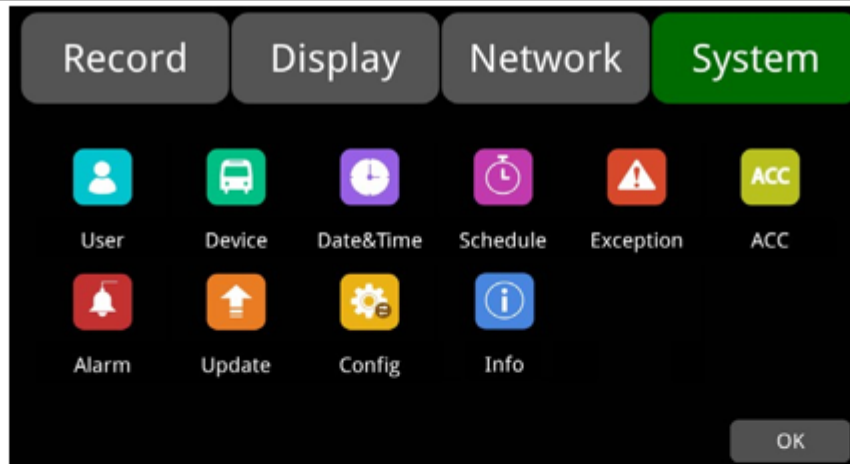
WLAN: WLAN ON/OFF status

RSSI: WLAN signal strength

IP: WLAN IP address

Status: WLAN connection status

SYSTEM



SYSTEM - LOG IN SETTING



Log In Setting: Set user name and password for entering the menu. The initial password is 123.

A screenshot of a dialog box titled "User" with a dark background. It has four tabs: Record, Display, Network, and System. The System tab is highlighted in green. Below the tabs, there are four input fields: Username (with "admin" entered), Password, New Password, and Confirm Password. At the bottom right, there are OK and Cancel buttons.

SYSTEM - LICENSE PLATE NUMBER



License Plate Number: Input license plate number. Default setting is as below:

A screenshot of a dialog box titled "Device" with a dark background. It has four tabs: Record, Display, Network, and System. The System tab is highlighted in green. Below the tabs, there is one input field: License No. (with "AAAAAA" entered). At the bottom right, there are OK and Cancel buttons.

SYSTEM TIME



Format Setup: system time format setup

The screenshot shows the 'Format Setup' screen with the following settings:

- Time Zone:** UTC (labeled 1)
- Date Format:** YYYYMMDD (labeled 2)
- 24 Hour:** On (labeled 3)
- Hour:** 8 (labeled 4)
- Minute:** 0 (labeled 5)

Buttons for 'OK' and 'Cancel' are visible at the bottom.

Format default configuration is shown above

Go to System → Date & Time → Format → Setup page

- ① **Time Zone:** Time zone setting
- ② **Date Format:** Date format setting
- ③ **24 Hour:** If it is ON, time will be displayed in 24-hour format. If OFF, 12-hour format
- ④ & ⑤ **Hour & Minute:** Time zone setting is accurate to minute

Hour & Minute	Min.	Max.	Default
Hour	-12	14	8
Minute	0	59	0

The screenshot shows the 'DST' setup screen with the following settings:

- Enable:** Off (labeled 1)
- Offset:** one hour (labeled 2)
- Mode:** week (labeled 3)
- Start Time:** Feb. 01:01 (labeled 4)
- End Time:** Mar. 02:02 (labeled 5)

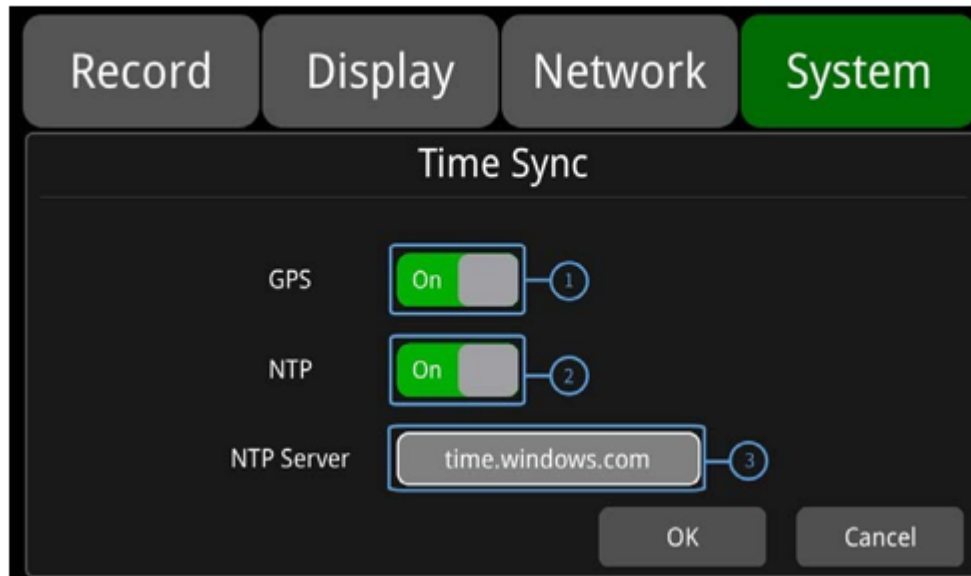
Buttons for 'OK' and 'Cancel' are visible at the bottom.

