

WEB UI Client Software User Manual

Thank you for using our mobile DVR.

Please read this user manual carefully to ensure that you can use this device properly and safely.

The contents of this manual are subject to change without notice. V1.2

AMERICAN BUS VIDEO INC.

Toll-Free 866.468.8042

Fax: 770.887.5944

AmericanBusVideo.com

SchoolBusCamera.com

VehicleVideoCameras.com

35+ Years of Mobile Digital Sales & Service Experience

Catalogue

1 Introduction	1
1.1 Purpose of Preparation	1
1.2 Terms and Abbreviations	1
2 Client Software Introduction	1
2.1 Software Usage	1
2.2 Operating Environment	1
2.3 Physical Structure.....	2
2.4 Basic Functions	2
3 Software Usage	2
3.1 Device Docking.....	2
3.1.1 Method 1: Wired Docking.....	3
3.1.2 Method 2: Wi-Fi Wireless Docking.....	4
3.2 Login System	6
4 Main Interface Display	7
5 Preview Interface	9
6 IPC Configuration.....	10
6.1 IPC Configuration	10
6.2 Add IPC Manually.....	11
7 Disk Management.....	14
7.1 Disk Management of Hard Disk Model.....	14
7.2 Disk Management of SD Model.....	15
7.3 Option	17
8 Parameter Configuration.....	17
8.1 Video Record Settings.....	18
8.1.1 Video Record Settings	19
8.1.2 Alarm Recording (The following picture is an example of HD waterproof network MDVR)	31
8.1.3 Video Quality	32
8.2 Display Settings	34

8.2.1 Camera Display settings	35
8.2.2 Channel Name Settings	37
8.2.3 Audio Output	38
8.2.4 OSD Settings	39
8.2.5 Menu Delay Settings.....	40
8.2.6 Speed Settings.....	40
8.2.7 GPS.....	41
8.2.8 Mirror-Horizontal	43
8.2.9 Mirror-Vertical.....	43
8.2.10 System Format Settings.....	44
8.2.11 CVBS Correction.....	44
8.3 Server Settings	46
8.3.1 Network Status	47
8.3.2 LAN Port Network Settings	48
8.3.3 Wi-Fi Network Settings.....	49
8.3.4 2G/3G/4G Network Settings	50
8.3.5 Network Settings	51
8.3.6 Files Uploading	51
8.3.7 Filter Channel Uploading (HD waterproof network MDVR doesn't have this module).....	53
8.4 System Settings.....	54
8.4.1 System Information	55
8.4.2 Login Settings	56
8.4.3 License Number Settings	57
8.4.4 System Time Settings	58
8.4.5 Daylight Saving Time Settings.....	59
8.4.6 Scheduled Recording.....	60
8.4.7 Buzzer Abnormal Alarm Settings.....	60
8.4.8 ACC Settings.....	62
8.4.9 Alarm Settings.....	63

8.4.10 Update	65
8.4.11 Logo Updating	66
8.4.12 Configuration Information Settings	67
8.4.13 Volume	68
8.4.14 ADAS.....	69
8.4.15 DMS	70
8.4.16 LDWS.....	71
8.5 Exit.....	71

1 Introduction

1.1 Purpose of Preparation

This document mainly focuses on the detailed instruction to the WEB UI user interface software operation process for the DVR device, providing reference for DVR device users.

1.2 Terms and Abbreviations

Term and Abbr.	Description
WEB UI	Website User Interface
MDVR	Multi-channel HD Network MDVR

2 Client Software Introduction

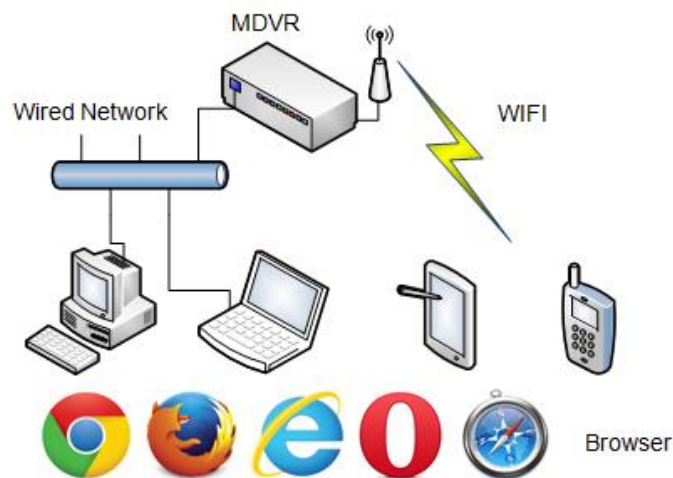
2.1 Software Usage

This software is an operator interface software, designed for MDVR device that operates independently without equipping with on-screen menus. The client communicates with the device via Internet (wired or Wi-Fi), which allows users to access easily and control the MDVR device in either an office environment or in a vehicle.

2.2 Operating Environment

Operating System	Windows, Android, IOS
CPU	AMD/Intel/Snapdragon/SAMSUNG/HUAWEI/Apple
Memory	512MB or above
Internet	Ethernet (wired network) or Wi-Fi wireless network
Software Platform	Support HTML5 browsers e.g.: Google Chrome, Mozilla Firefox, Opera, Safari, etc.

2.3 Physical Structure



The above picture shows the physical structure of the device connection. The client device can be a PC, mobile phone, or tablet. These devices are connected to the MDVR device via wired network or Wi-Fi wireless network, and then the MDVR device is accessed and operated by running the WEB UI software related resources of client browser.

2.4 Basic Functions

The main functions are as follows:

- (1) Display the preview screen of the device channel.
- (2) Configure IP camera.
- (3) Display and format storage media.
- (4) Configure the working parameters of device.
- (5) Configure the split mode of the preview interface.

3 Software Usage

3.1 Device Docking

Client device and MDVR can be connected by wired network or Wi-Fi wireless network.

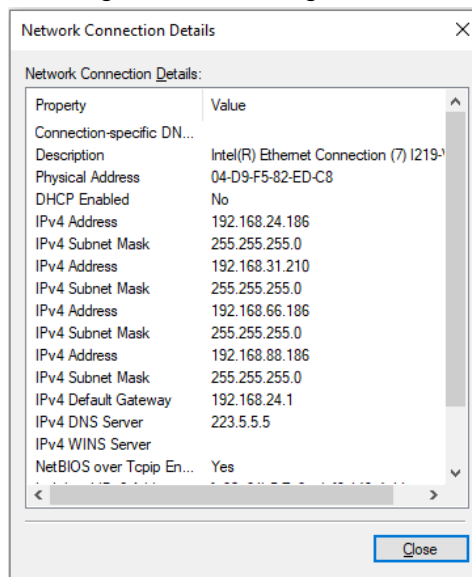
The introduction to each of them is as follows.

3.1.1 Method 1: Wired Docking

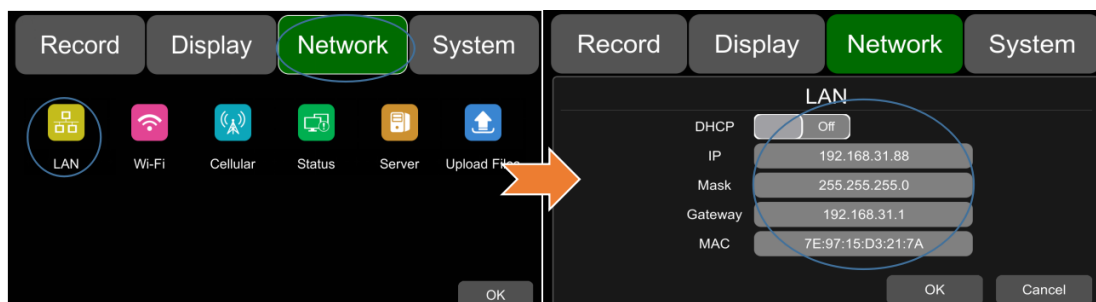
Client devices for docking using wired network are: office computer or laptop. Docking steps are as follows:

(1)Connect with network cable: connect the MDVR and PC to the same network via network cable (connect them to the same switch or router, or connect the PC network port directly to the MDVR network port).

(2)Configure the IP address: ensure both IP addresses of PC and MDVR are in the same network segment. For example: if the IP address of MDVR is 192.168.31.244, then the PC should set up an IP address using the network segment 192.168.31.xx as shown below.



Method to set up the static IP of DVR:



(3)Ping test: using ping command in PC cmd window to test whether the PC and MDVR are connected.

```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.16299.2166]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ping 192.168.31.244

Pinging 192.168.31.244 with 32 bytes of data:
Reply from 192.168.31.244: bytes=32 time=28ms TTL=62
Reply from 192.168.31.244: bytes=32 time=48ms TTL=62
Reply from 192.168.31.244: bytes=32 time=146ms TTL=62
Reply from 192.168.31.244: bytes=32 time=8ms TTL=62

Ping statistics for 192.168.31.244:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 146ms, Average = 57ms

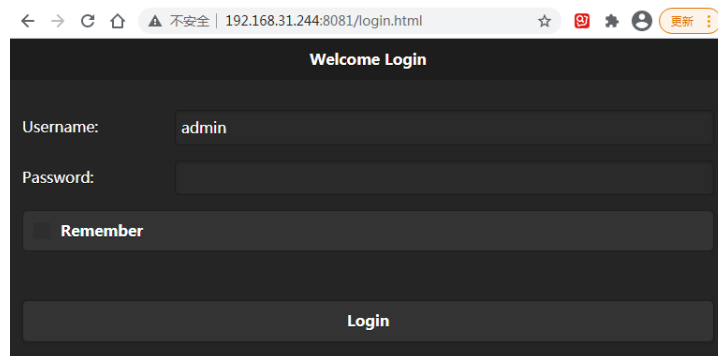
C:\Users\Administrator>^A
```

(4)Open the Login interface: run the PC browser (Google or Firefox browser is recommended) and input the MDVR address. (Input the static IP address directly to the address bar, e.g. input “192.168.31.244:8081”, press “Enter” button, then the rest will be filled in automatically).

User name and password (default):

Username: admin

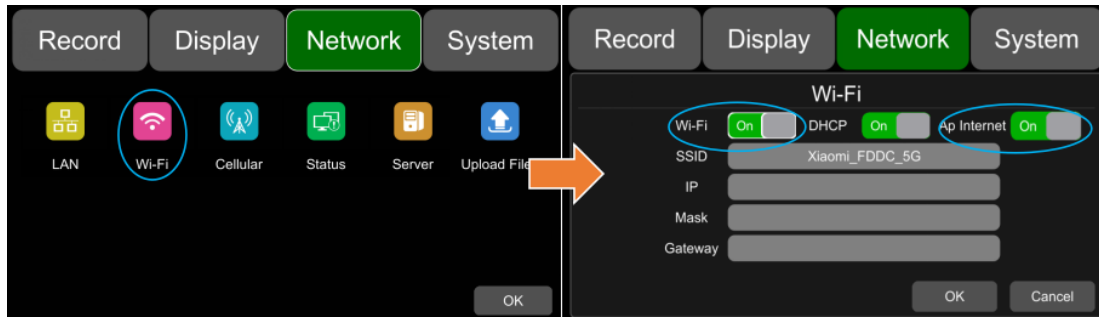
Password: 123



3.1.2 Method 2: Wi-Fi Wireless Docking

Client device with Wi-Fi function can be connected by Wi-Fi. Common devices include: laptop, PC and cell phone. Docking steps are as follows:

(1)Set AP Internet: ensure the AP Internet is on. More detailed settings are as follows:



(2) Search and connect to the MDVR Wi-Fi hotspot: The SSID name of MDVR hotspot is prefixed with "WFD-", followed by the serial number of the device (the password is: ap12345678), as shown below:

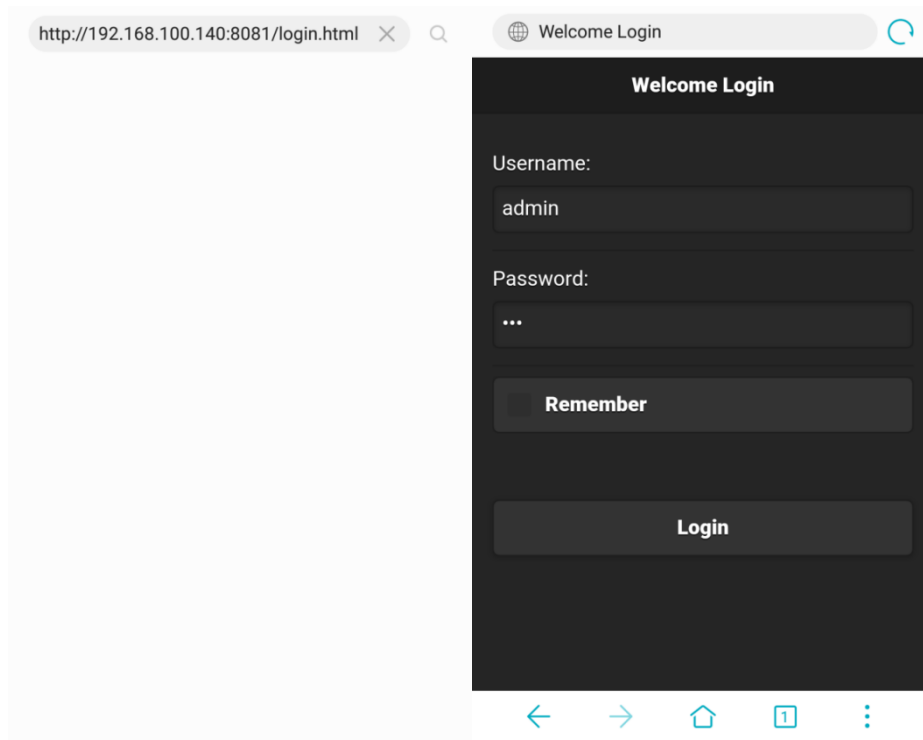


(3) Open the login interface: run the browser (embedded web browser or UC browser is recommended for mobile phone client) and input the MDVR address. (Input the static IP address directly to the address bar, e.g, 192.168.100.140:8081, then the rest will be filled in automatically), as shown below:

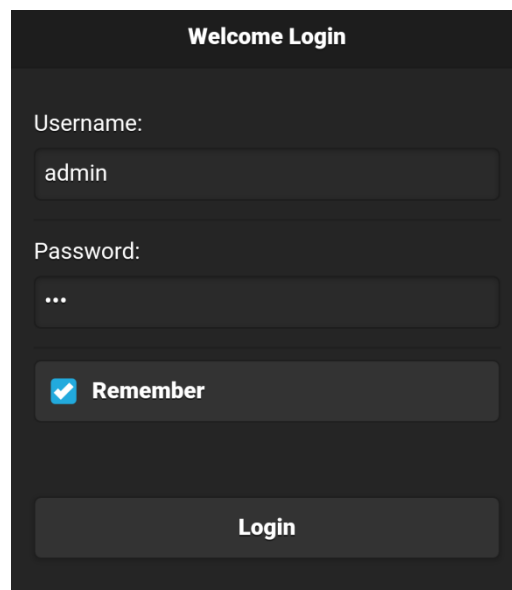
User name and password (default):

Username: admin

Password: 123



3.2 Login System



Web browser will show the login interface (see the picture above) after successfully docking with the device. Enter the user name, password and click "Login" to enter the interface system. Check "Remember", the browser will record the password corresponding to the IP address, then the password will be automatically filled in the next time you log in.

Note: After logging in, if there is no operation within 30 minutes, the system will log out by default. Click any operation after log out will return to the login interface for logging in again.

4 Main Interface Display

After logging in the WEB UI system, it will jump to the main interface, as shown below:

The following picture displays the interface of 4CH HD waterproof network MDVR:



① **Recording status:** the icon will display in red when recording, and in white when not recording.

② **Electronic lock status:** the icon will display in red when the electronic lock is closed,

and in white when the electronic lock is open.

③ **GPS status:** the GPS icon is always red after successful positioning. Alternating red and white when it is in the positioning state. The disconnected positioning is marked with a white cross.

④ **4G signal:** the icon will turn green when 4G signal is available, otherwise, it will be displayed in gray with a cross.

⑤ **Wi-Fi signal:** the icon will turn green when Wi-Fi signal is available, otherwise, gray with a cross will be shown.

⑥ **Full screen display:** click this icon to enlarge the window to full screen.

⑦ **Home menu:** click this icon to enter the parameters setting interface.

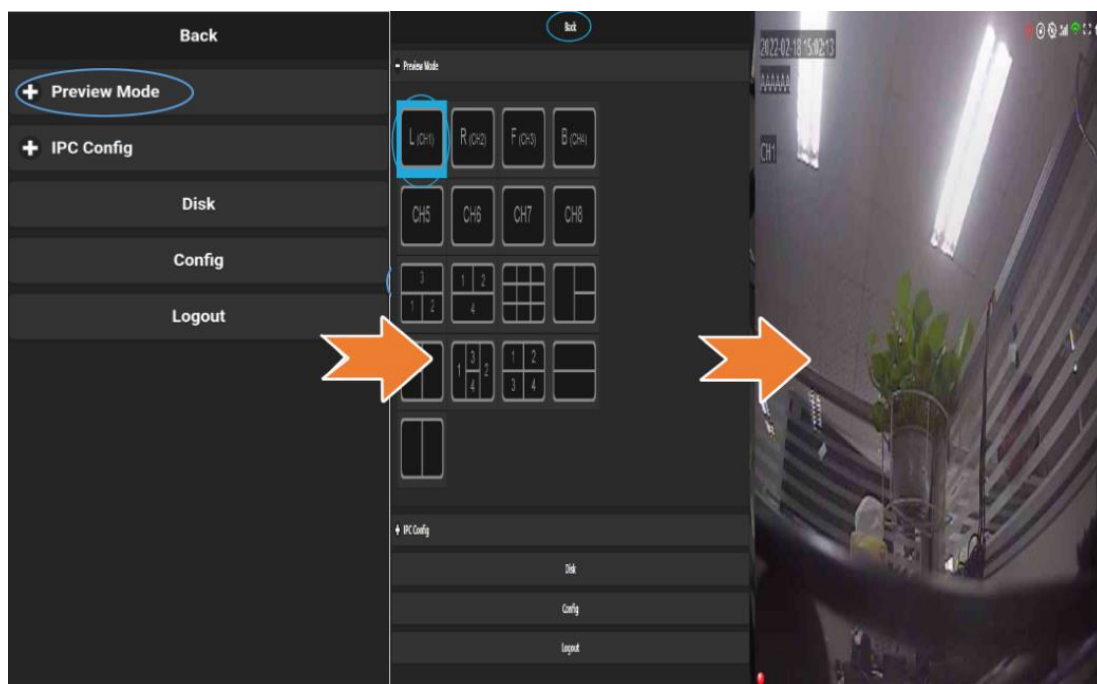
The following figure displays the interface of intelligent HD network MDVR:



- ① **Recording status:** the icon will display in red when recording, and in white with diagonal when not recording.
- ② **Electronic lock status:** the icon will display in green when the electronic lock is closed, and in white when the electronic lock is open.
- ③ **GPS status:** the GPS icon is always green after successful positioning. Alternating green and white when in the positioning state. The disconnected positioning is marked in white with diagonal.
- ④ **4G signal:** the icon will turn green when 4G signal is available, otherwise, it will be displayed in white upper left with a cross.
- ⑤ **Wi-Fi signal:** the icon will turn green when Wi-Fi signal is available, otherwise, white bottom right with a cross will be shown.
- ⑥ **Full screen display:** click this icon to enlarge the window to full screen.
- ⑦ **Home menu:** click this icon to enter the parameters setting interface.