DST default configuration is shown above

Go to System → Date & Time → DST → Setup page

- ① **Enable:** Set DST setting to ON/OFF
- ② **Offset:** Adjust the offset after enabling DST
- ③ **Mode:** Select the mode of DST (setup DST according to the week or date)
- ④ **Start Time:** Set start time of DST
- ⑤ **End Time:** Set end time of DST

SYSTEM TIME CONTINUED...



Time Sync default configuration is shown above

Go to System → Date & Time → Time Sync → Setup page

- ① **GPS:** Set GPS to ON/OFF
- ② **NTP:** Set NTP to ON/OFF
- ③ **NTP Server:** Show the URL of the NTP Server

Application Scene	Usage
GPS: OFF & NTP: OFF	Set the time zone and daylight saving time (DST) first, then set the date and time
GPS: ON or NTP: ON	Time zone and daylight saving time (DST) must be set, no need to set date and time

► **Note:** When Time Sync → GPS or Time Sync → NTP is ON, the time zone and daylight saving time must be set; if the time zone is not set, GPS and NTP will change the system time to the default East 8 zone time, which might cause incorrect device time.

SYSTEM - SCHEDULED RECORDING



	Record	Display	Network	System
Schedule				
	Enable	Start	End	Weekday
Schedule 1	<input type="checkbox"/> Off	00:00	01:40	Setup
Schedule 2	<input type="checkbox"/> Off	00:00	01:40	Setup
Schedule 3	<input type="checkbox"/> Off	00:00	01:40	Setup
Schedule 4	<input type="checkbox"/> Off	00:00	01:40	Setup
		OK		Cancel

The default configuration is shown above

Enable: Set scheduled recording ON/OFF

Start: Set start time of scheduled recording

End: Set end time of scheduled recording

Weekday: Set scheduled recording by weekdays. Select the weekdays to schedule recording

Scheduled Recording:

- ▶ Support up to four appointed tasks. The recording duration is counted in minutes
- ▶ Recording time can overlap
- ▶ The start time of scheduled recording must be set ahead of the end time

SYSTEM - EXCEPTION



It can be set to examine the recording status of the monitor.

If the monitor does not generate normal recording videos, the buzzer will issue an alarm.

For stopping the alarm, please check whether the monitor is recording

The default configuration is shown below

- ▶ The buzzer issues a prolonged alarm sound for all types of alarm recordings.
- ▶ If you do not need the buzzer alarm, you can go to "System - Exceptions" page and set the buzzer from on to off. Please note that when the buzzer is set to off, no buzzer will sound for all event recordings

The image shows two screenshots. The left screenshot shows the 'System' menu with the 'Exception' option highlighted. The right screenshot shows the 'Exception' configuration screen with the 'Exception Buzzer' toggle set to 'On' and the 'Duration' set to '30s'.

Different beep modes represent different working states, as shown below:

If the buzzer beeps intermittently, it indicates that the monitor is not recording.

- ▶ Without SD card: one long beep + two short beeps
- ▶ SD card file system bug: one long beep + three short beeps
- ▶ When the SD card is normal, the recording file is full, and the recording overlay is not opened: two short beeps+ one short beep
- ▶ No camera input: two short beeps + two short beeps
- ▶ When the SD card is normal but the monitor is not recording: two short beeps + three short beeps

SYSTEM - ACC



Record Display Network System

ACC

Current Voltage 30.5 V

Shutdown Voltage 10 V

ACC Duration 0 min 5 s

OK Cancel

The default configuration of “Shutdown Voltage” and “ACC Duration” is shown above

Current voltage: Working voltage of the monitor

Shutdown voltage: When the current or voltage is lower than the shutdown voltage, the device will shut down automatically

ACC Duration: The device will continue recording for some time after ACC is disconnected. ACC duration can be set to 5sec to 60 min

ACC	Min.	Max.	Default
Shutdown Voltage (V)	9	24	10
ACC Duration (s)	5	3600	5

SYSTEM - ALARM



Record Display Network System

Alarm

Alarm 1 Alarm 2

Alarm 3 Alarm 4

Alarm 5

Priority

OK Cancel

Alarm 1~Alarm 5: Customized alarm recording

Priority: Set priorities for Alarm 1 to Alarm 5

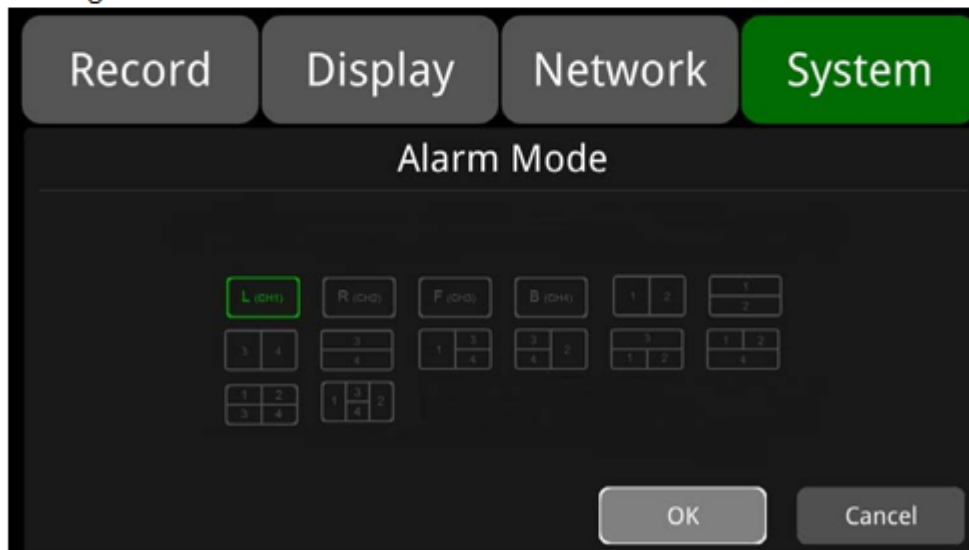
► When different types of alarm are triggered at the same time, alarms with the highest priority will work first

SYSTEM - ALARM CONTINUED...



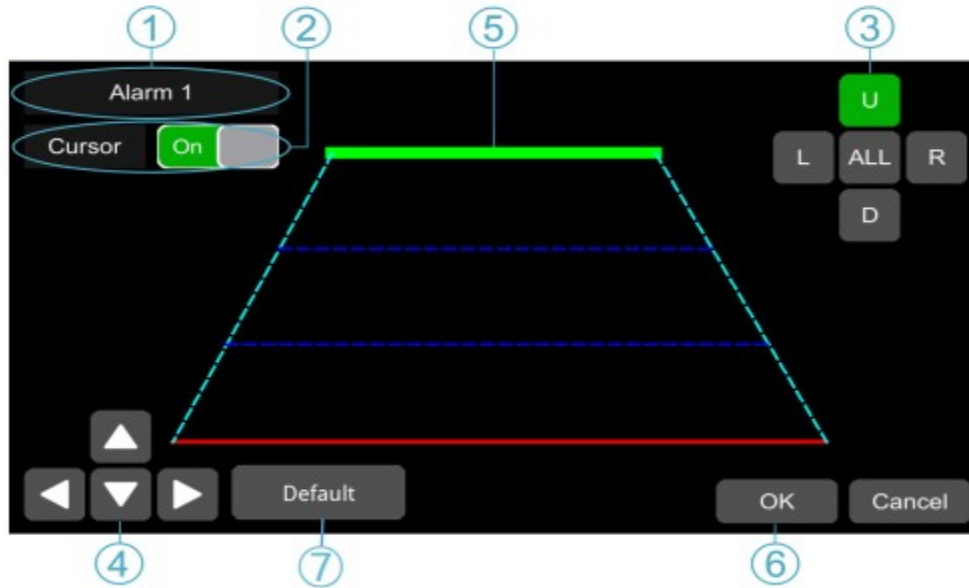
"Alarm 1" default configuration is shown above