5 Preview Interface

Click “Home” menu to enter the WEB UI setting interface. Click “Preview Mode” to enter the preview interface setting. Click to select the interface display split mode, and click “Back” to return after the selection. Then, the selected split mode will be displayed as shown in the following picture:

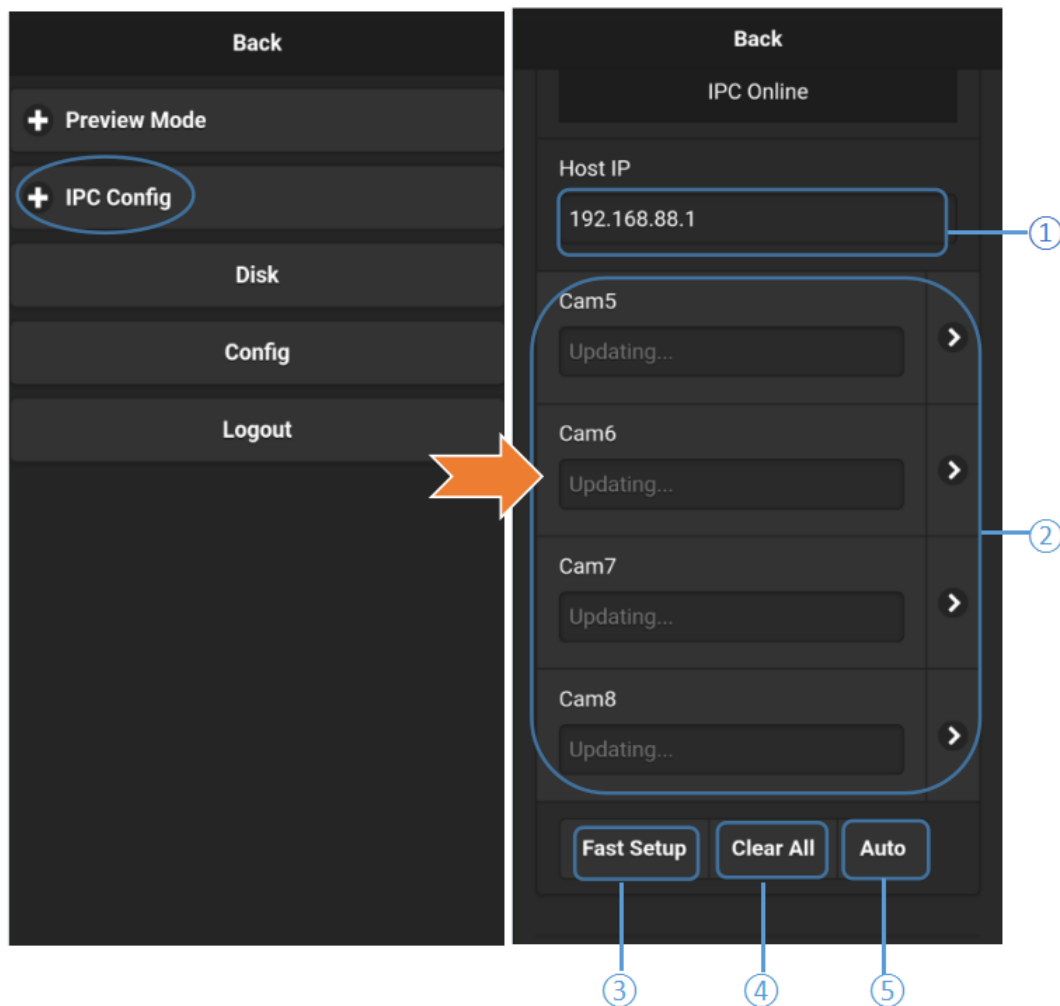


6 IPC Configuration

6.1 IPC Configuration

Click “IPC Config” to enter the IPC configuration interface. IPC channels cam5 - cam8 are for 4CH HD DVR; IPC channels cam9 - cam12 are for 8CH HD DVR.

The IPC channels of 4CH HD DVR are as follows:



① The default “Host IP” of DVR is 192.168.88.1. The connected IPC must be in the same network segment as DVR, so that it can be connected and used.

② A DVR can connect up to 4 IPCs, and the word “Updating” is displayed in the channel which is not connected.

③ Click this button, DVR will quickly connect to the detected IPC.

④ Click this button, DVR will disconnect all successfully connected IPC.

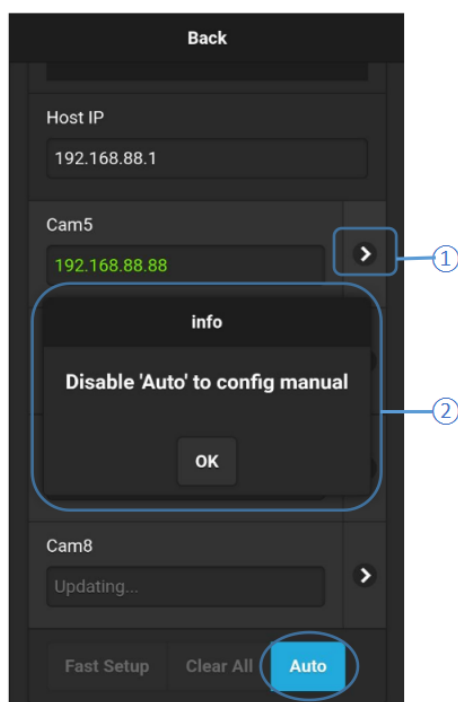
⑤ Automatically connect to the detected IPC. When “AUTO” is set to ON, “Clear”, “Add”, “Clear All”, “Fast Setup” cannot be operated.

6.2 Add IPC Manually

Click “IPC Config” to enter the IPC configuration interface. IPC channels cam5-cam8 are for 4CH HD DVR; IPC channels cam9-cam12 are for 8CH HD DVR.

The IPC channels of 4CH HD DVR are as follows:

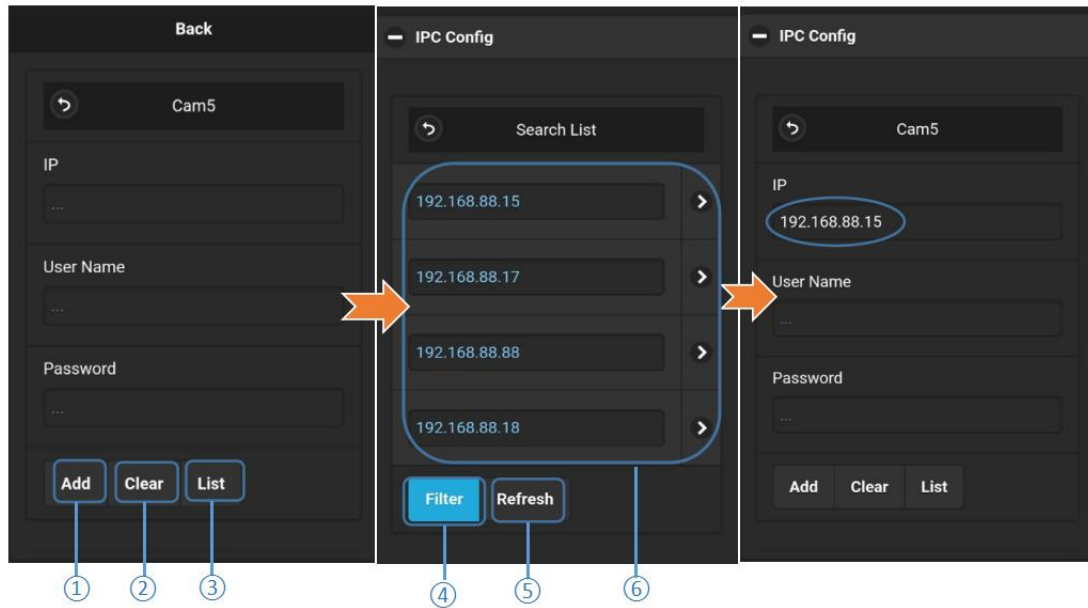
Click on the position shown in the picture ① to add IPC manually (taking Cam5 as an example, Cam6, Cam7 and Cam8 are the same). When “AUTO” is set to ON, the interface will appear a pop-up box as shown in the following picture ②.



Click “AUTO” to set to OFF, then click the position shown in the above picture ① to enter the manual add IPC interface. There are two ways to add the IP address of IPC.

Way 1: Auto Search

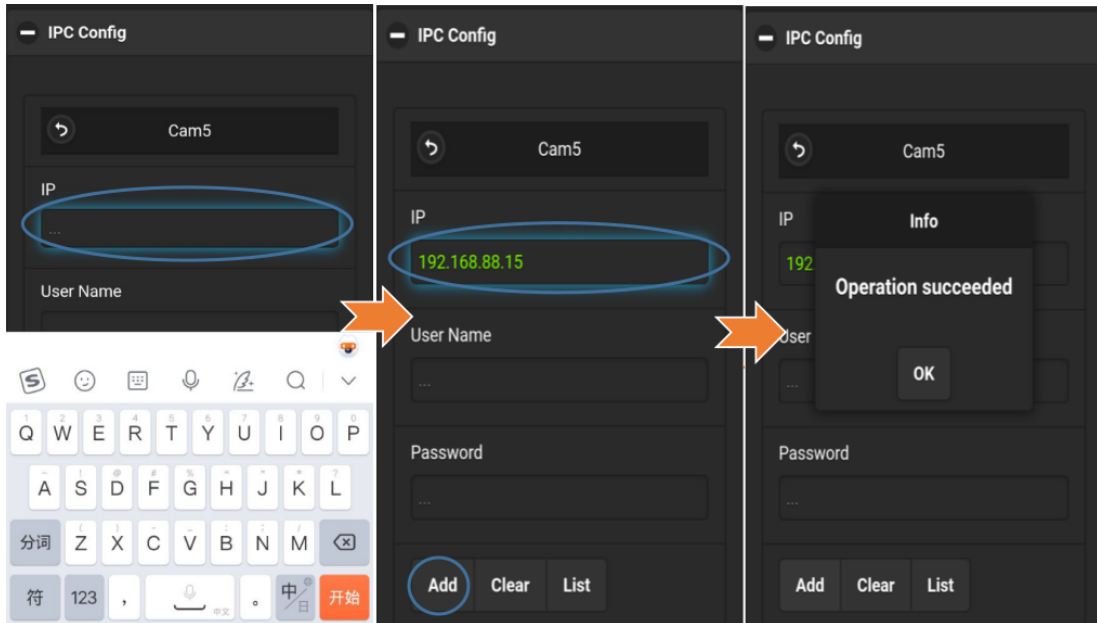
Click “List”, the available IP address for IPC will pop up, click the small arrow on the right of the corresponding IP address, and this IP will be added to the corresponding channel as shown in the picture below:



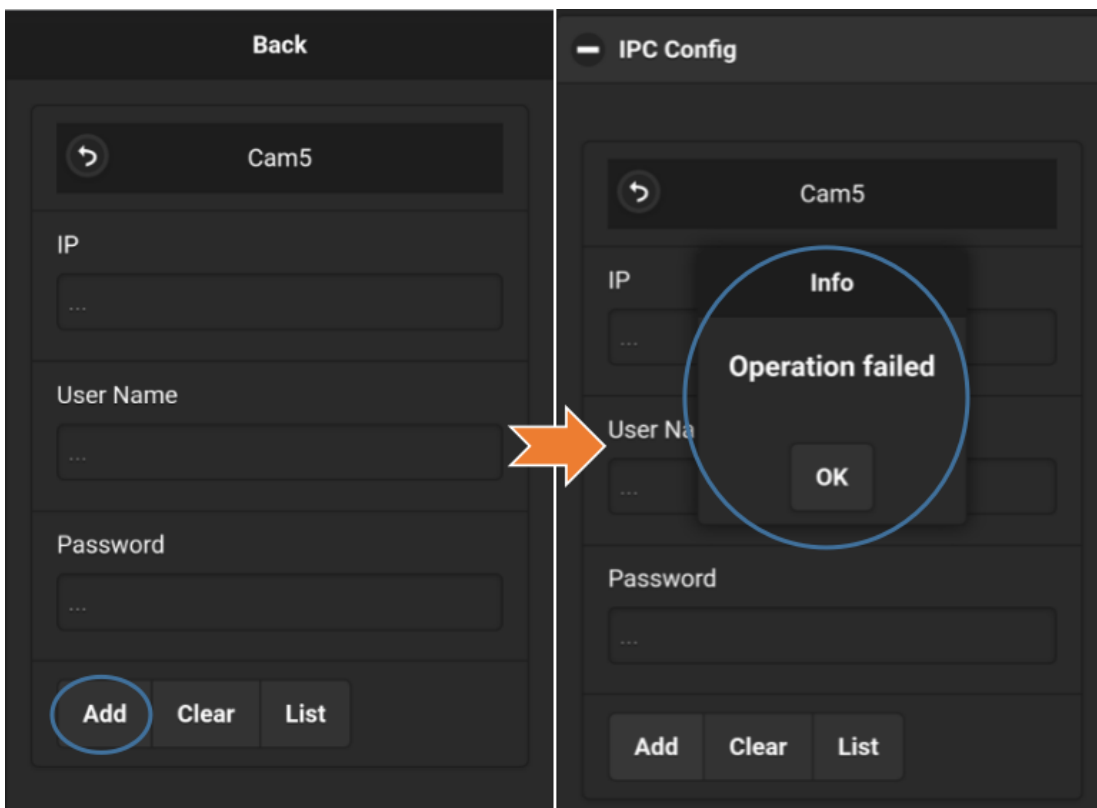
- ① **Add:** add IP camera manually.
- ② **Clear:** disconnect the connected IPC configuration.
- ③ **List:** search for the IP addresses that can be connected to the IPC.
- ④ **Filter:** filter the IP addresses of the successfully connected IPC.
- ⑤ **Refresh:** refresh the search list.
- ⑥ **Search List:** if “Filter” is on, this list shows the searched IP addresses of IPC that can be connected. If “Filter” is off, this list shows the searched IP addresses of all IP cameras.

Way 2: Manual input

- (1) Click the corresponding rectangular box below to input the IP address of IPC manually.
- (2) After inputting the IP address of the IPC, click “Add”, and a prompt box for “Operation succeeded” will pop up if there is a corresponding IP address.



If there is no corresponding IP address, a prompt box for “Operation failed” will pop up as shown below:

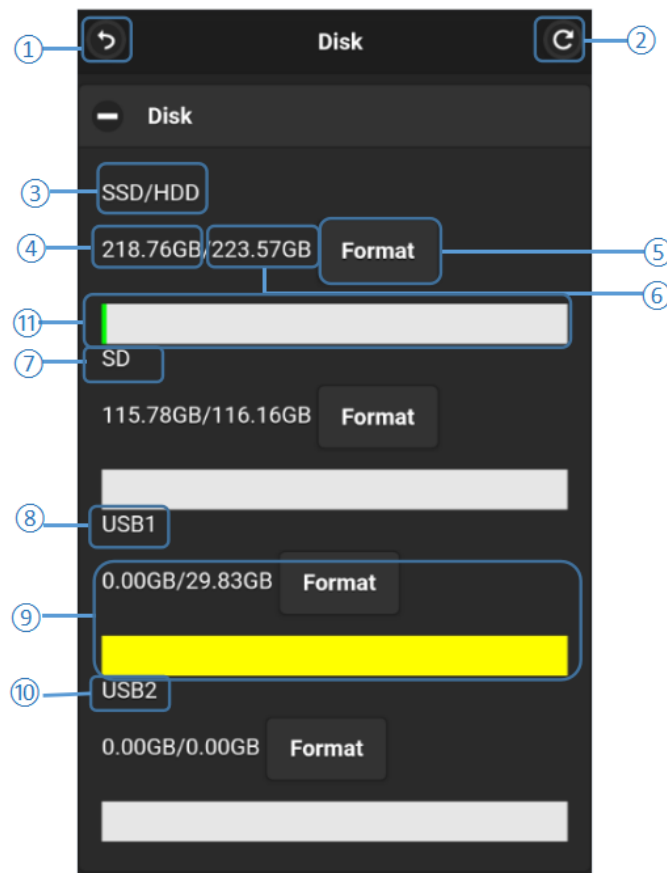


After adding IPC successfully, you can see the image of the channel corresponding to IPC camera on the display that connected to the DVR.

7 Disk Management

7.1 Disk Management of Hard Disk Model

This interface shows the total capacity and current available capacity of three storage medias: hard disk, SD card and USB. You can also format them directly on the WEB side as the following picture shows (take SSD as an example, SD card and USB are the same):



- ① **Return:** return to the previous menu.
- ② **Refresh:** refresh the current page.
- ③ ⑦ ⑧ ⑩ show the disk type.
- ④ Disk remaining available capacity.
- ⑤ **Format:** formatting.
- ⑥ The total capacity of the storage media.
- ⑨ The remaining available capacity of the disk shows 0.00MB, meaning that the DVR cannot access to this type of disk and must be formatted before it can be used.

⑪ Disk capacity bar:

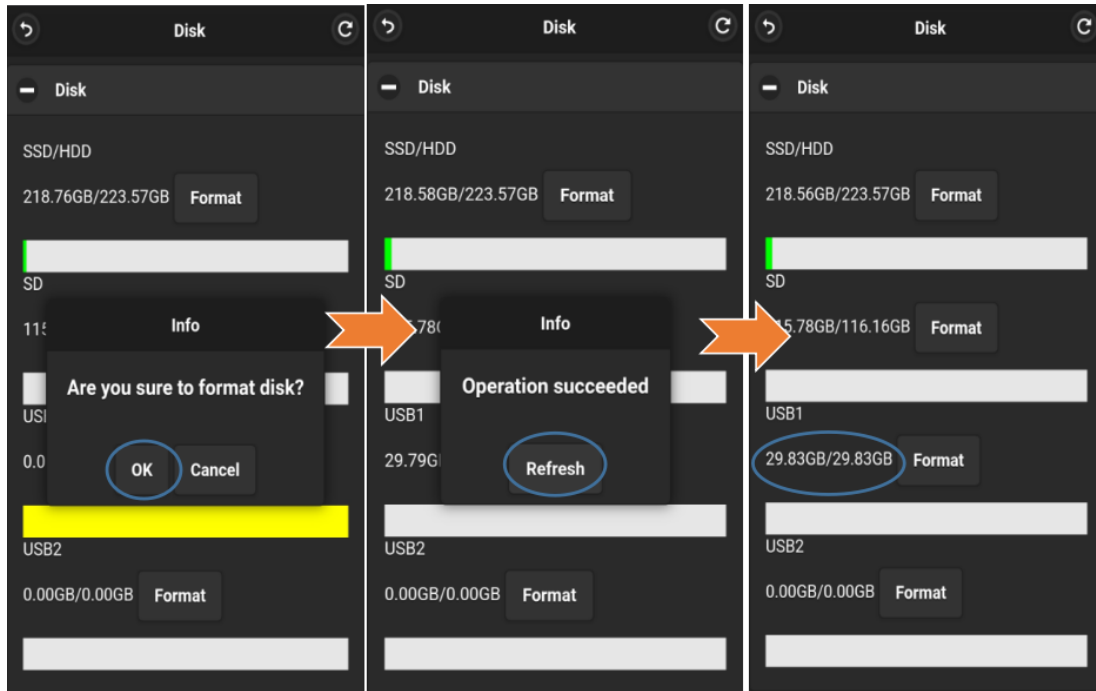
Green shows the size of all video files in the "Normal" list.

Red shows the size of all video files in the "Event" list.

Blue shows the size of all video files in the "Capture" list.

Yellow shows the size of all other files except those mentioned above.

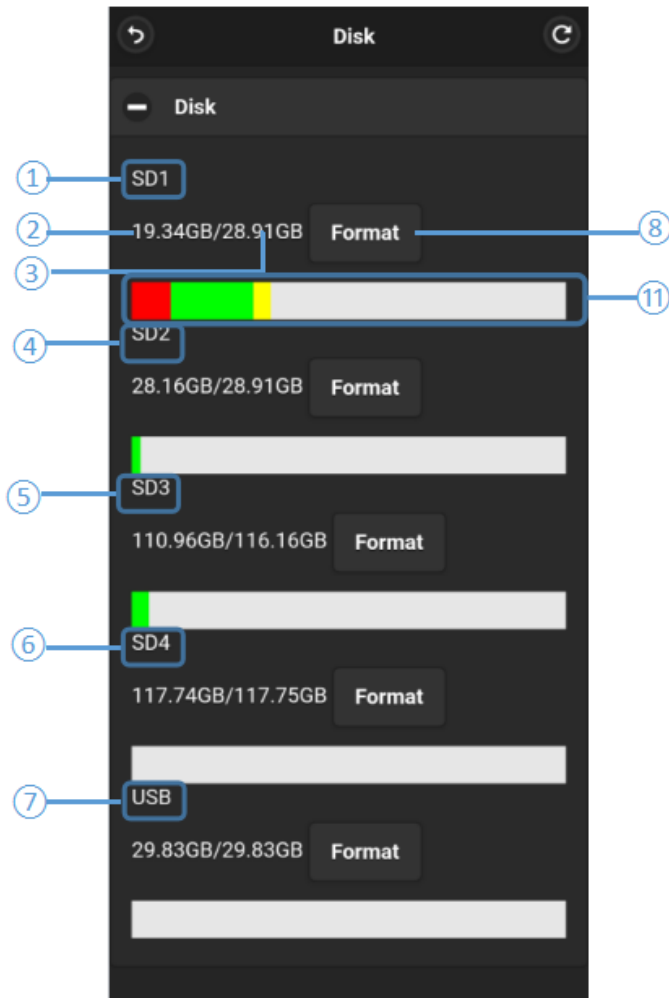
The picture below is an example of formatting USB1, click ⑤ to format it.



Note: The new disk must be formatted before it can be used.

7.2 Disk Management of SD Model

This interface shows the capacity and usage of SD card and USB. You can also format them directly on the WEB side. This Model can be compatible with 4 SD cards and one USB.