- ▶ **Trigger Level:** There are 3 options of Trigger Level. The options "Low" and "High" are for turning on alarm function. "Low" is generally used for debugging while "High" is set to enable alarm function for on-road use. "Off" is to disable trigger alarm function
- ▶ **Output Duration:** "Display" "Cursor" "Alarm Out" effect duration. Output Duration time is optional: 0s, 5s, 10s, 30s, 60s, 5min, 10min, 30min, 60min, Always
- ▶ **Alarm Out-Buzzer:** Switch ON or OFF of the Alarm Out-Buzzer. Alarm time is 5 seconds by default
- ▶ **Alarm Out-Output1:** When it is set ON, then 12V level output would come from the alarm wire of Output
- ▶ **Alarm 1 Rec.:** Alarm 1 event recording switch, the recording duration is set in [System] → [Record] → [Event Duration].
- ▶ **Display:** When the alarm is triggered, the selected split mode will be displayed; the available split modes are shown in the figure below



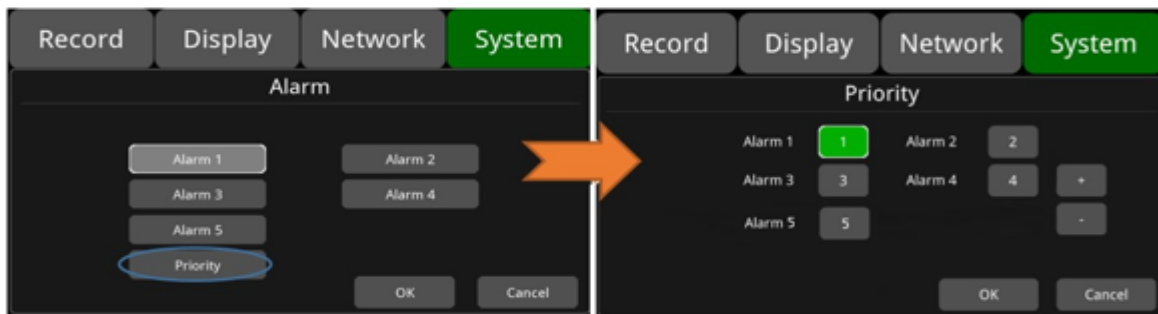
SYSTEM - ALARM CONTINUED...

► **Cursor:** It is "OFF" by default. The picture below shows the "ON" state



- ① Alarm type
- ② Touch to turn on/off the cursor
- ③ Line selecting: Line U (up), Line D (down), Line L (left), Line R (right) and ALL. Green means being selected. Remote control operation is available
- ④ Click the 4 directions (Up, Down, Left and Right) to adjust the shape of the cursor. The movements only affect the selected lines
- ⑤ Lines of cursor: The selected line will thicken for threefold. The two lines in the middle will not
- ⑥ Touch "OK" to save the settings and exit. Cancel to exit without saving any settings.
- ⑦ Click "Default" to turn back original state

► **Priority:** The default configuration is shown below



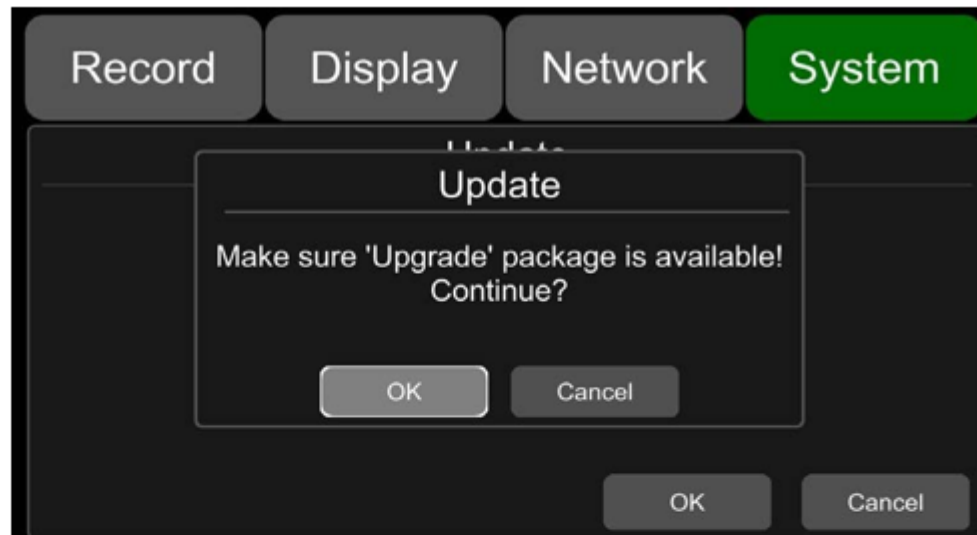
Touch to decrease trigger priority. The bigger the value, the lower the priority