①④⑤⑥⑦ show the disk type.

② Disk remaining available capacity.

③ Total capacity of the memory card.

⑧ **Format:** format the memory card.

⑪ Disk capacity bar:

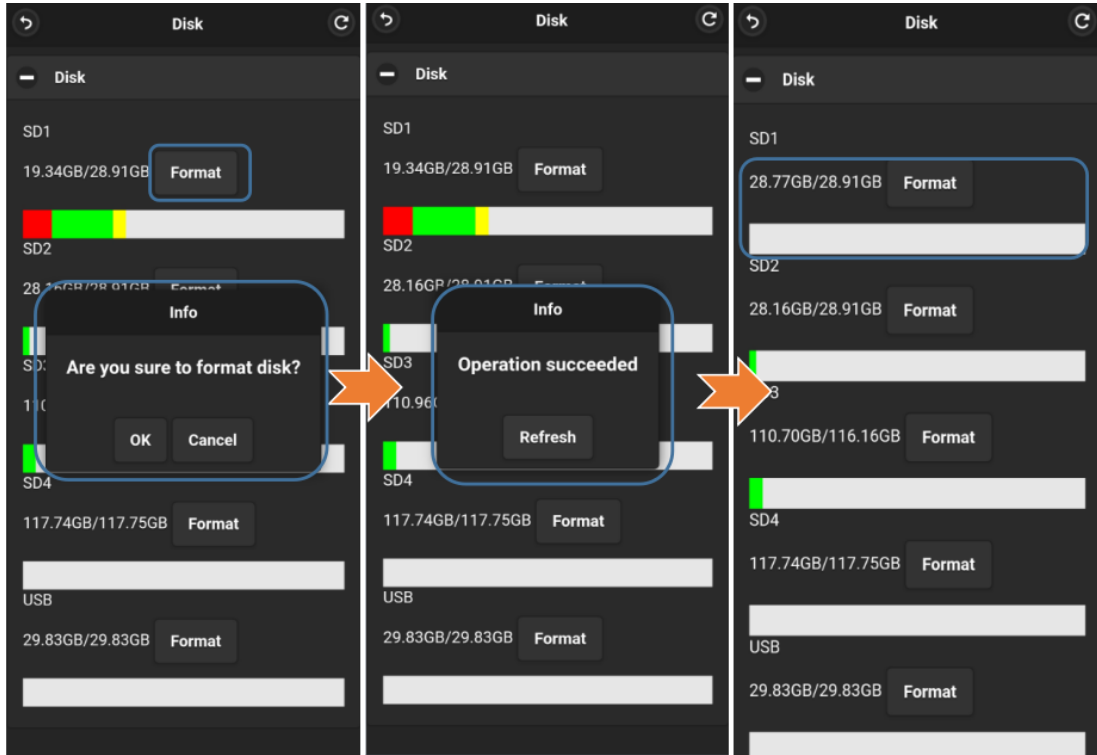
Green shows the size of all video files in the "Normal" list.

Red shows the size of all video files in the "Event" list.

Blue shows the size of all video files in the "Capture" list.

Yellow shows the size of all other files except those mentioned above.

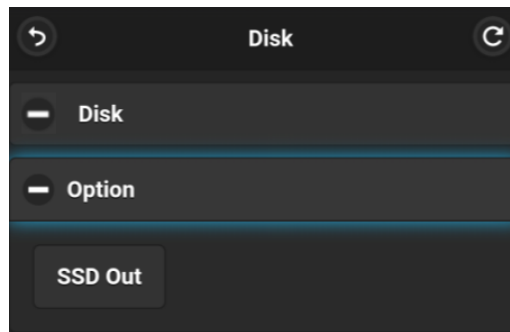
Click "Format" to format the storage media, then a prompt box will appear "Are you sure to format disk?". Click "Cancel" to cancel formatting, click "OK" to confirm formatting. When the formatting is done, the pop-up box will prompt "Operation Succeeded", then click "Refresh" to refresh the available capacity as shown in the picture below:



7.3 Option

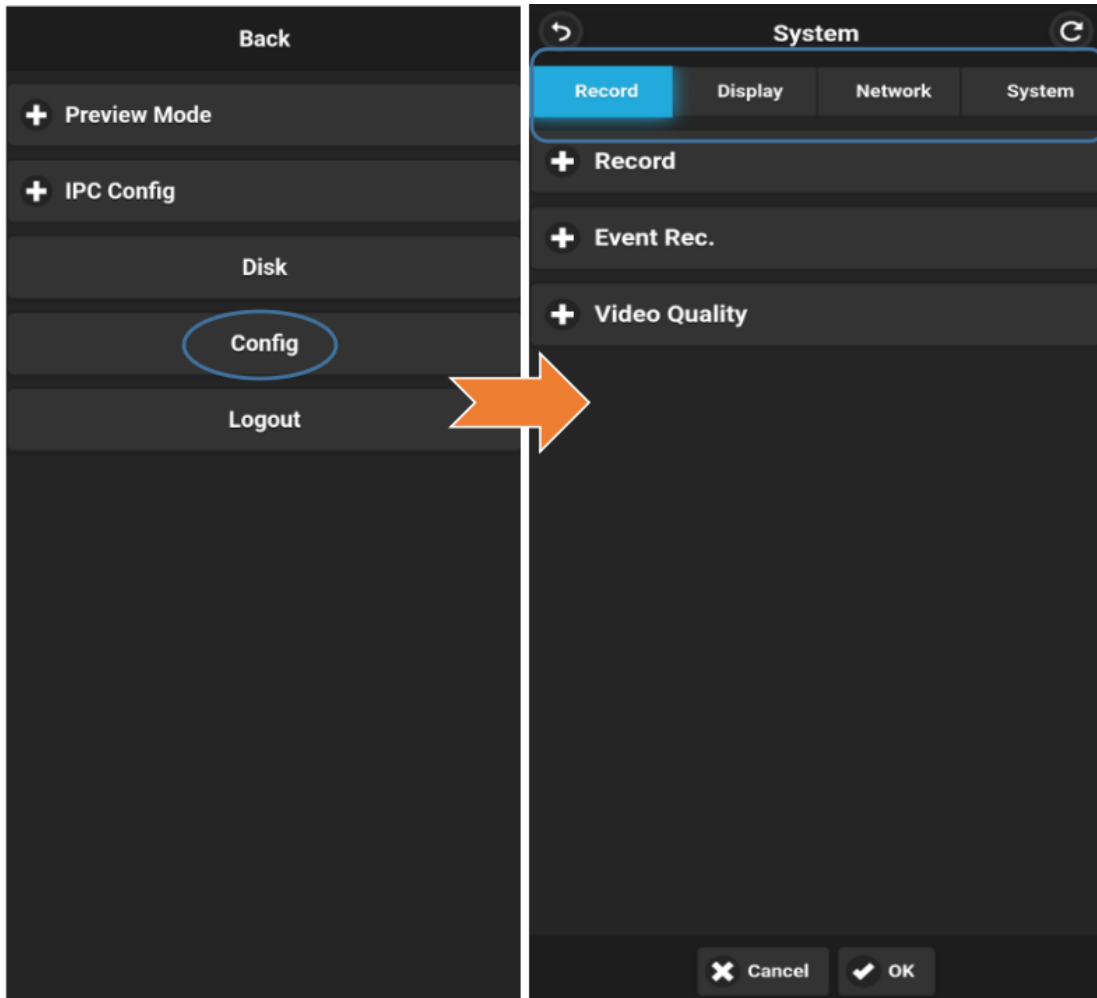
Only 4CH HD waterproof hard disk model has this function.

SSD Out: Disconnect the hard drive and the DVR, and connect the hard drive to the computer.



8 Parameter Configuration

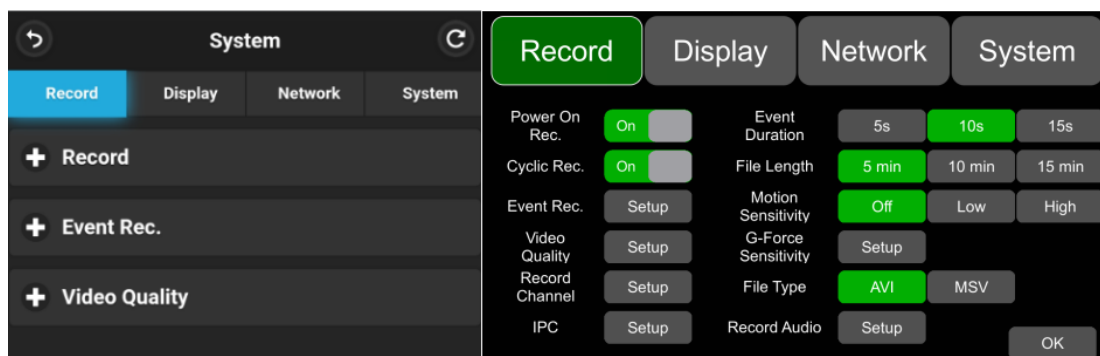
The main functions of parameter configuration include: Record, Display, Network and System.



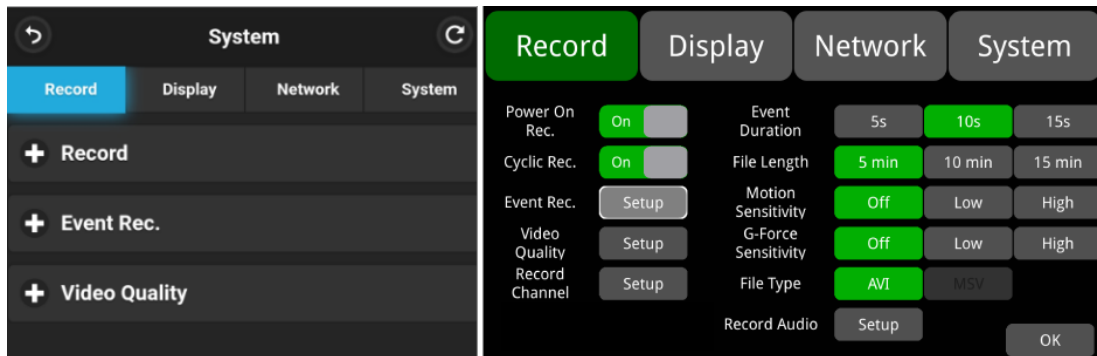
8.1 Video Record Settings

Record consists of three modules, Record, Event Rec and Video Quality respectively, WEB UI and corresponding MDVR interface show are as follows:

HD waterproof network MDVR Record corresponds to WEB UI interface and MDVR interface, showing below:

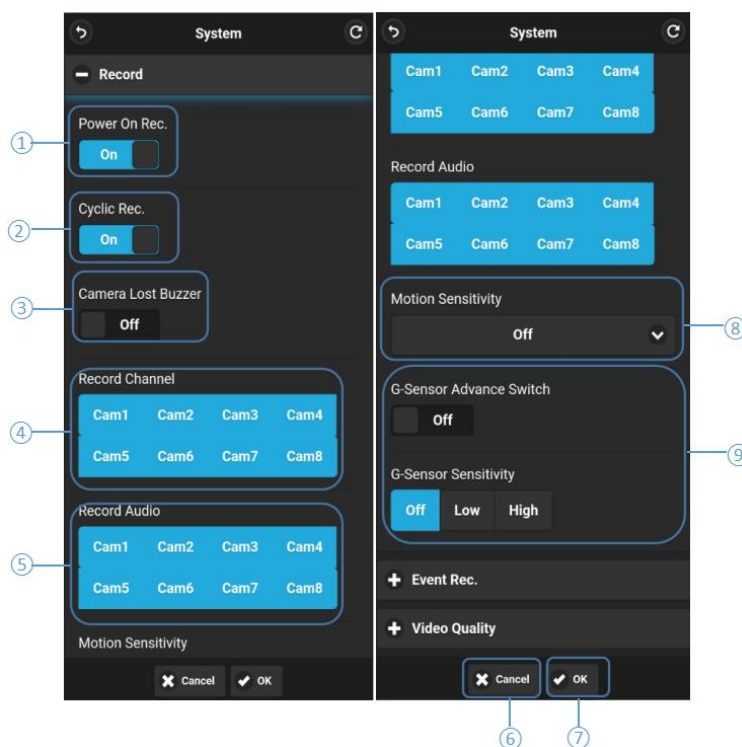


Intelligent HD waterproof network MDVR Record corresponds to WEB UI interface and MDVR interface, showing below:



8.1.1 Video Record Settings

This section introduces the settings related to DVR recording, as shown in the picture below(The following picture takes HD waterproof network MDVR as an example):



- ① **Power On Rec:** if set to ON, the DVR will automatically record after restarting, and when set to OFF, the DVR will not automatically record after power on.
- ② **Cyclic Rec:** if set Cyclic Rec. to ON, the new video file will overwrite the previous video file when the disk is full. Otherwise, the recording will stop when the disk is full.
- ③ **Camera Lost Buzzer:** if set to ON, when the selected record channel is not connected

to the camera, there will be a “Beep” alarm sound.

④ **Record Channel:** the corresponding selected channel will start recording when the record is on. Turn off the record channel, when the record is on, the corresponding turned off channel will not record.

Note: This configuration is only valid for normal recording, not for event recording. For trigger event recording, all channels will start recording.

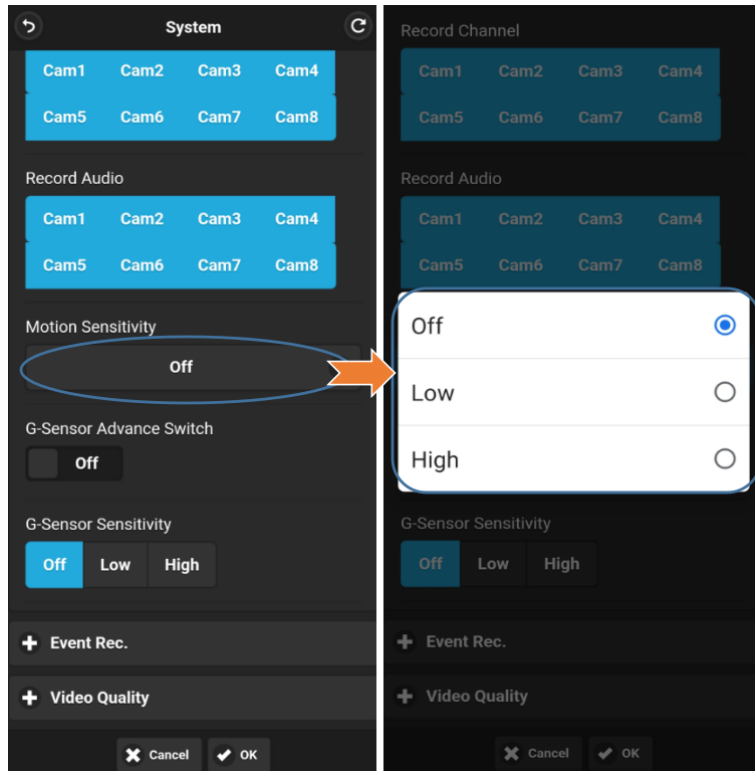
⑤ **Record Audio:** set the recording audio of the channel. When the record channel is selected, the audio of this channel will be recorded into the recording file. If this channel is not selected, there is no audio in the recording of this channel.

⑥ **Cancel:** click to cancel the current setting, the DVR parameters will not be modified.

⑦ **OK:** click to save the current setting, the corresponding item of DVR is modified.

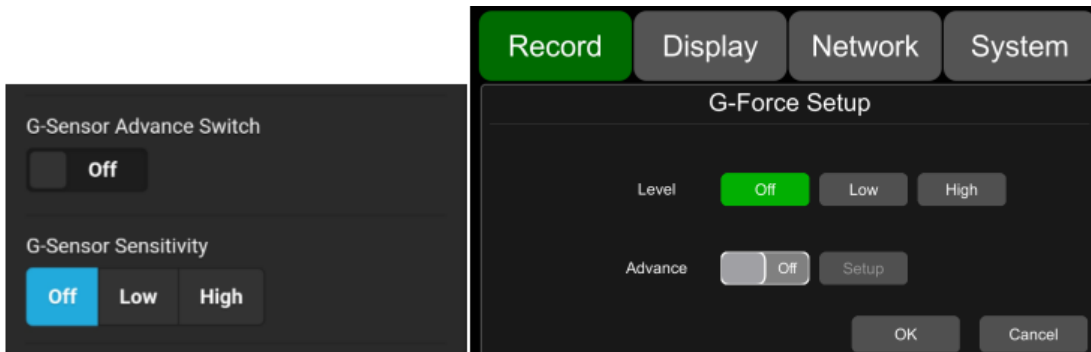
⑧ **Motion Sensitivity:** it will trigger dynamic detection recording when motion detection recording and sensitivity level set to the state that an object move or its movement exceeds pre-set motion detection sensitivity level. For this alarm recording, the pre-recording duration will be set to 10s, and the file length is configured by Event Duration above.

Total length of recording file= Pre-recorded file length + file length (configured by Event Duration). If Motion Sensitivity is set to off, it will not trigger motion detection alarm recording. Motion detection sensitivity can be set to two levels, low or high. When selecting low or high, it will trigger motion detection. When selecting off, motion detection recording is closed. The operation diagram is shown below:



⑨ **G-Sensor Advance Switch:**

HD waterproof network MDVR configuration is shown below:



G-force has two optional setting modes, the simple mode and the advanced mode. If you choose the simple mode, you only need to set the trigger level of G-force. The detailed instruction is as follows:

When the acceleration or the gyroscope of DVR reaches the pre-set sensitivity level, it will trigger G-force to record. For such event recording, the pre-recording duration is set to 10s by default. The duration of G-force event recording is set according to the Event Duration.

Total length of recording file = Length of the pre-recorded file (fixed 10 seconds) + Length of the file (configured by Event Duration).

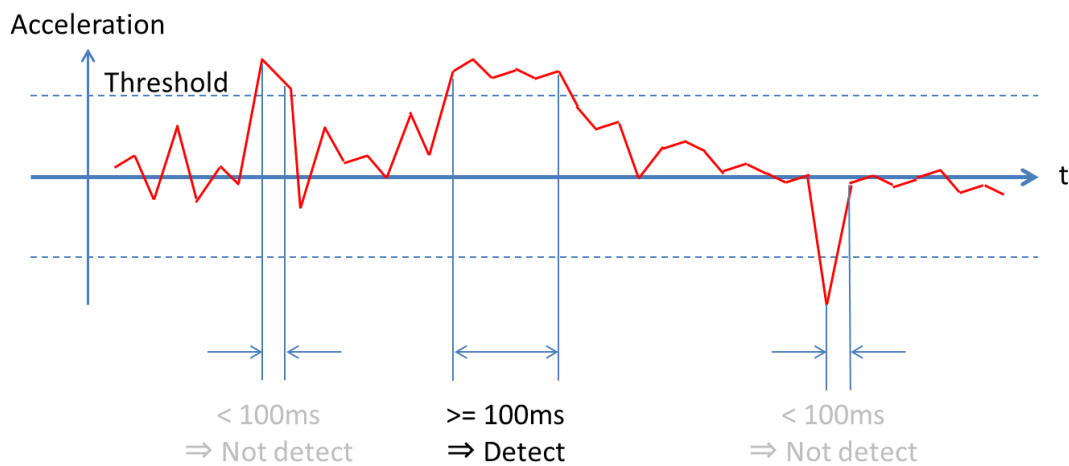
If G-force trigger is turned off, the event recording will not be triggered. G-force sensitivity can be set to two levels, low or high. When low or high is selected, G-force trigger will be activated. And it will be turned off when OFF is selected.

If the advanced mode is set to ON, the simple mode will be disabled automatically.