Touch to increase trigger priority. The smaller the value, the higher the priority

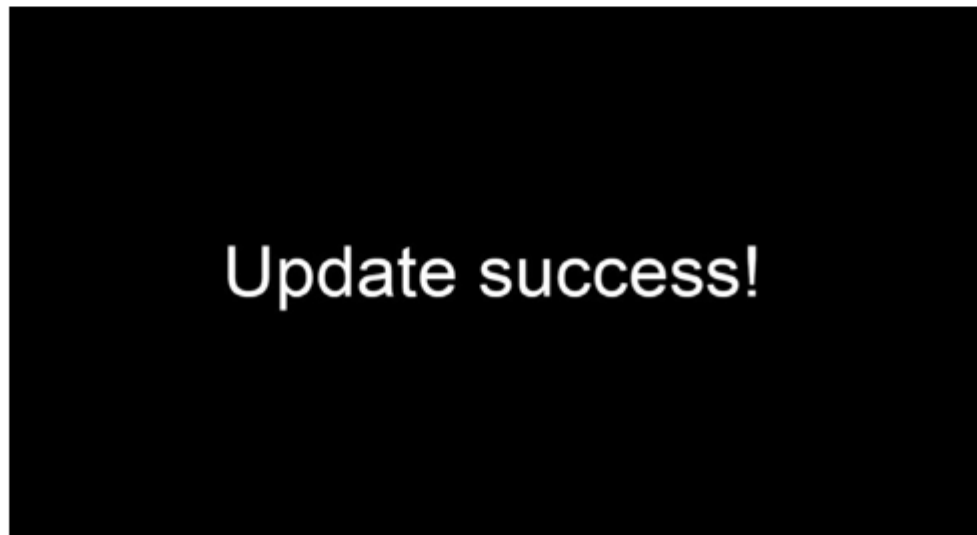
- Alarms with higher priority will be triggered first
- 1 stands for the highest priority, and 5 the lowest
- If two alarms A and B are triggered at the same time, and A's priority is higher than B's, then A will be recorded first. After A finishes the recording, if B is still being triggered, B will be recorded then. If B is no longer being triggered, it will not be recorded
- If alarm B is triggered and recorded, and then alarm A, whose priority is higher than B is triggered, alarm B recording will not stop

SYSTEM - UPDATE



► For single device

- Step 1:** Copy the files to the SD card/upgrade/package/local directory, insert the SD card into the monitor
- Step 2:** Power off the monitor and reboot it, then it will upgrade automatically. Or go to Menu → System → Update → Software, touch “OK” to confirm the update. Either way can proceed the upgrade process
- Step 3:** When “Update success!” is shown on the display, the device will reboot automatically



- Step 4:** After rebooting, please check if the version is the same as the one you copy into “upgrade” folder.
Instruction: Menu → System → Info

Note: After the upgrade is completed, the upgrade package in the SD card/upgrade/package/local directory will be renamed as “old_update_packet”.

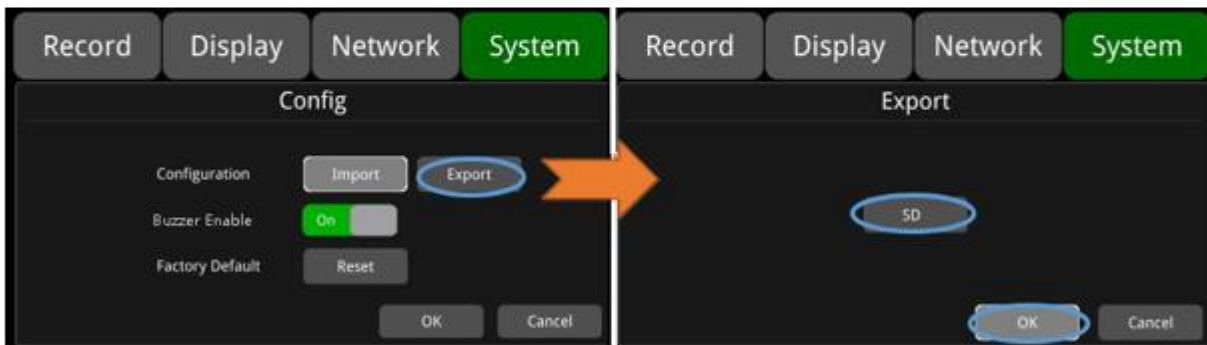
SYSTEM - CONFIGURATION



Configuration Import: Import the configuration information from the flash memory device and place the configuration file in the "sd/export_file/config" directory.