The advanced mode is described as follows:

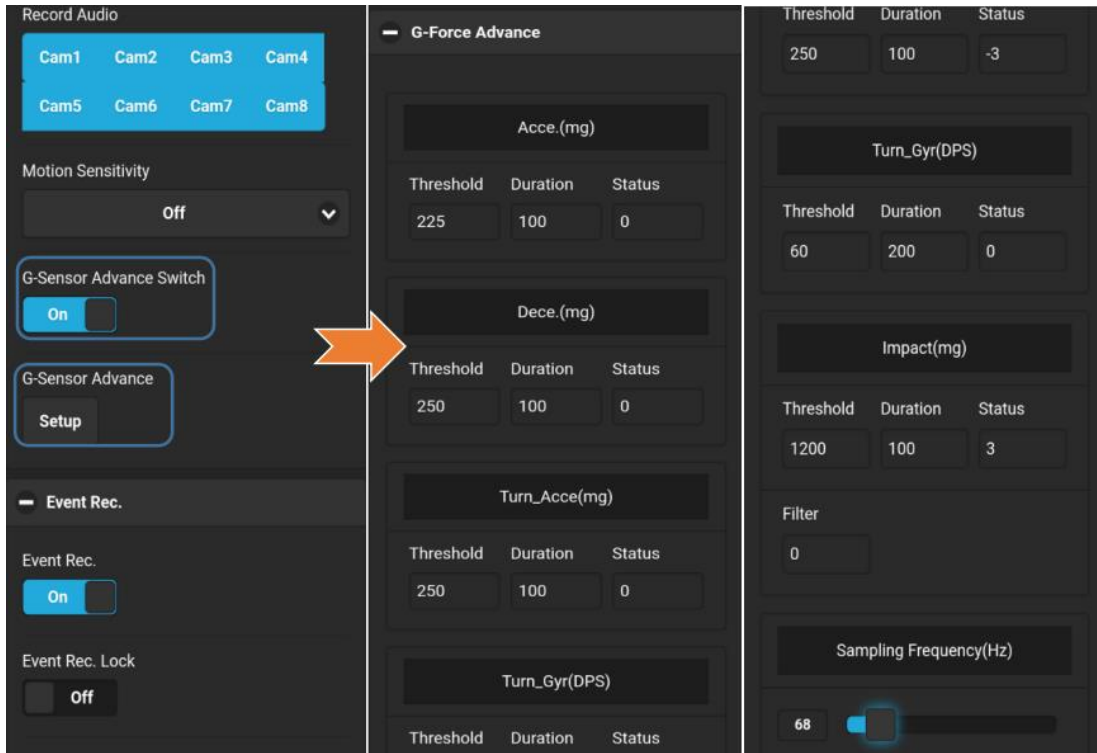
• G-force Trigger Detection Principle

The device measures and detects acceleration and angular velocity when the vehicle is moving or turning by means of a nine-axis G-force (the transmitted data including acceleration and angular velocity). When the acceleration and angular velocity exceed a certain threshold within a certain period of time, an alarm will be triggered and start video recording. The detected data will be uploaded as well. For example, according to the detected data, if the acceleration of the vehicle exceeds a certain threshold acceleration "a" during "t" (100ms by default) while driving or turning, then the acceleration or turning speed of the vehicle will be recognized as too fast and it is easy to cause traffic accidents.

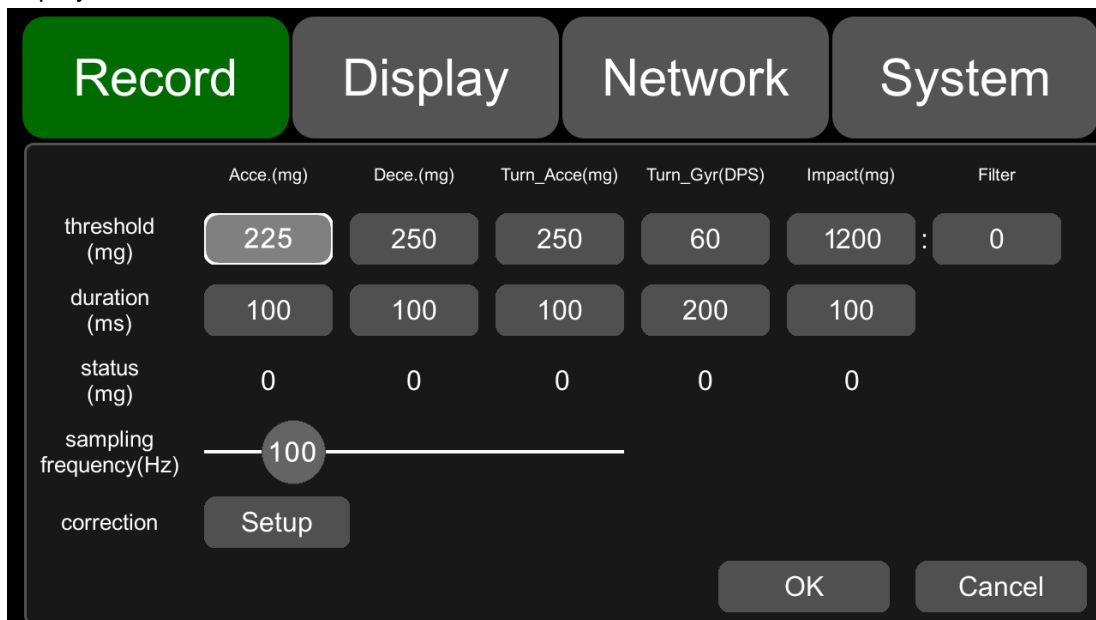


G-force trigger detection principle

• G-force Alarm Trigger Setting Introduction



The corresponding DVR interface is: enter “Menu” -> “Record” -> “G-force Sensitivity” -> “Setup” -> “Advance” -> “ON”, then the setting interface of G-force advanced mode will be displayed.



The meanings of “Acce”, “Dece”, “Turn_Acce”, “Turn_Gyr”, “Impact” and “Filter” are as follows:

Item	Meaning
Acce.	Acceleration value while the vehicle is driving (for detecting sudden acceleration).
	This value is positive when the vehicle is accelerating. When decelerating, the value is zero.
	Unit: mg.
Dece.	Deceleration value while the vehicle is driving (for detecting sudden deceleration).
	This value is positive when the vehicle is decelerating. When accelerating, the value is zero.
	Unit: mg.
Turn_Acce	Acceleration value during vehicle turns (for detecting sharp turns).
	When the vehicle accelerates during a left turn or decelerates during a right turn, this value is positive. When the vehicle decelerates during a left turn or accelerates during a right turn, this value is negative.
	Unit: mg.
Turn_Gyr	Vehicle turning and angular velocity (for detecting sharp turns and turning directions).
	When the vehicle turns left, this value is positive. When it turns right, this value is negative.
	Unit: DPS (radians per second).
Impact	Acceleration when the vehicle collides (for detecting collision event).
	Positive value.
	Unit: mg.
Filter	Acceleration coefficient of z-axis when the vehicle impacts.
	Positive value.

The meanings of “threshold”, “duration”, “status”, “correction” and “sampling frequency” are as follows:

Item	Meaning
Threshold	Set the thresholds of "Acce", "Dece", "Turn_Acce", "Turn_Gyr", "Impact" and "Filter". When the detected value continuously exceeds the threshold set by "duration", an alarm recording will be triggered.
Duration	Set the detection time of "Acce", "Dece", "Turn_Acce", "Turn_Gyr", "Impact" and "Filter".
Status	Display the real-time detection value of the corresponding event.
Correction	Set the installation angle of DVR and G-force data correction.
sampling frequency	Sampling frequency of G-force.

The threshold and continuous detection time of the alarm trigger recording can be modified according to different application environments. In the setting, the shorter the continuous detection time, the lower the threshold, and the higher the sensitivity of alarm triggering. The unit of acceleration is mg. ($1g \approx 9.8m/s^2$, $1g = 1000mg$). The unit of angular velocity is radians per second (dps).

The default value and range of the threshold and duration for G-force alarm trigger detection are shown in the following table:

	Default	Range
Acceleration threshold	225 mg	101~999
Deceleration threshold	250 mg	101~999
Turn_Acce threshold	250 mg	250~999
Turn_Gyr threshold	60 DPS	21~99
Impact threshold	1200mg	101~19999
Filter	0	0~5
Acceleration duration	100ms	1~4999
Deceleration duration	100ms	1~4999
Turn_Acce duration	100ms	1~4999
Turn_Gyr duration	200ms	1~4999
Impact duration	100ms	1~4999

The calculation formula for the acceleration of an impact (collision) event is as follows.

$$\mathbf{abs(X) + abs(Y) + abs(Z)*Filter.}$$

"abs(X)", "abs(Y)" and "abs(Z)" are the x, y and z axis data from the acceleration sensor in the vehicle. The filter is the coefficient of z-axis of the acceleration sensor.

Z-axis filter rate

Sensitivity Level	Filtration Rate
0	100%
1	80%
2	60%
3	40%
4	20%
5	0%

Acceleration sensitivity level and Z-axis value of collision detection (default level: 0)

For example: Threshold: 1200 mg, Interval: 100 ms

(1)Setting value: 5

Detection condition: $abs(x) + abs(y) + abs(z) \geq 1200mg$

(2)Setting value: 4

Detection condition: $abs(x) + abs(y) + abs(z) \times 0.8 \geq 1200mg$

(3)Setting value: 3

Detection condition: $abs(x) + abs(y) + abs(z) \times 0.6 \geq 1200mg$

(4)Setting value: 2

Detection condition: $abs(x) + abs(y) + abs(z) \times 0.4 \geq 1200mg$

(5)Setting value: 1

Detection condition: $abs(x) + abs(y) + abs(z) \times 0.2 \geq 1200mg$

(6)Setting value: 0

Detection condition: $abs(x) + abs(y) \geq 1200mg$

The detection of default value is as follows:

(1)If the vehicle continuously accelerates in the positive direction of the X-axis, and the

real-time value of Acce continuously exceeds the threshold 100ms during driving, the device will trigger the acceleration alarm.

(2) If the vehicle continuously decelerates in the positive direction of the X-axis (sudden braking), and the real-time value of Dece continuously exceeds the threshold 100ms during driving, the device will trigger the deceleration alarm.

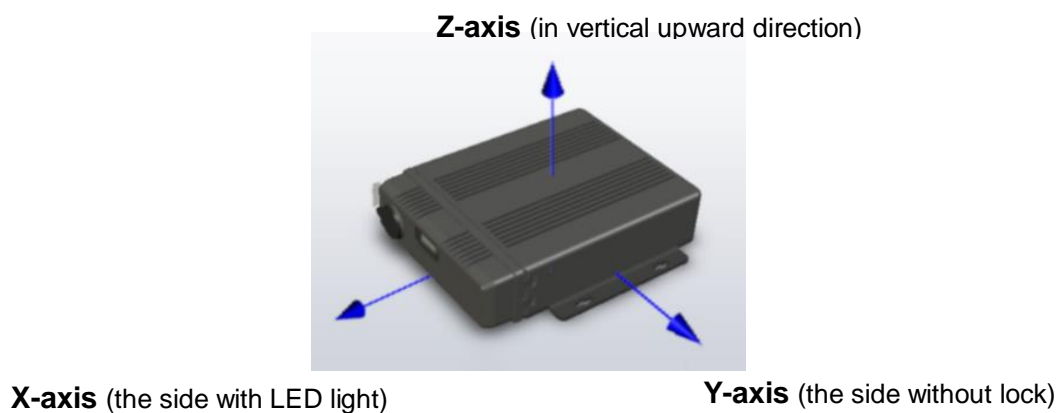
(3) If the vehicle quickly turns to the positive direction of the Y-axis, and the real-time value of Turn_Acce continuously exceeds the threshold 100 ms during driving, the device will trigger the sharp turn alarm (Turn_Acce).

(4) If the vehicle quickly turns to the opposite direction of the Y-axis, and the real-time value of Turn_Acce exceeds continuously the threshold 100ms during driving, the device will trigger the sharp turn alarm (Turn_Acce).

(5) If the vehicle quickly turns to the forward or reverse direction of the Y-axis, and the real-time value of Turn_Gyr exceeds continuously the threshold 100ms during driving, the device will trigger the sharp turn alarm (Turn_Gyr).

• Device installation and calibration

Since the DVR has a different coordinate system from the vehicle itself, there are various installation methods for installing the DVR in the vehicle. The device coordinate system is shown below. X-axis refers to the front site of the device (the side with LED light), and Y-axis refers to the left side of the DVR (the side without lock). Z-axis is the vertical upward direction when the DVR is installed.



The vehicle coordinate system is shown in the figure below. In the coordinate system, the

vehicle forward direction is set as the forward axis and the vehicle left direction is set as the left axis. There are multiple ways to install the device.



As shown in the picture below, the device may have multiple installation positions and may be slightly tilted during installation. Thus, it needs to be calibrated through G-force data.



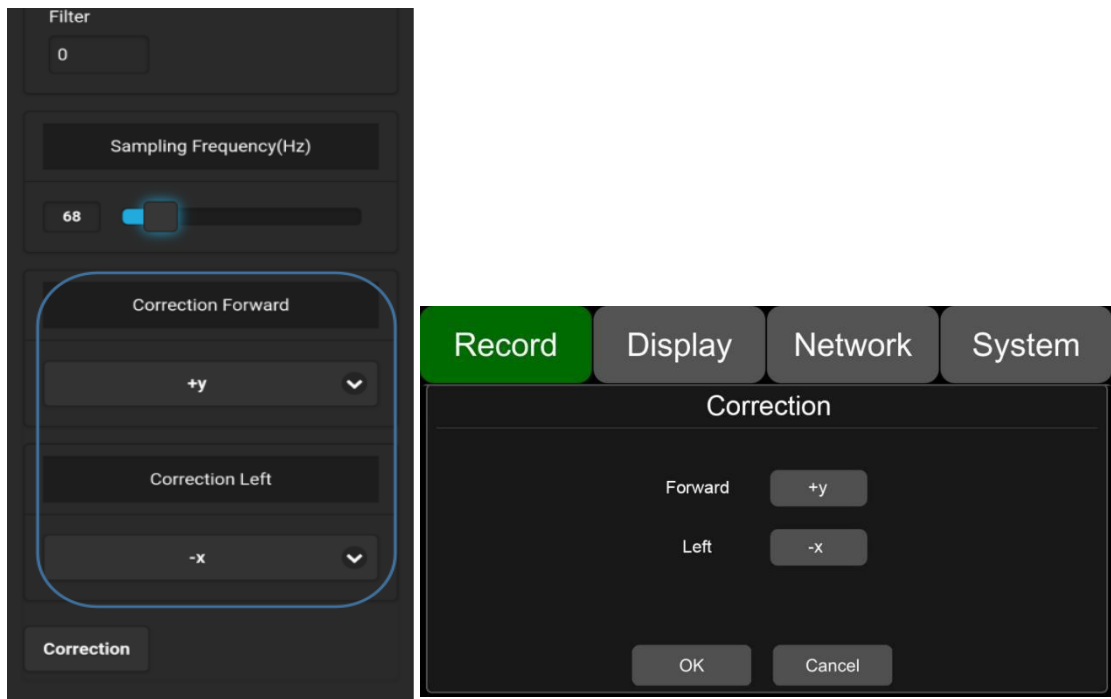
Possible installation locations of the device

• DVR Installation Method Selection and Installation Correction

“Forward” and “Left” refer to the forward movement direction and the leftward movement direction of the vehicle. They help to determine the direction of the vehicle through the corresponding axis of the device, and are used to determine the installation method of the device.

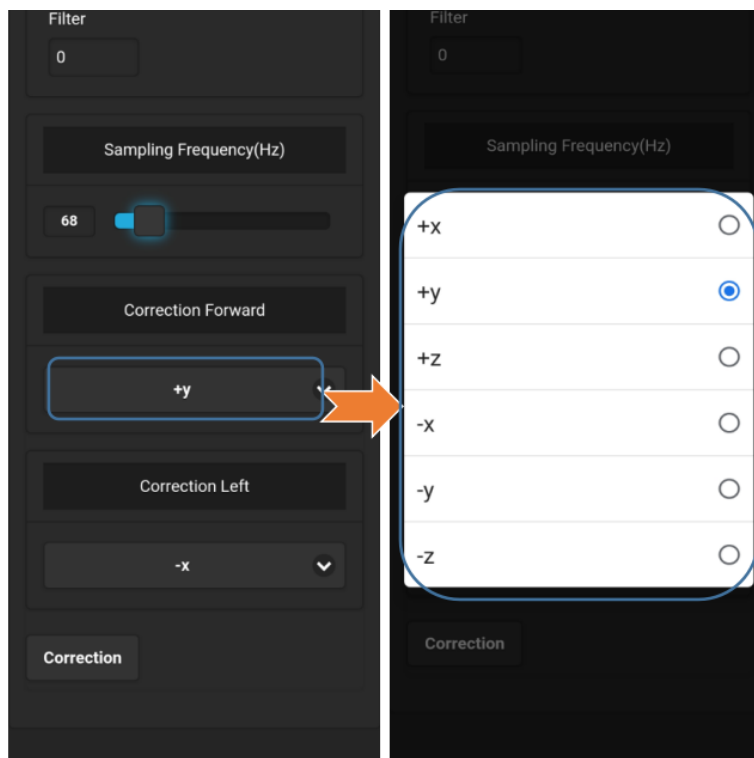
Click "Forward" and "Left" buttons to set the direction of the DVR relative to the vehicle's axis. For example, if "Forward" is set to +x and "Left" is set to +y, it means that when the vehicle moves forward, the forward direction of the device is the positive direction of the x-axis of the device. If "Forward" is set to -Z and "Left" is set to +Y, it means that when the vehicle is moving forward, the forward direction of the device is the opposite direction of the Z-axis, and the positive Y-axis direction of the device is the left direction of the vehicle,

that is, the device is vertical Installed on the vehicle with the bottom facing the front of the vehicle.



WEB UI installation method setting interface and the corresponding DVR interface

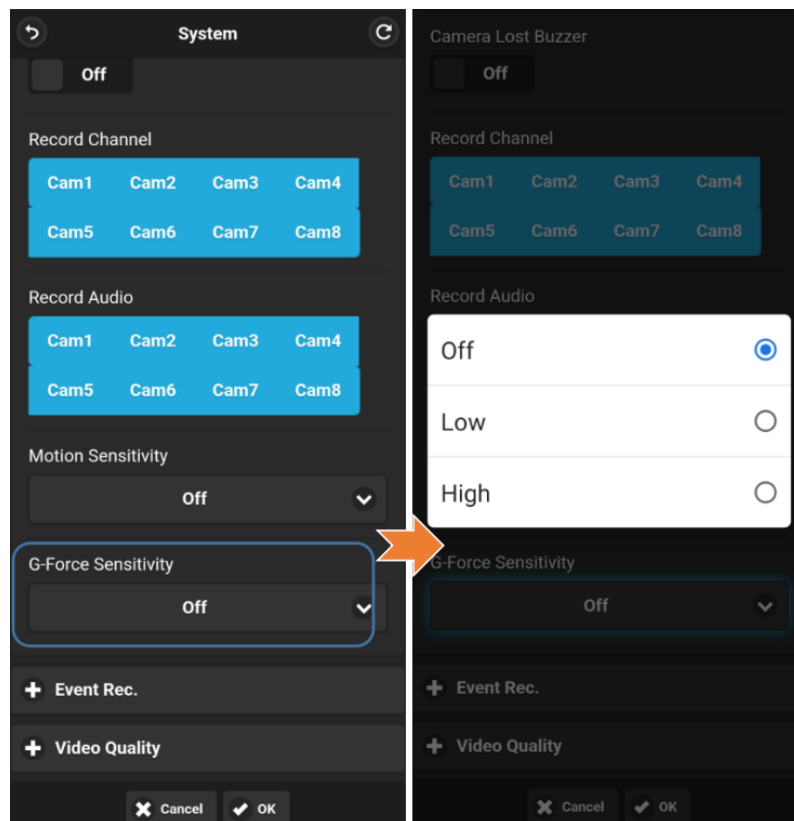
The operation of WEB UI installation method setting interface is shown in the following pictures:



After setting, click "Correction" button to exit the interface. Please make sure that the vehicle is stationary for more than 1s so that the system can apply the calibration procedure. When the real-time sensor data is close to 0, it means that the calibration process has been completed.

Warning: DVR must be calibrated before use. During calibration, the vehicle must be stationary and parked in a flat place and the calibration time shall not be less than 1s. When the DVR is installed for the first time or reinstalled, or the installation position changes significantly, the installation position should be recalibrated.

For multi-channel intelligent HD waterproof network MDVR, G-Sensor Sensitivity only has simple mode, the function settings are shown below:



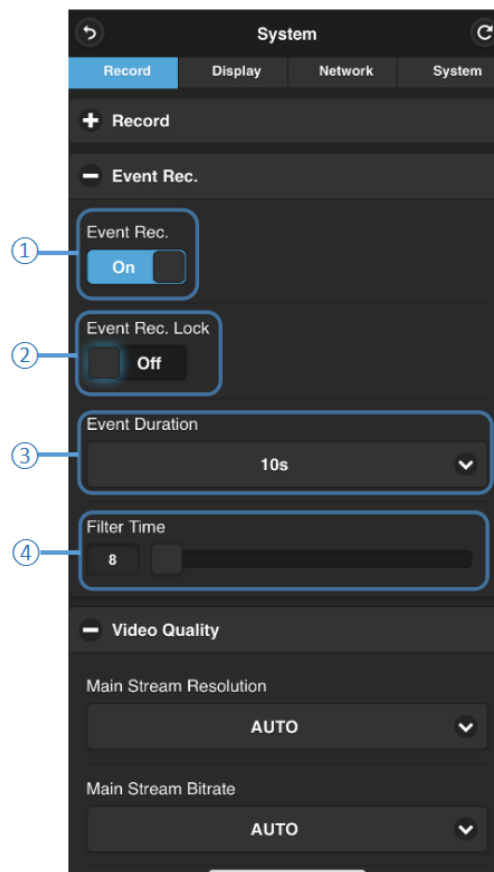
G-Sensor sensitivity level setting: when the acceleration or gyroscope of G-Sensor reaches the preset sensitivity value, G-Sensor recording will be triggered. For this kind of alarm recording, the pre-recording time will be fixed at 15 seconds, and the file length is configured by the Event Duration.