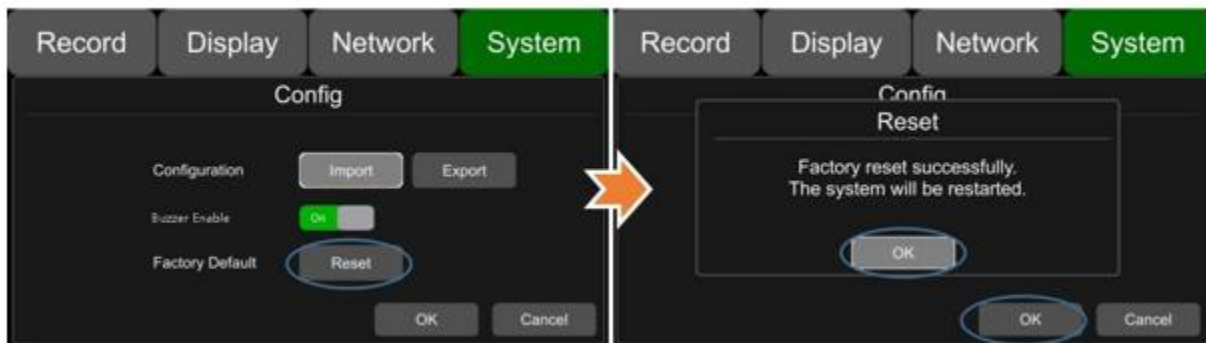
► **Configuration export:** Export configuration information to a flash device



► **Buzzer Enable:** When turn On, buzzer will alarm when there is touch screen operation and the device is responding the remote control demand



► **Factory Default:** Press "Reset" to restore factory settings



PRECAUTIONS

► Storage and Keeping

- Do not expose the monitor to excessive heat or cold. The storage temperature of this device is $-30 \sim +80^{\circ}\text{C}$, and the operating temperature is $-20 \sim +70^{\circ}\text{C}$.
- Never use this device near a bathtub, wash basin, kitchen, damp basement, swimming pool or similar places.
- Never use this device in the environment with excessive moisture, dust or smoke
- Avoid dropping or striking this device
- Avoid using this device in enclosed spaces, areas with excessive vibration or subject to severe impacts
- Never puncture, scratch or use abrasive cleaning materials on this device
- Do not place cables where they may be pinched or stepped on
- Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the device
- The monitor is not designed to be waterproof

► Operating Precautions

- The device can be powered by DC power 10V - 32V (e.g. 12V or 24V ACC)
- Make sure all cables are connected properly, and check the polarity, as improper cable connections may damage the monitor. Remove the power cable connections when you do not intend to use the device

WARNING!

- High voltage is present within the monitor. The opening of the case should be by professionals
- Do not watch the video while driving unless you are monitoring the display

SPECIAL NOTICE

Occasionally, a few highlights or dark spots may occur on the LCD screen. This is a very common phenomenon in active matrix display technology, and doesn't necessarily indicate any defects or faults

Never try to repair this device by yourself. In case of any problems, please turn off the display at once and notify our company or the authorized dealer. The monitor is a complex device, and any disassembly or modification may lead to damage and void the warranty.

MAINTENANCE

- Remove all the cable connections from the monitor before cleaning the device.
- Use a mild household detergent and clean the unit with a slightly damp, soft cloth.
- Never use strong solvents such as thinner or benzine, as they might damage the finish of the device



CAUTION!!!

Risk of Electrical Shock
DO NOT OPEN



Caution: to reduce the risk of electric shock, Do not remove cover (or back).
No user-serviceable parts inside.
Refer servicing to qualified service personnel

You are cautioned that any changes or modifications not expressly approved in this manual could void your warranty and necessitate expensive repairs

[FCC COMPLIANCE STATEMENT]

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
 - This device may not cause harmful interference
 - This device must accept any interference received, including interference that may cause undesired operation