Total length of recording file = Length of the pre-recorded file (fixed 15 seconds) + Length

of the file (configured by Event Duration).

If G-Sensor trigger recording is turned off, it will not trigger the event recording. The sensitivity of G-Sensor can be set to low or high levels. When low or high is selected, G-Sensor trigger recording will be activated. When Off is selected, G-Sensor trigger recording will be disabled.

8.1.2 Alarm Recording (The following picture is an example of HD waterproof network MDVR)



① **Event Rec:** event recording includes motion detection trigger alarm, G-Sensor trigger alarm, panic button trigger alarm, overspeed alarm, DMS detection alarm, trigger 1-6 alarm for 4CH HD waterproof hard disk model and CH HD waterproof SD model, and trigger 1-8 alarm for 8CH HD hard disk model and 4CH HD SD model. If Event Rec. is set to ON and the corresponding alarm parameters are set, event recording will be triggered when the above event is triggered. If Event Rec. is set to OFF, event recording will not be triggered even if the event is triggered. This function is ON by default.

② **Event Rec. Lock:** when "Event Rec. Lock" is turned off, but "Cyclic Rec." is turned on and all disks are full, new video files will overwrite the previous recording files, including

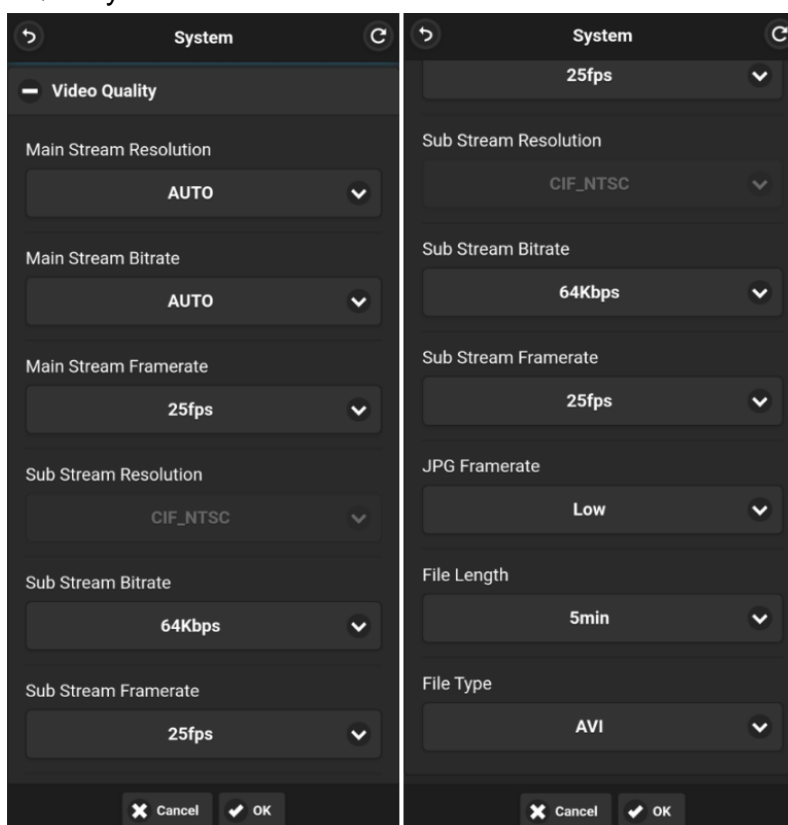
event recording files.

If both "Event Rec. Lock" and "Cyclic Rec." are turned on and all disks are full, the new recording files will only overwrite the normal recording files, not the event recording ones.

③ **Event Duration:** when event recording is on, the file length of event recording can be set to 5s, 10s and 15s. The continuous trigger will generate a file with a maximum length of 5min.

④ **Filter Time:** time filtering. As shown in the picture, the event filter is set to 8s. (The default filtering time of multi-channel intelligent HD waterproof network MDVR is 60s). If the same event is triggered continuously, the DVR generates an event message every 8s and detects whether a new event record is generated every 8s. When the DVR is connected to the server, the event information will be sent to the server. The minimum setting of "filter time" is 1s, and the maximum is 300s.

8.1.3 Video Quality



The main stream is used for video storage. The sub stream is used for network transmission.

The default configuration of the main stream, sub stream and JPG is as follows:

	Main stream	Sub stream	JPG
Resolution	AUTO	CIF	none
Bitrate	AUTO	64Kbps	none
Framerate	25fps	25fps	Low

① **Resolution:** there are 5 optional resolutions in the main stream menu, 1080P, 720P, D1 (PAL), D1 (NTSC) and AUTO. CIF is the default value of sub-stream menu and is not selectable. The higher the resolution, the better the quality of the video and the larger the video record file. Therefore, the file size should be considered during configuration.

In the Resolution option, AUTO is defined as follows:

	Main stream
AUTO	The DVR will obtain the camera standard and record the video of that standard

② **Bit rate:** there are 8 optional levels of bit rate in the main stream menu, 4Mbps, 2Mbps, 1Mbps, 512Kbps, 256Kbps, 128Kbps, 64Kbps and AUTO, while only 6 optional levels of bit rate in the sub stream menu, 1Mbps, 512Kbps, 256Kbps, 128Kbps, 64Kbps and AUTO. The higher the bit rate, the clearer the image and the larger the video record file.

Therefore, all factors should be taken into consideration.

In the Bit rate option, AUTO is defined as follows:

Bit rate		
	Main stream	Sub stream
AUTO	The bit rate is 4Mbps for 1080p camera, 2Mbps for 720p camera, and 1Mbps for D1 camera.	No matter what camera is connected, the bit rate will always be 64kbps.

③ **Frame rate:** there are 8 optional levels of frame rate in the main stream and sub stream menu: 30fps (NTSC), 28fps (NTSC), 25fps, 20fps, 15fps, 14fps, 10fps and 5fps.

The higher the frame rate, the smoother the recording and the larger the video record file.

SD capacity	Video Quality	File Length
4 x 128GB	4 x 1080P、4Mbps	≈76h
	4 x 720P、2Mbps	≈152h
	4 x D1、1Mbps	≈304h
	1 x 1080P、4Mbps	≈304h
	1 x 720P、2Mbps	≈608h
	1 x D1、1Mbps	≈1216h

④ **JPG**: the frame rate of JPG can be Excellent, High, Mid and Low. The meaning of these four values is as follows:

Excellent	The upload rate of picture to the client is unlimited (the fastest) and smoothest.
High	The upload rate to the client is 1s per picture.
Mid	The upload rate to the client is 3s per picture.
Low	The upload rate to the client is 5s per picture.

⑤ **File Length**: the default video file length for both AVI and MSV formats is 5min.

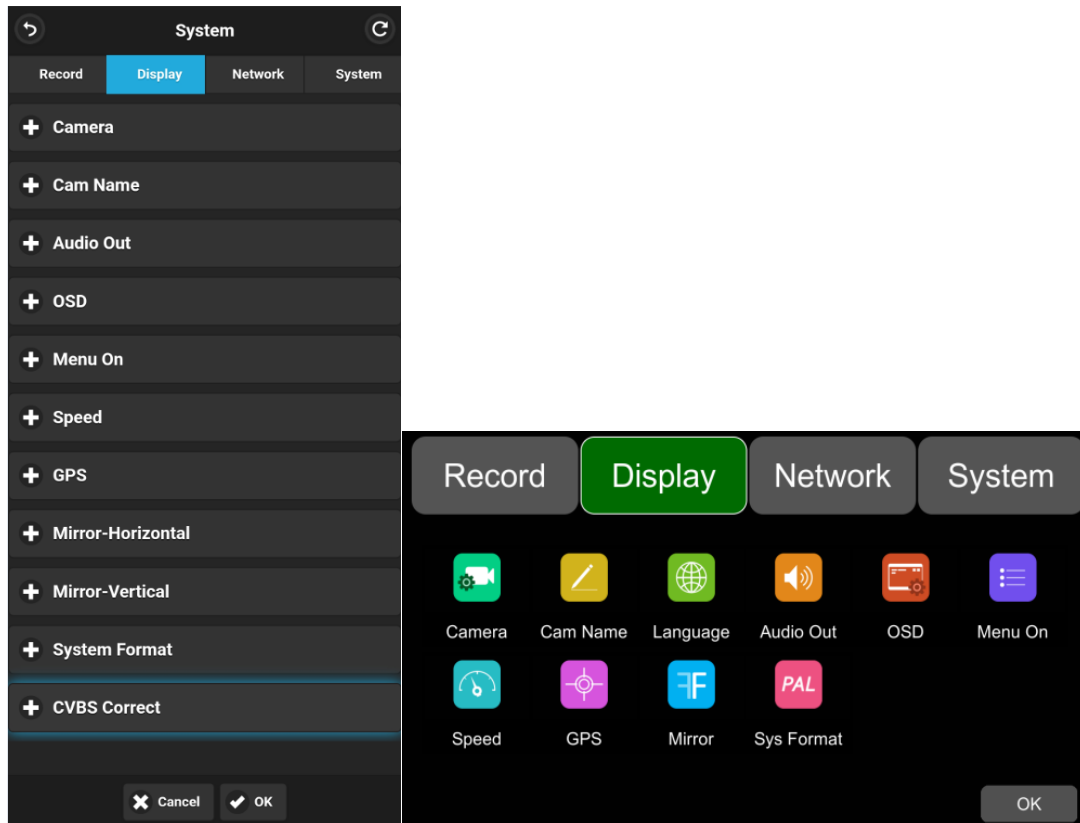
The length of the video file in AVI format can be set to 5 minutes, 10 minutes, and 15 minutes. And that in MSV format can be set to 2 minutes, 3 minutes, and 5 minutes.

File Type	File Length
AVI	5min,10min,15min.
MSV	2min,3min,5min.

⑥ **File Type**: there are two optional video file formats: AVI and MSV.

8.2 Display Settings

The Display section contains 11 modules, the WEB UI and the corresponding DVR interface are as follows:



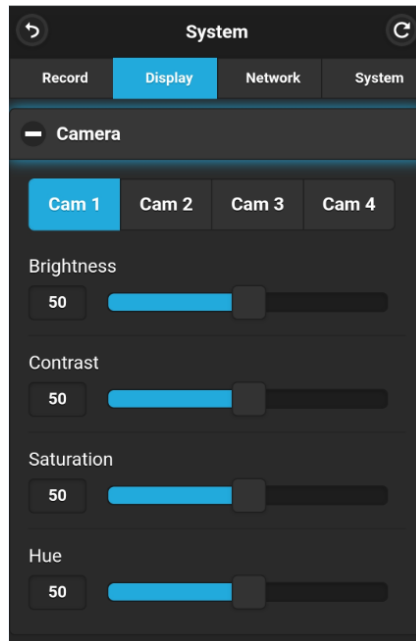
8.2.1 Camera Display settings

The following table takes HD waterproof network MDVR interface as an example:

The camera parameter settings corresponding to each channel include brightness, contrast, saturation, and hue. By default, the values of all above items for all channels are set to 50. Press and hold the number circle to the left or right to turn down or up the corresponding value.

Camera Display	Minimum	Maximum	Default
Brightness	0	99	50
Contrast	0	99	50
Saturation	0	99	50
Hue	0	99	50

The operation interface is shown in the picture below:

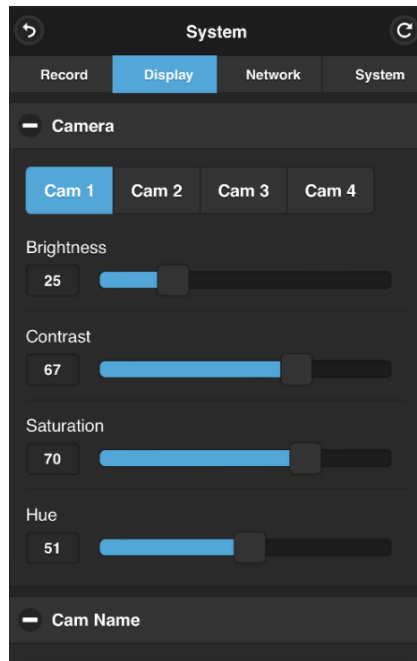


The following table takes intelligent HD waterproof network MDVR interface as an example:

The camera parameter settings and default configuration corresponding to each channel are shown in the following table. Hold down the numeric circle to the left or right to turn the corresponding value down or up.

Camera Display	Minimum	Maximum	Default
Brightness	0	99	25
Contrast	0	99	67
Saturation	0	99	70
Hue	0	99	51

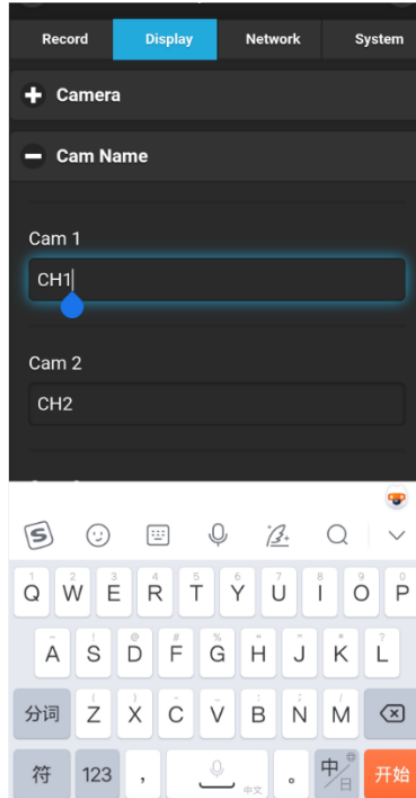
The operation interface is as follows:



8.2.2 Channel Name Settings

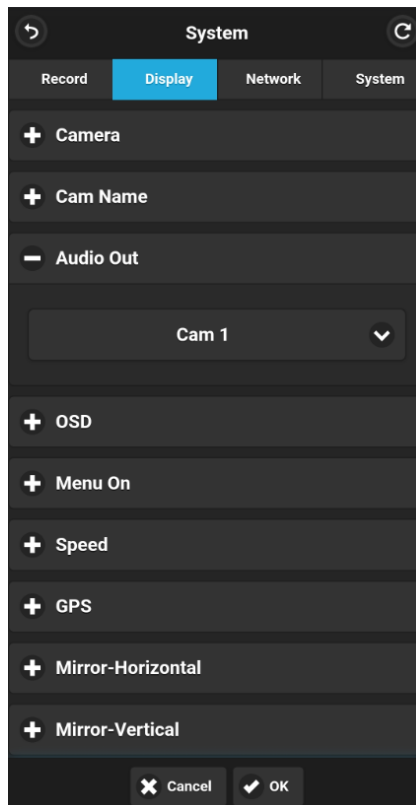
Set the channel name. The corresponding name will be displayed at the bottom of the screen of each channel. Click the button corresponding to the name of each channel on the menu, the input keyboard menu will pop up, then you can enter a new name.

Note: Up to 8 characters can be input for each channel. The channel name cannot be empty.



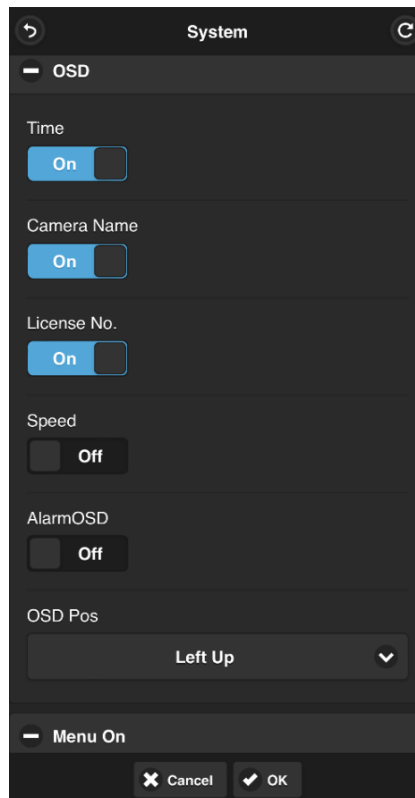
8.2.3 Audio Output

Audio Output is used to set the channel for audio output.

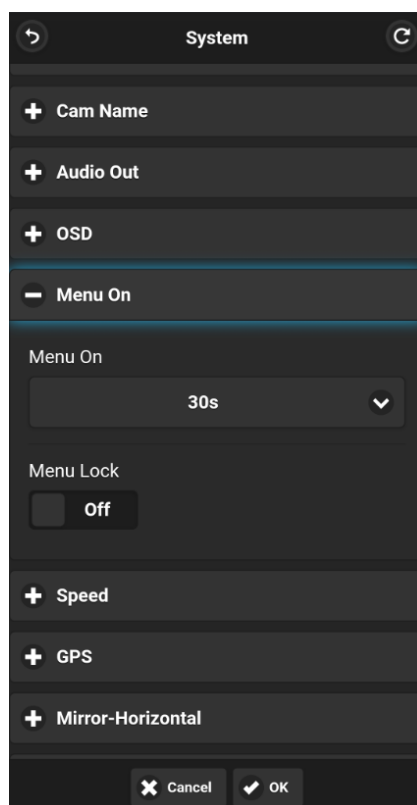


8.2.4 OSD Settings

Set the OSD to configure whether the Time, Camera Name, License No. and Speed are embedded in the video recording. After embedding, this information can be seen during video playback (The following picture is an example of HD waterproof network MDVR interface, while intelligent HD waterproof network MDVR interface doesn't have AlarmOSD and OSD Pos settings).



8.2.5 Menu Delay Settings



① **Menu On:** the duration of the menu can be set to 30s, 60s, 120s and Always. when it is set to 30s, 60s or 120s, that is, after opening the menu, if there is no operation for 30s, 60s or 120s, the menu will be hidden. When it is set to Always, the menu will always be present.

Note: If you enter the menu, the recording will stop. In order not to affect the recording, it is not recommended to set the Menu On to Always.

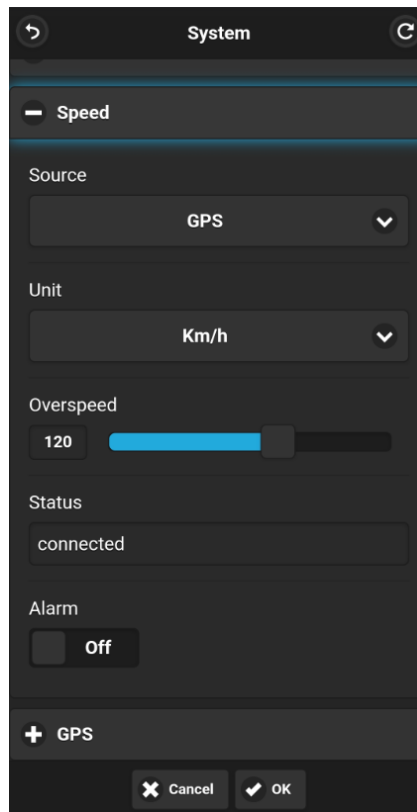
② **Menu Lock:** “On” means the account and password information is required to enter the menu. “Off” means no permission is required to enter the menu.

If you want to change the status of the menu lock, you need use the user name "admin" and its corresponding password.

8.2.6 Speed Settings

Speed setting: the speed data of overspeed alarm comes from GPS; Unit: Km/h and Mile/h. Overspeed is the overspeed threshold, which can be set by the customer. Speed shows the current vehicle speed. If the Speed value exceeds the Overspeed value, the DVR will trigger an overspeed alarm recording. The Alarm button in the picture below is the switch to set the speeding alarm recording. When Alarm is set to On, vehicle speeding

will trigger alarm recording. When it is set to Off, it will not trigger alarm recording.



Overspeed	Minimum	Maximum	Default
Km/h	0	200	120
Mile/h	0	125	75

8.2.7 GPS

After installing the GPS antenna, the latitude, longitude, and speed will be recorded into the video recording file. The menu provides GPS information such as latitude, longitude, detection satellite, reachable satellite, etc.



- ① **Mode:** indicates the GPS connection status.
- ② **Used:** the number of available satellites.
- ③ **Visible:** the number of satellites that can be searched.
- ④ **Lat:** displays the latitude.
- ⑤ **Lon:** displays the longitude.
- ⑥ **Alt:** displays the altitude.
- ⑦ **Speed(km/s):** displays the current speed.
- ⑧ **UTC:** displays the UTC time.
- ⑨ **GPS Histogram:** histogram of GPS satellite number.

8.2.8 Mirror-Horizontal

Horizontal: Set to ON, the corresponding record channel will flip horizontally. Set to OFF, the corresponding channel will display normally without flipping.

The setting steps are shown in the following picture:



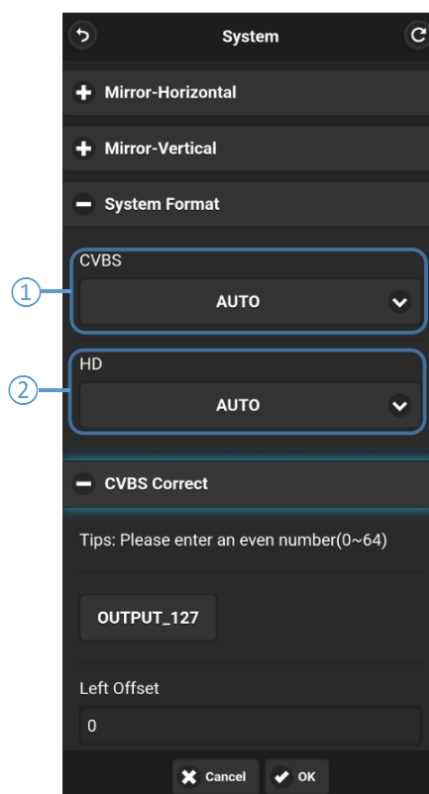
8.2.9 Mirror-Vertical

Vertical: Set to ON, the corresponding record channel will flip vertically. Set to OFF, the corresponding channel will display normally without flipping.

The setting steps are shown in the following picture:



8.2.10 System Format Settings



① **CVBS**: switch the display format of MDVR SD screen. The available formats are: AUTO, NTSC and PAL. DVR will restart after changing the format.

② **HD**: switch the display format of MDVR HD screen. The available formats are: AUTO, 720P and 1080P (Intelligent HD waterproof network MDVR doesn't have AUTO model) DVR will restart after changing the format.

8.2.11 CVBS Correction

When the interface on the screen is not fully displayed, the display interface can be reduced. One unit is equal to two pixels, and it can be reduced by up to 64 units. When the interface is reduced, the DVR can only be operated with the remote control.



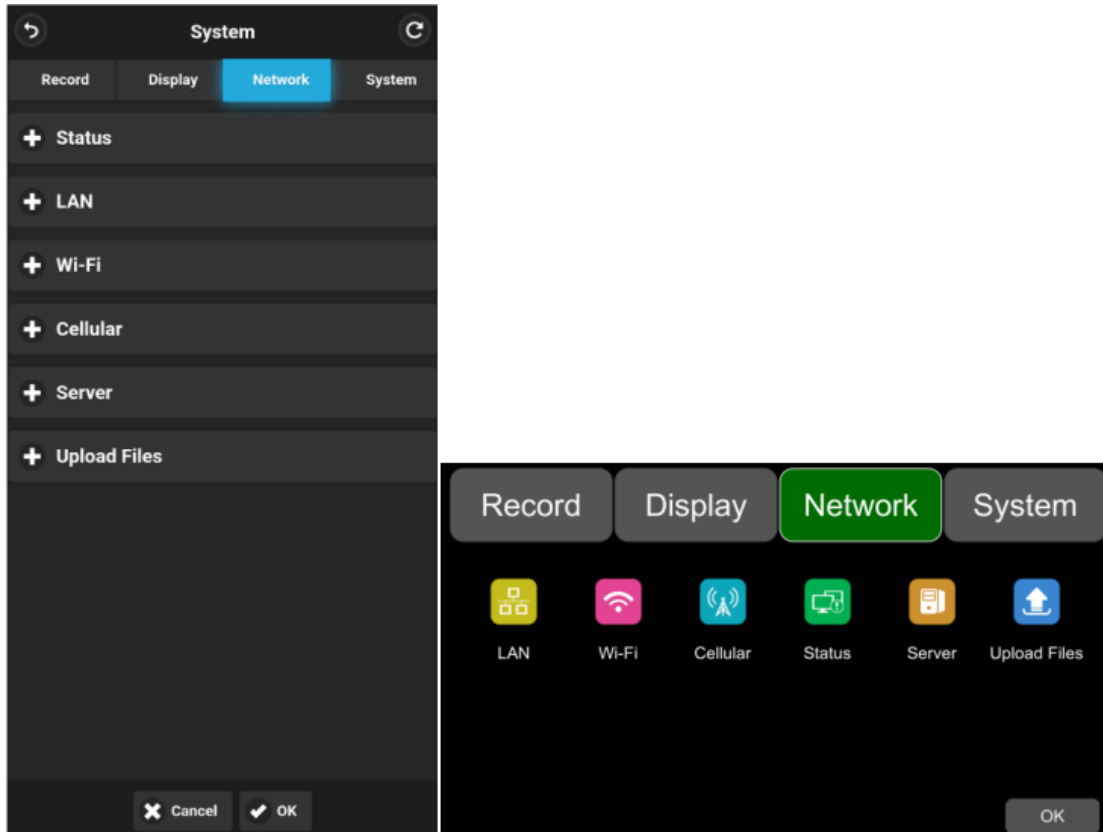
OUTPUT_127	Left Offset	Right Offset	Up Offset	Down Offset
Default	30	28	12	10

The range of each parameter is set as shown in the table below. The value can only be an even number. When an odd number is entered, it will be automatically updated to the entered odd value minus 1.

Correct	Minimum	Maximum
Left Offset	0	64
Right Offset	0	64
Up Offset	0	64
Down Offset	0	64

8.3 Server Settings

HD waterproof network MDVR Network corresponds to 6 modules totally, while intelligent HD waterproof network MDVR Network corresponds to 7 modules totally. WEB UI and corresponding DVR interface are shown as follows:



8.3.1 Network Status



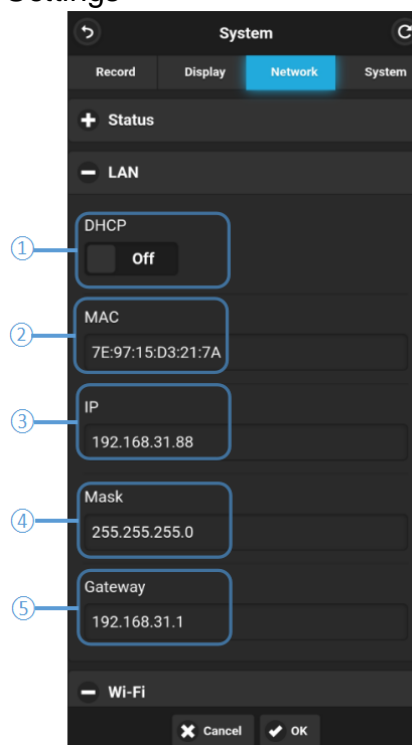
- ① **LAN IP:** refers to the static IP set on the NetWork-LAN page or the dynamic IP obtained automatically.
- ② **MAC:** refers to the static physical address set on the NetWork-LAN page or the dynamic physical address obtained automatically.
- ③ **Wi-Fi:** Wi-Fi ON/OFF status obtained from the network Wi-Fi page.
- ④ **Wi-Fi RSSI:** displays Wi-Fi signal strength.
- ⑤ **Wi-Fi IP:** static IP or dynamic IP obtained from NetWork—Wi-Fi page.
- ⑥ **Wi-Fi status:** displays the Wi-Fi status.
- ⑦ **Cellular:** On/Off status of Cellular obtained from the Network-Cellular page.
- ⑧ **Module:** displays the type of 2G/3G/4G module.
- ⑨ **Cellular RSSI:** icon of 2G/3G/4G signal strength.
- ⑩ **Cellular Type:** displays the type of 2G/3G/4G module.
- ⑪ **Cellular status:** the corresponding meaning is as follows:

Content	Meaning
Module initialization	Module initialization
Module exception	Module exception
No SIM card	No SIM card
Cpin locked	Cpin is locked
Signal abnormal	Signal abnormal
Networking failure	Network connection is failed
SUCCESS	Network connection is successful

⑫ **Server Status:** server status, Online / Offline.

⑬ **Register status:** the reason for server connection failure.

8.3.2 LAN Port Network Settings



① **DHCP:** dynamic IP switch. When the switch is set to on, then it is a dynamic IP. When the switch is set to off, it is a static IP, then you need to manually input the IP address, subnet mask and gateway. The MAC address can be assigned automatically or modified.

② **MAC:** set the physical address of DVR.

③ **IP:** set the IP address of DVR.

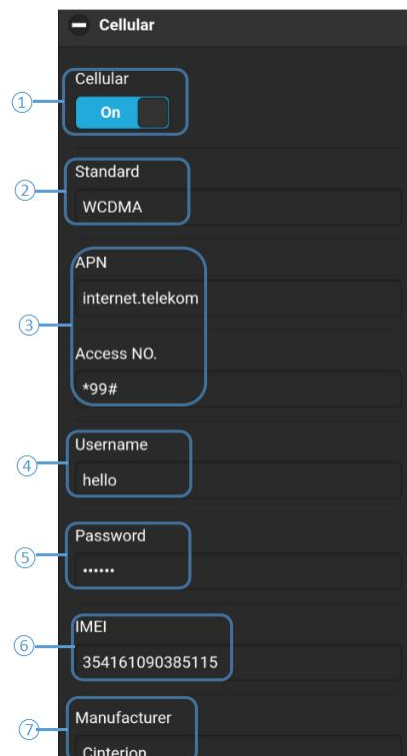
- ④ **MASK:** set the subnet mask of DVR.
- ⑤ **GATEWAY:** set the gateway of DVR.

8.3.3 Wi-Fi Network Settings



- ① **Wi-Fi:** ON/OFF
- ② **DHCP:** dynamic IP switch. When the switch is set to on, then it is a dynamic IP. When the switch state is off, it is a static IP, you need to manually input the IP address, subnet mask and gateway. The MAC address can be assigned automatically or modified.
- ③ **SSID:** list of Wi-Fi hotspots that can be searched by DVR. If there is no list, input manually the Wi-Fi name.
- ④ **Password:** Wi-Fi password.

8.3.4 2G/3G/4G Network Settings



① **Cellular:** 2G/3G/4G switch, turn it on to allow cellular working.

② **Standard:** the default is WCDMA.

③ **APN & Access No.:** usually, the Access Point Name (APN) and Access Number (Access Number) are set by default, no need to fill in. If it doesn't work, please consult the local operator.

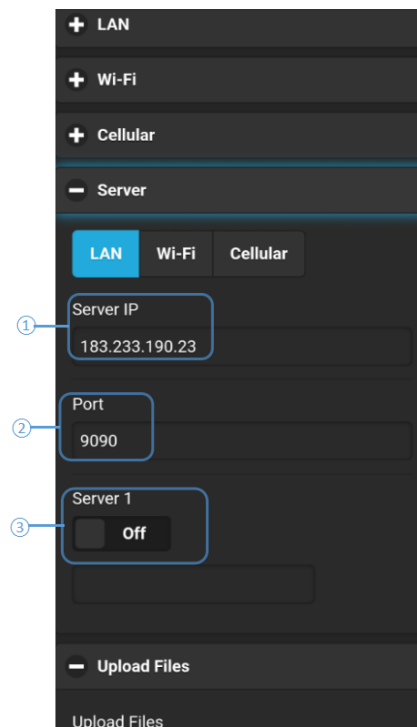
④ **Username:** user name setting, provided by the operator, please consult the operator.

⑤ **Password:** user password setting, provided by the operator, please consult the operator.

⑥ **IMEI.**

⑦ **Manufacturer.**

8.3.5 Network Settings

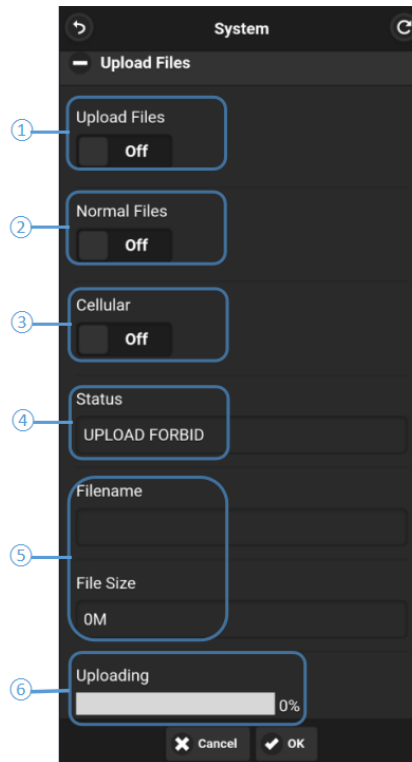


① **Server IP:** IP address of the server. The default server IP of LAN, Wi-Fi, and Cellular is 183.233.190.23.

② **Port:** server port number.

③ **Server 1:** domain name setting. You can manually input the domain name when it is set to ON.

8.3.6 Files Uploading



① **Upload Files:** ON/OFF

② **Normal File:** two states, OFF and ON.

- OFF: Upload such videos as alarm recording files and scheduled recording files except the normal videos.

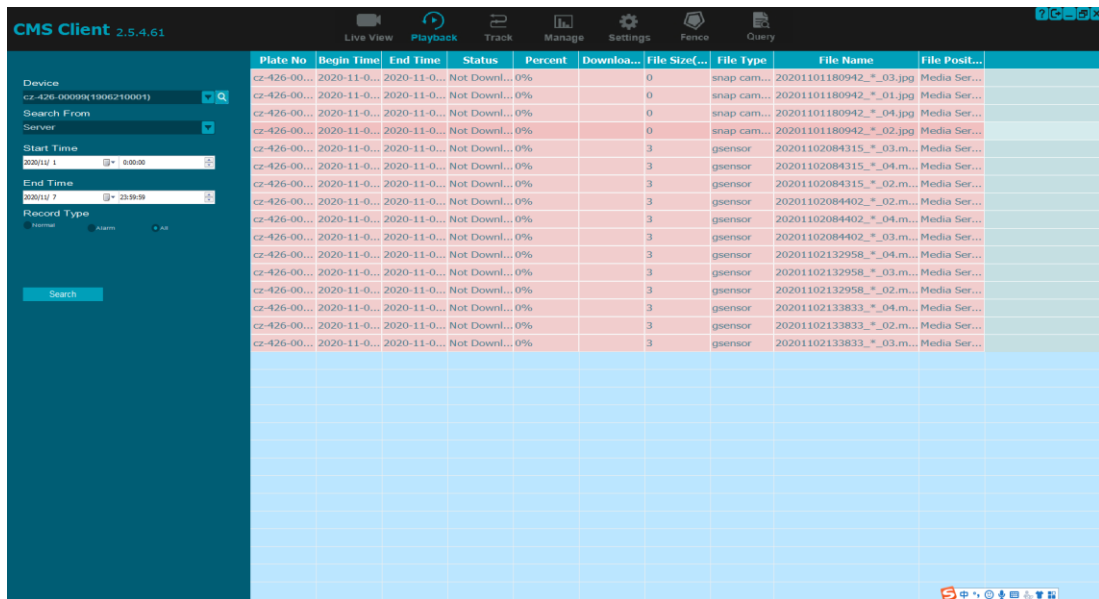
- ON: Upload all video recording files (including the normal recording ones).

③ **Cellular:** two states, OFF and ON

- OFF: The video files will only be uploaded when wired network or Wi-Fi is connected.

- ON: When Cellular is connected, uploading files is allowed. When the switch is turned on, there will be a pop-up box prompting "Network flow consuming, continue?". Click "OK" to confirm. However, after turning it on, it will consume a lot of traffic once Cellular is connected. Thus, it is recommended to set it to OFF.

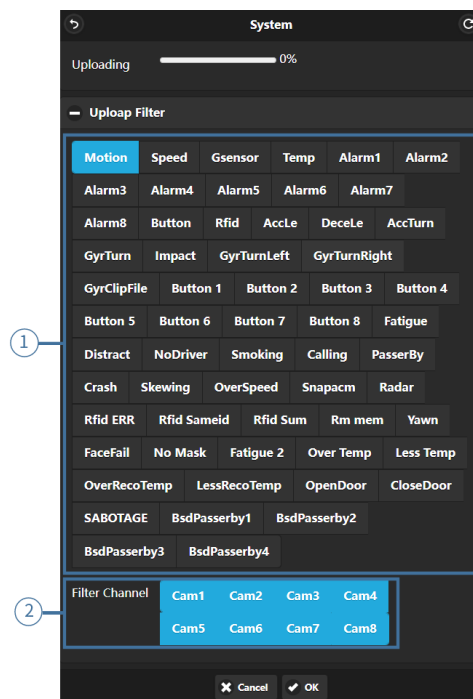
④ **Status:** displays the working status of "Upload Files". The successfully uploaded video files can be found in the client interface below:



⑤ **Filename&File Size:** displays the filename and the size of the uploaded video file.

⑥ **Uploading:** displays the progress bar of video file uploading.

8.3.7 Filter Channel Uploading (HD waterproof network MDVR doesn't have this module)



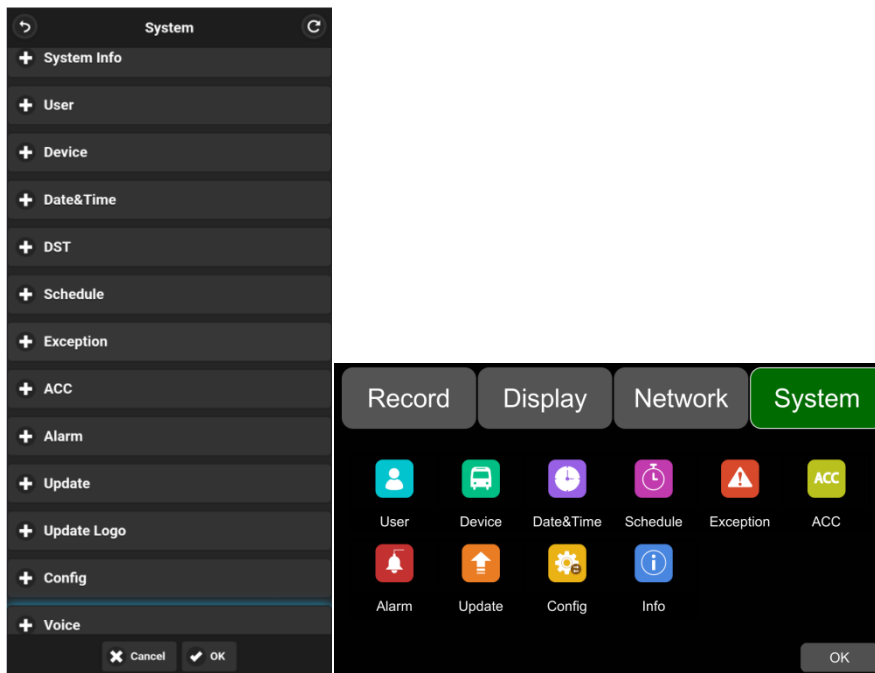
① **Upload Filter:** filter type selection.

② **Filter Channel:** filter channel selection.

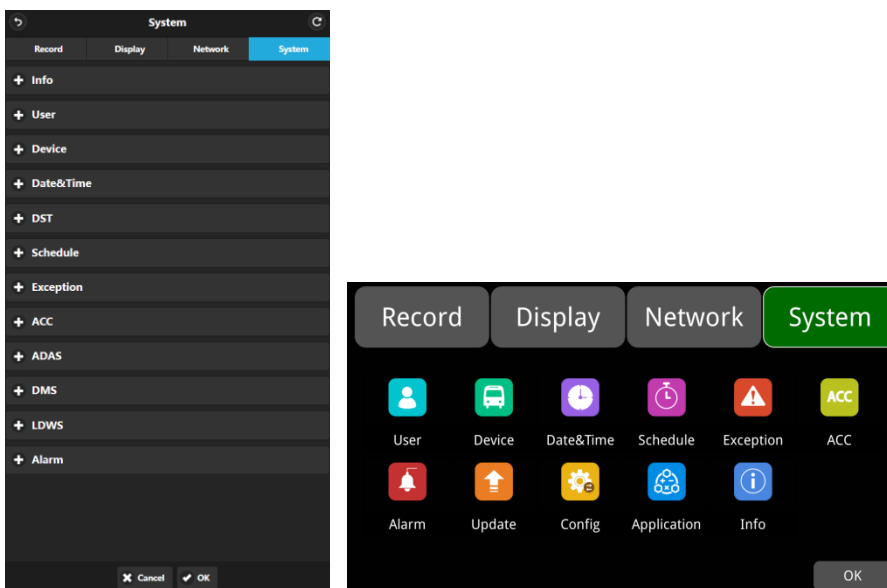
8.4 System Settings

HD waterproof network MDVR System includes 13 modules totally, while intelligent HD waterproof network MDVR System includes 12 modules totally. WEB UI and corresponding DVR interface are shown as follows:

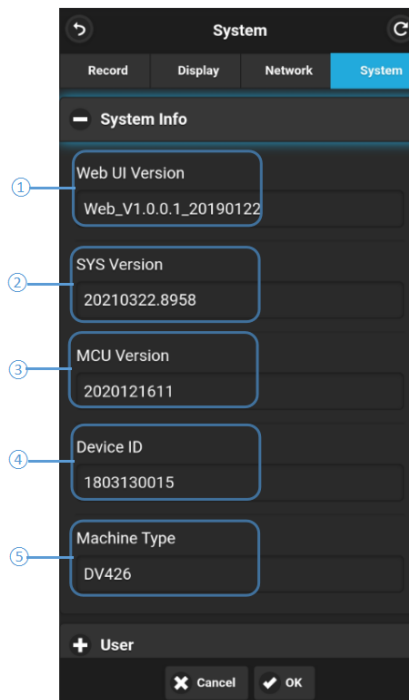
The following picture is an example of HD waterproof network MDVR interface:



The following picture is an example of intelligent HD waterproof network MDVR interface:



8.4.1 System Information



- ① **Web UI Version:** version number of the current version of WEB UI.
- ② **SYS Version:** version number of DVR system.
- ③ **MCU Version:** version number of DVR MCU.
- ④ **Device ID:** device server ID number.
- ⑤ **Machine Type:** DVR type.

8.4.2 Login Settings

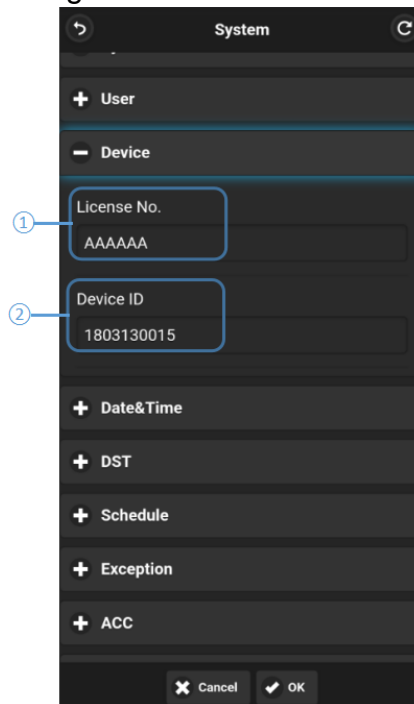
The screenshot shows a mobile application interface for 'System' settings. The title bar at the top is labeled 'System' and includes a back arrow on the left and a refresh icon on the right. Below the title bar, there is a section header 'User' with a minus sign icon to its left. The form contains six input fields, each with a blue circle and number to its left:

- ① Username: The input field contains the text 'admin'.
- ② Password: An empty input field.
- ③ Confirm Password: An empty input field.
- ④ Guest Name: The input field contains the text 'guest'.
- ⑤ Guest Password: An empty input field.
- ⑥ Confirm Password: An empty input field.

At the bottom of the screen, there are two buttons: 'Cancel' with a close icon (X) and 'OK' with a checkmark icon (✓).

- ① **Username:** display the admin user name.
- ② **Password:** set the admin user password.
- ③ **Confirm Password:** confirm the password of admin user.
- ④ **Guest:** display the guest user name.
- ⑤ **Password:** set the guest user password.
- ⑥ **Confirm Password:** confirm the password of guest user.

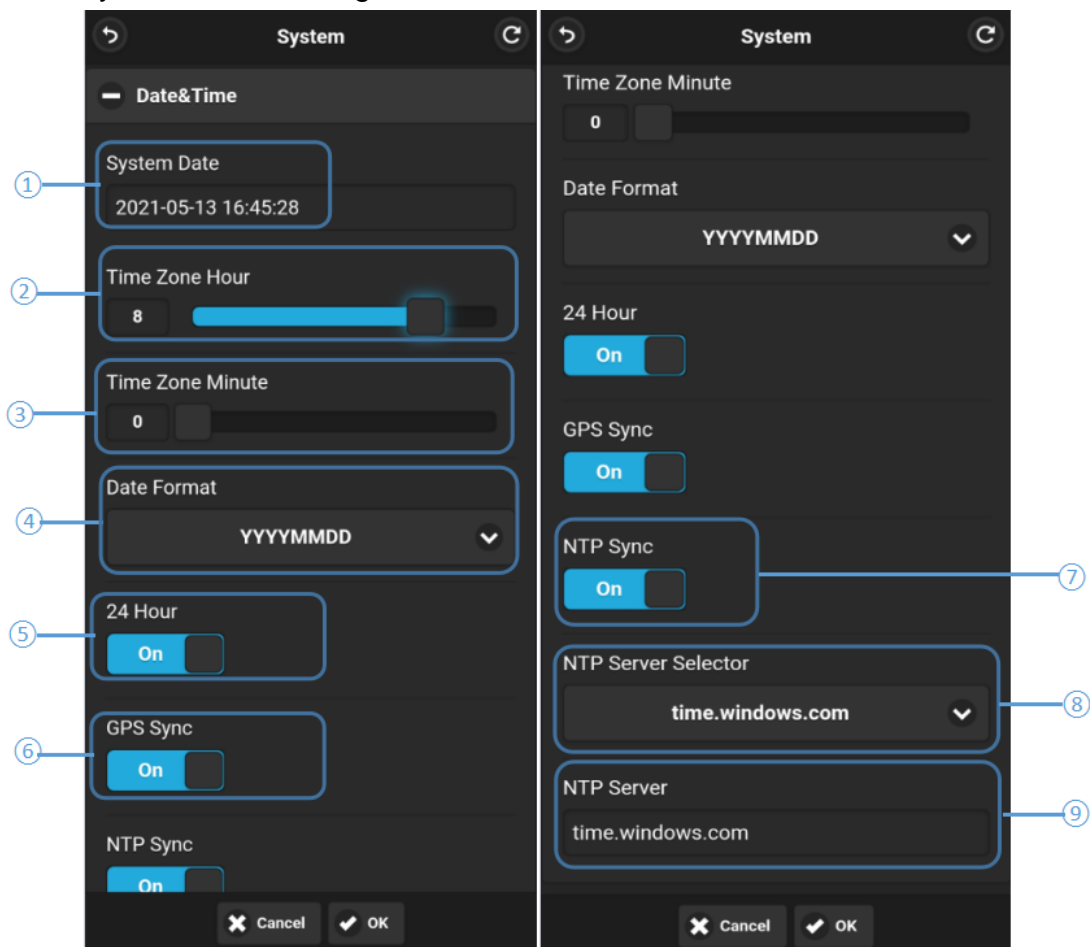
8.4.3 License Number Settings



① **License NO.:** license number setting.

② **Device ID:** ID number of the device. This ID number does not support user-defined.

8.4.4 System Time Settings



① **System Date:** DVR system time setting.

② & ③ **Hour & Minute:** time zone setting should be accurate to the minute.

Hour & Minute	Minimum	Maximum	Default
Hour	-12	14	8
Minute	0	59	0

④ **Date Format:** date mode display, "YYYYMMDD" is displayed in the form of "year-month-date", and "MMDDYYYY" is displayed in the form of "month-date-year".

⑤ **24 Hour:** if it is turned on, the time format will be displayed in 24-hour system format. Otherwise, the display will be in 12-hour system format.

⑥ **GPS Sync:** turn on or off the GPS time calibration.

⑦ **NTP Sync:** turn on or off the NTP time calibration.

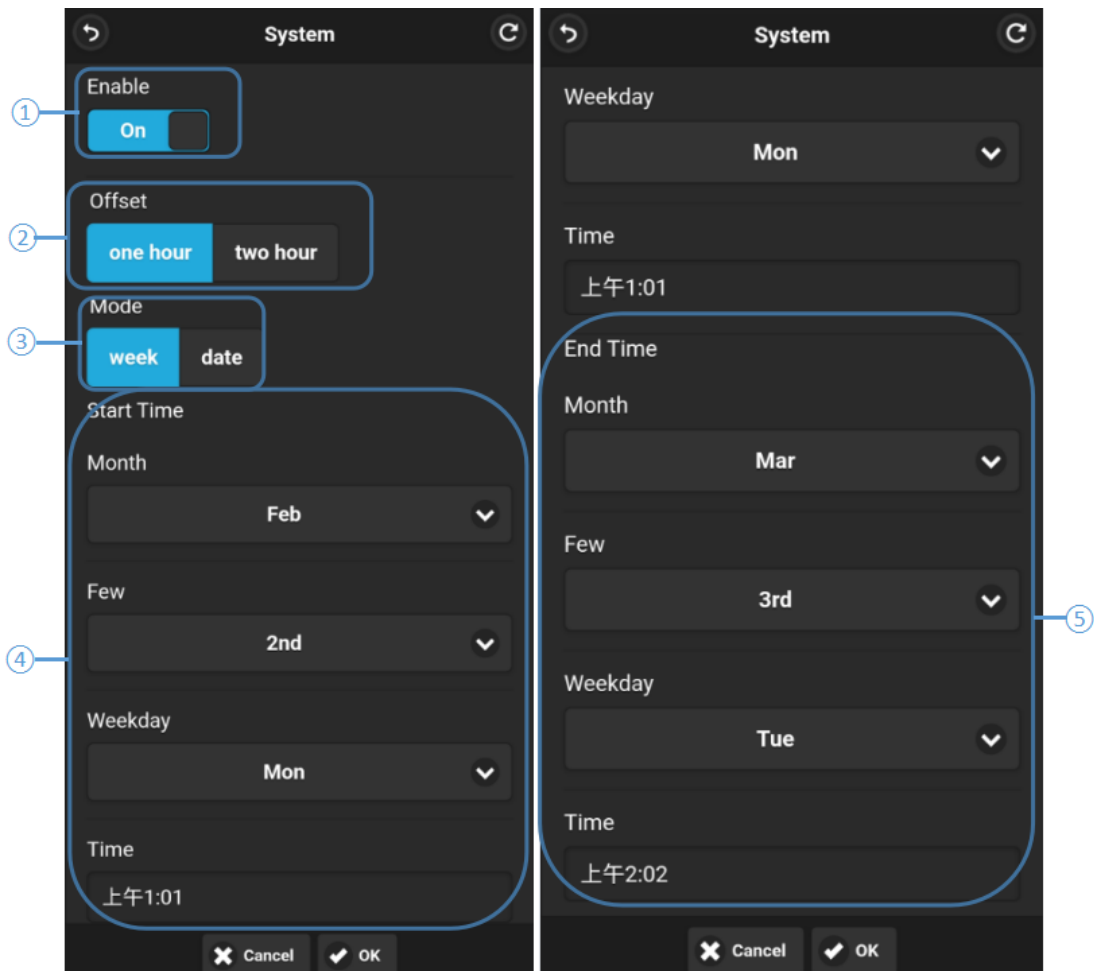
⑧ **NTP Server Selector:** select the URL of NTP server.

⑨ **NTP Server:** display the URL of NTP server.

Usage Scenarios	Usage Instructions
GPS: Off and NTP: Off	Set the time zone and daylight saving time firstly, then set the date and time
GPS: On or NTP: On	Must set time zone and daylight saving time, no need to set the date and time

Note: When "Time Sync" -> "GPS" or "Time Sync" -> "NTP" is set to 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 ET-8, resulting in abnormal device time.

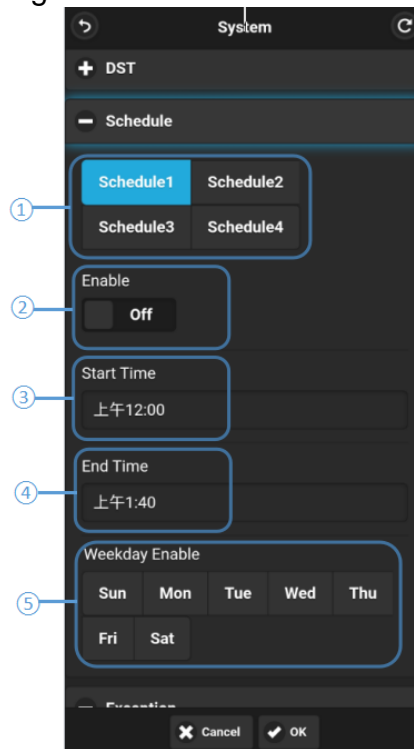
8.4.5 Daylight Saving Time Settings



① **Enable:** set DST to On or Off.

- ② **Offset:** adjust the offset by 1 hour or 2 hours after enabling DST.
- ③ **Mode:** select DST mode (set DST by week or date).
- ④ **Start Time:** set the start time of DST.
- ⑤ **End Time:** set the end time of DST.

8.4.6 Scheduled Recording



① **Schedule:**

- Support up to four scheduled recordings. The minimum unit of recording time is minute.
- The recording time can be overlapped.
- The end time of scheduled recording must be later than the start time.

② **Enable:** ON/OFF of scheduled recording.

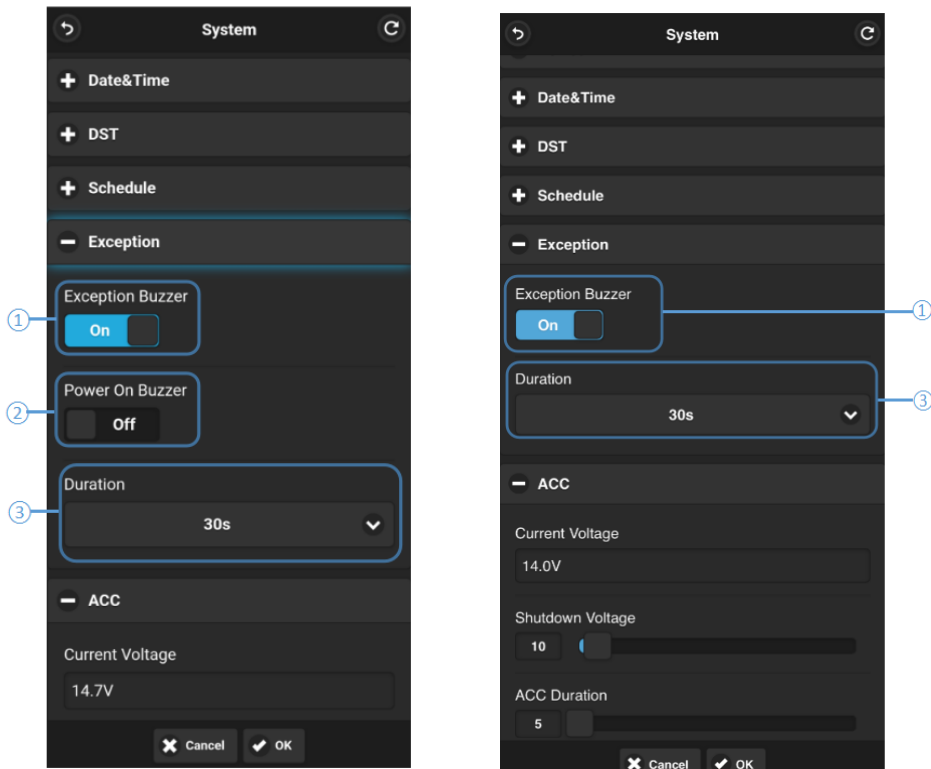
③ **Start Time:** set the start time of scheduled recording.

④ **End Time:** set the end time of scheduled recording.

⑤ **Weekday Enable:** select the days for scheduled recording.

8.4.7 Buzzer Abnormal Alarm Settings

The following left picture is the Exception setting interface of intelligent HD waterproof network MDVR and the right picture is the Exception setting interface of intelligent HD network MDVR. Compare to the former, the latter doesn't have Power on Buzzer choice.

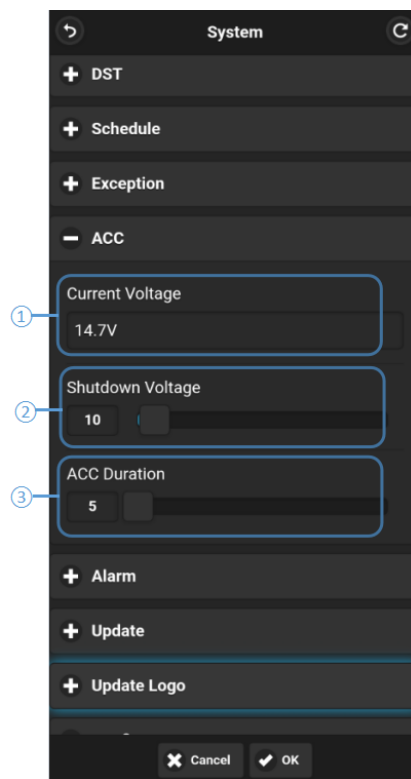


Left: intelligent HD waterproof network MDVR.

Right: intelligent HD network MDVR.

- ① **Exception Buzzer:** the alarm buzzer can be set to ON/OFF.
- ② **Power On Buzzer:** the power on buzzer can be set to ON/OFF.
- ③ **Duration:** set the interval of the buzzer, 30s, 60s or 90s optional.

8.4.8 ACC Settings



① **Current Voltage:** the current working voltage of the DVR.

② **Shutdown Voltage:** when the current and voltage are lower than the Shutdown Voltage, the DVR will automatically shut down. In this case, the DVR will work for about 1min after cutting the power and power it up again, then we can modify the value of the Shutdown Voltage. However, when the voltage is higher than the Shutdown Voltage, the DVR will not restart and will work normally.

③ **ACC Duration:** DVR will continue to record for a period of time after ACC is disconnected. The ACC delay time can be set from 5s to 3600s.

ACC	Minimum	Maximum	Default
Shutdown Voltage(V)	9	24	10
ACC Duration(s)	5	3600	5

8.4.9 Alarm Settings



intelligent HD waterproof network MDVR/HD waterproof network MDVR

① **Alarm1-Alarm4:** customised alarm recording.

Reverse: reversing alarm recording.

Brake: brake alarm recording.

Left: left turn alarm recording.

Right: right turn alarm recording.

Note: Left: left turn alarm recording; Right: right turn alarm recording are unused temporarily.

② **Trigger Level:** there are 3 trigger levels. The "Low" and "High" options are used to turn on the alarm function. "Low" means a low electrical level trigger, generally used for debugging. "High" means a high electrical level trigger, used to turn on the alarm function. "Off" refers to turn off the alarm trigger function.

③ **Output Duration:** the displaying duration of "Display", "Cursor" and "Alarm Out".

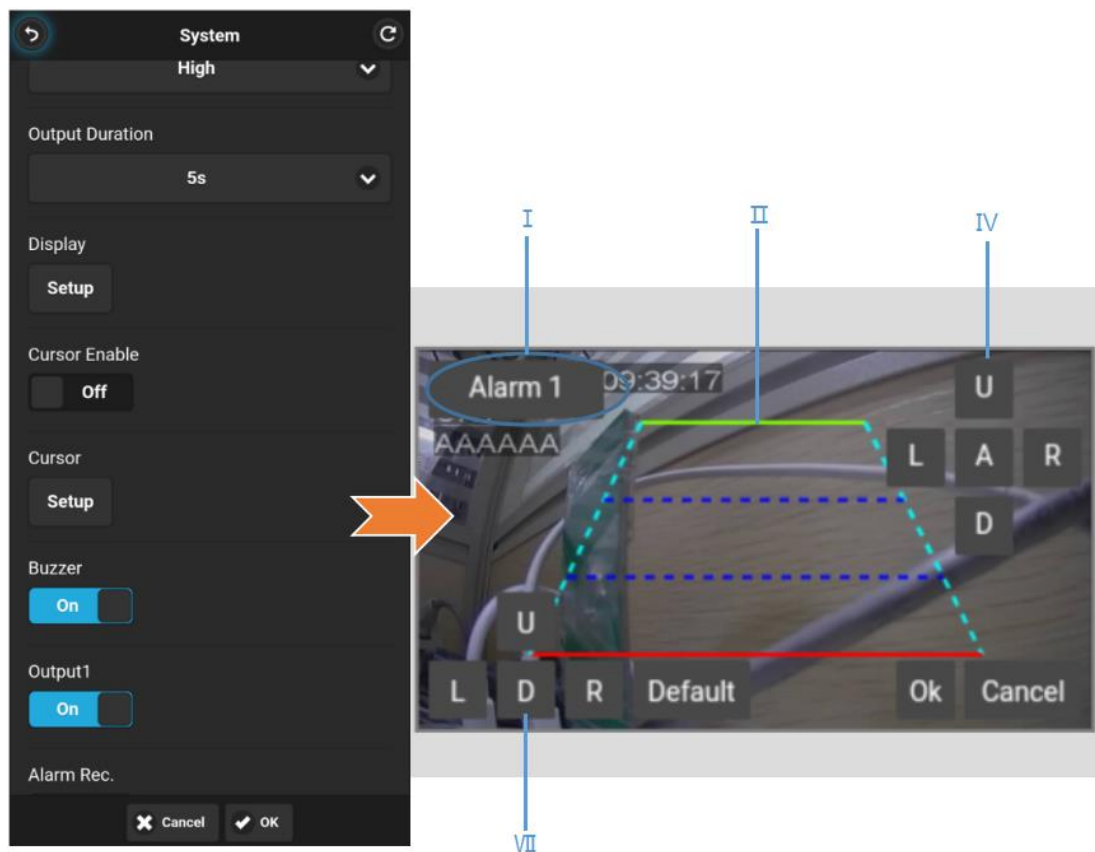
Output Duration can be selected from 0sec, 5sec, 10sec, 30sec, 60sec, 5min, 10min, 30min, 60min and Always.

④ **Display:** once the alarm is triggered, the selected single channel (Cam1-8), dual channel (CamLR and CamFB) or triple channel (CamLRB) will be in full screen mode.

Detailed operation is shown below:

⑤&⑥ are the reversing cursor switch and the button to enter the configuration interface.

The operation is shown in the following picture:



I Alarm type

II Cursor line: The selected line will be bolded three times, while the middle two lines will not change.

IV Line selection button: Up (U), Down (D), Left (L), Right (R), All selected (ALL)

VII Click Up (U), Down (D), Left (L) and Right (R) to move the selected line.

(1)When click “U”, the green line can be moved to up, down, left and right.

(2)Click “L” and press the up and down direction keys to move the vertex of the blue line on the left to the right or left. Press the left and right direction keys to move the bottom

point of the mentioned blue line to the left or right.

(3) Click “R” and press the up and down direction keys to move the vertex of the blue line on the right to the right or left. Press the left and right keys to move the bottom point of the mentioned blue line on the right to the left or right.

(4) When click “D”, the red line can be moved to up, down, left and right.

⑦ **Buzzer:** set the buzzer. By default, the buzzer sounds will last for 5 seconds when alarming.

⑧ **Output1:** set to ON, the output of 12V electrical level comes from the alarm wire of Output 1

⑨ **Alarm Rec:** alarm recording switch of the corresponding channel

⑩ **Priority:**

(1) Alarms with higher priority will be triggered first.

(2) 1 represents the highest priority, and 8 represents the lowest priority.

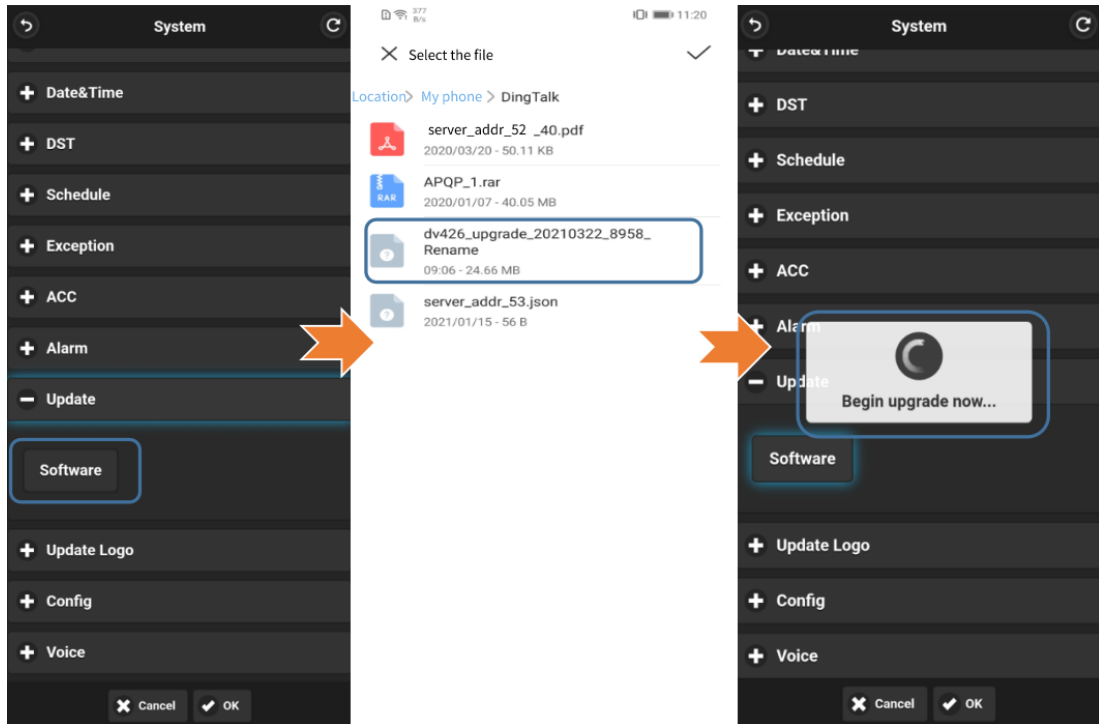
(3) If both A and B alarms are triggered at the same time, A will start recording first if A has a higher priority than B. After A finishes recording, if B is still triggered, B will start recording. If B is not triggered any more, will not start recording.

(4) If alarm B is triggered and is recording, then alarm A is triggered, B will not stop recording even if A has a higher priority.

8.4.10 Update

(1) Download the upgrade package to the mobile phone, make sure its name is correct, if not, rename it.

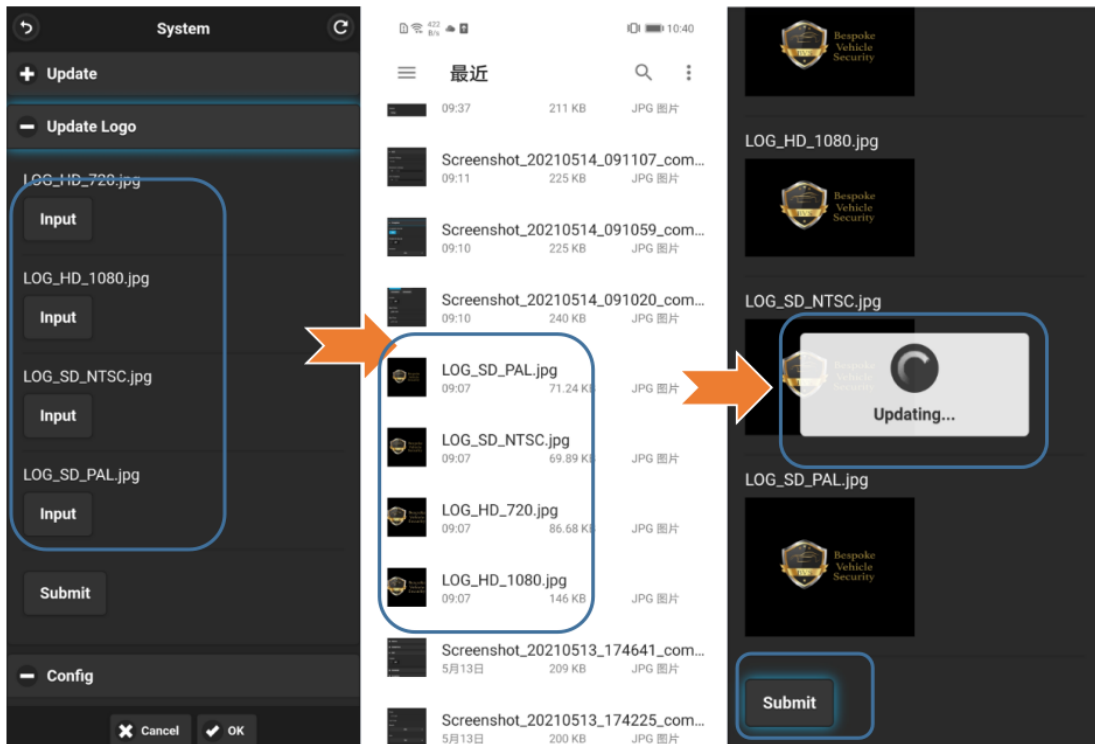
(2) After selecting the upgrade package, there will be a pop-up box prompting to start the upgrade. The detailed operation is shown in the picture below:



8.4.11 Logo Updating

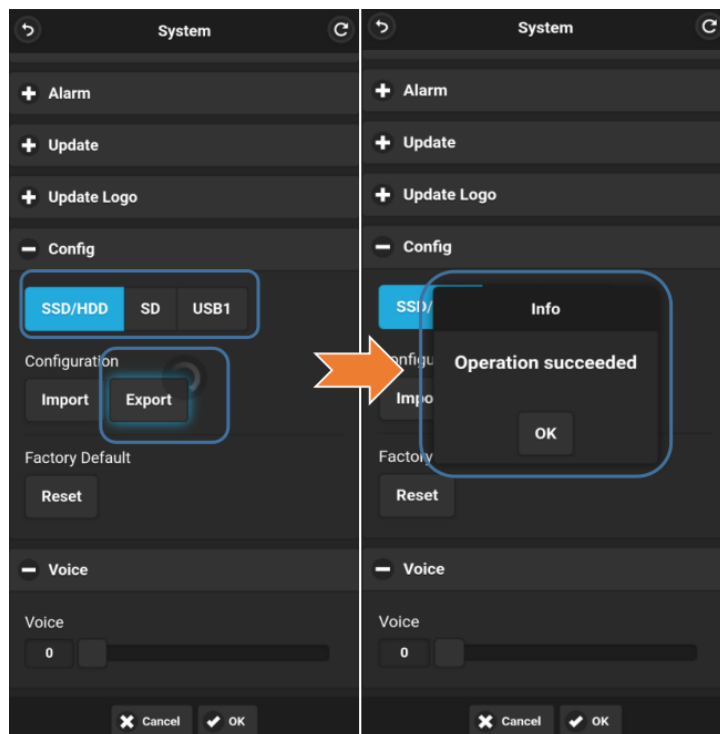
(1)Download 4 logo images to your mobile phone.

(2)Select the logo of the corresponding format, click "Submit", a pop-up box will appear "Updating...". Restart the device, and the new logo will take effect. The detailed operation is shown in the following picture:

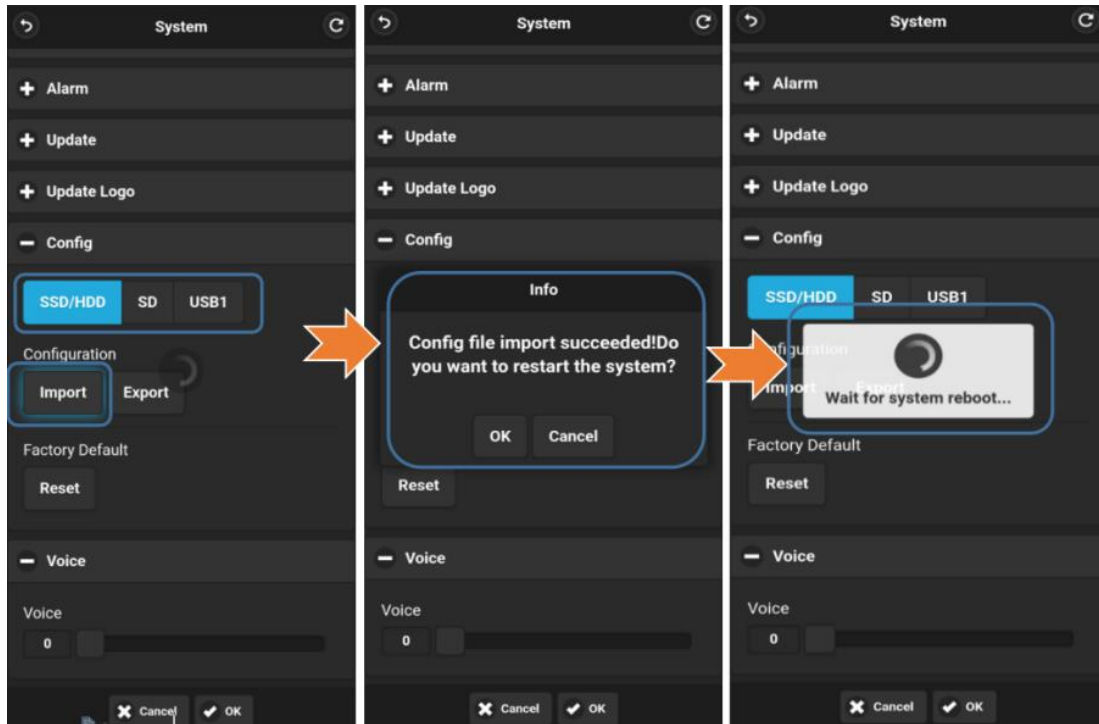


8.4.12 Configuration Information Settings

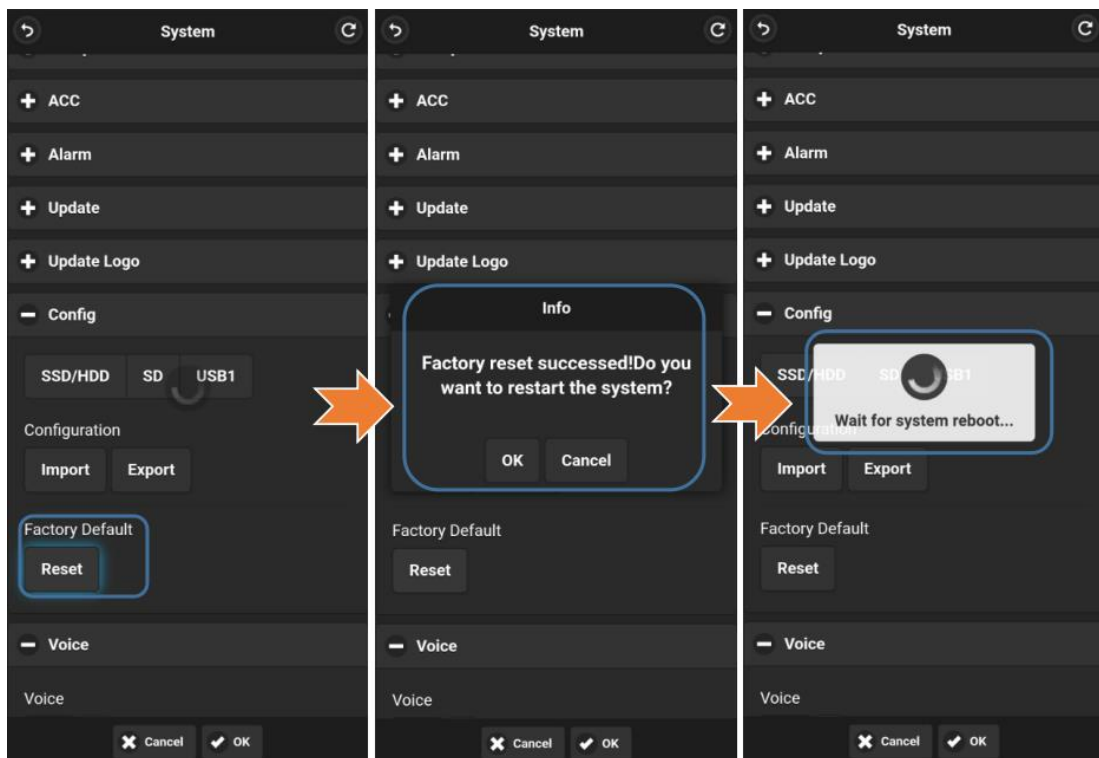
Configuration Export: export configuration information to SD, USB or SSD devices.



Configuration Import: import configuration information from SD, USB or SSD devices.

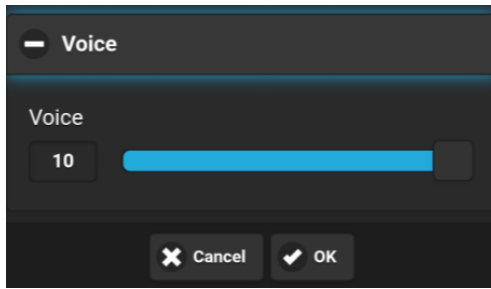


Factory Default: press the “Reset” button to reset the parameters.



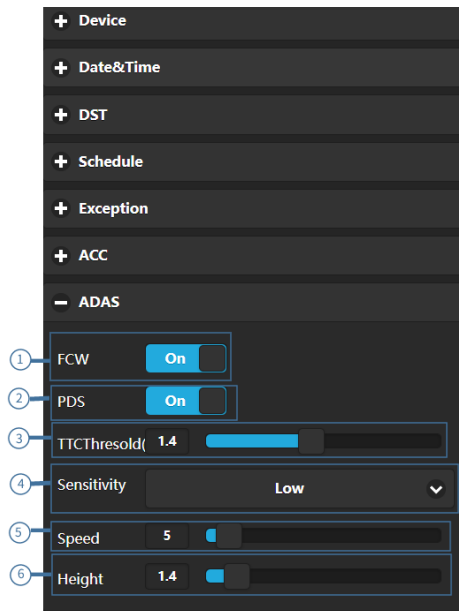
8.4.13 Volume

Volume adjustment: the minimum volume is 0, the maximum is 10. The default is 10.



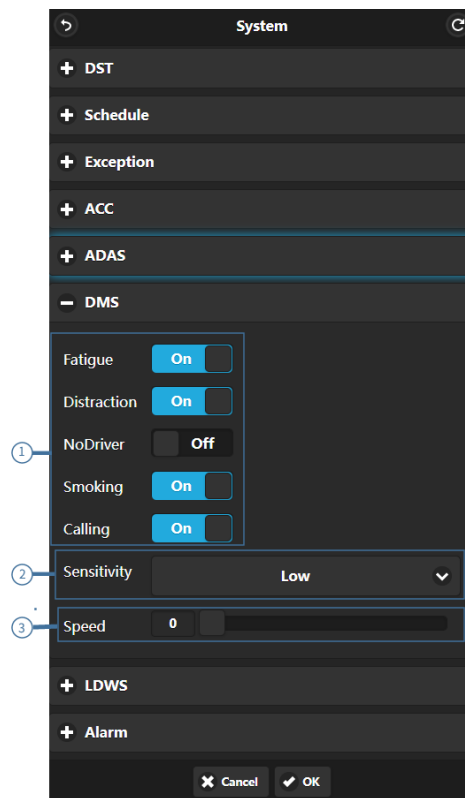
Function	Minimum	Maximum	Default
Volume	0	10	10

8.4.14 ADAS



- ① **FCW:** forward collision warning algorithm.
- ② **PDS:** pedestrian detection system algorithm.
- ③ **TTC Threshold(s):** estimated collision time, default is set to 1.4s.
- ④ **Sensitivity:** three sensitivity levels in total, Low/Medium/High, default is set to low.
- ⑤ **Speed:** set the FCW speed. When FCW speed is set to 5, the FCW algorithm can start working only when the speed is greater than or equal to 5km/h. The default value is 5.
- ⑥ **FCW installation:** installed in front of the windshield, the installation height is about 1.4h.

8.4.15 DMS



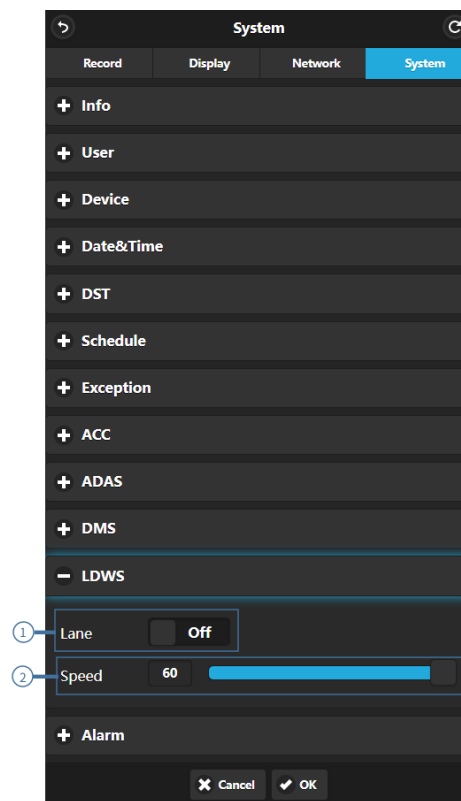
① **Alarm Type.**

② **Sensitivity:** three sensitivity levels in total, Low/Medium/High, default is set to low.

③ **Speed:** set the DMS speed. When DMS speed is set to 60, the DMS algorithm can start working only when the speed is greater than or equal to 60km/h. The default value is

0.

8.4.16 LDWS



① **LANE:** the lane departs, and the default is set to off.

② **Speed:** set the lane departure algorithm speed. When set to 60, the lane departure algorithm can start working only when the speed is greater than or equal to 60km/h. The default value is 60.

8.5 Exit

Click “Logout” to exit the WEB UI interface and return to the login interface, as shown below:

