AVYCON®

DIVERSITY Digital Video Recorder

DVR USER MANUAL

Please read this manual carefully for correct use of the product.
Please preserve this manual for reference purposes.

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

This manual may contain several technically incorrect placements or printing errors. Updates will be added to this manual as newer versions release. The contents of this manual are subject to change without notice.

This device should be operated only with the power source indicated on the marking label. The voltage of the power must be verified before use. Please remove the cables from the power source if the device is not to be used for a long period of time.

Do not install this device near any heat sources such as radiators, heat registers, stoves, or other devices that produce heat.

Do not install this device near water. Clean only with a dry cloth.

Do not block any ventilation openings and ensure proper ventilation around the machine.

Do not power off the device at normal recording condition.

This machine is for indoor use only. Do not expose the machine to rain or moist environments. If any solids or liquids get into the machine's case, please turn off the device immediately and get it checked by a qualified technician.

Do not try to repair the device yourself without technical aid or approval.

When this product is in use, the relevant contents of Microsoft, Apple, and Google will be involved.
The pictures and screenshots in this manual are only used to explain the usage of our products. The ownerships of trademarks, logos, and other intellectual properties related to Microsoft, Apple, and Google shall belong to the above-mentioned companies.

This manual is suitable for many models. All examples and pictures used in the manual are from one of the models for reference purposes.

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SAFETY INSTRUCTION

Please carefully read the following safety instruction so as to avoid personal injuries and prevent the equipment and other connection devices from being damaged.

1. Power sources (note: please use the power supply attached or specified by the manufacturer)
Never operate the equipment by using unspecified power supply.

2. Never push objects of any kind through openings of DVR
Never push objects of any kind through openings of DVR so as to avoid electric shock or other accidents.

3. Please keep DVR out of harsh environments
Any dust, sand or solid particles that enter inside of DVR chassis can cause irreparable damge that will not be covered under warranty.

4. Do not place the equipment under rain or humid environment
Do not place the equipment under humid environment like basement. If the equipment is accidentally in contact with water, please unplug the power cable and immediately
contact your local dealer.

5. Keep the surface of the equipment clean and dry
Use soft damp cloth to clean the outer case of DVR (do not use liquid aerosol cleaners)

6. Do not operate if any problems are found
If there are any strange smell or sound from DVR, unplug the power cable and contact the authorized dealer or service center.

7. Do not try to remove the chassis cover, while device is powered
Warning: Do not remove the DVR chassis cover so as to avoid electric shock.

8. Handle with care
If DVR does not work normally because of a fall tp the ground or impact from a heavy object, please contact the authorized dealer for repair or replacement.

9. Use standard lithium battery (Note: Use the batteries attached or specified by the manufacturer)
After cutting off the power supply, if the system clock cannot continue to work, please replace the standard 3V lithium battery on the main board.

Warning: Turn off DVR before replacing the batteries, or you may be suffered from serious electric shock. Please properly dispose of the used batteries.

10. Put the equipment in a place with good ventilation

The DVR system includes HDD, which produces large amount of heat during operation. As a result, do not block the ventilation openings (on the top, bottom, both sides and the reverse side) for cooling the system during operation. Install or put the equipment in the place with good ventilation.

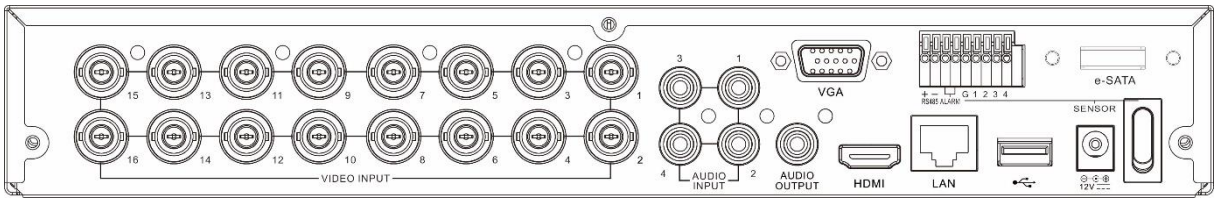
11. The attached power adapter can only be used for 1 set of DVR. Do not connect more equipment, or DVR may be restarted repeatedly because of insufficient power.

12. Prevent the equipment from water dropping or splashing. Do not place objects containing water, such as flower vase, on the equipment.

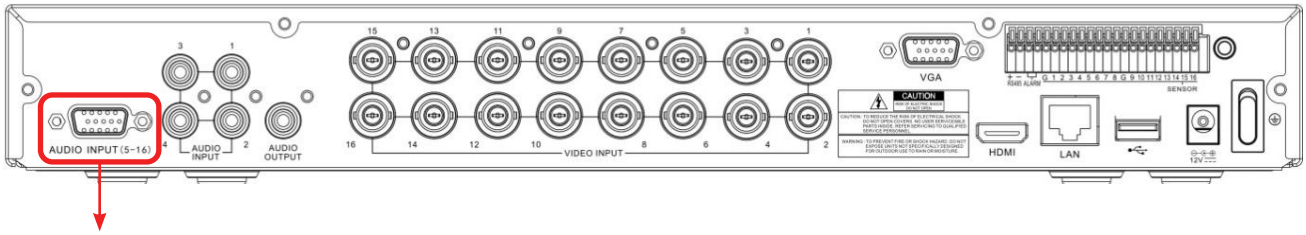
13. Do not ingest battery, Chemical Burn Hazard, This product contains a coin / button cell battery.
If the coin / button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
Keep new and used batteries away from children.
If the battery compartment does not close securely, stop using the product and keep it away from children.
If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Chapter 1 Product Overview

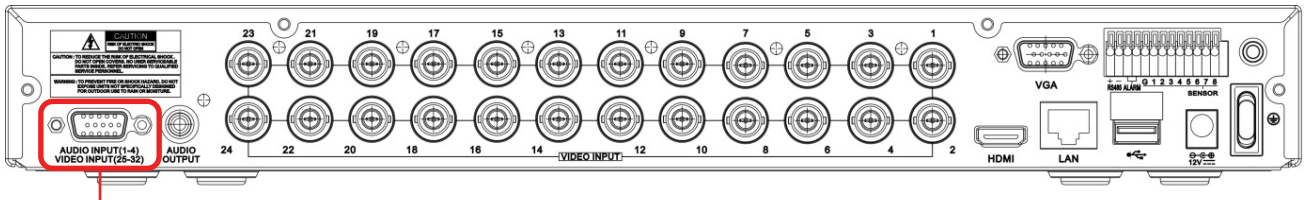
1.1 Rear Panel



Item	Description
VIDEO INPUT	Connect with video input devices, standard BNC port
AUDIO INPUT	Connect with audio input signals, RCA port
AUDIO OUTPUT	Audio signal output, RCA port
USB port	Connect the supplied mouse or USB flash memory
VGA	Connect to your TV or a monitor with VGA input
HDMI	Connect to your digital TV or monitor with HDMI input
LAN	Connect to your home network
e-SATA	Optional. Connect to e-SATA HDD for recording & backup
RS-485	Connect to PTZ devices
Sensor & Alarm	Optional. Connect to an external sensor & alarm devices
Power	Connect to the supplied power adapter
Power Switch	Turn on / off power supply



AUDIO INPUT (5-16)
For some models to connect to audio inputs with supplied connector.



AUDIO INPUT (1-4) & VIDEO INPUT (25-32)
For some models to connect to audio inputs with supplied connector.

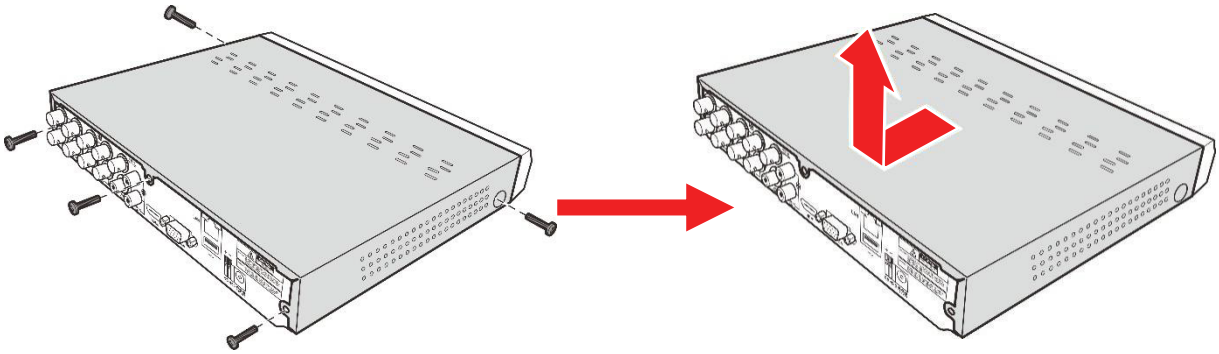
Chapter 2 DVR Installation & Connection

2.1 HDD Installation

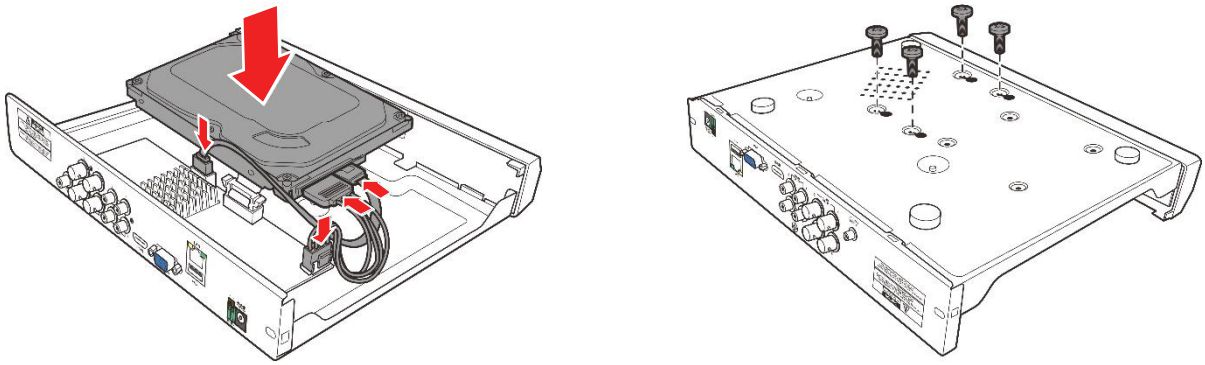
Depending on the package you have purchased, the hard disk drive may be included in the full package. If it is not pre-installed, follow the installation instructions on this user manual.

CAUTION: DO NOT install or remove the hard disk drive while the device power is turned ON.

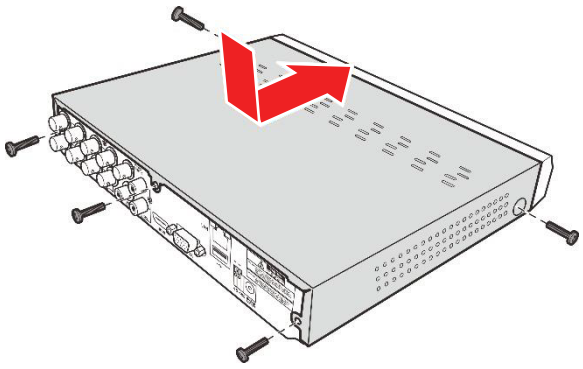
HDD Installation:
1. Cut power firstly, and then remove screws on both sides & rear panel, and open DVR upper cover.



2. Connect the data and power cables to the HDD and place the HDD on the DVR case. Carefully flip the DVR case and secure the HDD to the DVR with the screws.

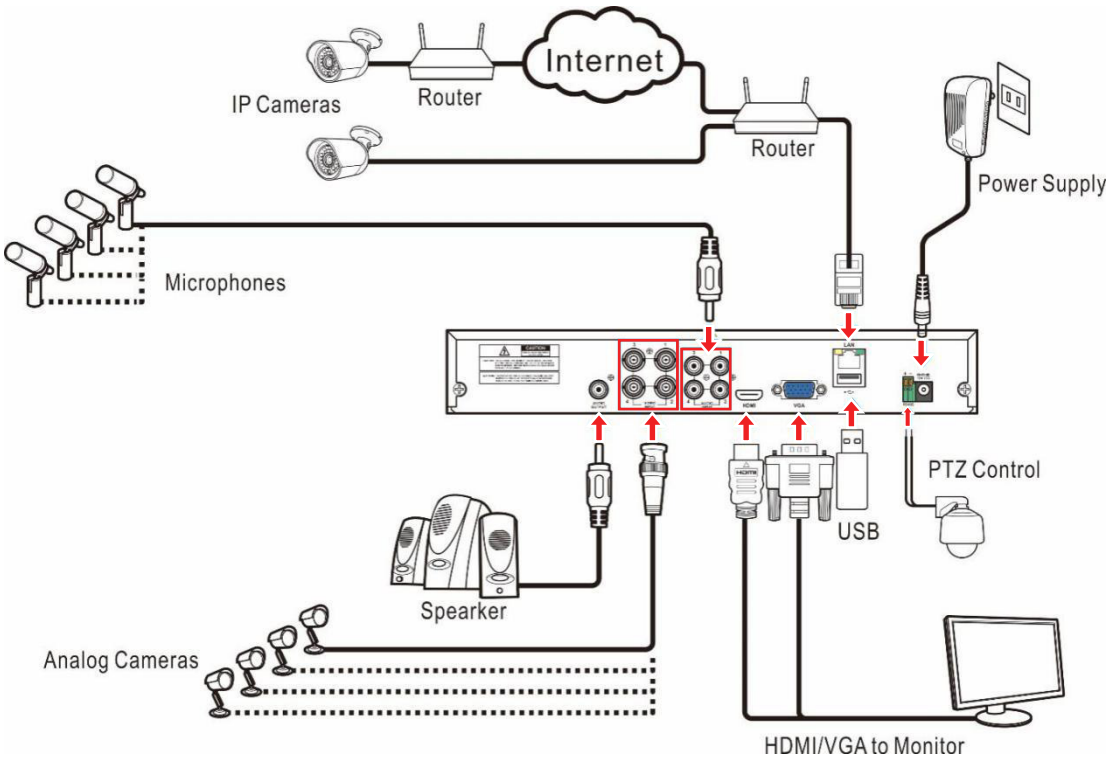


3. Put the upper cover back carfully, and fix the cover with screws.



Note:
Above procedures are for reference only. The practical operation may be different depending on the DVR you have purchased.

2.2 Connection Diagram

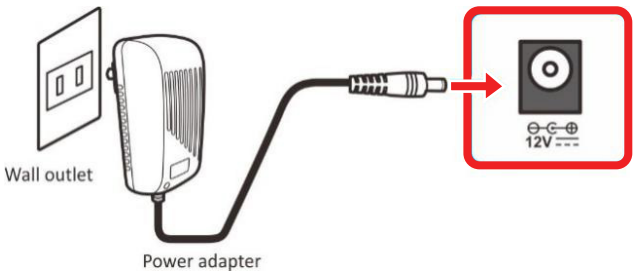


Note:
Above procedures are for reference only. The practical operation may be different depending on the DVR you have purchased.

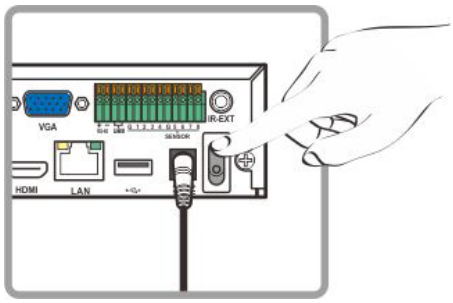
2.3 Power Supply Connection

CAUTION: Use only the supplied power adapter that came with the DVR.

Connect one end of the power adapter to the power connector on the back of the DVR. Plug the other end of the power adapter into the wall outlet.

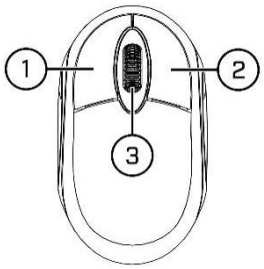


For some specific models, you may need to press the Power switch to turn on the power.



Chapter 3 DVR Common Operations

3.1 Using the Supplied Mouse



1. Left Button:

- Click to select menu options.
- During live viewing in split-screen view, double-click on a Camera to view it in full-screen. Double-click the Camera again to return to split-screen viewing.
- Click upon a Camera on Live Viewing screen to open Camera Quick Toolbar.
- Click and hold to drag sliders and scales on menu mode

2. Right Button:

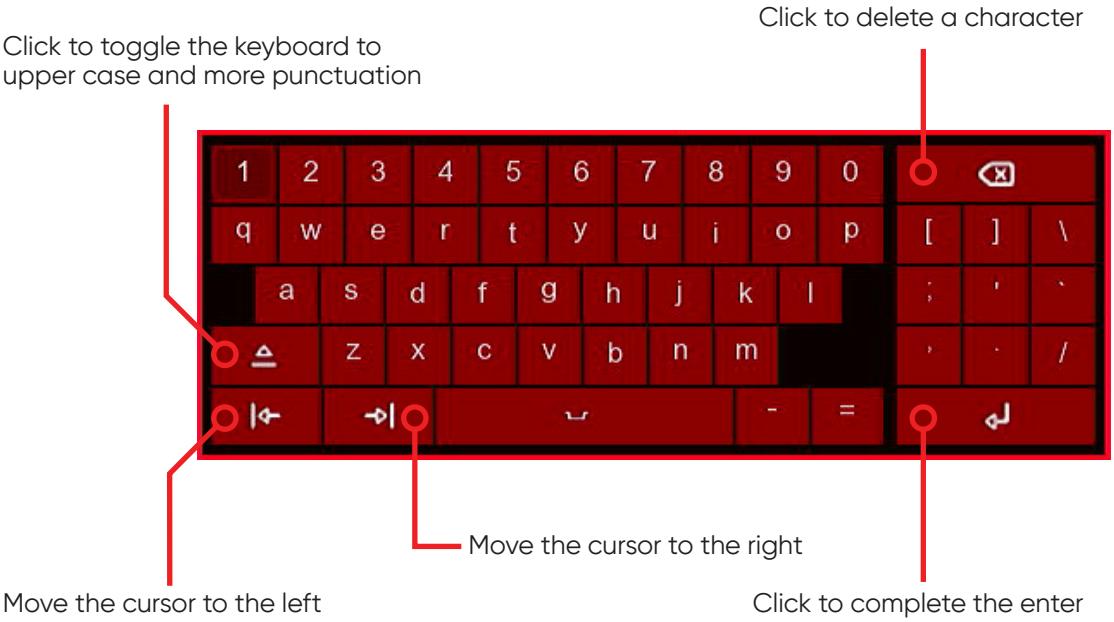
- Click once to open the Taskbar on the Live Viewing screen. View Taskbar on 4.2.2 Taskbar
- In menus, click to go back / close menus.

3.Scroll Wheel:

- In menus, scroll to move up / down through the menu content.
- While hovering over the volume control wheel, scroll to turn system volume up / down.

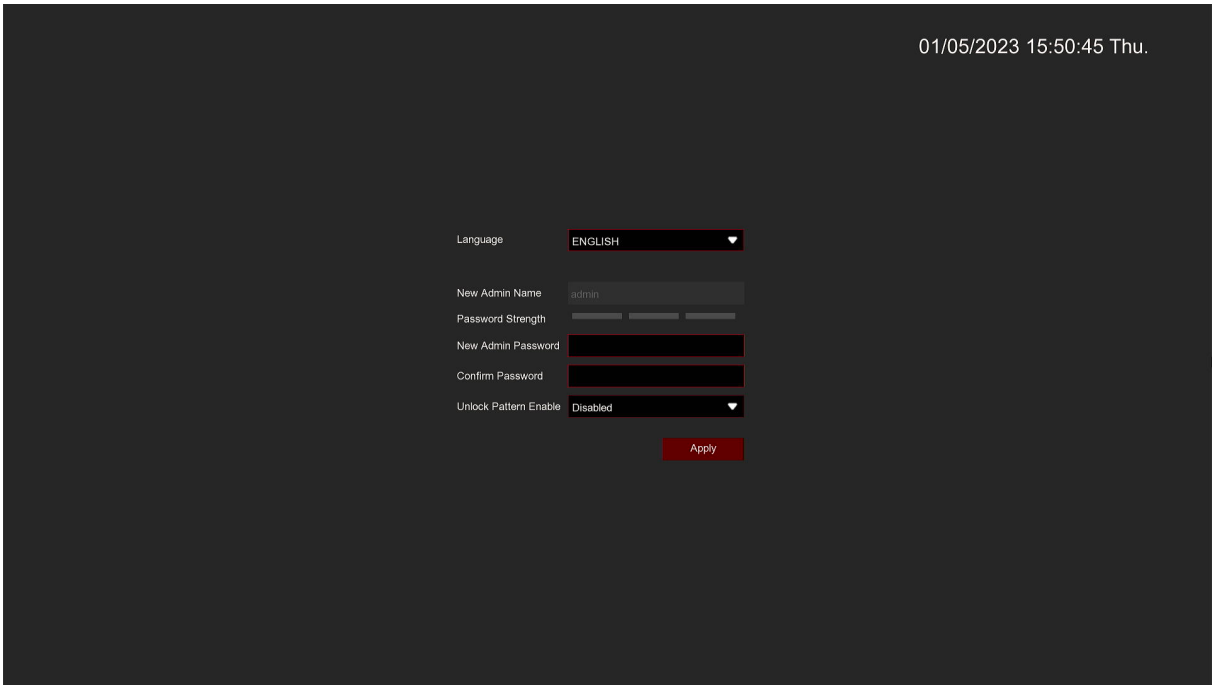
3.2 Using the Virtual Keyboard

You will see the virtual jeyboard automatically on the screen when you need to enter data.

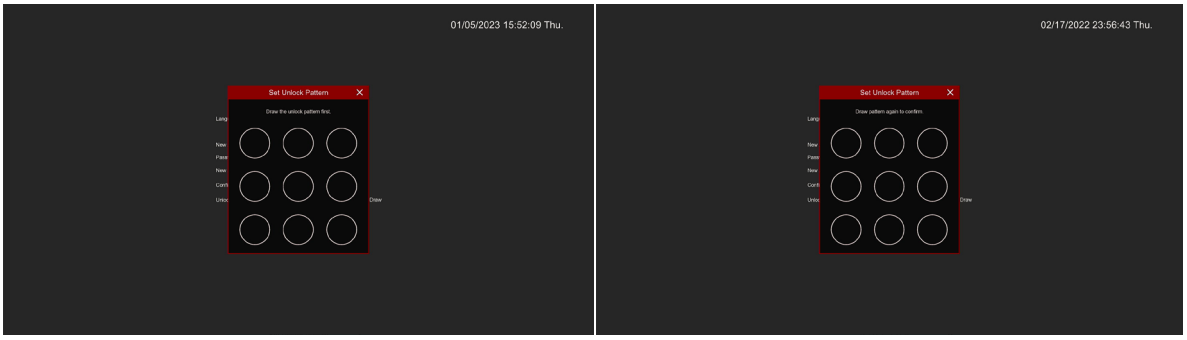


3.3 Password

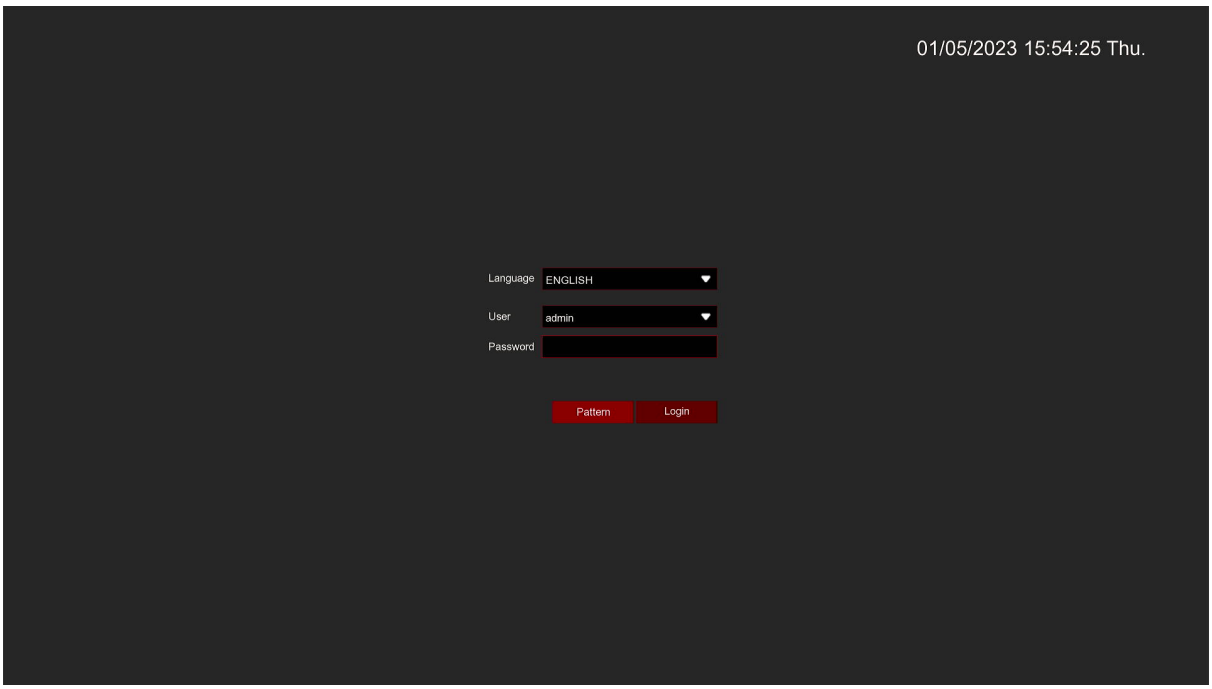
For the first time when you run the DVR, you must be required to set your own password immediately in order to protect your privacy. Please be sure to record your username and password and save them in a secure place.



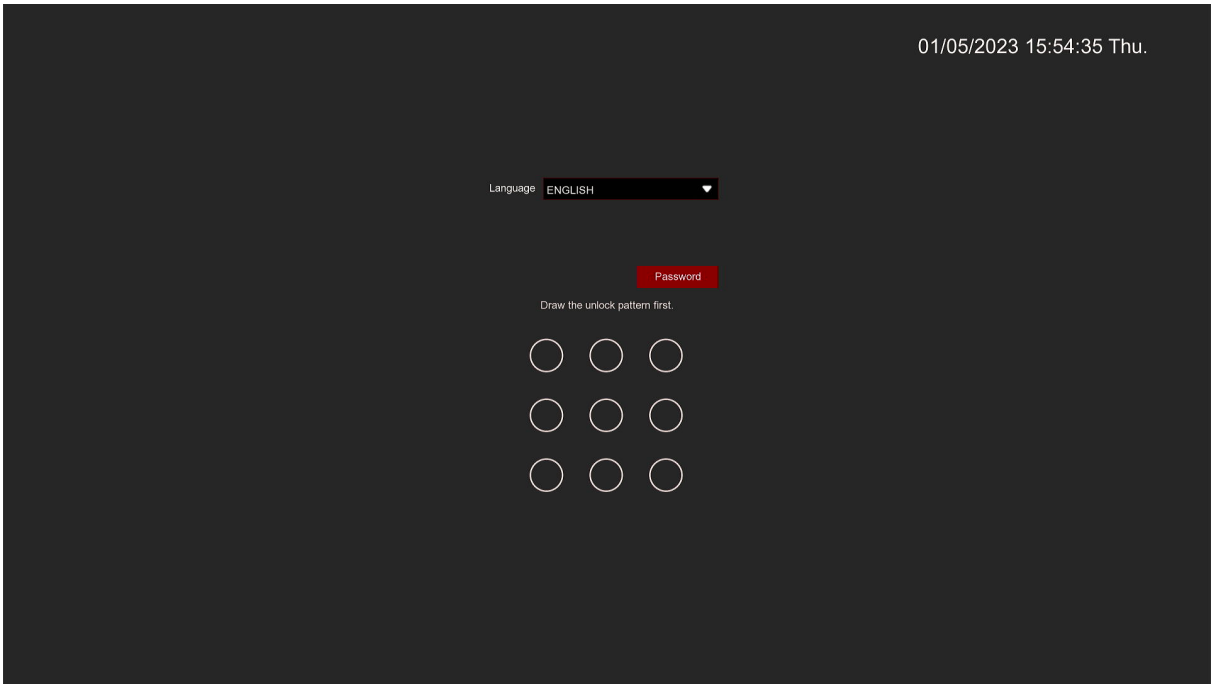
Language: Choose an OSD language
New Admin name: To set your own administrator name.
New Admin Password: To set your own password. Please follow password strength requirements shown on-screen.
Corfirm Password: Enter your own password again.
Unlock Pattern Enable: Enable uplock pattern. Click the right edit icon to start setting the pattern password. After confirming twice, you can set the gesture password successfully.



Click **Apply** to confirm your settings and goes to the login interface. Enter your user name & password to **Login** the DVR system.



Pattern: Enter the pattern login interface.



Note:

If you forget two kinds of password, you will not be able to login the system. Please check Forgot Password to reset password. System will send the temporary password to the setting email. This password is used on login interface and User setting to change password. If you didn't set the email, please contact your reseller to reset password. (Some models didn't support FORGOT PASSWORD function.)

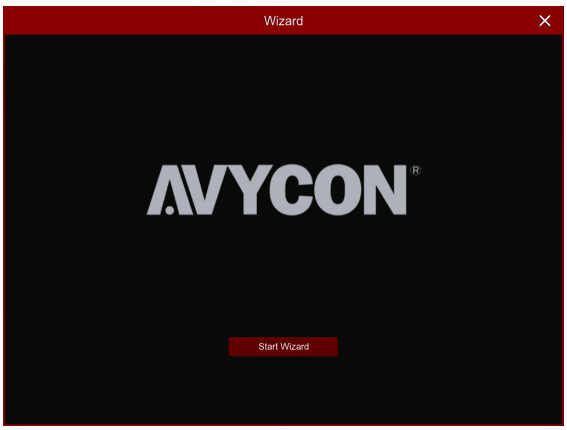
Chapter 4 DVR Starting Up

4.1 Start Wizard

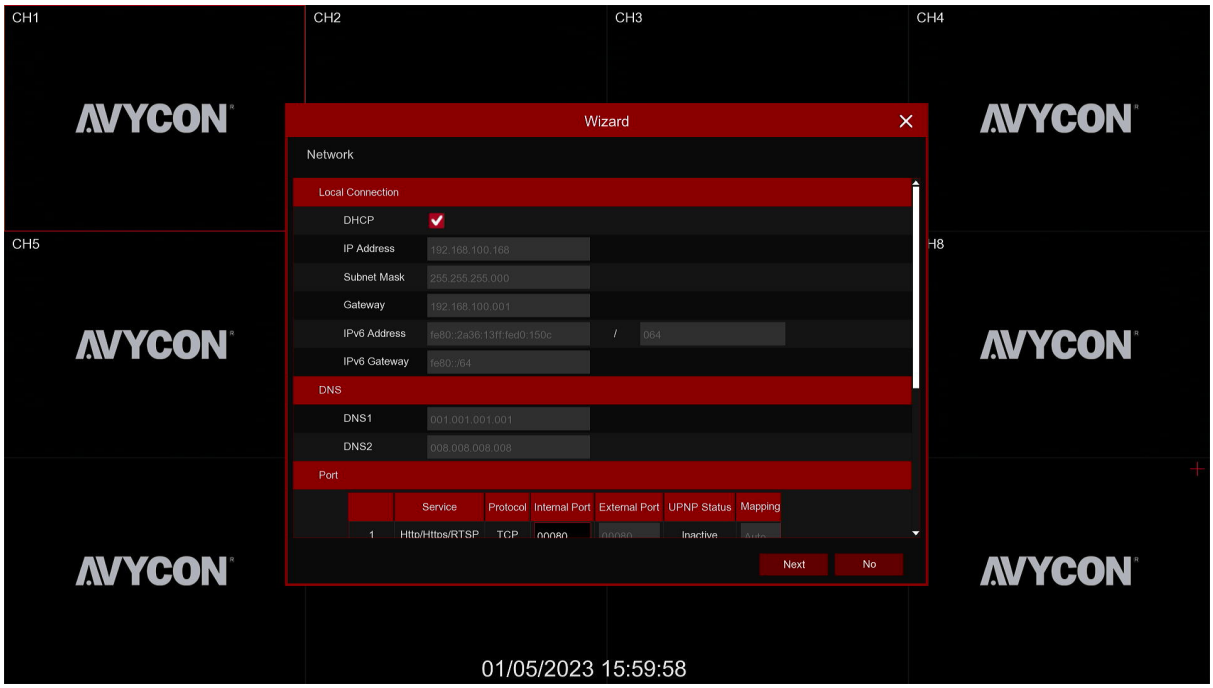
Start Wizard will quickly help you configuring the DVR system.

4.1.1 Start Wizard

Click the **Start Wizard** to proceed to the next step



4.1.2 Network Configuration



If you connect to a router allows to use DHCP, please check the **DHCP** box. The router will assign automatically all the network parameters for your DVR. Unless the network is manually addressed below parameters:

IP Address: The IP address identifies the DVR in the network. It consists of four groups of numbers between 0 to 255, separated by periods. For example, "192.168.001.100".

Subnet Mask: Subnet mask is a network parameter which defines a range of IP addresses that can be used in a network. If IP address is like a street where you live then subnet mask is like a neighborhood. The subnet address also consists of four groups of numbers, separated by periods. For example, “255.255.000.000”.

Gateway: This address allows the DVR to access the Internet. The format of the Gateway address is the same as the IP Address. For example, “192.168.001.001”.

DNS1/DNS2: DNS1 is the primary DNS server and DNS2 is a backup DNS server. Usually should be enough just to enter the DNS1 server address.

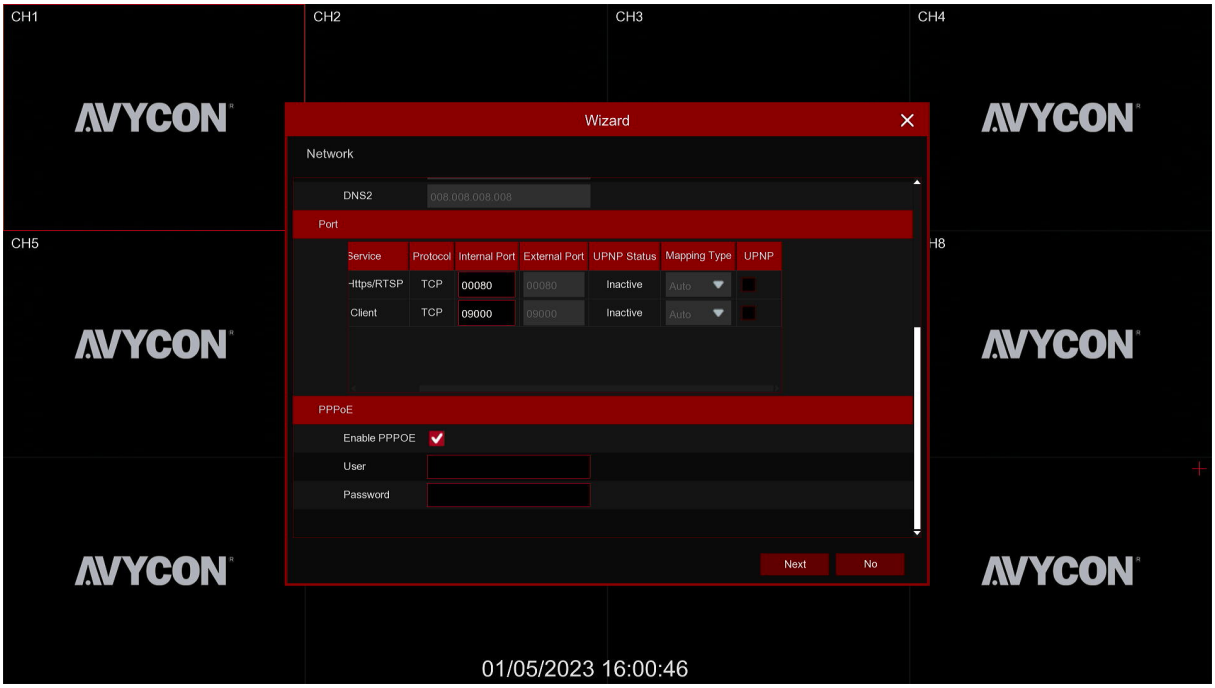
Web Port: This is the port that you will use to log in remotely to the DVR (e.g. using the Web Client). If the default port 80 is already taken by other applications, please change it.

Client Port: This is the port that the DVR will use to send information through (e.g. using the mobile app). If the default port 9000 is already taken by other applications, please change it.

RTSP Port: This is the port that the DVR will be allowed to transmit real-time streaming to other device (e.g. using a streaming Media player.).

UPNP: If you want to log in remotely to the DVR using Web Client, you need to complete the port forwarding in your router. Enable this option if your router supports the UPnP. In this case, you do not need to configure manually port forwarding on your router. If your router does not support UPnP, make sure the port forwarding is completed manually in your router.

PPPoE



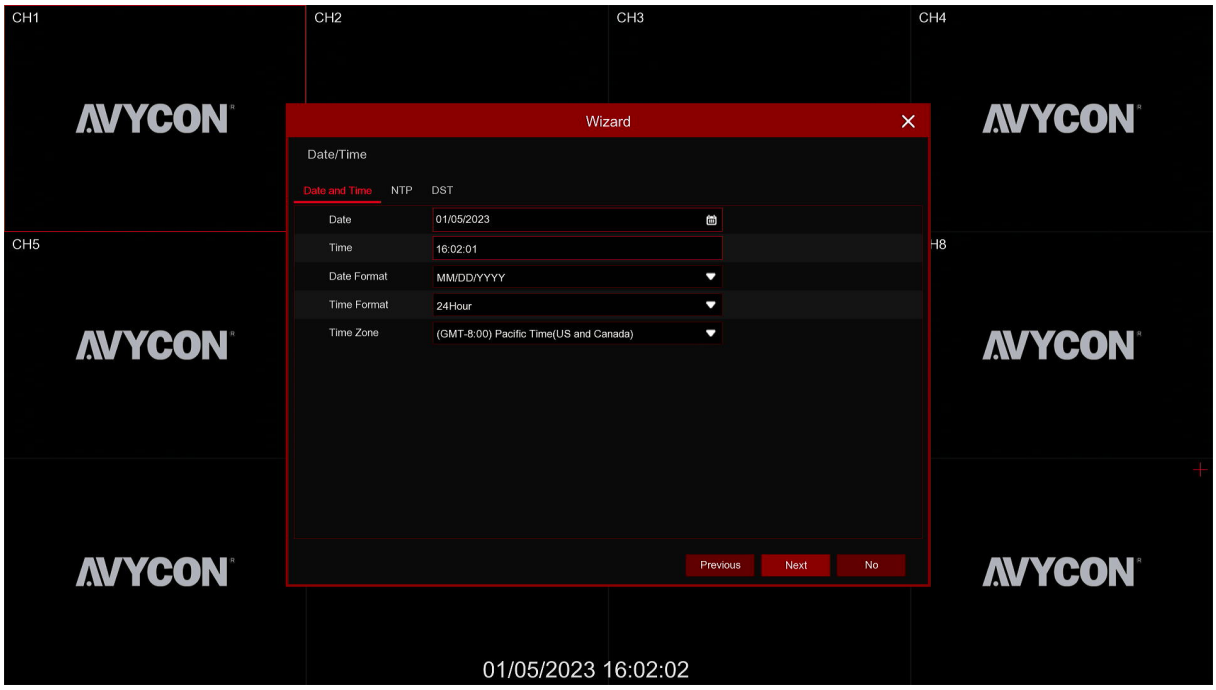
This is an advanced protocol that allows the DVR to connect to the network more directly via DSL modem. Check the “Enable PPPOE” box, and then enter the User name & Password of the PPPoE.

4.1.3 Date/Time

This menu allows you to configure the Date, Time, Date Format, Time Format, Time Zone, NTP and DST.

Date and Time

Click on the calendar icon to set the current system date.



Date: Click on the calendar icon to set the system date.

Time: Click to set the system time.

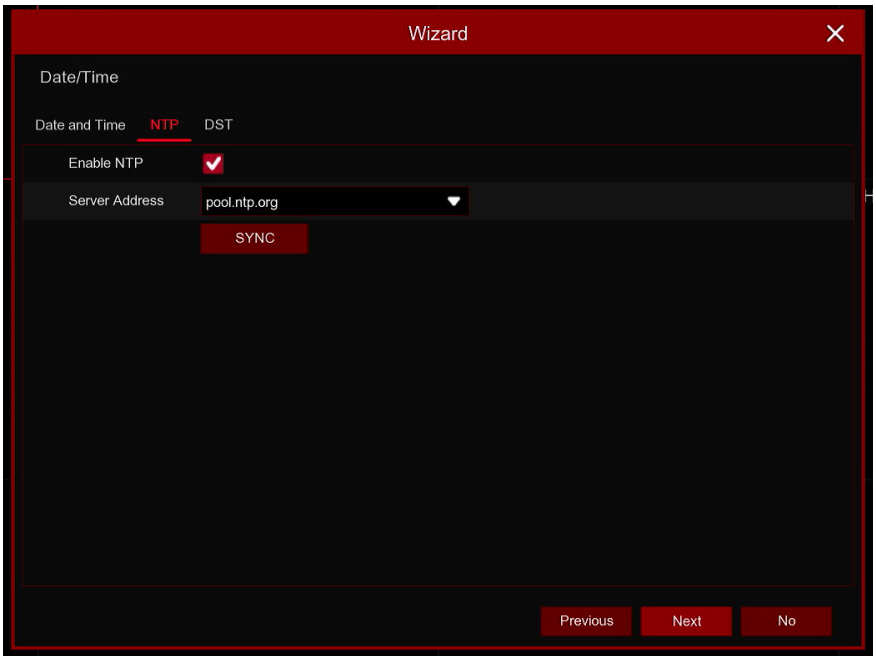
Date Format: Choose from the dropdown menu to set preferred date format.

Time Format: Choose time format between 24Hour and 12Hour.

Time Zone: Set the correct time zone.

NTP

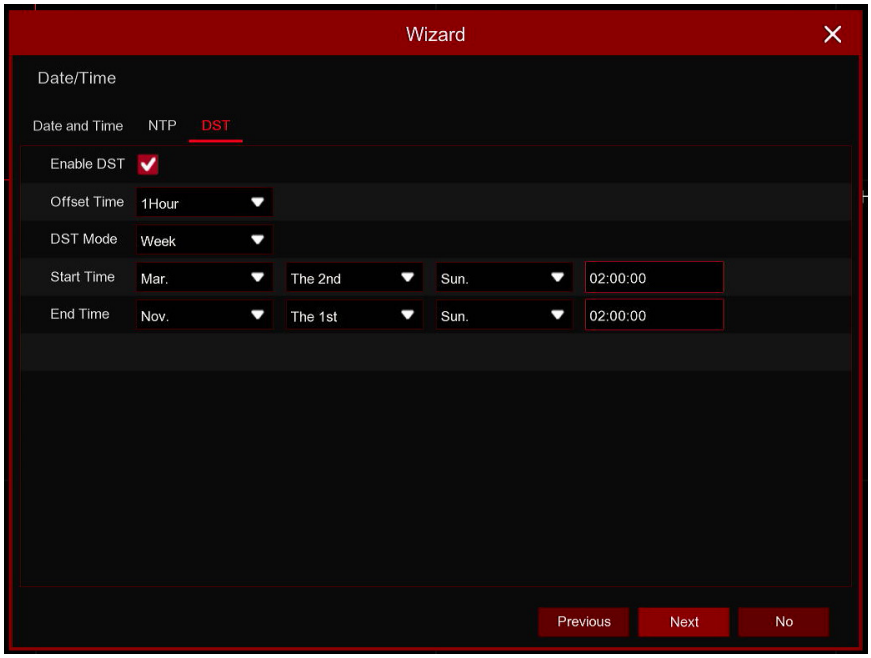
NTP stands for Network Time Protocol. This feature allows you to synchronize the date and time automatically on the DVR over Internet. Therefore, the DVR needs to be connected to the Internet.



Check the **"NTP"** box, and select the NTP server.
Choose the server address: time.windows,com,/time.nist.gov/pool.ntp.org/User-Defined

DST

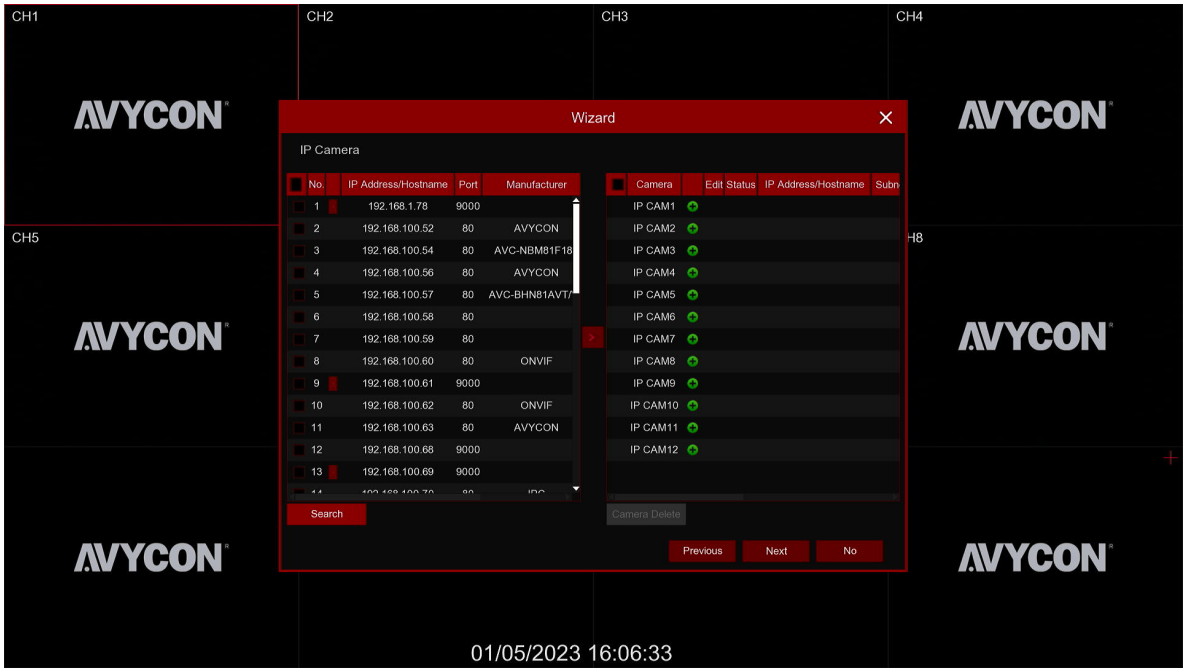
DST stands for Daylight Savings Time.



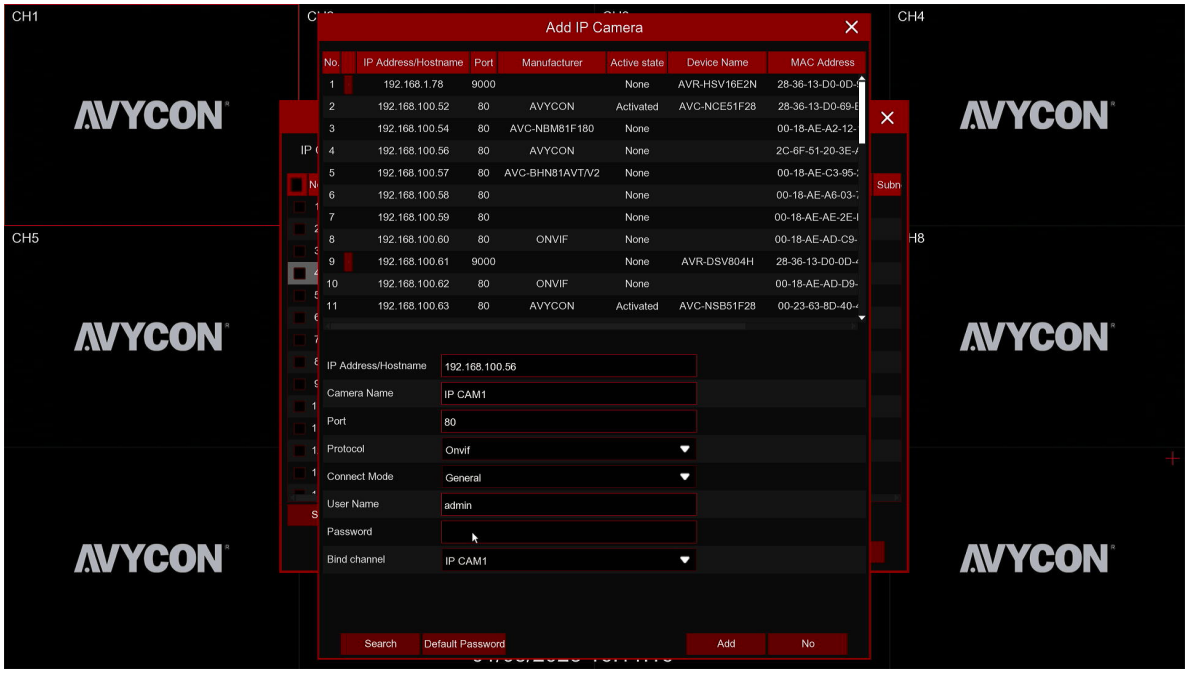
DST: Enable if Daylight Saving Time (DST) is observed in your region.
Time Offset: Select the amount of time to offset for DST.
Time Mode: Choose to set the daylight saving time in weeks or in days.
Start Time/End Time: Set the start time and end time for daylight saving.

4.1.4 IP Camera

This menu allows you to add IP cameras to the DVR.

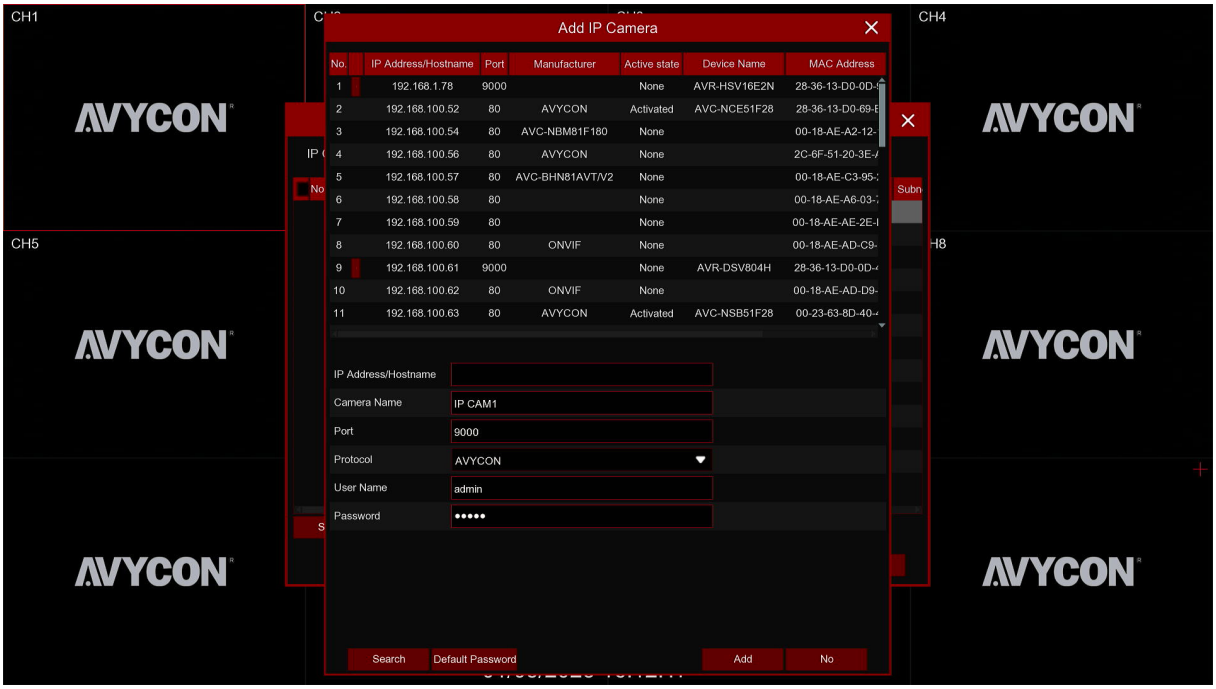


Click **Search** to search IP cameras in the same network. Choose the IP camera(s) you want to add, and then click ➡ icon to add to the DVR.



Enter the camera's user name & password to add the camera(s).

You can also click ⊕ button to add individual IP camera to a single Camera.



Click **Search** button to search IP cameras, and then click one of the IP camera in the device list.

IP Address/Domain: IP address or domain name of the IP camera.

Camera Name: Name of the IP camera.

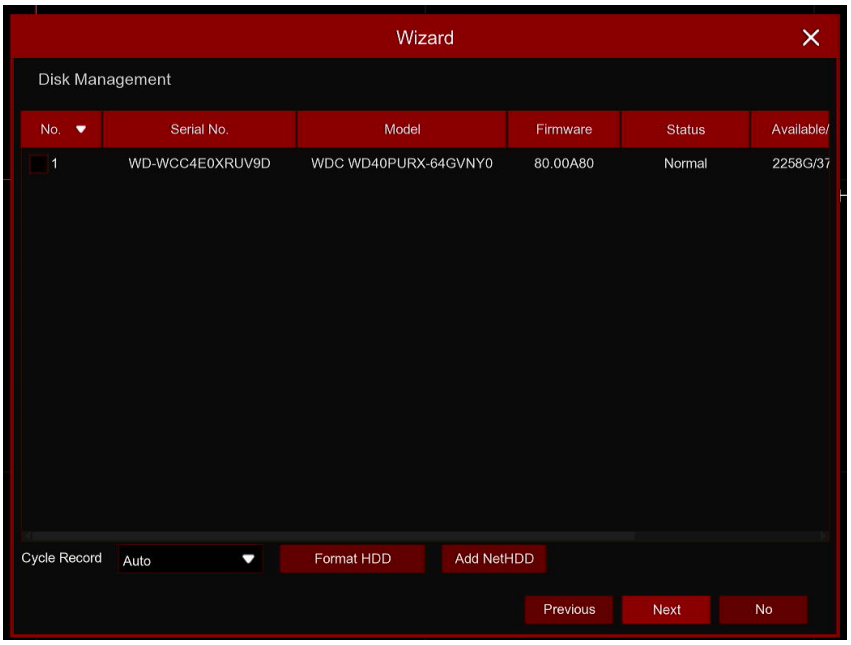
Port: Port of the IP camera.

Protocol: Choose the protocol of the IP camera from the dropdown menu.

User Name: User Name of the IP camera.

Password: Password of the IP camera.

4.1.5 Disk



If the HDD is installed in the DVR for the first time, it must be formatted. Select the HDD and then click **Format HDD** button to format the HDD.

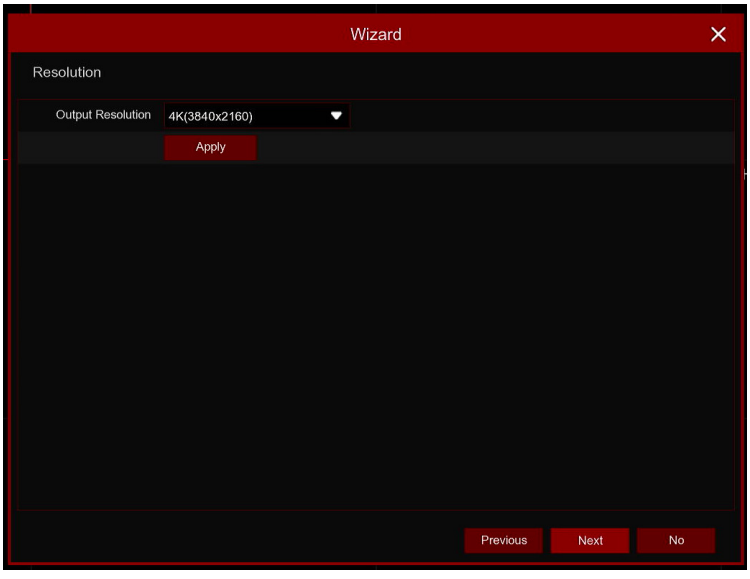
Cycle Record: By default, your DVR is configured to use all available space on HDD to keep recordings and cycle recordings once full.

Record On ESATA: If your DVR comes with an e-SATA port on the rear panel, you can enable to record the video to e-SATA HDD.

Add NetHDD: Further information please check 5.5.1.1 Disk setting.

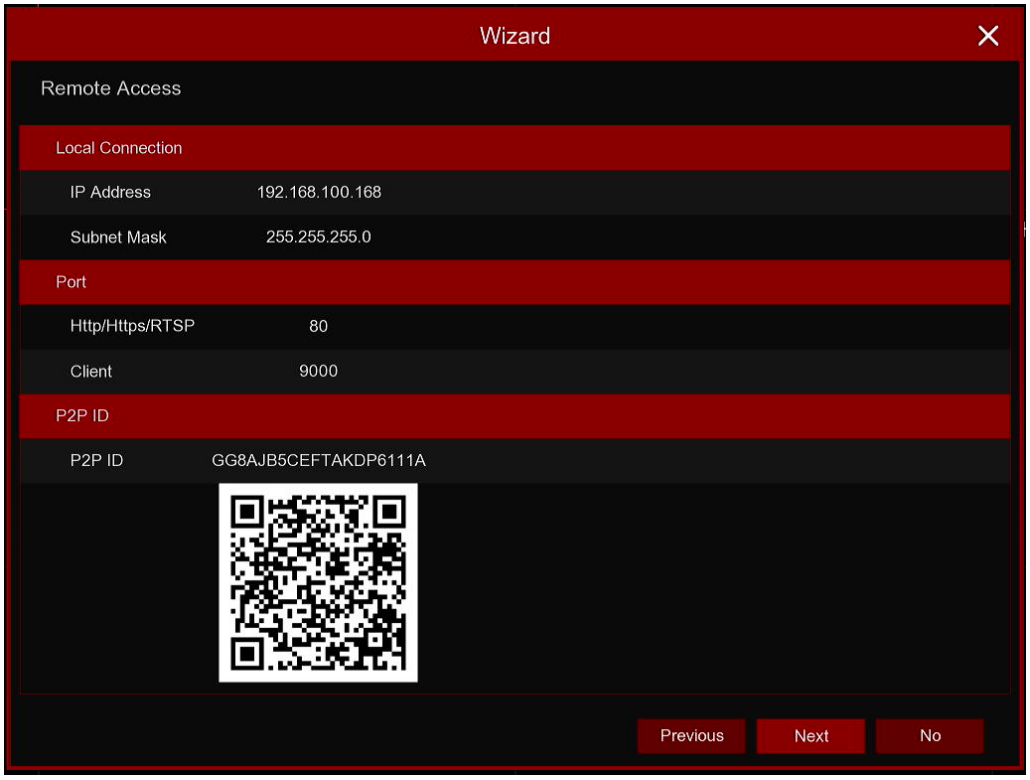
4.1.6 Resolution

Choose an output resolution matches to your monitor. The DVR supports to adjust the output resolution automatically to match the best resolution of your monitor when the system is starting up.



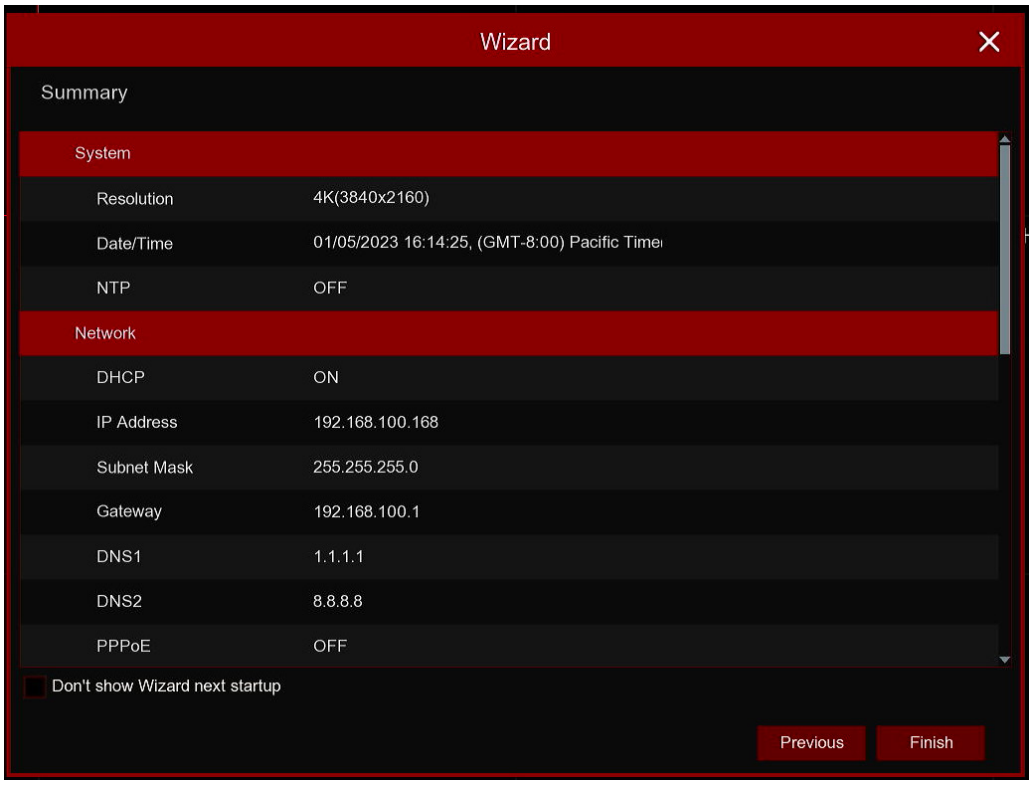
4.1.7 Mobile

If your DVR come with a P2P ID, you can scan the QR code with your mobile app to view the DVR remotely.

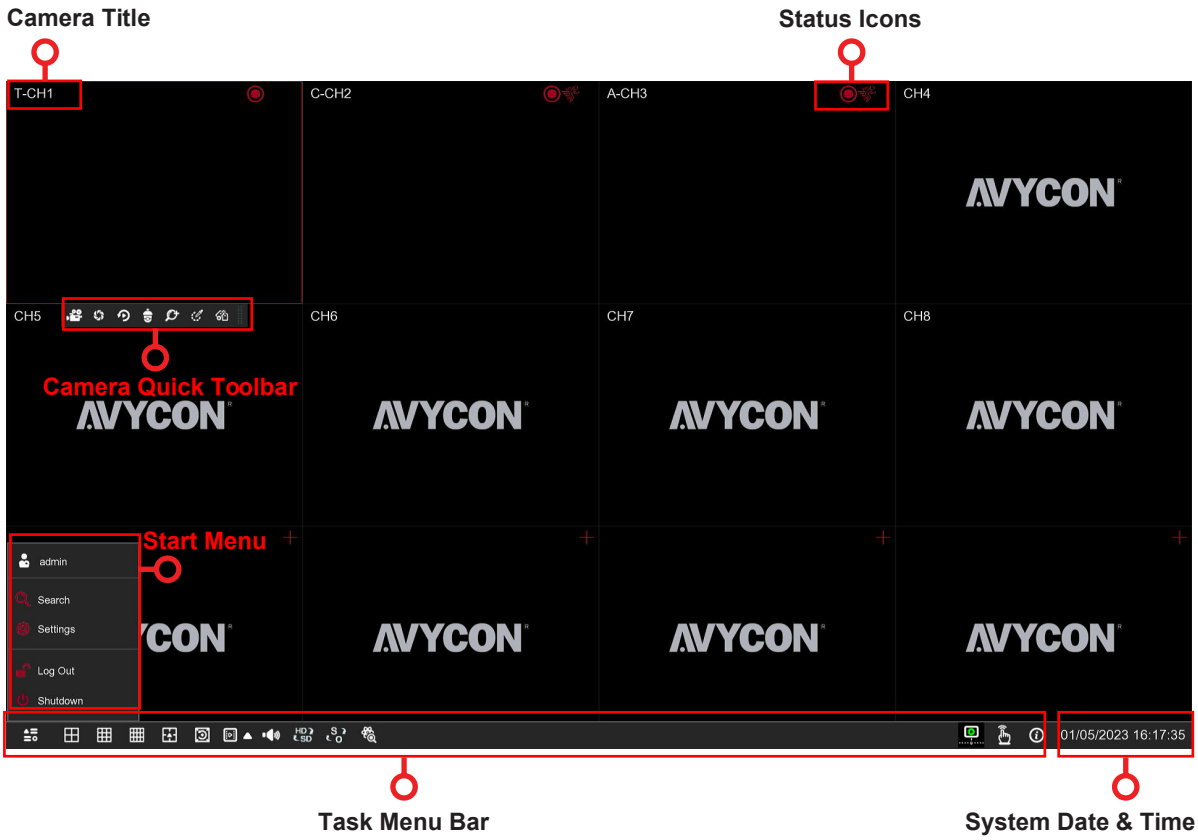


4.1.8 Summary

You can check the system summary information you had set in the start wizard and finish the wizard. Tick **"Don't show this window next time"** if you don't want to display Start Wizard when system reboot next time. Click **Finish** button to save & exit.



4.2 Live View Screen Overview



Camera Title
To display the camera title.
A- : This indicates that the camera connected is an AHD camera.
T- : This indicates that the camera connected is a TVI camera.
C- : This indicates that the camera connected is a CVI camera.
IP : This indicates that the camera connected is an IP camera.

Status Icons

This indicates that the DVR is currently recording.

This icon appears when the camera has detected motion.

The icon indicates that the external I/O alarm device is triggered.

This icon indicates that the HDD is in error to work.

This icon indicates the HDD is unformatted.

This icon indicates the HDD is full.

This icon indicates the HDD is read only.

VIDEO LOSS: The analog camera is disconnected.

No Camera: IP camera is disconnected.

Decoding Failed: The DVR doesn't support this kind of IP camera compression format, please change to H.265 compression format.

+ Click to open Quick Add menu to add IP camera
Click to edit current IP camera

4.2.1 Camera Quick Toolbar

In live viewing, click the left button of your mouse on a connected camera to display the Camera Quick Toolbar.

Click to manually record the Camera immediately. If the manually recording is in process, the icon will be in red color. Click one more time to stop manual record.

Click to save a snapshot of the current camera image. Manual Snapshot must be enabled to use this feature. For details on enabling Manual Snapshot, see 5.2.3.1 Snapshot.

Click to play the latest 5 minutes recording of this Camera.

Click to enter PTZ control panel.

Click to adjust the image color of the Camera. You can adjust the HUE, BRIGHT, CONTRAST & SATURATION of the image.

Click to switch main/sub stream.

Click to add customized tag. It can be playback the tag in "Sesarching"(Tag playback).

4.2.2 Task Bar

Click to open the Start Menu.

Click to choose different layout for live view.

Click to choose more layouts for live view.

Click to start viewing Cameras in a sequence.

Quick playback. You can choose to play the latest recording for all Cameras from the beginning of the day, or you can choose the playback from the latest 5s, 10s, 30s, 1Min, 5Min.

Click to adjust audio volume.

Click to switch all IP Cameras between mainstream and substream (for live view resolution).

Click to switch among real-time, balanced, or smooth view. The view effect modes affect only the live view video quality by bitrate and frame rate but do not affect the recording quality.

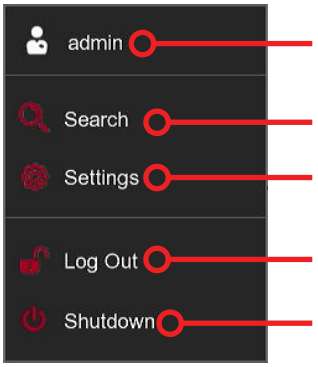
To start or stop Manual Record and Manual Alarm.

To view system information, Camera information, record info and network state.

This icon will appear if the network is disconnected.

4.2.3 Start Menu

With the start menu, you can switch user, search & playback, enter system setup menu, lock & unlock the screen, shut down, reboot & logout the system.



To switch user. To enable multi-user, please view on 5.6.3 Accounts.

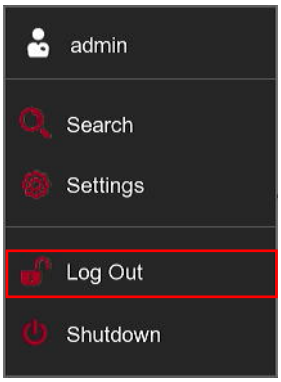
Search & Playback. View more on Chapter 6 Search, Playback & Backup.

DVR System Setup. View on Chapter 5 DVR System Setup.

Login & Logout screen. View on 4.2.3.1 Login & Logout.

Shutdown, reboot & logout the system. View on 4.2.3.2 Shutdown.

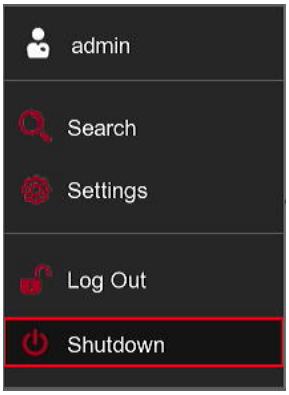
4.2.3.1 Login & Logout



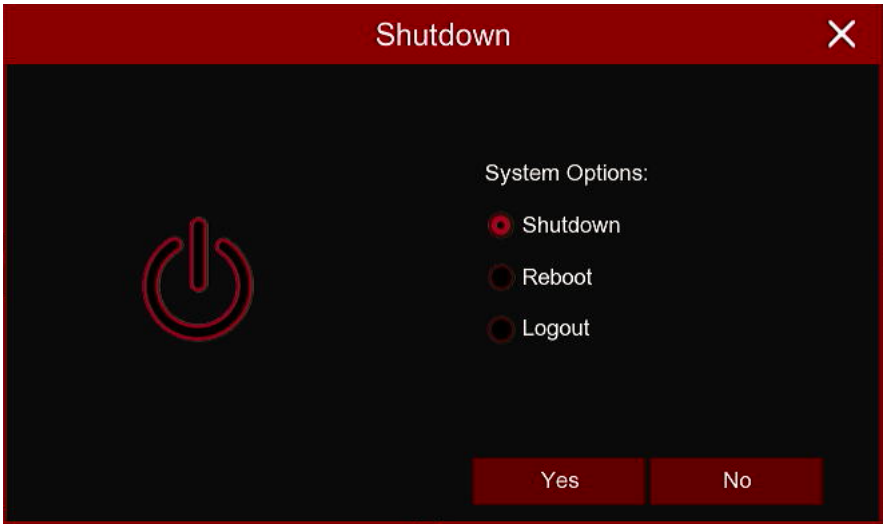
The user will be logged out to protect unauthorized OSD operation while the DVR is not in menu operation for 1 minute. If necessary, you can also logout the screen operation manually. To do so, go to Start Menu, and then click the Logout icon to logout of the system immediately.

If the system is logged out, you can click the Login icon to login to the system for further operation.

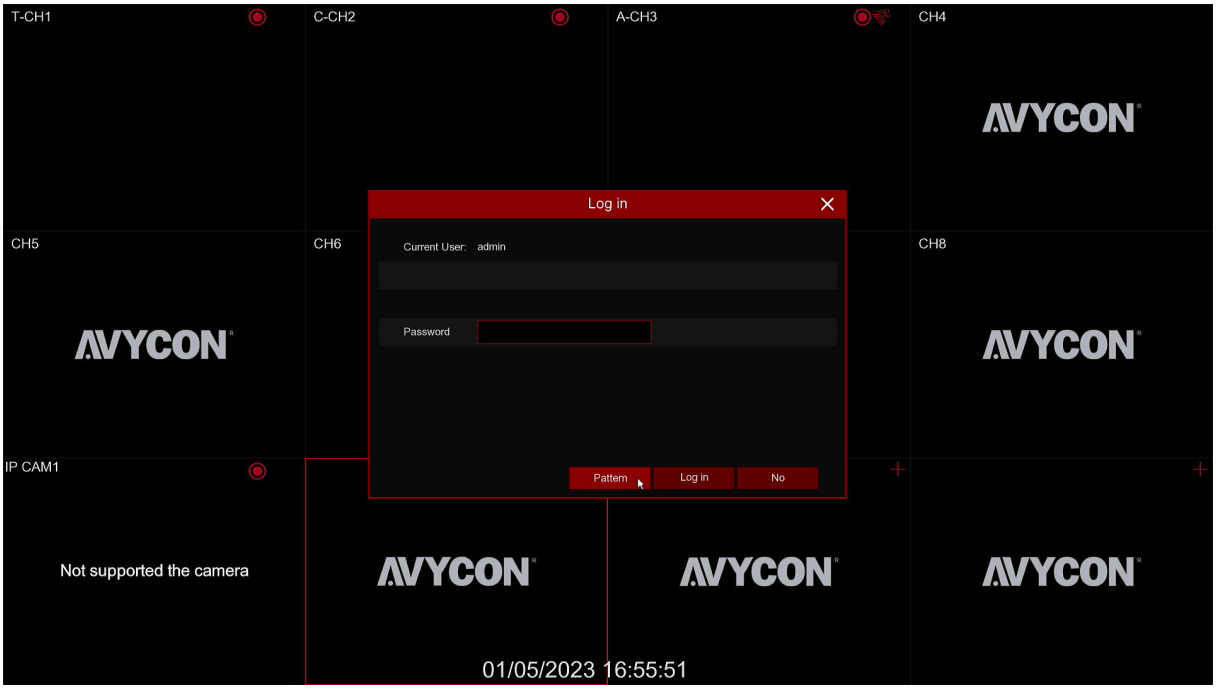
4.2.3.2 Shutdown



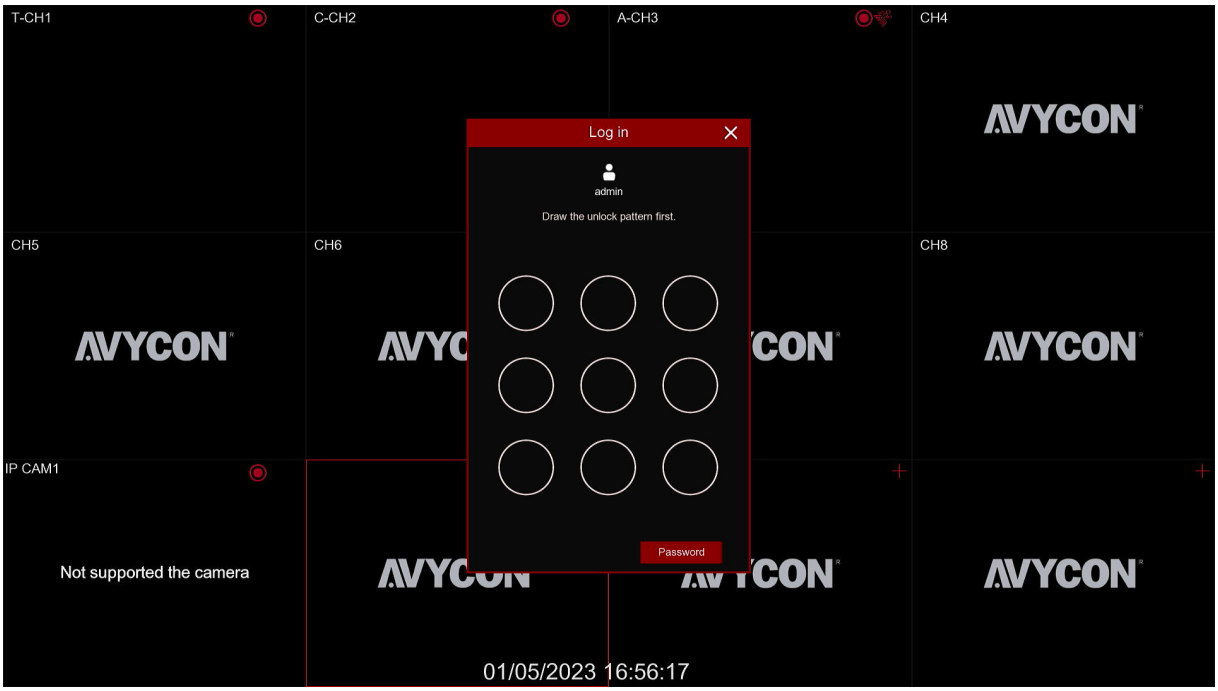
Click the **Shutdown** button from Star Menu, and the check the further action you want to move. Click **OK** button, system will require to input the Admin password to authenticate.



If you choose **Logout** the system, the live viewing screen will be disappeared. You will need to login the system for further operations.



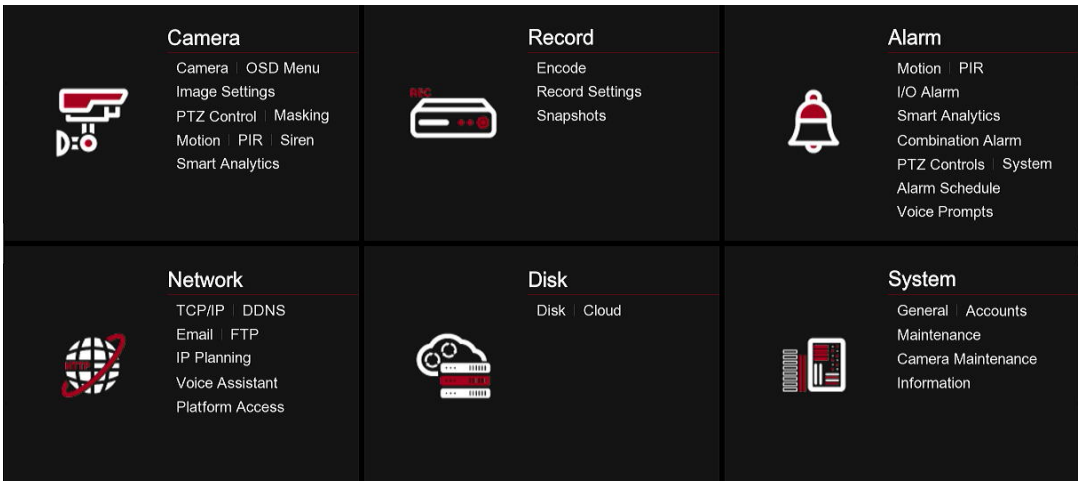
Pattern: Click for the Pattern unlock interface. Use the pattern password, you can unlock the system.



Password: Returns to text-based password entry.

Chapter 5 DVR System Setup

You are able to configure the DVR for Camera, Record, Alarm, Network, Device & System from **Start Menu** → **Setup**.

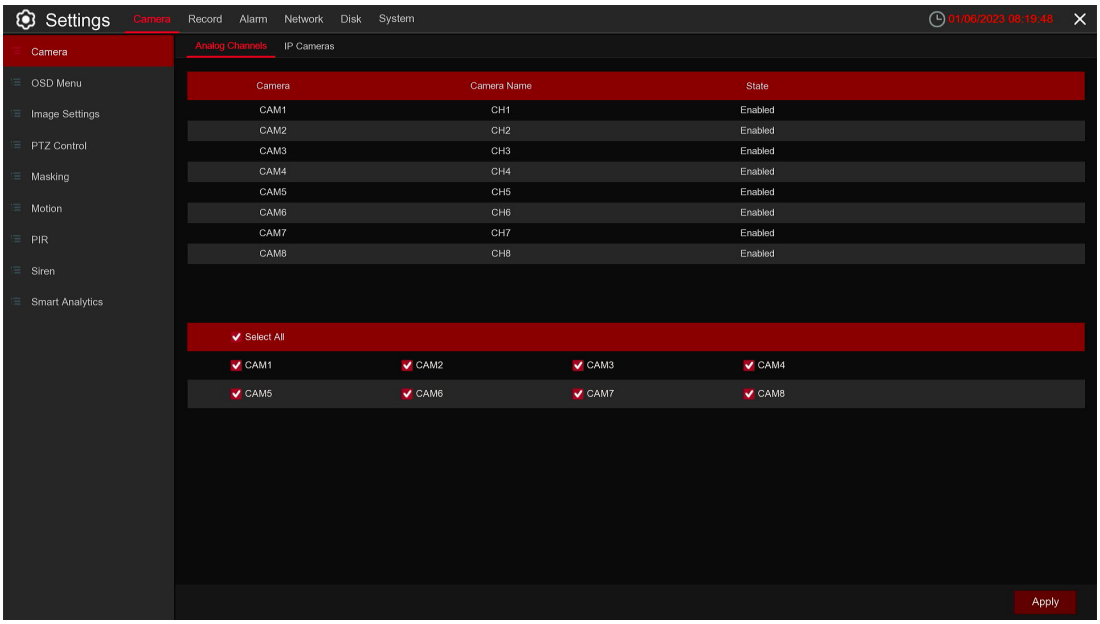


5.1 Camera

In this section, you are allowed to configure the camera, live view display, manage IP cameras, adjust IP camera's image, PTZ setup, motion setup, convert mode, and more.

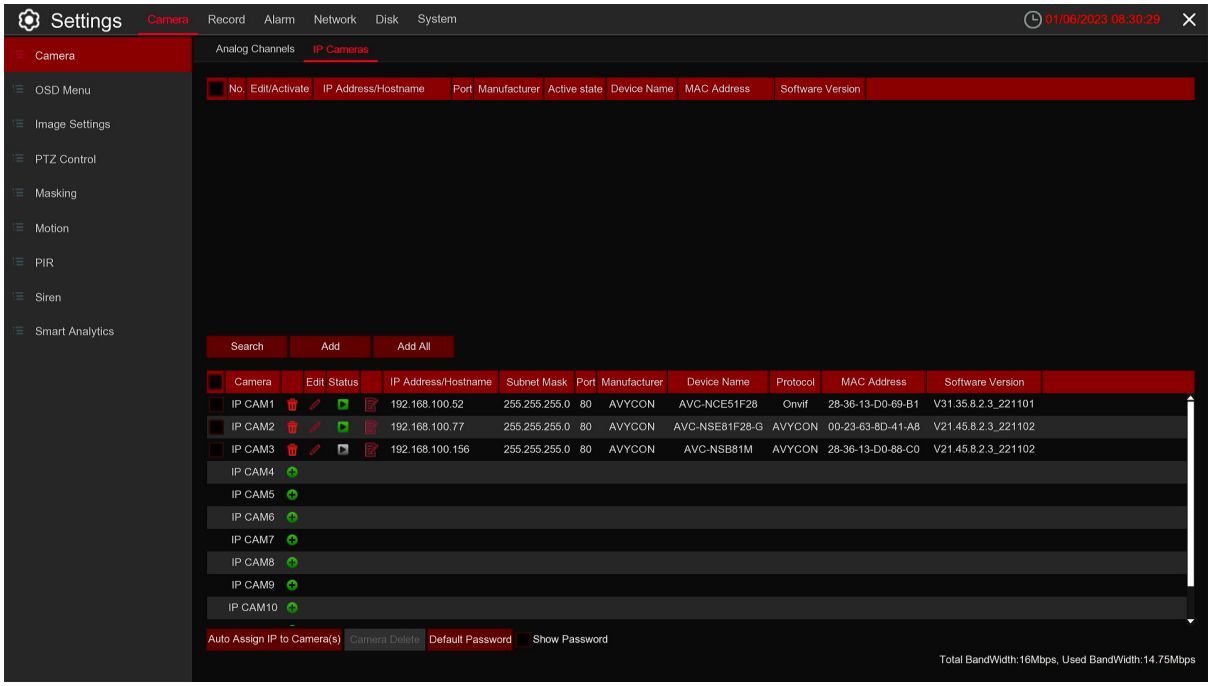
5.1.1 Camera

5.1.1.1 Camera Configure

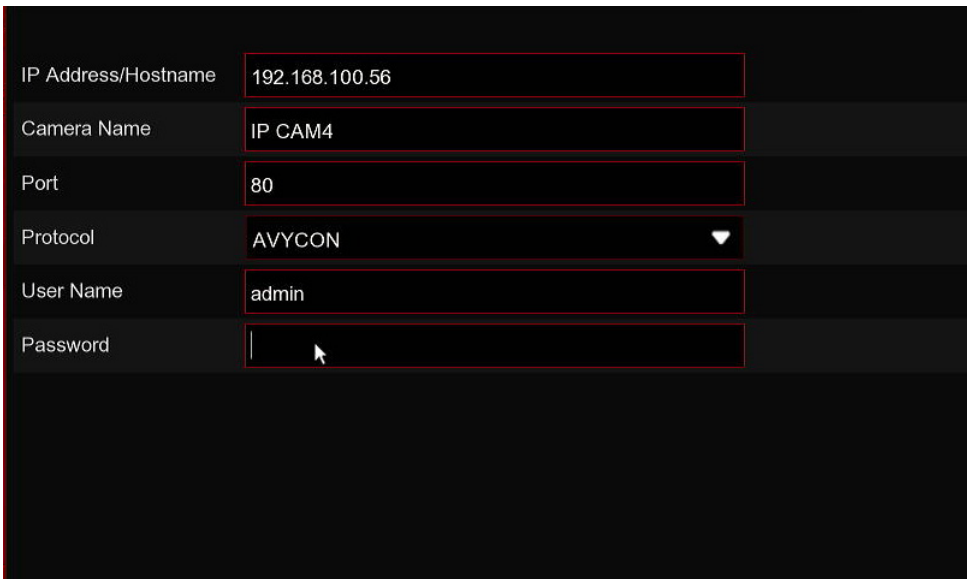


This DVR supports the ability to disable analog cameras to make extra IP Camera channels available. If you want to disable an analog Camera, uncheck the box and click **Apply** to save. In order to configure this function, you need to confirm that XVR mode is enabled in **System → General → Mode**, view more on 5.6.1 General.

5.1.1.2 IP Cameras



If you enable the XVR mode for the DVR, it supports to add IP cameras & modify IP Cameras. Click **Search** to search IP cameras from local network, click **Add** to add individual IP camera, click **Add All** to add all IP cameras.



Click **Search** button to search IP cameras, and then click one of the IP camera in the device list.

IP Address/Domain: IP address or domain name of the IP camera

Camera Name: Name of the IP camera

Port: Port of the IP camera

Protocol: Choose the protocol of the IP camera from the dropdown menu.

User Name: User Name of the IP camera.

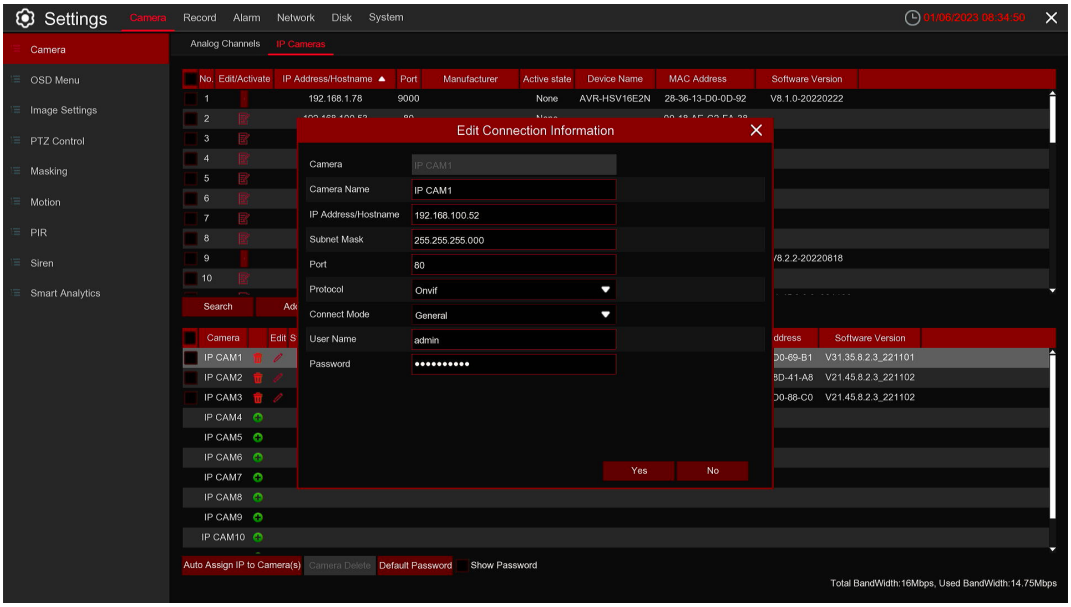
Password: Password of the IP camera.

Auto Assign IP to Camera(s): The added IP camera would be not able to connect if its IP address is not in the same network segment with DVR. With this function to reassign an IP address to all added IP cameras.

Camera Delete: Choose one or more added IP cameras, and click this button to detele.

Default Password: To set IP camera's default password.

Click Edit icon and enter the IP camera edit menu.



Click **Search** button to search IP cameras, and then click one of the IP camera in the device list.

IP Address/Domain: IP address or domain name of the IP camera

Camera Name: Name of the IP camera

Position: Position to display the camera name on the screen.

Port: Port of the IP camera

IP Address: Set the IP address of the camera.

Subnet Mask: Configure the subnet mask of the camera.

Port: Configure the port of the camera.

Protocol: Set the camera protocol.

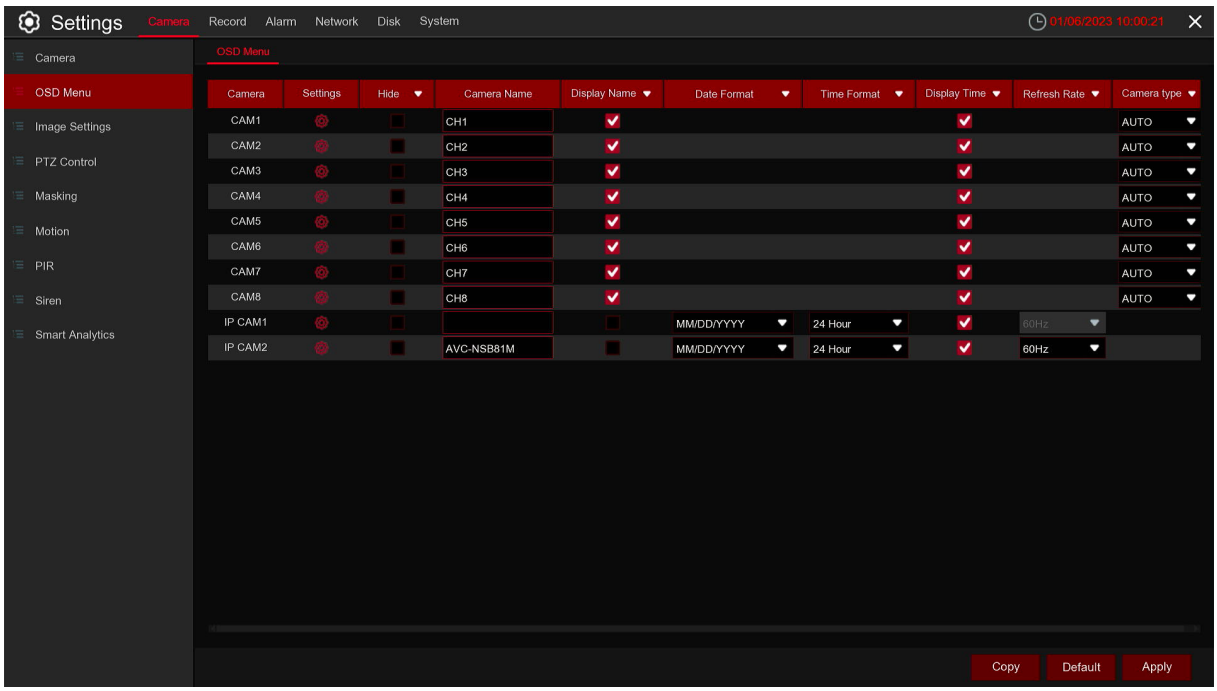
User Name: Enter the correct user name of the camera.

Password: Enter the correct camera password.

OK: After configuring the parameters, click OK to make the configuration effective.

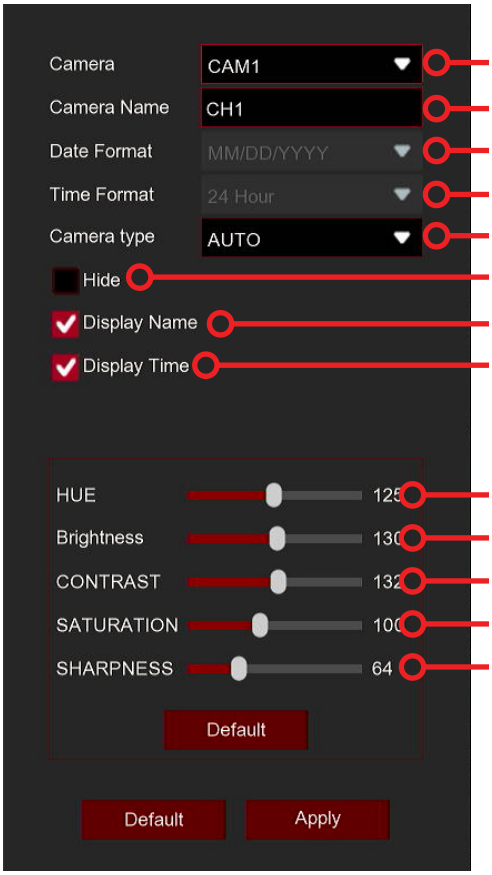
5.1.2 Live

To configure camera parameters.



Camera: Display Camera name.

Setup: Click on the gear icon to navigate to advanced OSD configuration.



Choose a Camera to configure

Give a name to the camera

Date format to display for the camera (for IP camera only)

Time format to display for the camera (for IP camera only)

Choose a camera type (Auto, AHD, TVI, CVI) for analog camera

Check the box If you want to hide the live image of this Camera

To show the camera name in live view screen

To show the system time in live view screen

Adjust the Hue value for the image color

Adjust the Bright value for the image color

Adjust the Contrast value for the image color

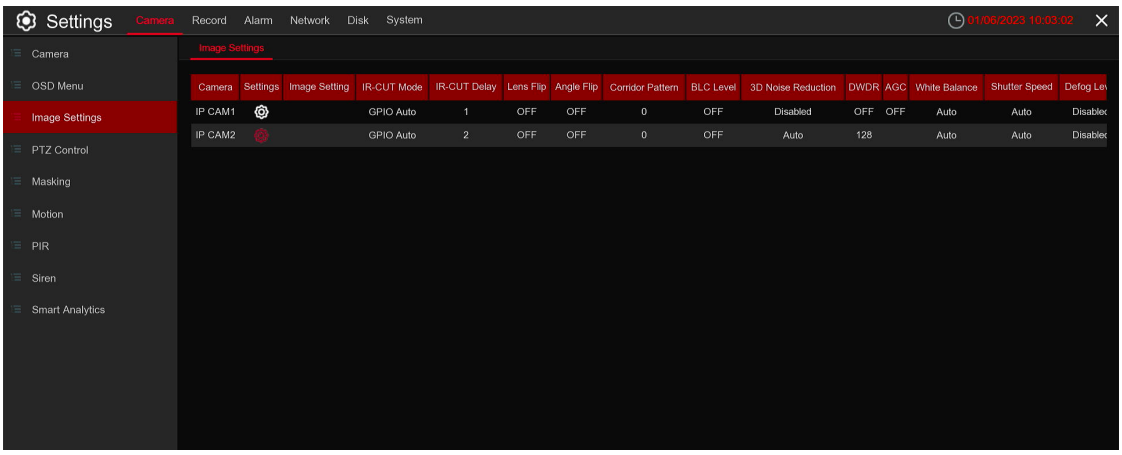
Adjust the Saturation value for the image color

Adjust the Sharpness value for the image color

Click **Default** to load default settings, click **Apply** to save settings, click right buttons of your mouse to exit.

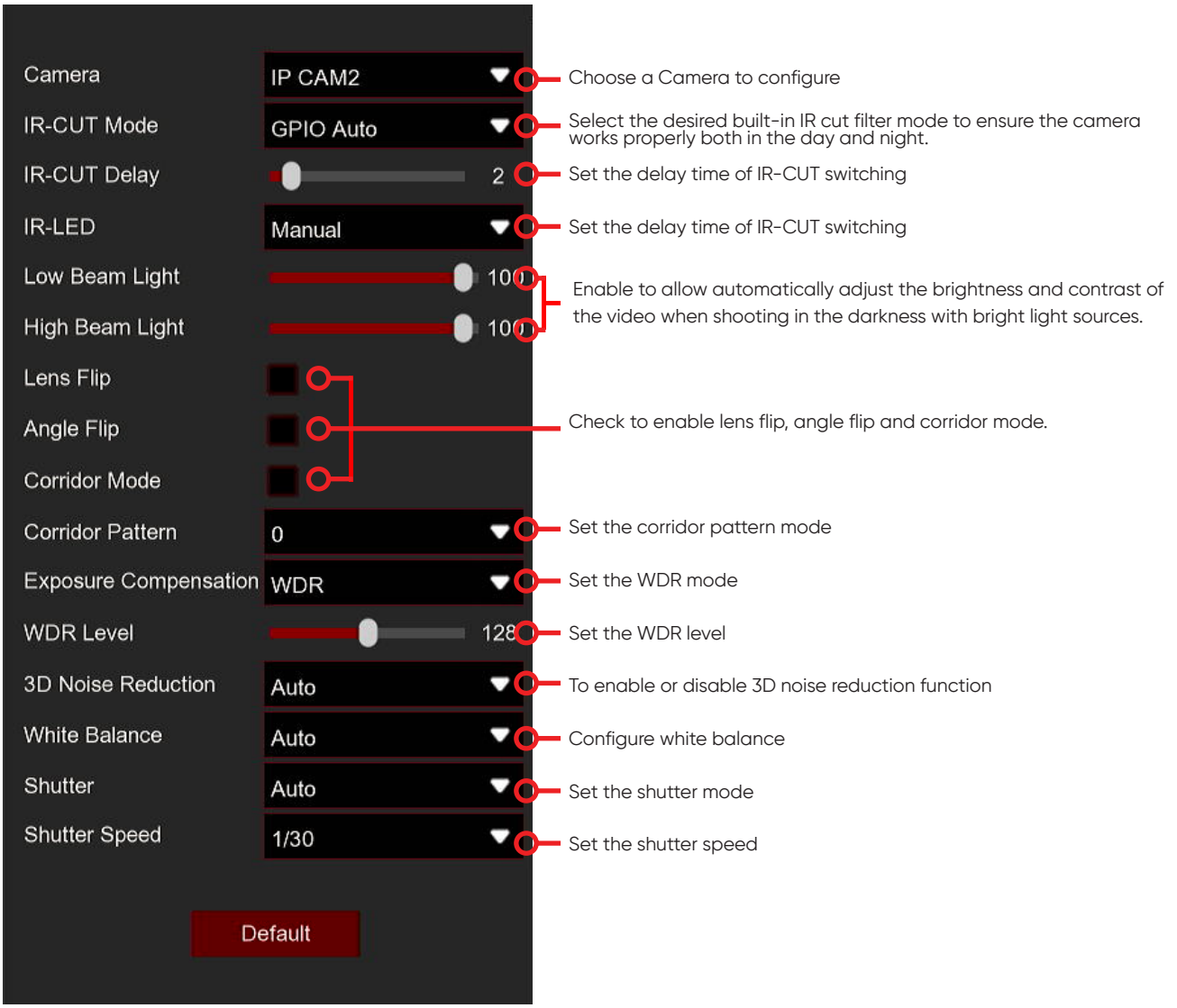
5.1.3 Image Control

This menu allows you to control image settings for supported IP cameras.



Camera: Display Camera name.

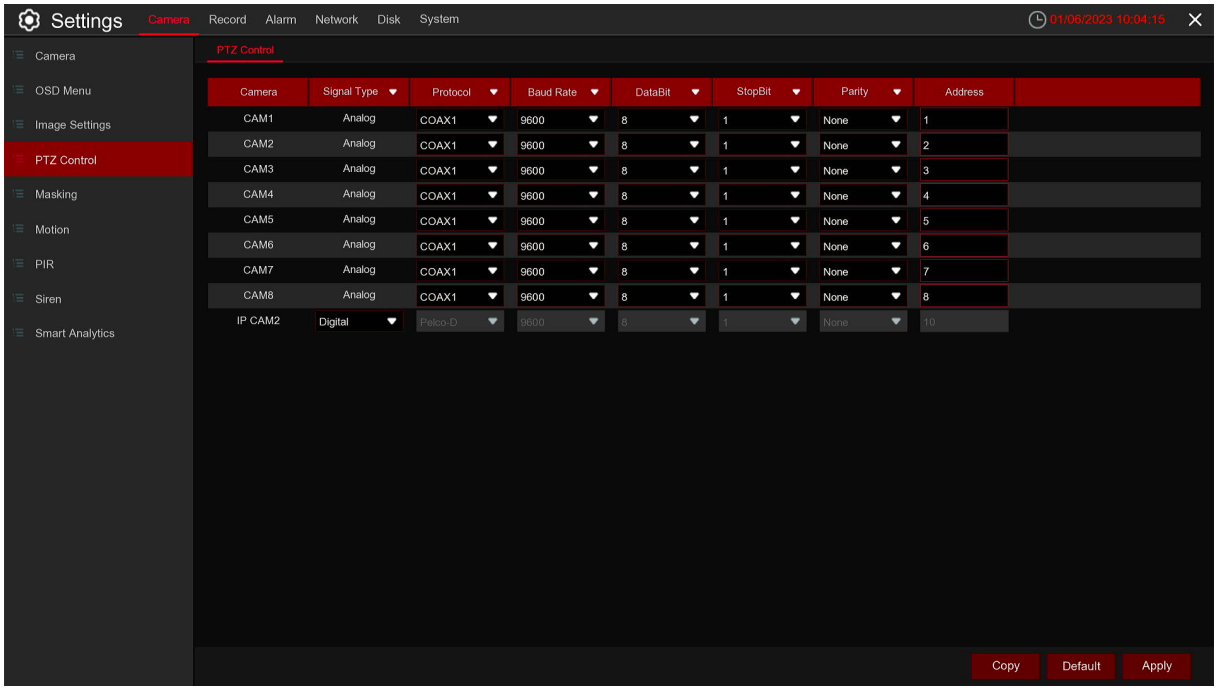
Setup: Click on the gear icon to navigate into advanced configuration.



Note: Some devices support **Corridor Mode** (not shown in the picture above, please refer to the actual menu). The function of the Corridor Mode is to rotate the lens 90 degrees clockwise.

5.1.4 PTZ

This menu allows you to configure the PTZ (Pan-Tilt-Zoom) settings for the compatible PTZ camera.



Camera: Camera name.

Signal Type: Analog for analog Cameras, Analog & Digital for IP Cameras.

Protocol: Choose the communication protocol between the PTZ capable camera and DVR. If your camera support UTC (Up the Coax) function, you can choose COAX1 or COAX2 to display your camera OSD menu or control the UTC PTZ function.

Baudrate: The speed of the information sent from the DVR to the PTZ-capable camera. Make sure it matches the compatibility level of your PTZ-capable camera.

DataBit / StopBit: The information between the DVR and PTZ-capable camera is sent in individual packages. The **DataBit** indicates the number of bits sent, while the **EndBit** indicates the end of the package and the beginning of the next (information) package. The available parameters for **DataBit** are: 8, 7, 6, 5. the available parameters for the **StopBit** are 1 or 2.

Parity: For error check. See the documentation of your PTZ-capable camera, to configure this setting.

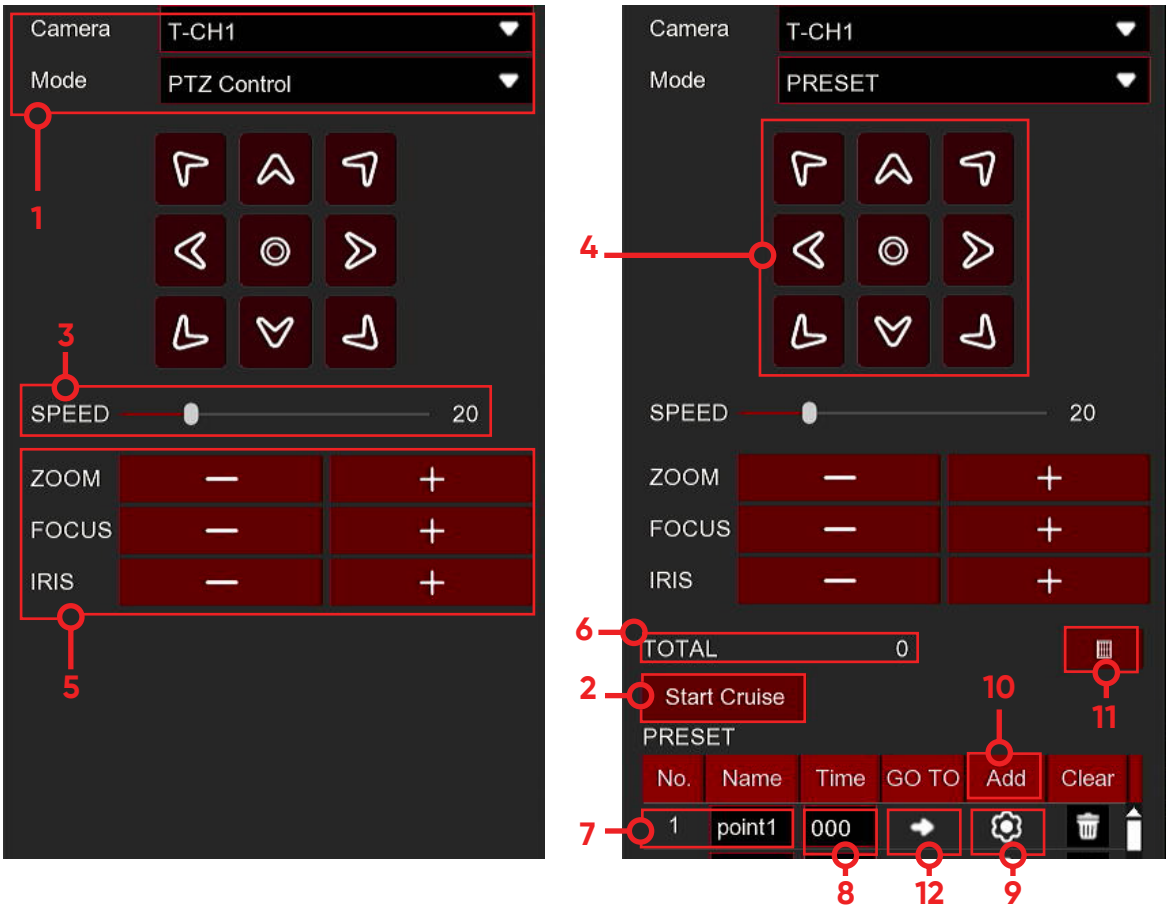
Cruise: Enable to use the Cruise mode. In order to use the Cruise mode, you need to set a number of preset points.

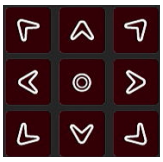
Address: Set the command address of the PTZ system. Please be noted that each PTZ-capable camera needs a unique address to function properly.

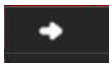
5.1.4.1 PTZ Control

After finishing the PTZ setup, you can use the PTZ function to control your PTZ camera.
1) Click left your mouse upon a Camera on Live Viewing screen to open 4.2.1 camera quick toolbar, and choose the PTZ control icon .

2) PTZ control panel will be displayed.

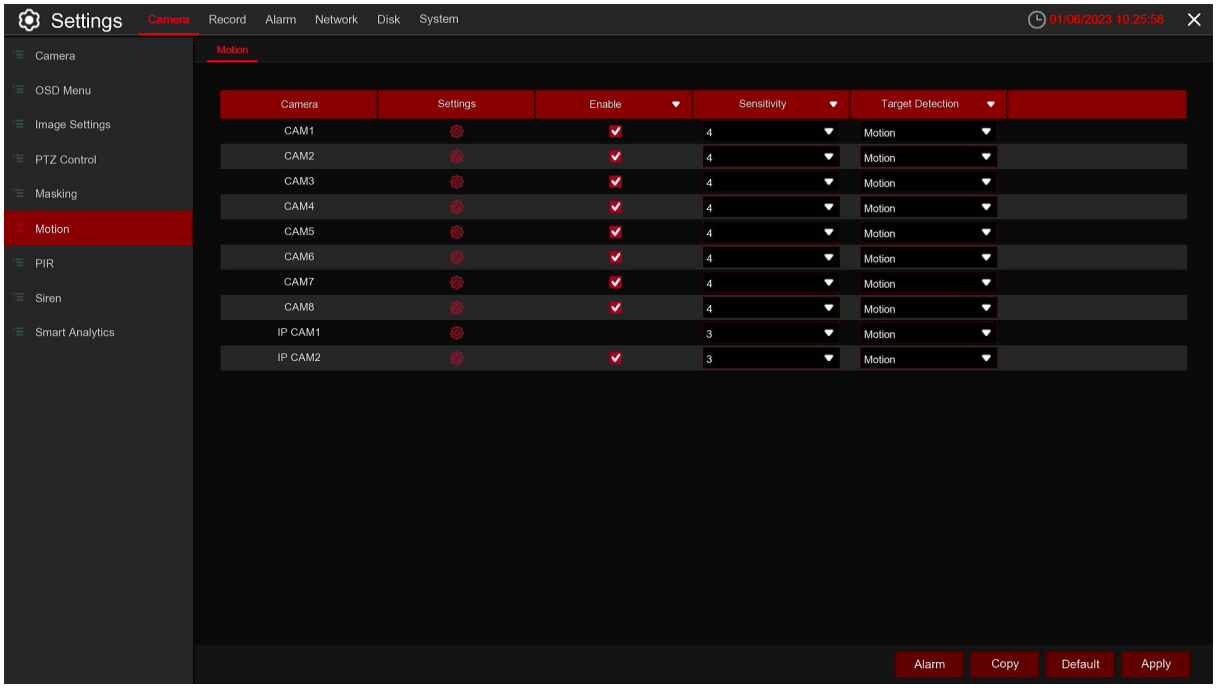


No.	Icon	Item	Description
1		Channel	Click to select the channel of the PTZ camera.
2	Start cruise	Cruise	Start / stop PTZ cruise by preset points.
3	Speed	Speed	Adjust the PTZ speed
4		Pointer Panel	A) Click the direction arrow to select the direction of the PTZ camera B) Click up/down/left/right arrow to move cursor in UTC OSD menu C) Click to switch to auto pan mode
5	- ZOOM +	Zoom	Click to zoom in/out.
	- FOCUS +	Focus	Click to adjust the focus
	- IRIS +	Iris	Click to adjust the iris setting(if the device supports)
6	Total	Total	Display the total number of preset points
7	No.	No	Number of preset point

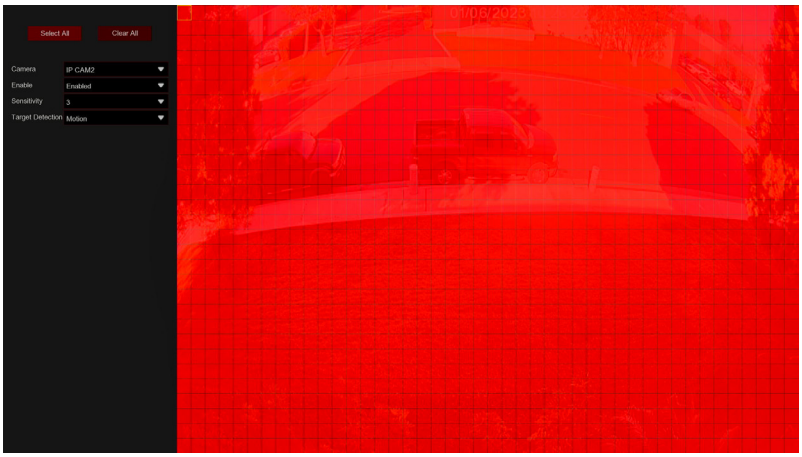
8	Time	Time	Set the time how long the camera will stay in the preset point
9	Save	Save	Click to save the settings and preset points
10		set	Click this button to set preset point for PTZ cameras. Maximum you can set 255 pieces preset point for each DVR.
11		Delete	Click to delete the selected preset point
12		Go to	Click this button to move your PTZ camera to the preset point

5.1.5 Motion

This menu allows you to configure motion parameters. When motion has been detected by one or more cameras, your DVR will alert you to a potential threat at your home. It does this by sending you an email alert with an attached image from the camera to use as a reference (if this option is enabled) and/or sending push notifications via the mobile app.



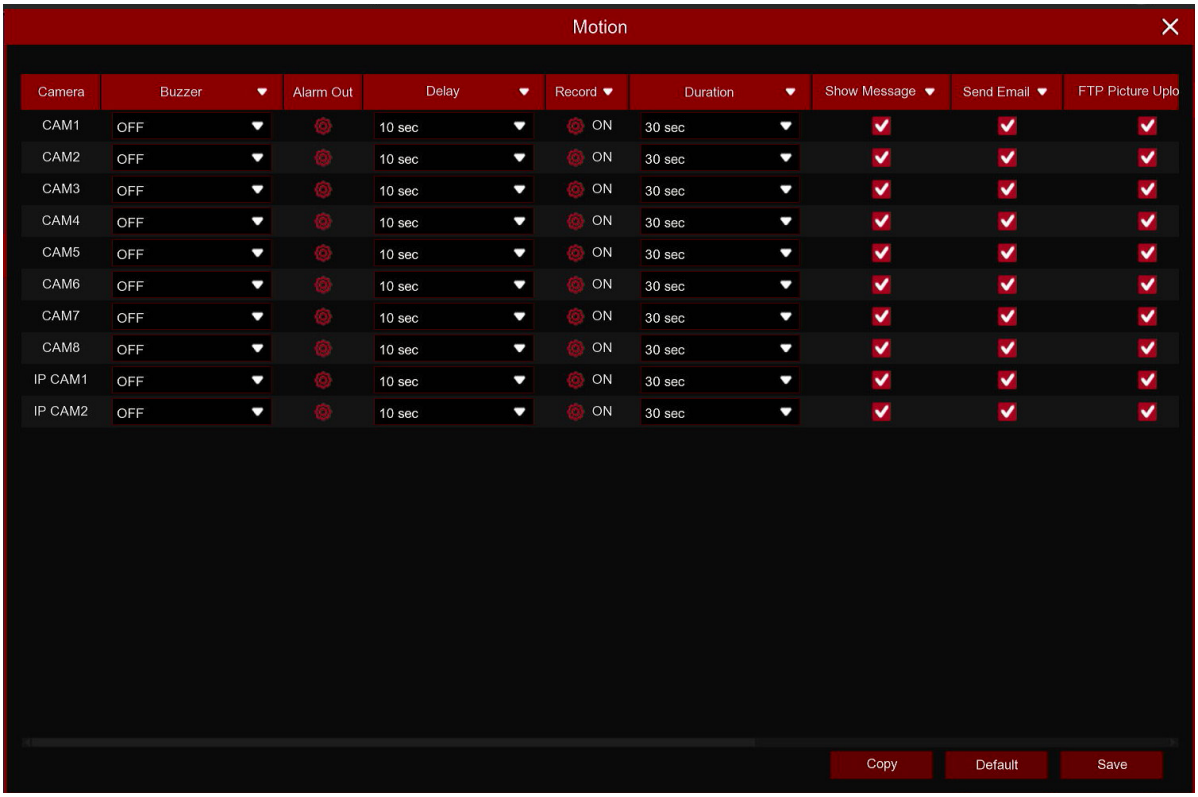
Setup: Click on the gear icon to navigate into advanced configuration.



Motion Detection Area:
The whole screen is marked for motion detection (red blocks) as default. If you want to disable the motion detection on a certain area, click the grid cursor and then drag the mouse to highlight the scope to unmark the area into transparent blocks. After setting is completed, click the right button of your mouse to return and click **Save** to make the area setup effective.

Switch: Enable or disable motion detection.
Sensitivity: Set the sensitivity level. Level 1 the lowest sensitivity level while level 8 is the highest sensitivity level.
Deterrent: Enable spotlight linkage alarm. When alarm is triggered, the spotlight will be triggered 5.1.7 Video Cover.

Click **Alarm** button to configure the motion detection alarm function:



Buzzer: The DVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when the motion is detected.
Alarm Out: If your DVR supports relay connection terminal on the rear panel, you can connect these to an external alarm device which can be triggered when a motion event occurs.
Delay: To configure the external alarm time when motion is detected.

Record: Click icon and choose which Camera(s) you want to record when the motion detection is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record. The recommended recording length is 30 seconds but it can be set higher up to 5 minutes.

Show Message: Check the box to display icon on the live view screen when the motion is detected.

Send Email: You can let the DVR to send you an auto-email when the motion is detected.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

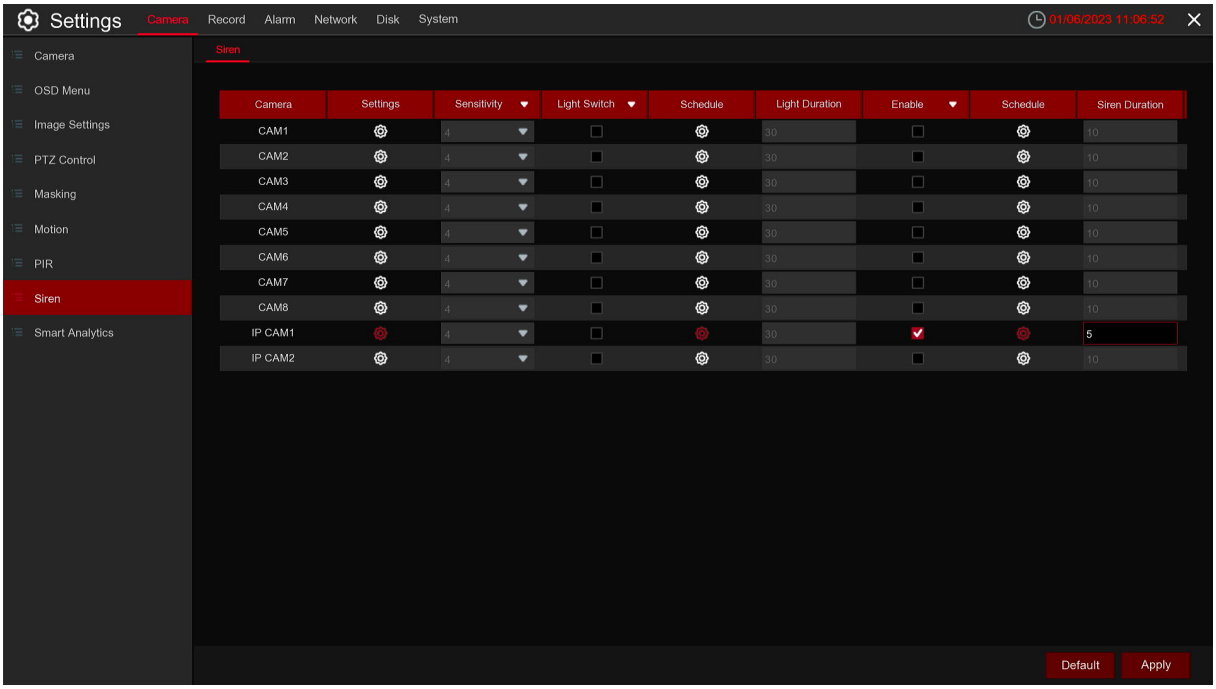
Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Full Screen: If this function is enabled and a motion is detected in a Camera, you will see that Camera in full screen.

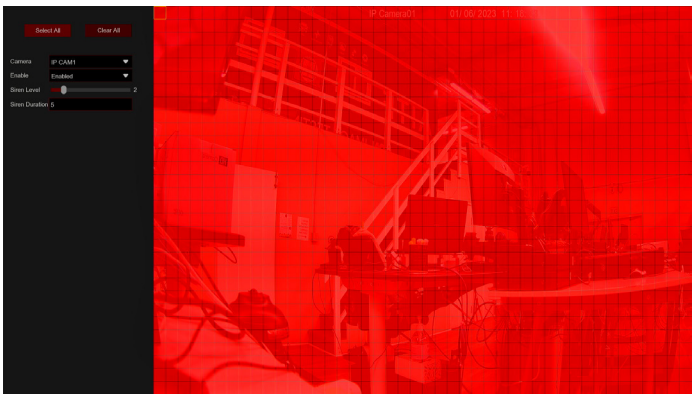
Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.6 Deterrent alarm settings

Spotlight alarm can be configured in this menu. It requires that the NVR and camera can support this function.



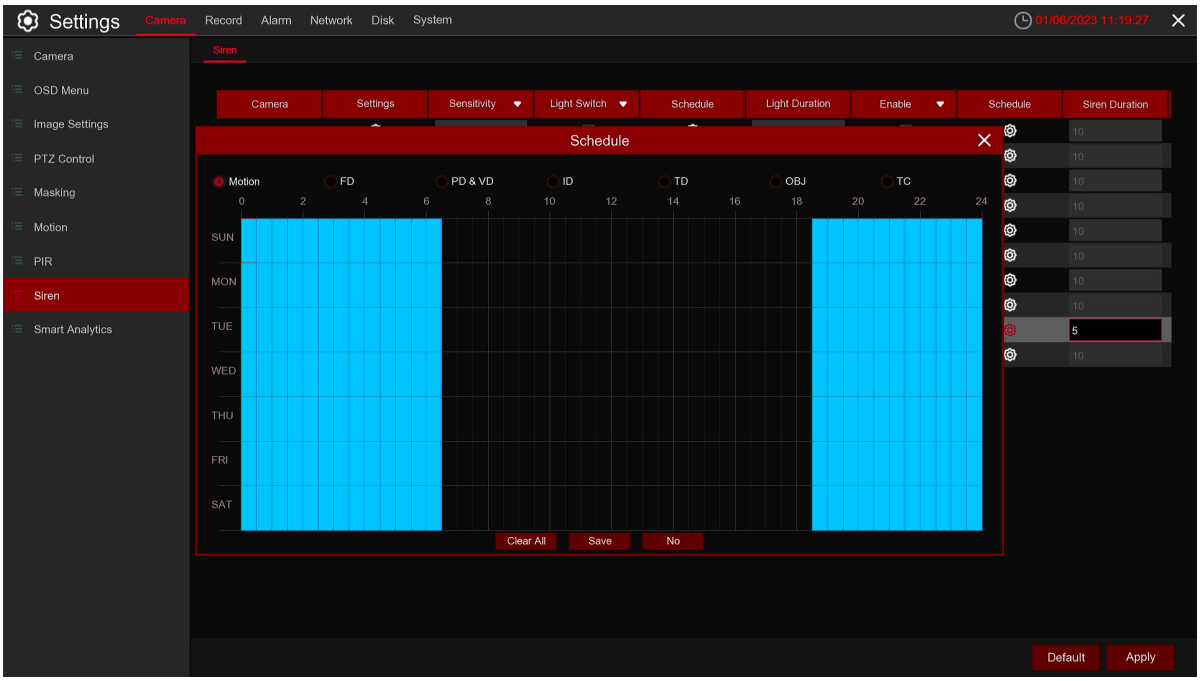
Setup: Click icon into the setup page.



Deterrent Detection Area:
Click Select All to set the whole screen of the camera as deterrent detection area. Click **Delete All** to clear the area. You can also set an area in the screen by drawing a pentagon in the screen. If you want to edit the size of the area, please check the box and change the position.

After setting is completed, click the right button of your mouse to return and click **Save** to make the area setup effective.

Schedule: Setup spotlight alarm schedule, blue color is the spotlight working time.



Sensitivity: Set the sensitivity level, the higher the value, the easier it is to trigger alarm.

Light: To enable spotlight alarm.

Duration: Set the spotlight alarm time period.

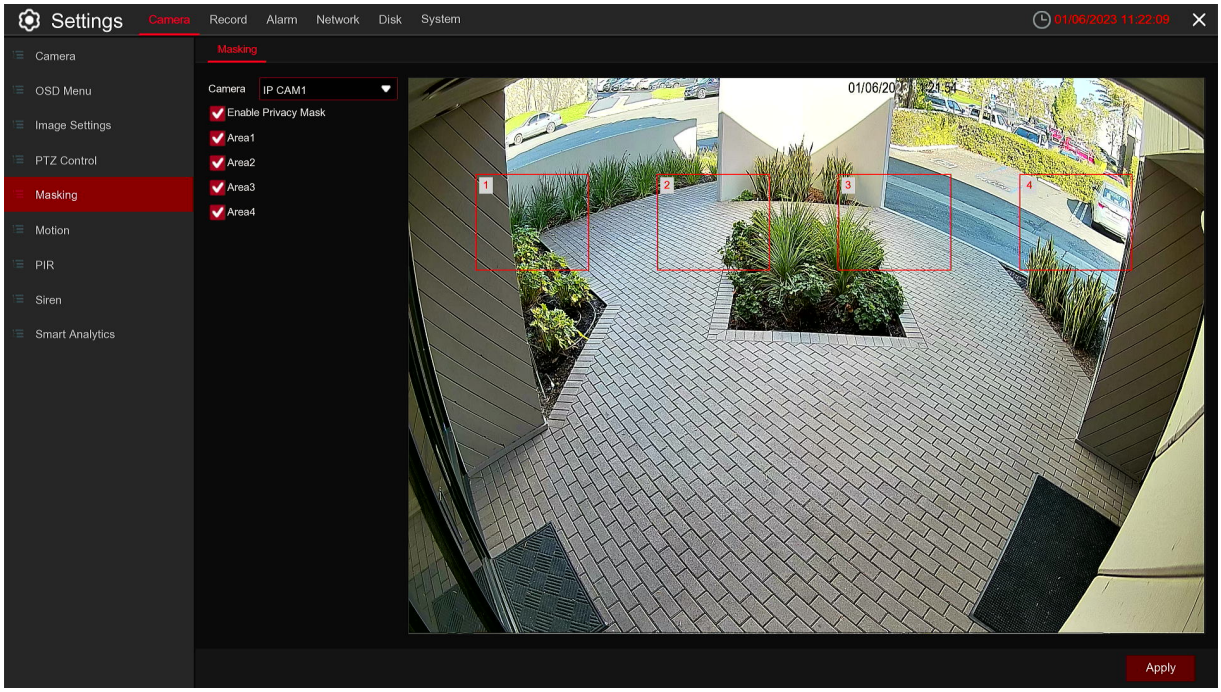
Siren: To enable alarm siren.

Siren Duration: Set the alarm siren time period.

Default: Load default.

5.1.7 Video Cover

This menu allows you to create privacy zone(s) if you want to partially cover some certain part of the image. You can create up to 4 privacy zones in any size and location on the camera image. Enable the Privacy Zone, and choose how many zones you need. The zone(s) appear as “red box”. Click the edge of the red box and drag it to any size to create a privacy zone.



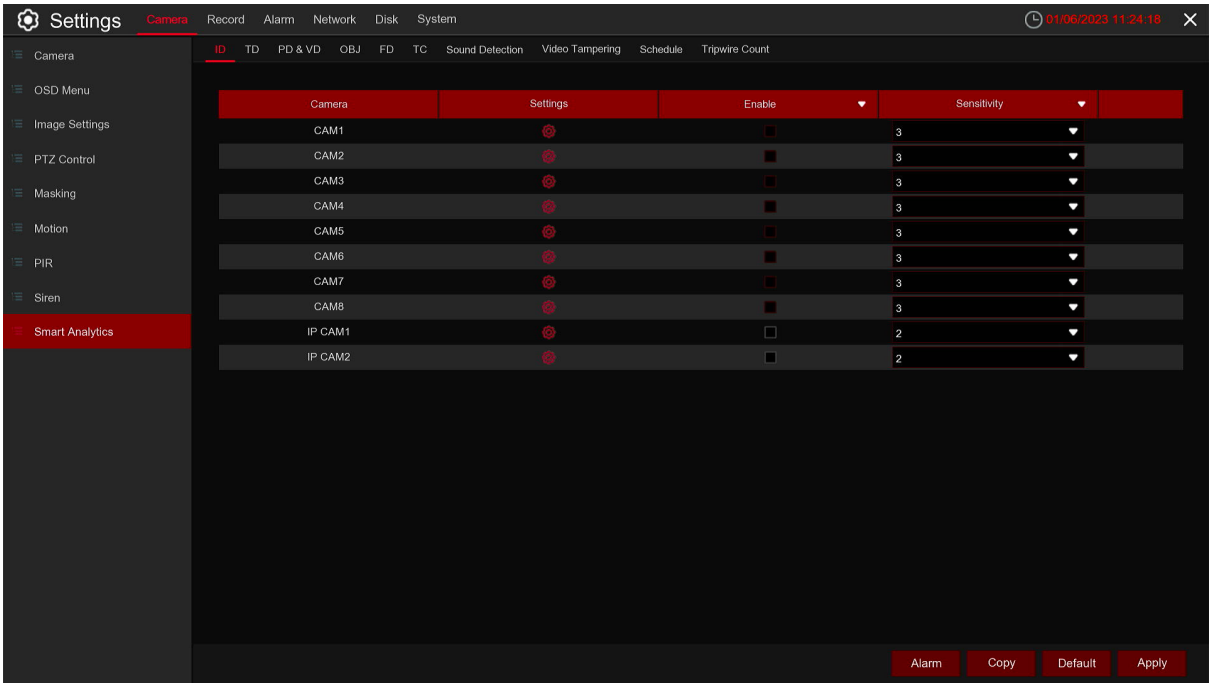
Note: The area of privacy zones you had set will be invisible in both live view & recording video.

5.1.8 Smart Analytics

The optional smart functions, including **Intrusion Detection**, **Tripwire Detection**, **Stationary Object Detection**, **Pedestrian and Vehicle Detection**, **Face Detection**, and **Tripwire Counting**.

5.1.8.1 ID (Intrusion Detection)

Intrusion Detection function detects people, vehicle or other objects which enter and loiter in a pre-defined virtual region, and some certain actions can be taken when the alarm is triggered.



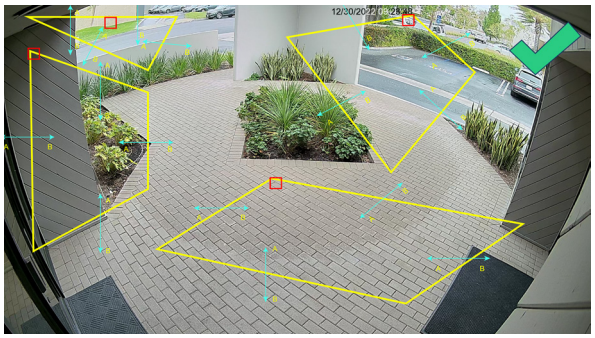
Switch: Enable or disable the ID function.
Sensitive: The sensitivity level is from 1 to 4. Higher sensitivity will be easier to trigger the detection.
Area: Click [Setup] to draw a virtual region in the camera picture.

1. **Camera:** Select the Camera you want to configure
2. Choose one of the Rule Number. It is the number of ID area. Maximum 4 areas you can set for ID function
3. To enable the detection in **Rule Switch**
4. Choose a **Rule Type**.
   A→B: DVR will only detect the action from side A to side B;
   B→A: DVR will only detect the action from side B to side A;
   A←→B: DVR will detect the action from either side B to side A or side A to side B.
5. Use your mouse to click 4 points in the camera picture to draw a virtual region. The sharp of the region should be a convex polygon. Concave polygon will be not able to save.
6. Click **Save** to save your settings.
7. If you want to modify the position or sharp of region, click the red box in the region, the borders of the region will be changed to red color. Long press the left button of your mouse to move the position of the region, or drag the corners to resize the region.
8. If you want to remove one of the regions from the camera picture, click the red box in the region and then click **Remove** button. Click **Remove All** will delete all regions.

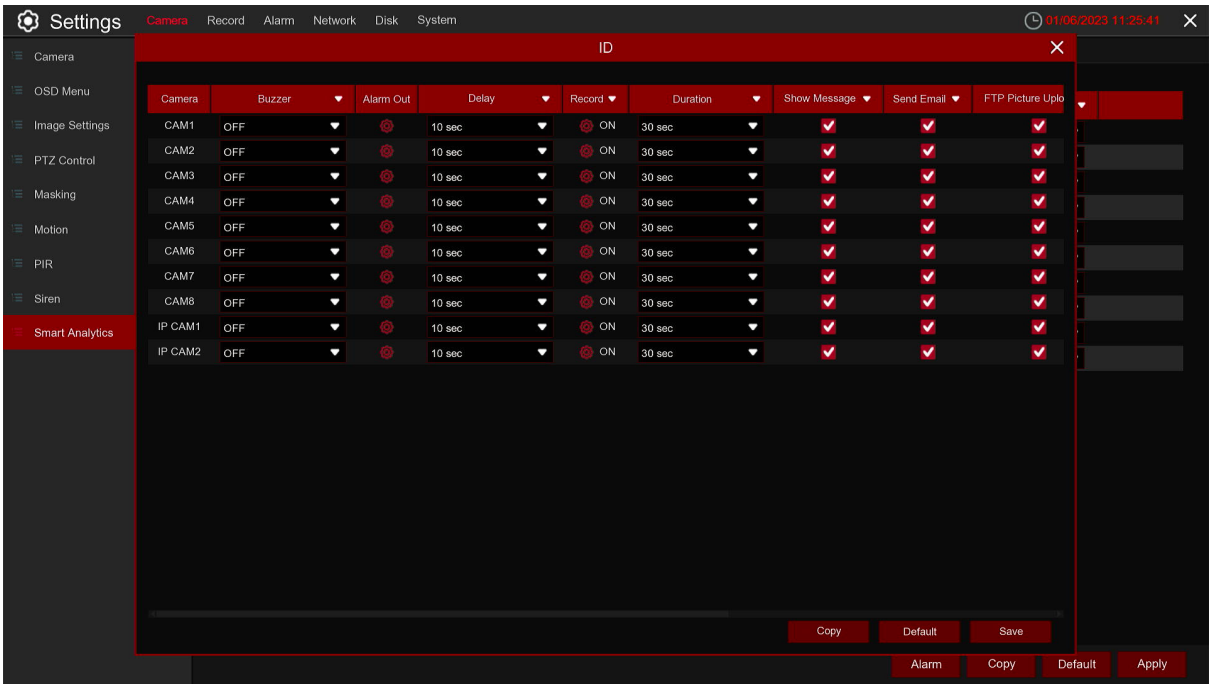
Note:

1) The perimeter shall not be too close to the edges/corners of the camera picture, since it may fail to trigger the detection when the target pass through the edges/corners.

2) The shape of the regions shall not be too narrow/small, since it may fail to trigger the detection when the target passes through outside the perimeter.



Click "**Alarm**" button to configure ID alarm function.



Buzzer: After the detection is triggered, disable the buzzer or activate the buzzer within 10/20/40/60 seconds to emit an alarm sound.

Alarm Out: If your DVR supports relay connection terminal on the rear panel, you can connect these to an external alarm device which can be triggered when a motion event occurs.

Delay: Configure the external alarm trigger time.

Record: Choose which Camera(s) you want to record when the alarm is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record.

Show Message: Live view screen will show "S" when alarm is triggered.

Send Email: You can let the DVR to send you an auto-email when alarm is triggered.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

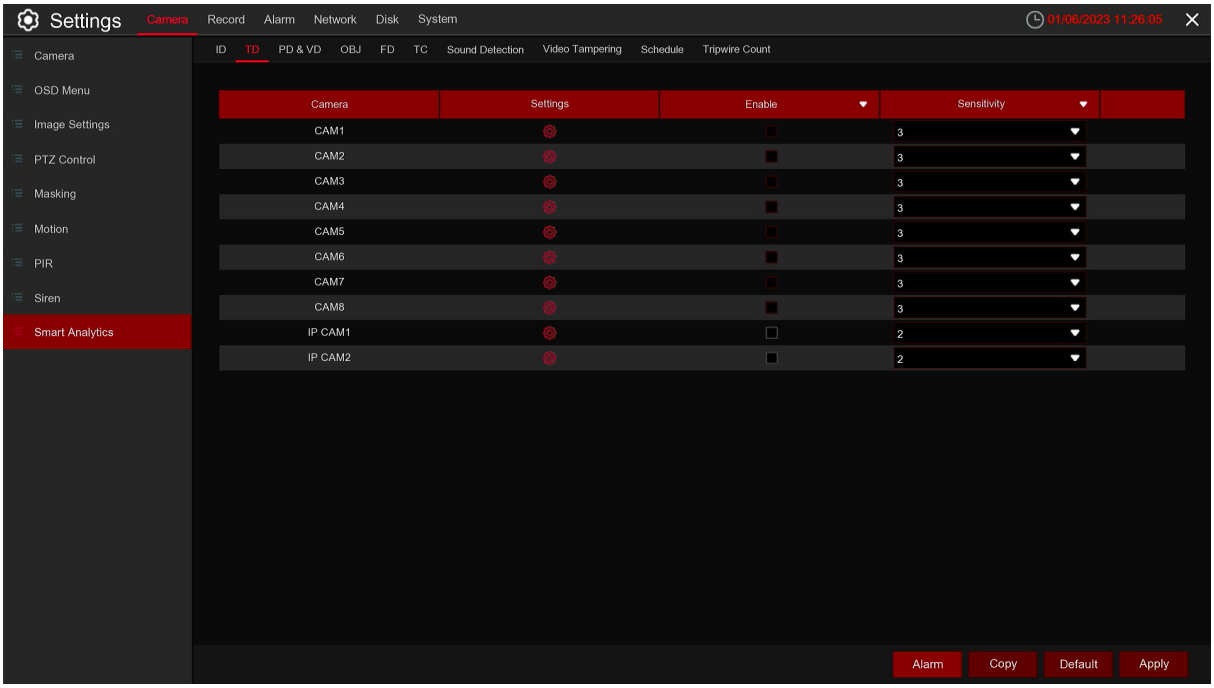
Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Full Screen: If this function is enabled and alarm is detected in a Camera, you will see that Camera in full screen.

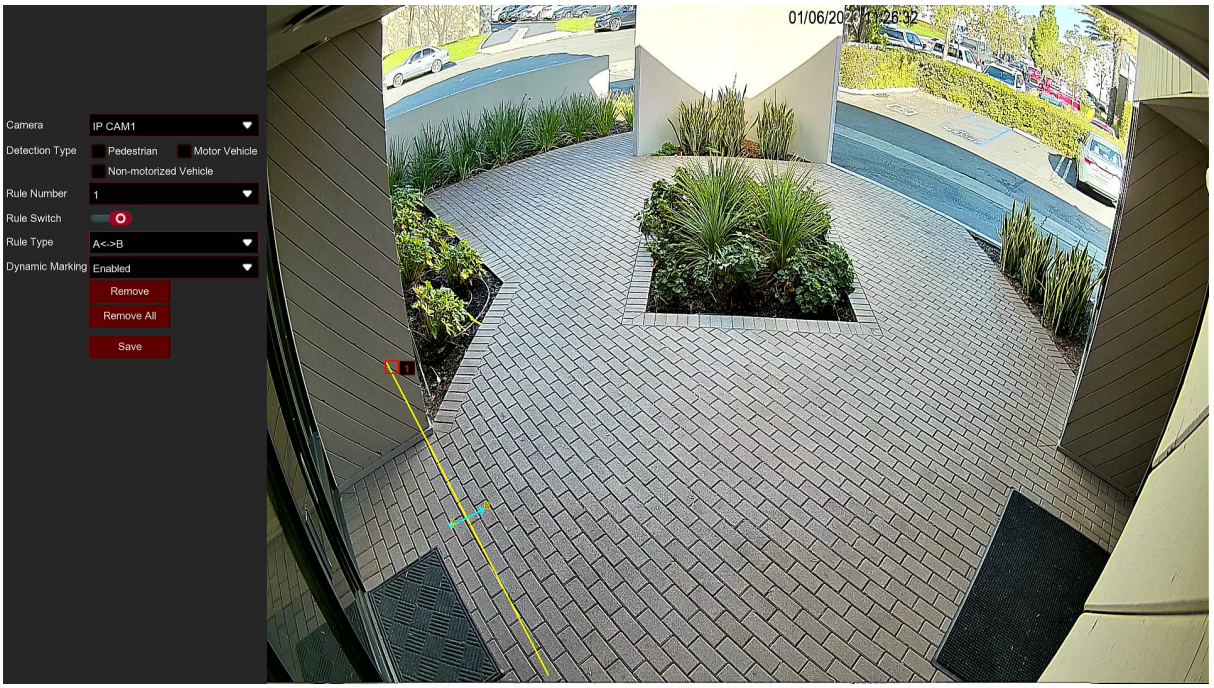
Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.8.2 TD (Tripwire Detection)

Tripwire Detection function detects people, vehicle or other objects which cross a pre-defined virtual line, and some certain actions can be taken when the alarm is triggered.



Sensitive: The sensitivity level is from 1 to 4. Higher sensitivity will be easier to trigger the detection.
Switch: Toggles enabling or disabling of function.
Area: Click [Setup] to draw a virtual line in the camera picture.

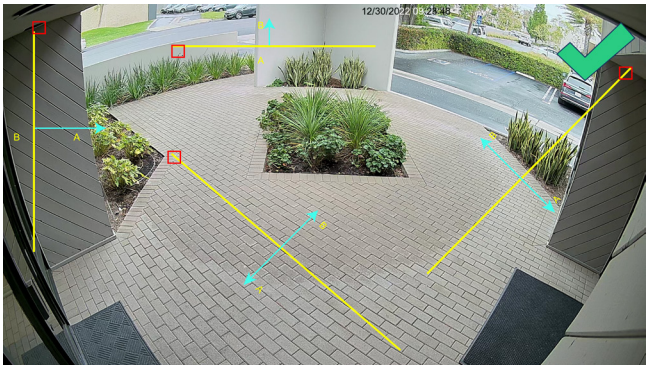


1. **Camera:** Select the Camera you want to configure
2. Choose one of the Rule Number. It is the number of TD lines. Maximum 4 lines you can draw
3. To enable the detection in **Rule Switch**
4. Choose a **Rule Type**.
   A→B: DVR will only detect the action from side A to side B;
   B→A: DVR will only detect the action from side B to side A;
   A←→B: DVR will detect the action from either side B to side A or side A to side B.
5. Use your mouse to click 2 points in the camera picture to draw a virtual line.
6. Click **Save** to save your settings.
7. If you want to modify the position or length of the line, click the red box in the line, the color of the line will be changed to red color. Long press the left button of your mouse to move the line, or drag the terminals to modify the length or position of the line.
8. If you want to remove one of the lines from the camera picture, click the red box in the line and then click **Remove** button. Click **Remove All** will delete all lines.

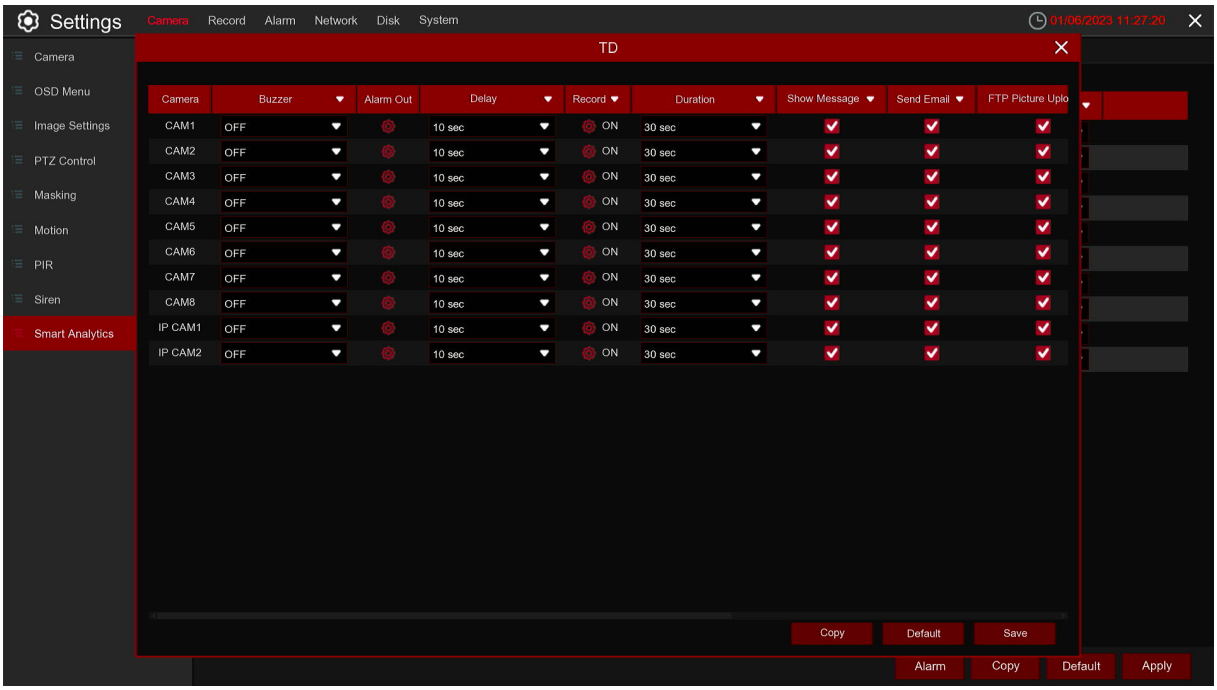
Note:

1) The lines shall not be too close to the edges of the camera picture, to avoid any failure to trigger an alarm when the target cross through it.

2) The lines shall not be set too short, to avoid any failure to trigger an alarm when the target passes outside it.



Click "**Alarm**" button to configure TD alarm function.



Buzzer: After the detection is triggered, disable the buzzer or activate the buzzer within 10/20/40/60 seconds to emit an alarm sound.

Alarm Out: If your DVR supports relay connection terminal on the rear panel, you can connect these to an external alarm device which can be triggered when a motion event occurs.

Delay: Configure the external alarm trigger time.

Record: Choose which Camera(s) you want to record when the alarm is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record.

Show Message: Live view screen will show "S" when alarm is triggered.

Send Email: You can let the DVR to send you an auto-email when alarm is triggered.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

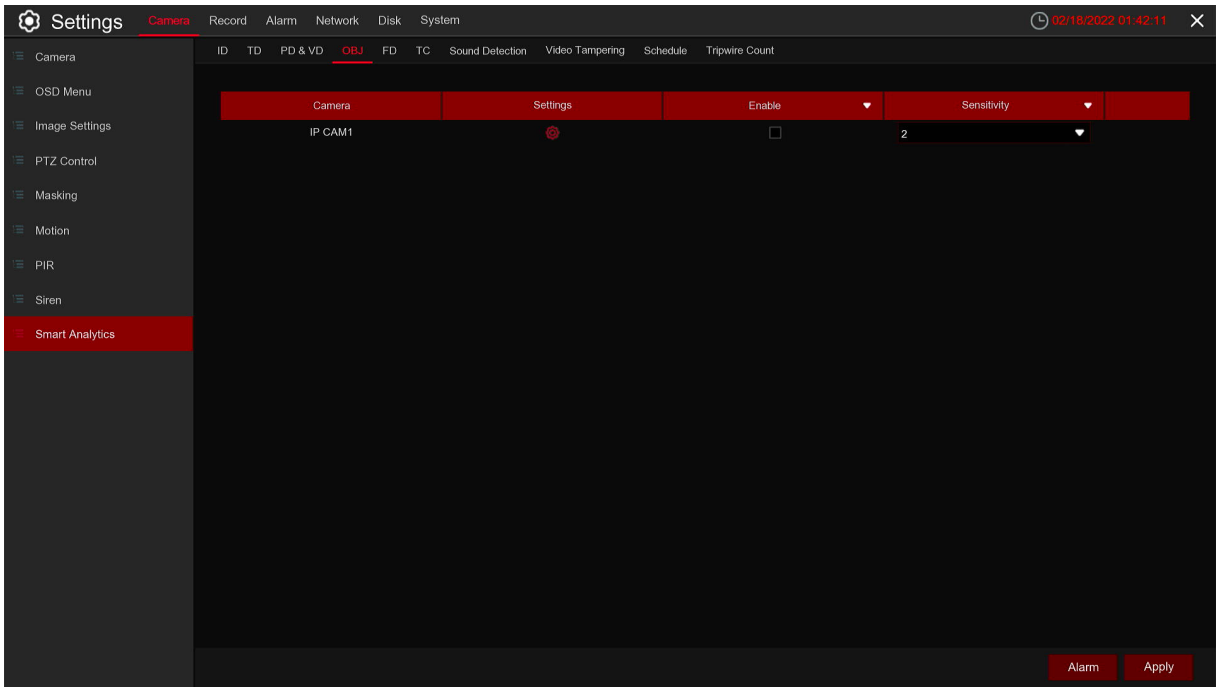
Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Full Screen: If this function is enabled and alarm is detected in a Camera, you will see that Camera in full screen.

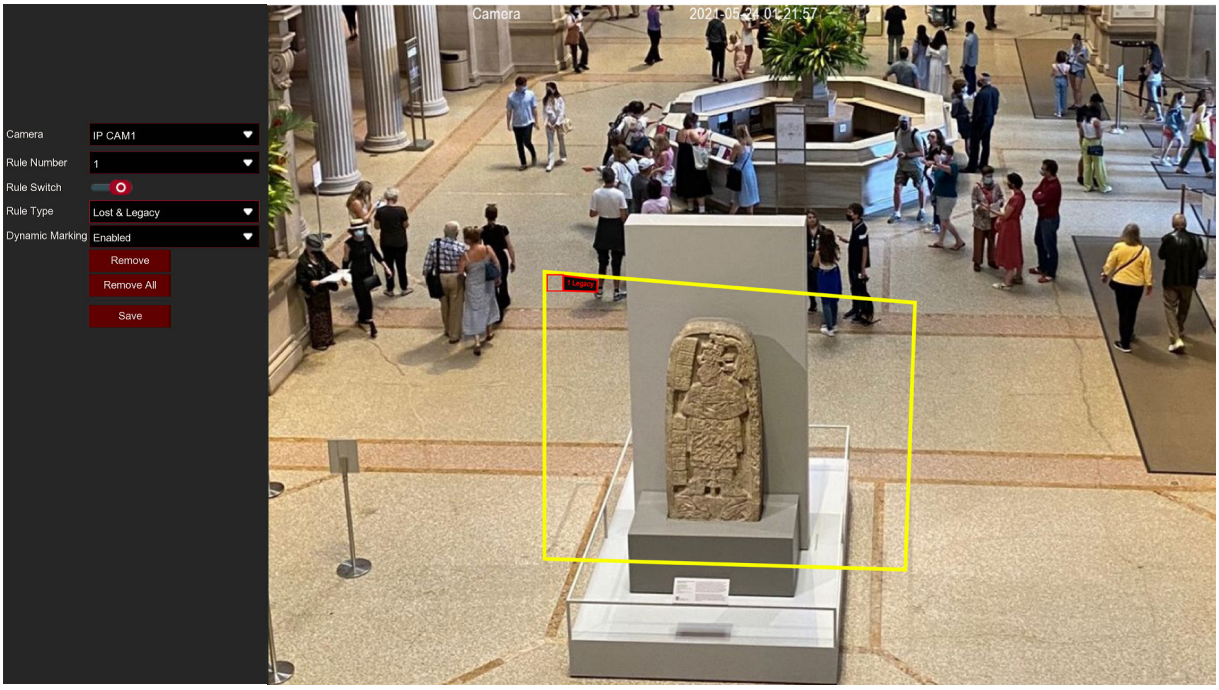
Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.8.3 SOD (Stationary Object Detection)

Stationary Object Detection function detects the objects left over or lost in the pre-defined region such as the baggage, purse, dangerous materials, etc., and a series of actions can be taken when the alarm is triggered.



Sensitive: The sensitivity level is from 1 to 4, with a default value of 2. Higher sensitivity will be easier to trigger the detection.
Switch: Toggles enabling or disabling of function.
Area: Click [**Setup**] to draw a virtual region in the camera picture.



1. **Camera:** to select the Camera you want to configure
2. Choose one of the Rule Number. It is the number of SOD area. Maximum 4 areas you can set for SOD function.
3. To enable the detection in **Rule Switch**.
4. Choose a **Rule Type**.
Legacy: DVR will only detect the left-over objects;
Lost: DVR will only detect the lost objects;
Legacy & Lost: DVR will detect both left-over & lost objects.

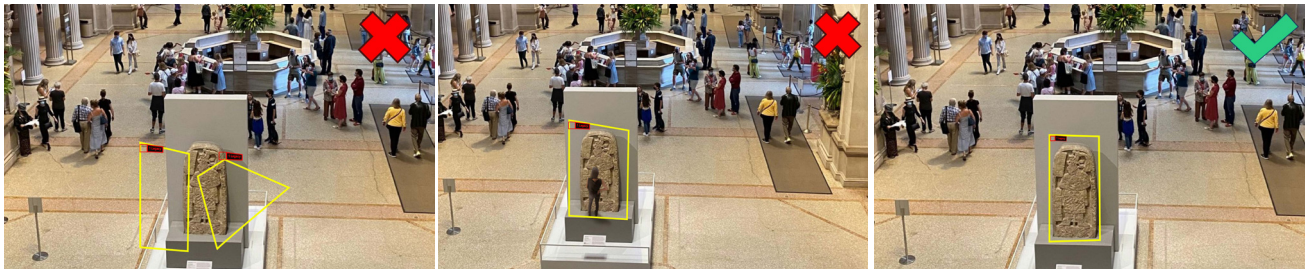
5. Use your mouse to click 4 points in the camera picture to draw a virtual region. The sharp of the region should be a convex polygon. Concave polygon will be not able to save.
6. Click **Save** to save your settings.
7. If you want to adjust the size of the region, click the red box in the region, the borders of the region will be changed to red color. Long press the left button of your mouse to move the whole region, or drag the corners to resize the region.

If you want to remove one of the regions from the camera picture, click the red box in the region and then click **Remove** button. Click **Remove All** will delete all regions.

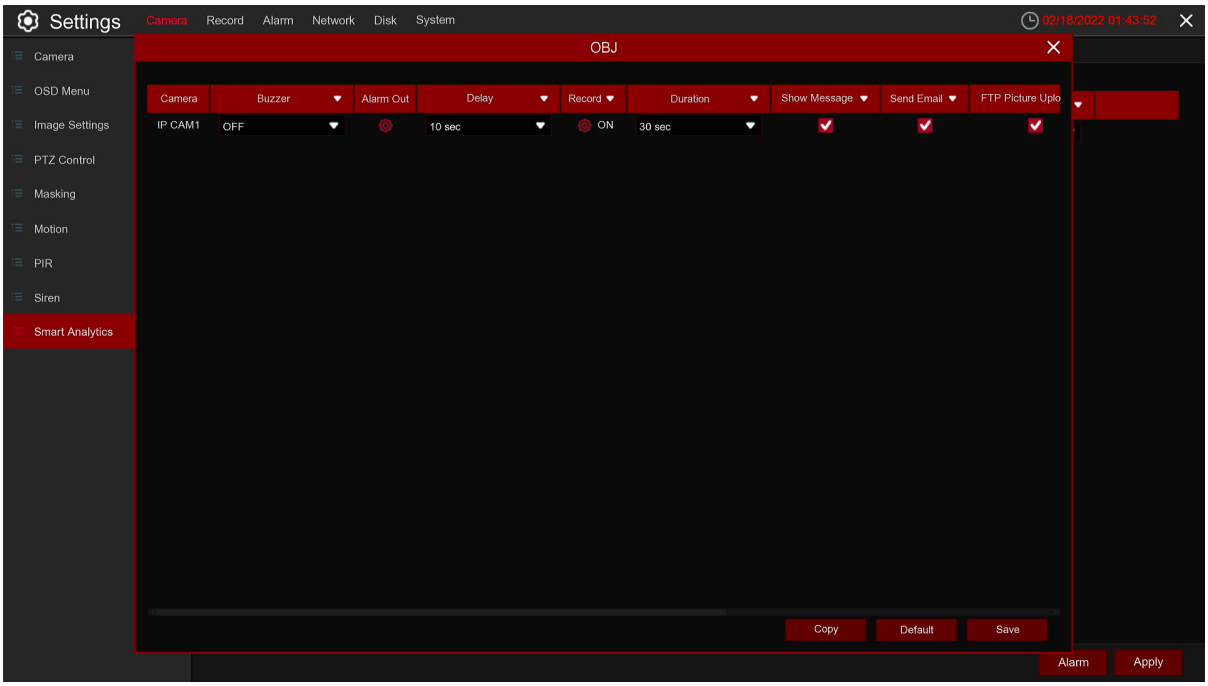
Note:

1) The area for detection shall be greater than or equal to the size of the detected object, such as the detection of a white bottle.

2) The detected object cannot be covered.



Click "**Alarm**" button to configure SOD alarm function.



Buzzer: After the detection is triggered, disable the buzzer or activate the buzzer within 10/20/40/60 seconds to emit an alarm sound.

Alarm Out: If your DVR supports relay connection terminal on the rear panel, you can connect these to an external alarm device which can be triggered when a motion event occurs.

Delay: Configure the external alarm trigger time.

Record: Choose which Camera(s) you want to record when the alarm is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record.

Show Message: Live view screen will show "S" when alarm is triggered.

Send Email: You can let the DVR to send you an auto-email when alarm is triggered.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

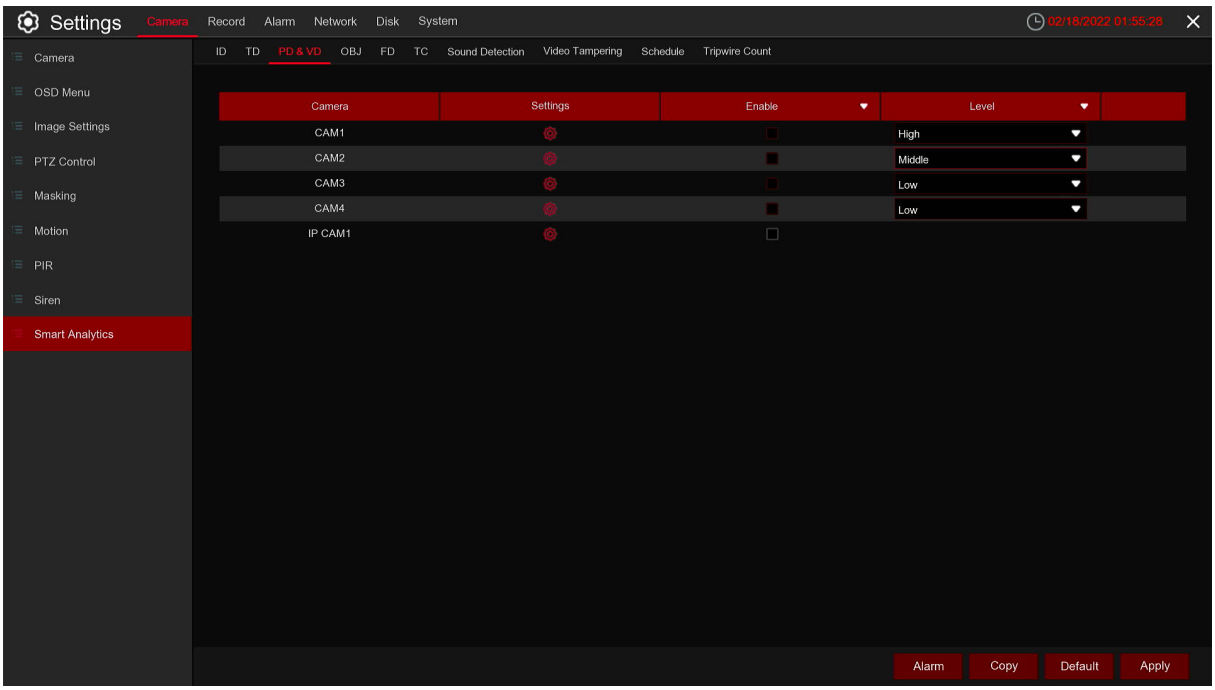
Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Full Screen: If this function is enabled and alarm is detected in a Camera, you will see that Camera in full screen.

Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.8.4PD & VD (Pedestrian and Vehicle Detection)

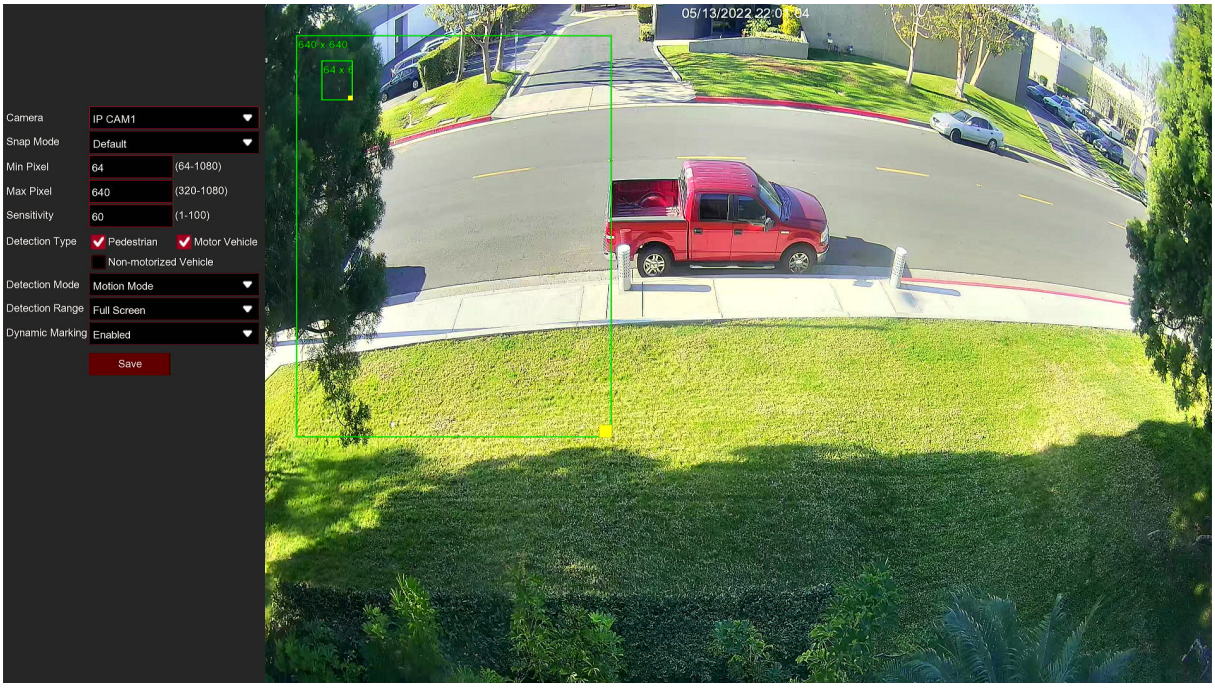
The Pedestrian and Vehicle detection function can detect moving humans, motor vehicles and non-motorized vehicles such as bikes in a pre-defined region, and a series of actions can be taken when the alarm is triggered.



Level: Small, Middle & Big. Small level is recommended to detect objects in long distance. Big level is recommended to detect objects in short distance.

Switch: Toggles enabling or disabling of function.

Area: Click [**Setup**] to draw a virtual region in the camera picture.



1. **Camera:** to select the Camera you want to configure

2. **Snap Mode:** Selects the Snapshot mode. Default Mode: Selects the best image between the beginning and end of detected motion, Real Time: Snapshot at beginning and then end of detection motion and, Interval Mode: Allows you to customize frequency of snapshots while object is detected

3. **Min Pixel:** Set the minimum recognition pixel box, and the face can be recognized only when it is larger than the set pixel.

4. **Sensitivity:** The sensitivity level is from 0 to 100, higher sensitivity will be easier to trigger the detection.

5. **Detection Type:** Select the detection type. When selecting pedestrians, only pedestrians can trigger the alarm, and when selecting vehicles, only vehicles can trigger the alarm.

6. **Detection Mode:** Select the detection mode. In static mode, only stationary people and vehicles will be detected, while in dynamic mode, stationary or moving people and vehicles can trigger detection

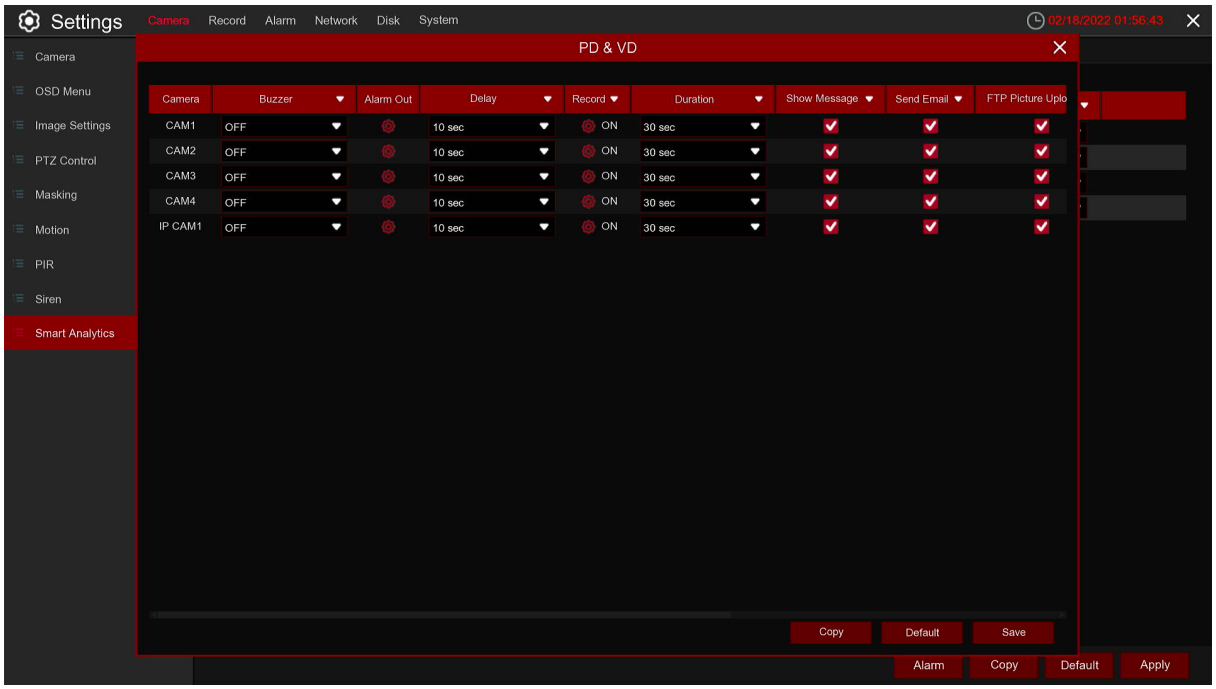
7. **Detection Range:** Set the detection range, Full Screen is full screen detection, Customize can customize the detection range. You can use the mouse to click 4 points in the camera picture to draw a virtual area. The sharpness of this area should be a convex polygon. Concave polygons will not be saved. If you want to adjust the size of the area, click the red box in the area, and the border of the area will turn red. Long press the left mouse button to move the entire area, or drag the corners to adjust the size of the area.

Note:

1) The region for detection shall not be in the area that people cannot reach.

2) The region should include the complete front face.

Click "**Alarm**" button to configure PD & VD alarm function:



Buzzer: After the detection is triggered, disable the buzzer or activate the buzzer within 10/20/40/60 seconds to emit an alarm sound.

Alarm Out: If your DVR supports relay connection terminal on the rear panel, you can connect these to an external alarm device which can be triggered when a motion event occurs.

Delay: Configure the external alarm trigger time.

Record: Choose which Camera(s) you want to record when the alarm is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record.

Show Message: Live view screen will show "S" when alarm is triggered.

Send Email: You can let the DVR to send you an auto-email when alarm is triggered.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

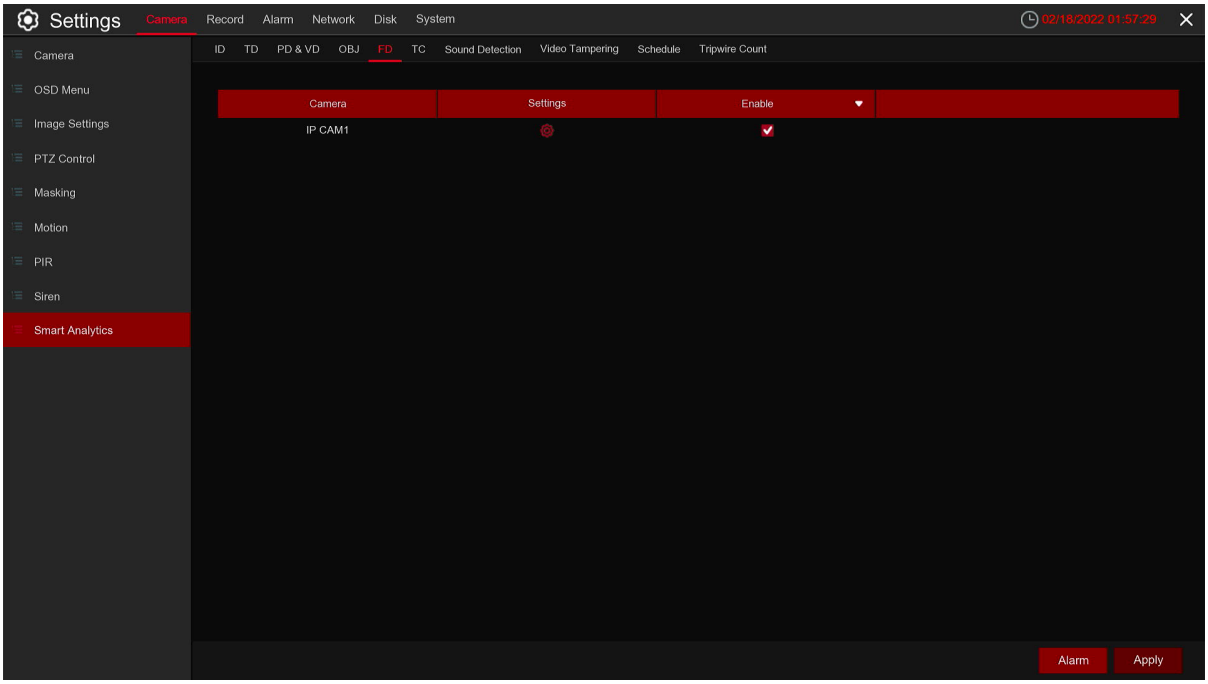
Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Full Screen: If this function is enabled and alarm is detected in a Camera, you will see that Camera in full screen.

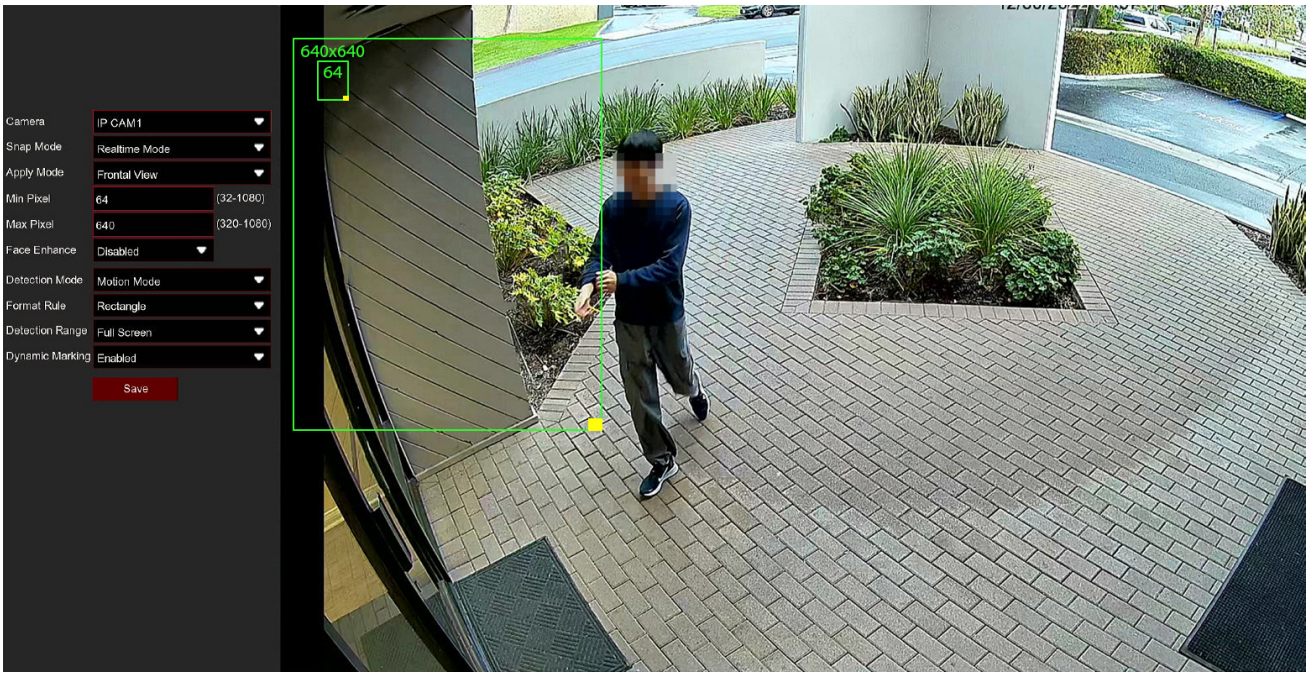
Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.8.5 FD (Face Detection)

Face Detection function detects the faces of moving people appear in a pre-defined region, and a series of actions can be taken when the alarm is triggered.



Switch: to enable or disable the FD function
Area: Click [**Setup**] to draw a virtual region in the camera picture.



1. **Camera:** to select the Camera you want to configure.

2. **Snap Mode:** Select snap mode. There are advanced mode (select the best image to push from the time when the face appears to disappear), real-time mode (push once when the face appears and push again when it disappears) and interval mode (customize the time and interval of push).

3. **Apply Mode:** Select the application mode, there are frontal angles, multi-angles and custom angles to choose from. The alarm can only be triggered when a face that meets these angles appears.

4. **Min Pixel:** Set the minimum recognition pixel box, and the face can be recognized only when it is larger than the set pixel.

5. **Face Enhance:** Face enhancement makes it easier to recognize faces when turned on.

6. **Detection Mode:** Select the detection mode. In static mode, only static faces are detected, while in dynamic mode, static or moving faces can trigger detection.

7. **Rule Kind:** Rule type. To set the cross-line shape, you need to select the cross-line rule and set the position of the line in the screen. The face can pass through the line according to the set rule to trigger the detection. The regional shape can be triggered only when the face is in the set area.

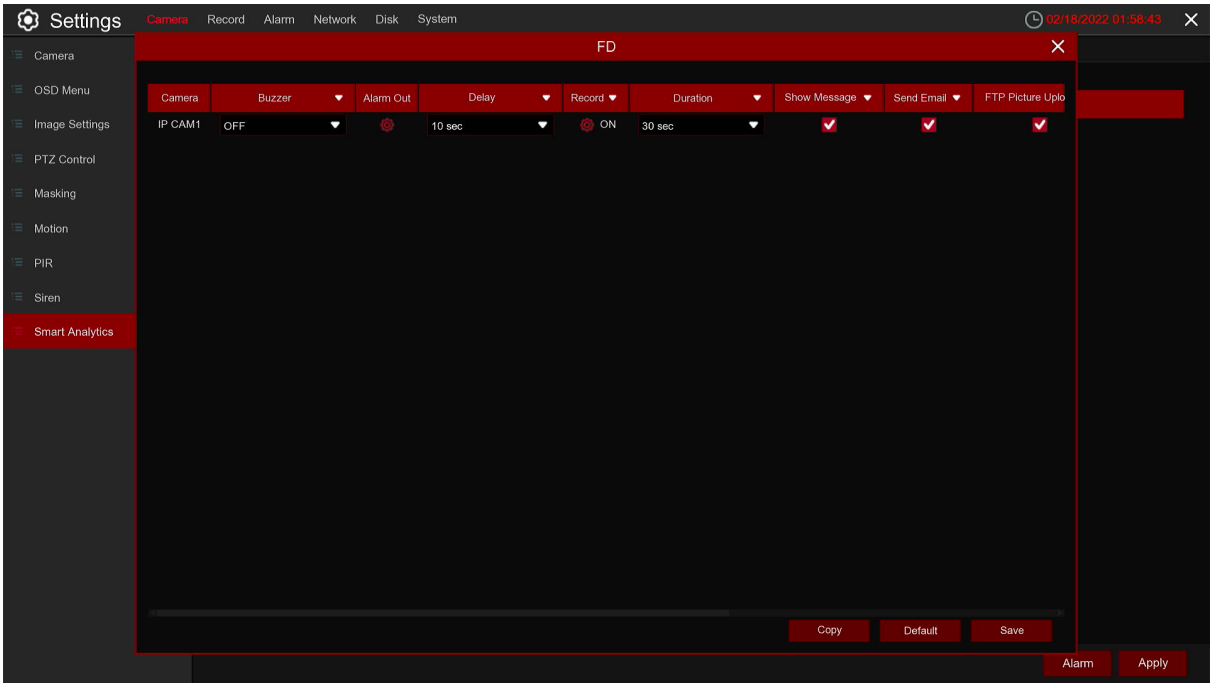
8. **Detection Range:** Set the detection range, Full Screen is full screen detection, Customize can customize the detection range. Use the mouse to click 4 points in the camera picture to draw a virtual area. The sharpness of this area should be a convex polygon. Concave polygons will not be saved. If you want to adjust the size of the area, click the red box in the area, and the border of the area will turn red. Long press the left mouse button to move the entire area, or drag the corners to adjust the size of the area.

Note:

1) The region for detection shall not be in the area that people cannot reach.

2) The region should include the complete front face.

Click"**Alarm**"button to configure alarm function:



Buzzer: After the detection is triggered, disable the buzzer or activate the buzzer within 10/20/40/60 seconds to emit an alarm sound.

Alarm Out: If your DVR support to connect to external alarm device, you can set to emit an alarm tone.

Delay: Configure the external alarm trigger time.

Record: Choose which Camera(s) you want to record when the alarm is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record.

Show Message: Live view screen will show "S" when alarm is triggered.

Send Email: You can let the DVR to send you an auto-email when alarm is triggered.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

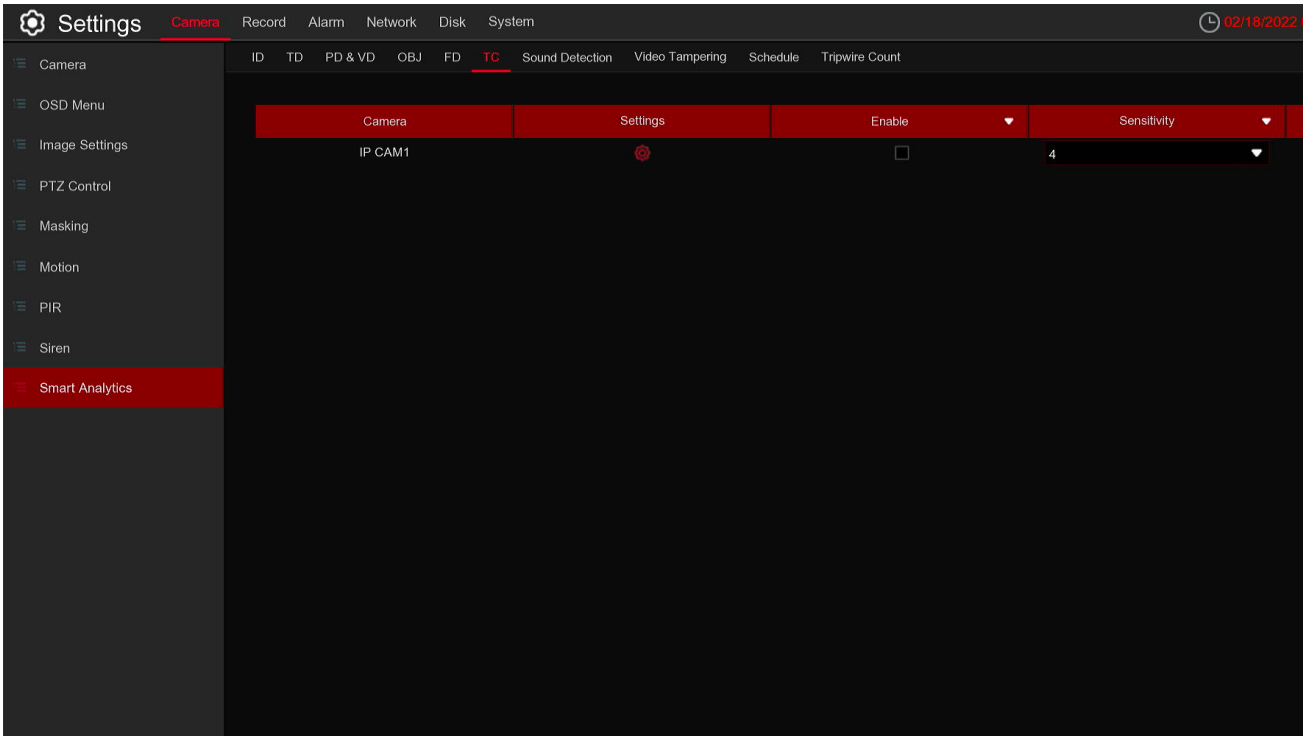
Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Full Screen: If this function is enabled and alarm is detected in a Camera, you will see that Camera in full screen.

Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.8.6 TC (Tripwire Count)

Tripwire Count function counts the times for moving objects or people across the virtual lines.



Sensitive: The sensitivity level is from 1 to 4, with a default value of 2. Higher sensitivity will be easier to trigger the detection.

Switch: to enable or disable the TC function.

Area: Click [**Setup**] to draw a virtual region in the camera picture.

1. **Camera:** to select the Camera you want to configure

2. Choose one of the Rule Number. It is the number of virtual lines you can draw. Maximum 4 lines.

3. To enable the detection in **Rule Switch**.

4. Choose a **Rule Type**
   Person: Will count for only pedestrians crossing the line.
   Motion: Count any moving objects that cross the line.
   Vehicle: Will count for only vehicles crossing the line.

5. **Start Time:** Set the count start time.

6. **End Time:** Set the count end time.

7. **Reset Count:** Clear the count and count again.

8. **Rule Number:** Rule number, there can only be one set of rules

9. **Rule Type:**
   a) A->B, DVR will count people or objects from side A to side B
   b) B->A, DVR will count people or objects from side B to side A.

10. Click **Save** to save your settings.

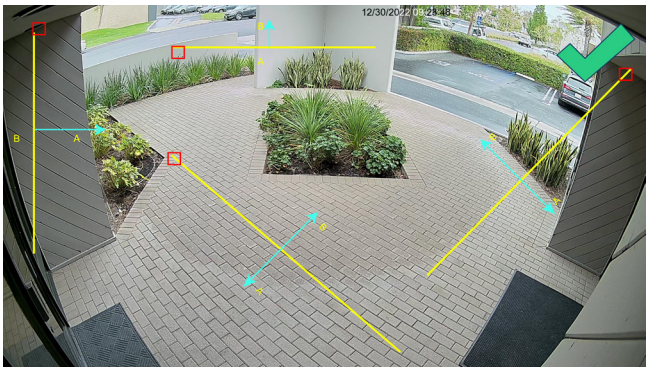
11. If you want to modify the position or length of the line, click the red box in the line, the color of the line will be changed to red color. Long press the left button of your mouse to move the line, or drag the terminals to modify the length or position of the line.

12. If you want to remove one of the lines from the camera picture, click the red box in the line and then click **Remove** button. Click **Remove All** will delete all lines.

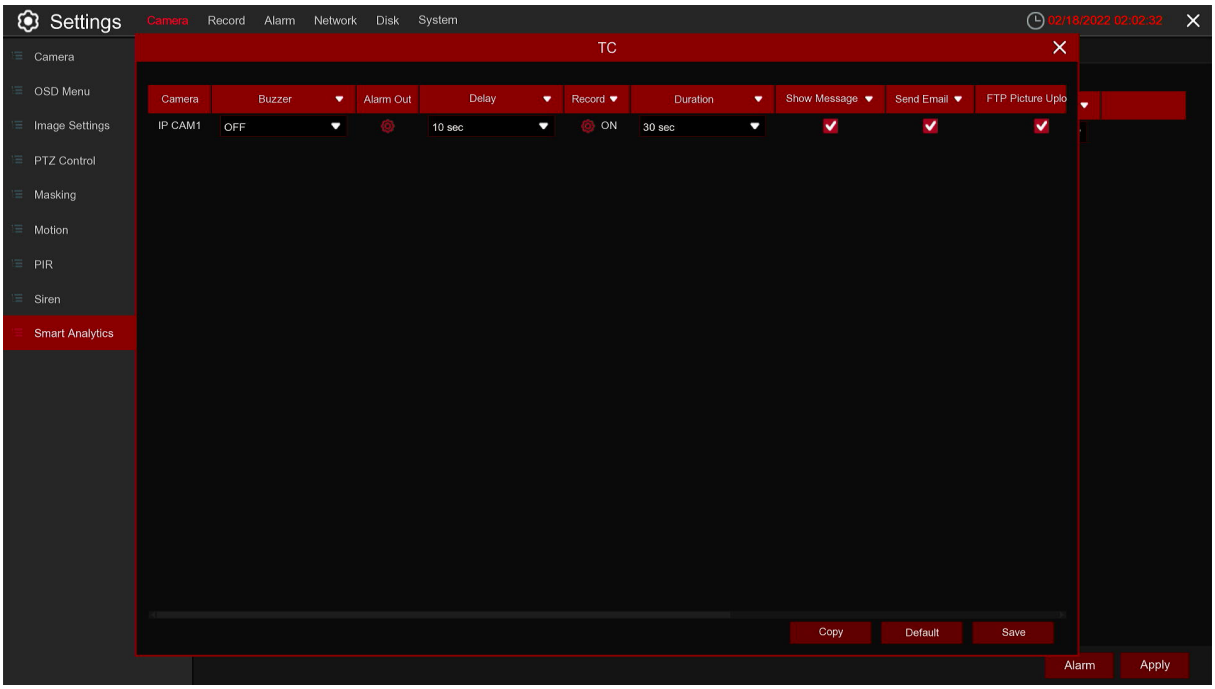
Note:
1) The lines shall not be too close to the edges of the camera picture, to avoid any failure to trigger an alarm when the target cross through it.

2) The lines should be in the area that detected object can be reach.

3) The lines shall not be set too short, to avoid any failure to trigger an alarm when the target passes outside it.



You are able to search & view the statistical result of Tripwire Count in 5.1.8.7 Sound Detection
Click"**Alarm**"button to configure TC alarm function:



Buzzer: After the detection is triggered, disable the buzzer or activate the buzzer within 10/20/40/60 seconds to emit an alarm sound.

Alarm Out: If your DVR support to connect to external alarm device, you can set to emit an alarm tone.

Delay: Configure the external alarm trigger time.

Record: Choose which Camera(s) you want to record when the alarm is triggered.

Duration: You can set how long after an event occurs that the DVR will continue to record.

Show Message: Live view screen will show "S" when alarm is triggered.

Send Email: You can let the DVR to send you an auto-email when alarm is triggered.

FTP Picture Upload: To upload alarm images to FTP server when alerts are triggered. Please view 5.4.4 FTP

FTP Video Upload: To upload alarm videos to FTP server when alerts are triggered. Please view 5.4.4 FTP

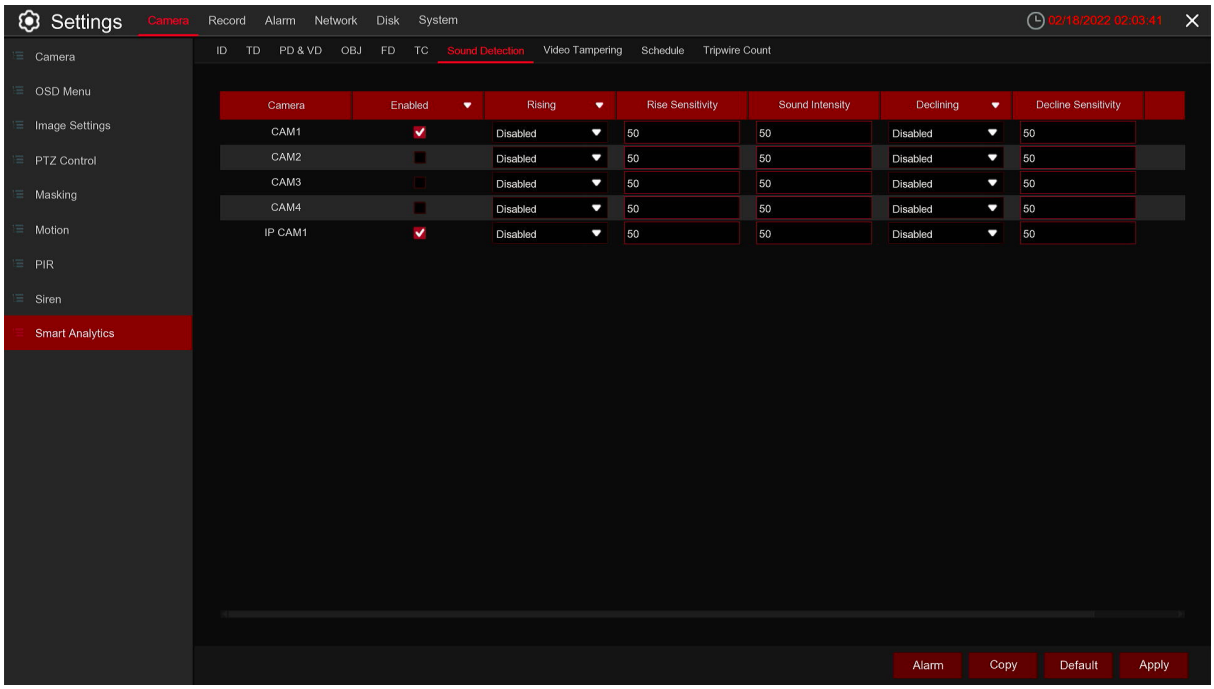
Picture to Cloud: To upload alarm images to cloud when alerts are triggered. Please view 5.5.2 cloud storage

Video to Cloud: To upload alarm videos to cloud when alerts are triggered. Please view 5.5.2 cloud storage

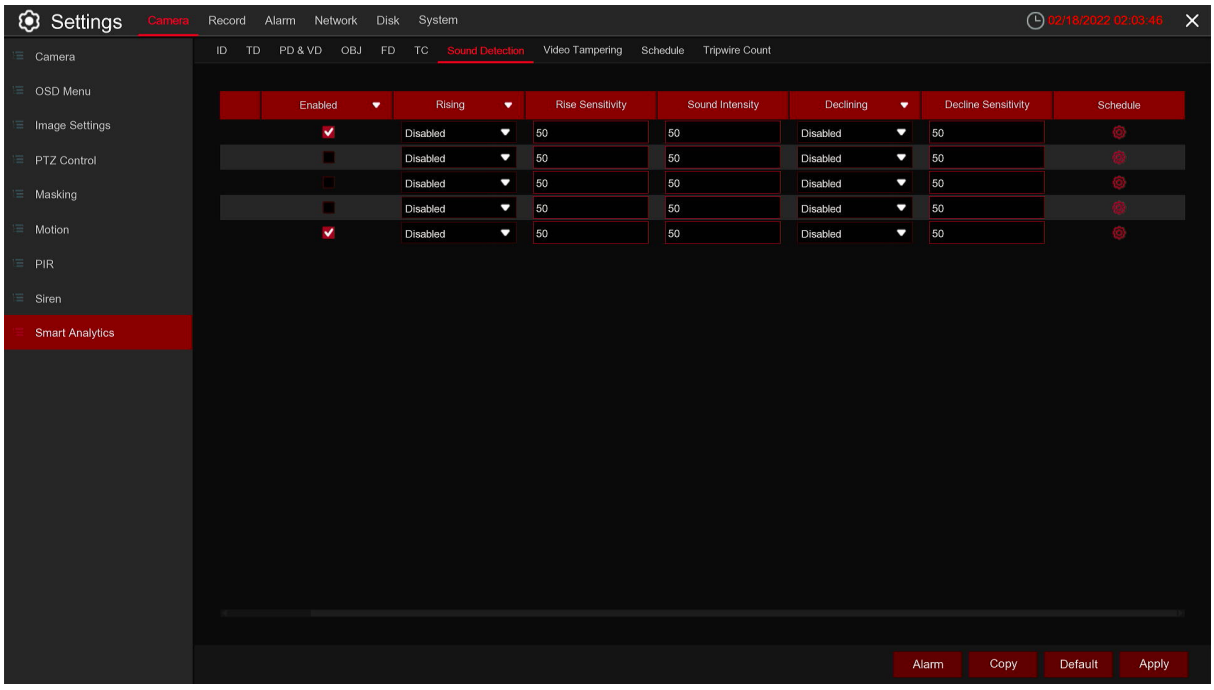
Full Screen: If this function is enabled and alarm is detected in a Camera, you will see that Camera in full screen.

Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

5.1.8.7 Sound Detection



With the sound detection, it can trigger an alarm while detecting the sound rise or decline, and some certain actions can be taken when the alarm is triggered.



Switch: Switch of sound detection.

Rise: Switch of volume rised,the alarm will be triggered only when volume rise sharply.

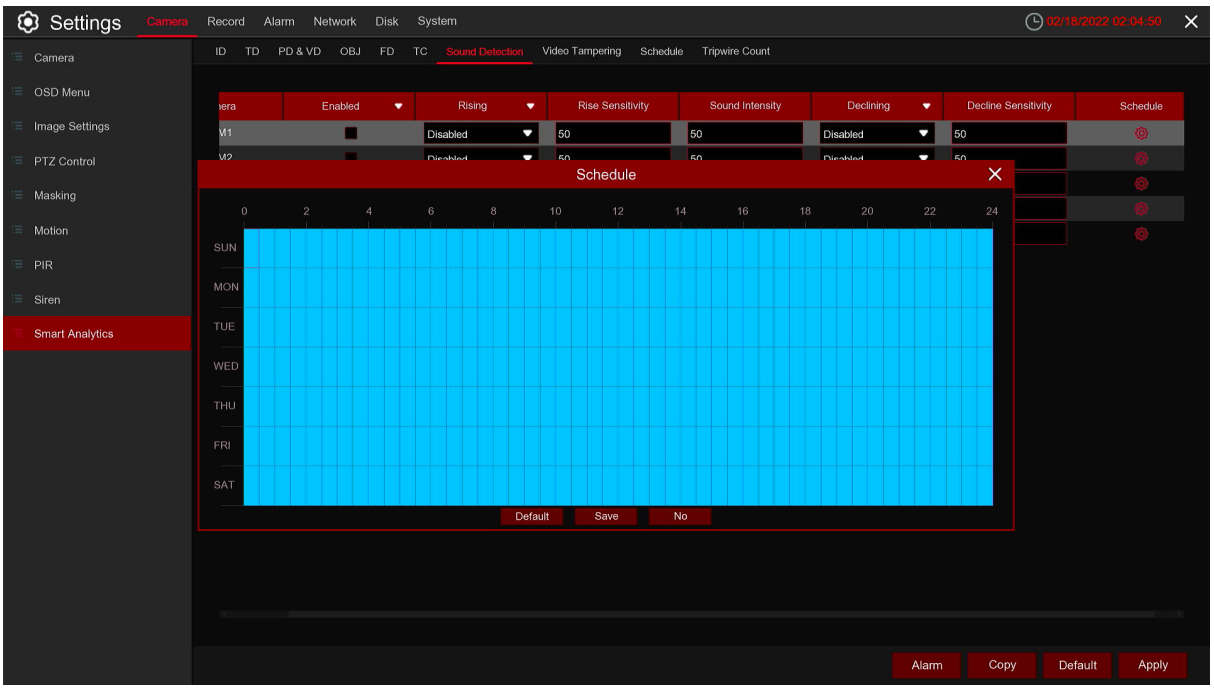
Rise Sensitivity: The sensitivity of volum rised, the larger the value, the easier to trigger the alarm.

Sound Intensity: Configuration of sound intensity, it is the sound threshold. The higher the threshold, the louder the spike alarm needs to be to trigger.

Decline: Switch of volume drop sharply, the alarm will be triggered only when volume rise sharply.

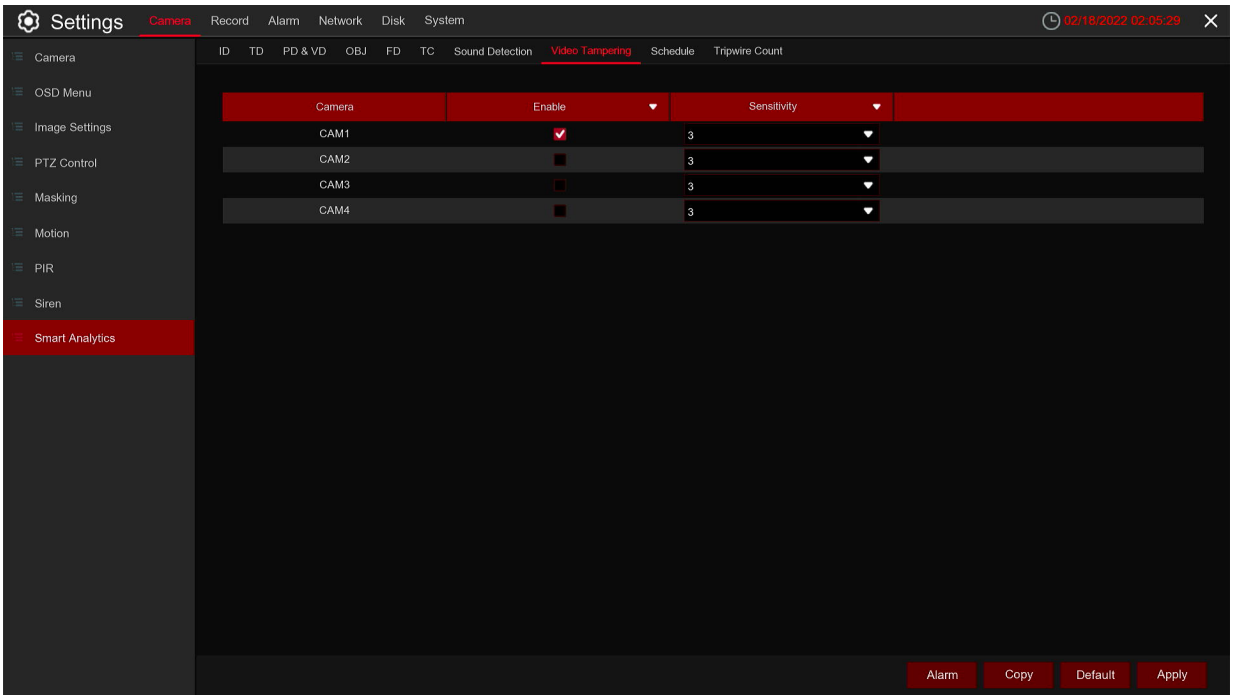
Decline Sensitivity: The sensitivity of drop sharply, the larger the value, the easier to trigger the alarm.

Schedule: Schedule of sound alarm setting.Only will be triggered during the schedule time.



5.1.8.8 Video Tampering

The alarm triggered when the camera be covered largely.

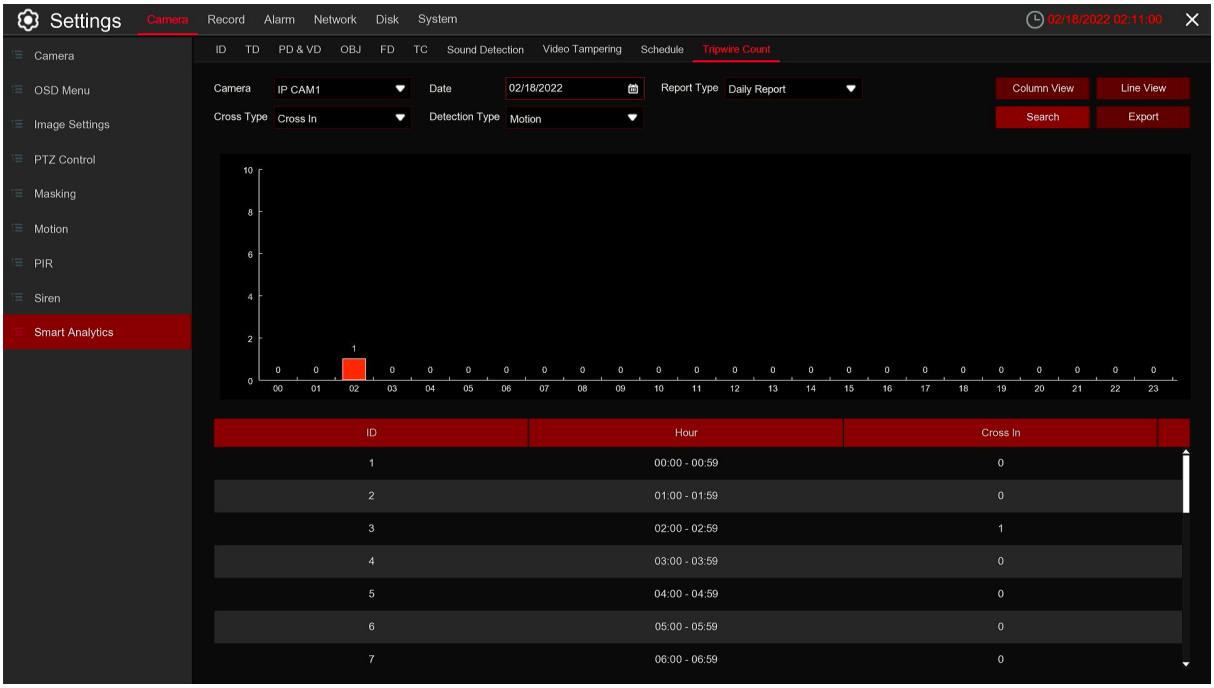


Switch: Enable or disable the alarm caused by video cover.

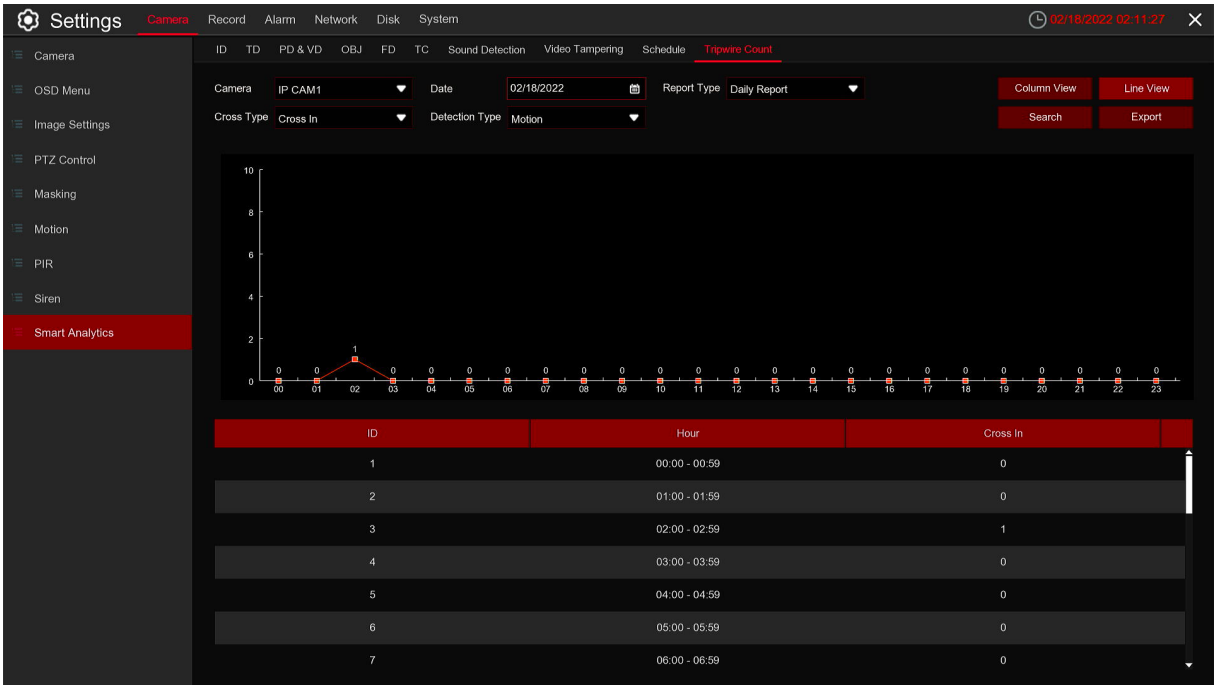
Sensitivity: Sensitivity setting, the larger the value, the easier to trigger the alarm.

5.1.8.9 Tripwire Counting Stastics

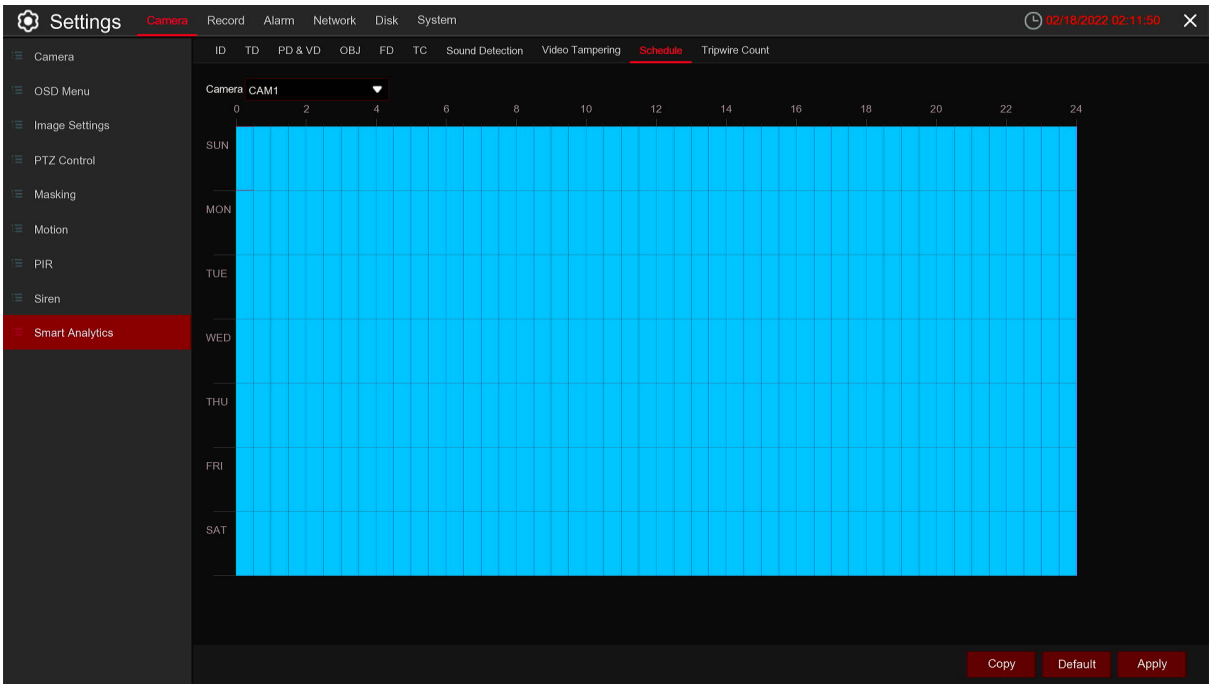
This menu can make stastics for alarms caused by the Tripwire Counting and draw a linear or bar chart.



Camera: Select the Camera wanted.
Date: Select the date wanted
Report Type: Select the report type, reports can be generated by day, week, month and year
Cross Type: Select the cross type,cross in and sross out for option.
Column Chart by default,click **Line Chart** to change to line grap.



5.1.8.10 Smart Analytics Schedule



In order to active the intelligent function, you need to config the schedule. The schedule will be active in 24 hours x 7 days.

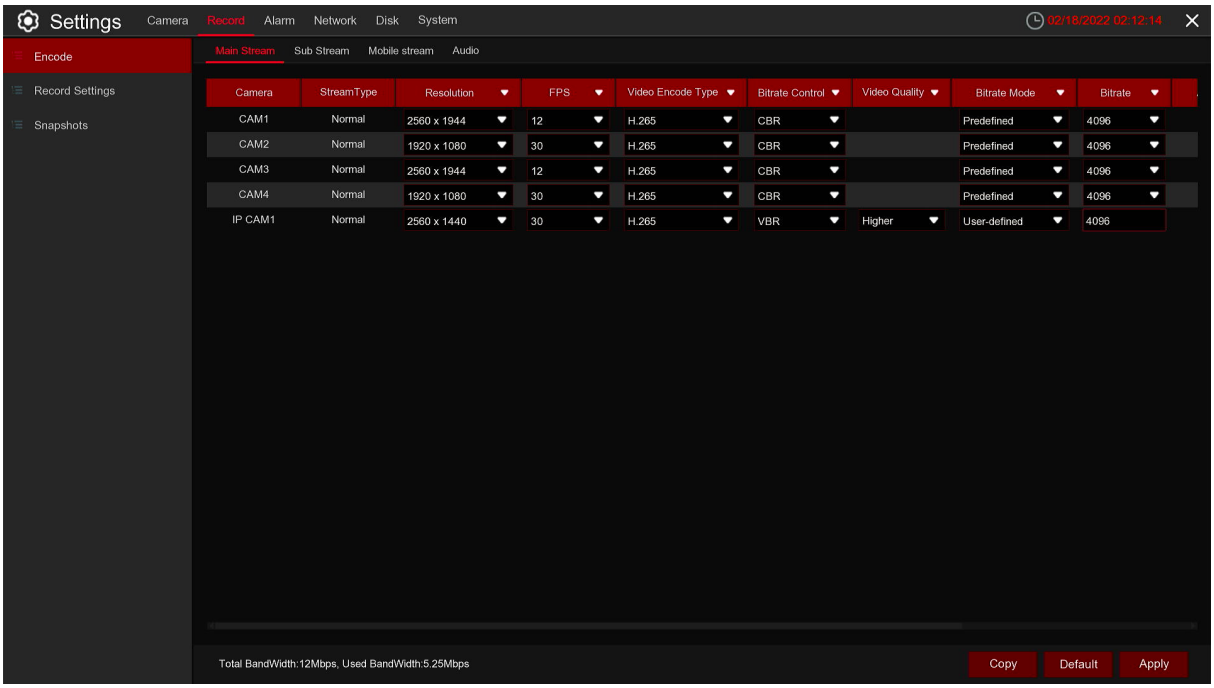
To set the schedule, choose one Camera then drag the cursor to mark the slots. The sky-blue blocks in the time slots will be active for Intelligent detections. The schedule is valid only for the selected Camera each time when you set. If you want to use the same schedule for other Cameras, use Copy function. Click Save to save your settings.

5.2 Record

This menu allows you to configure the recording parameters.

5.2.1 Encode

This menu allows you to configure the recording video or network transmission picture quality. Generaly, Mainstream defines the recording video quanlity which will be saved in the HDD; Substream defines the video quality which is being viewed via remote access, for example web client & CMS; Mobilestream defines the video quality which is being viewed via remote access via mobile devices.



Resolution: This parameter defines how large the recorded image will be.

FPS: This parameter defines the number of frames per second the DVR will record.

Video Encode Type: For IP camera only. DVR support H.264 IP camera only. If you choose H.265, live view screen of the IP Camera will display "Decoding Failed".

Bitrate Control: Select the bitrate level. For a simple scene, such as a gray wall is suitable constant bitrate (**CBR**). For more complex scene, such as a busy street is suitable variable bitrate (**VBR**).

Bitrate Mode: If you want to set the bitrate by yourself, then choose User-defined mode. If you want to select the predefined bitrate, choose Predefined mode.

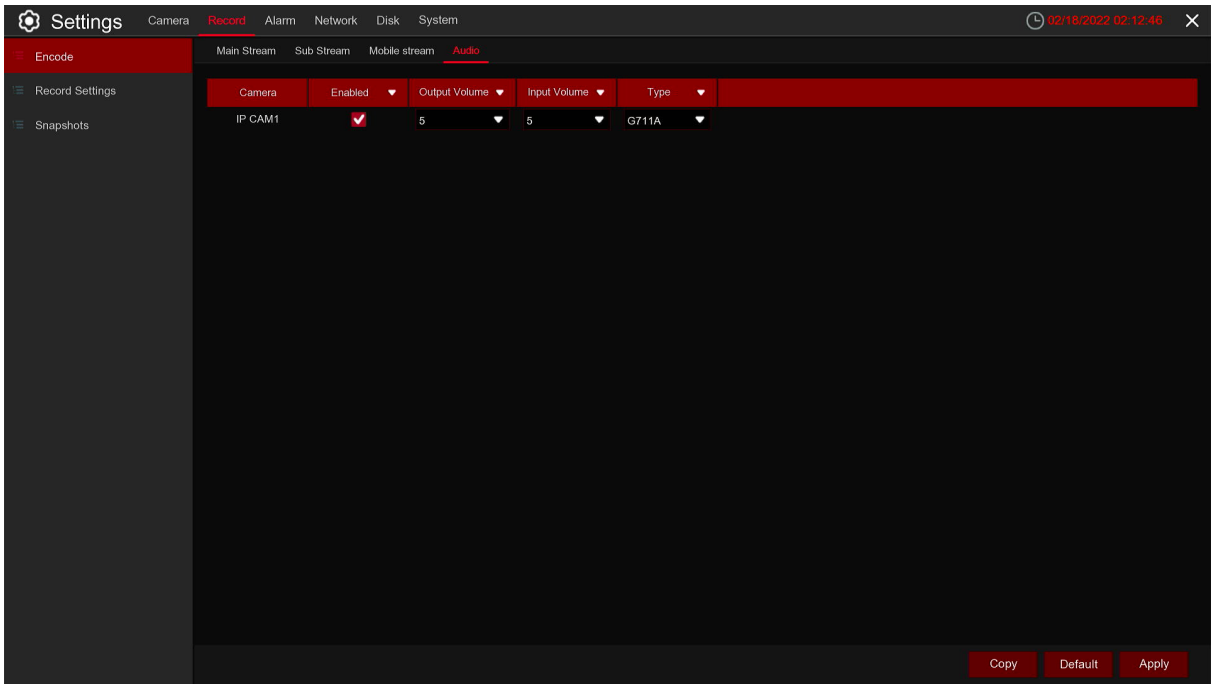
Bitrate: This parameter corresponds to the speed of data transfer that the DVR will use to record video. Recordings that are encoded at higher bitrates, will be of better quality.

Audio: Select this option if you want to record audio along with video and have a microphone connected to the DVR or using a camera with audio capability.

I Frame Interval: Set I Frame Interval, only available for IP Camera.

ETR: If ennable it,there will be two diffent framesabd resolutions when alarm triggeredandnot triggered.

Audio menu tab: Setting for camera audio(need device support)

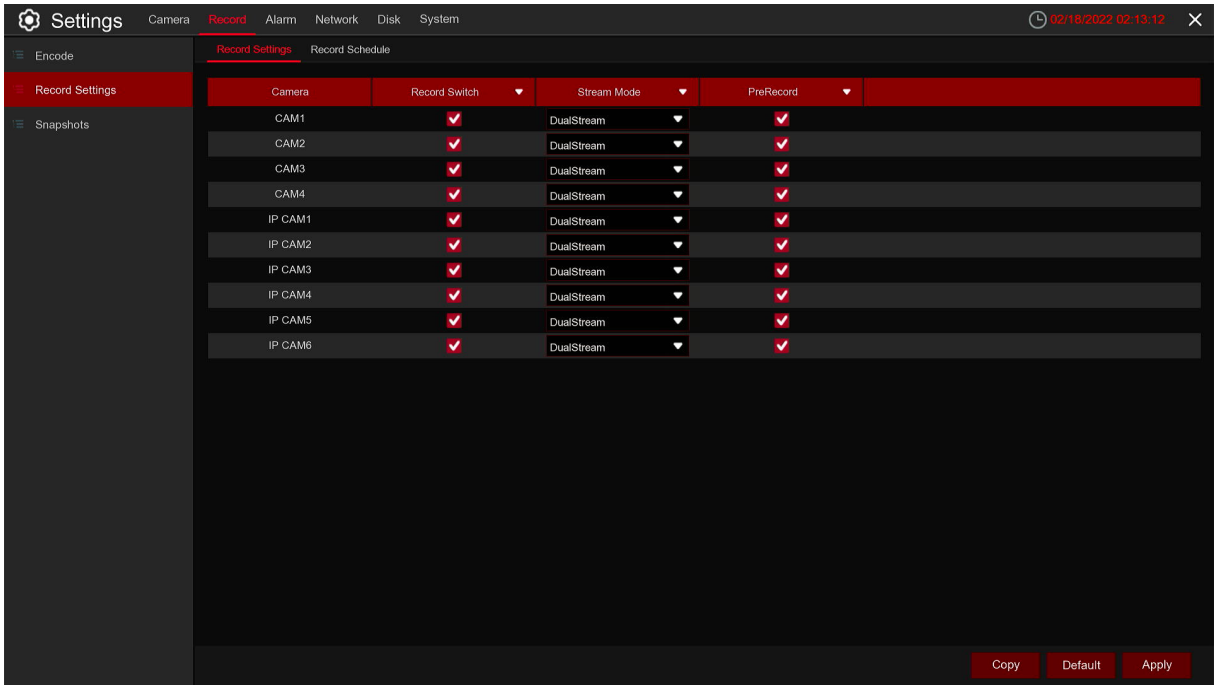


Enable: Switch for camera audio setting.
Output Volume: Set the output volume of camera.
Input Volume: Set the input volume of camera.
Type: Set the audio decoding type for the camera

5.2.2 Record

This menu allows you to configure the Camera recording parameters.

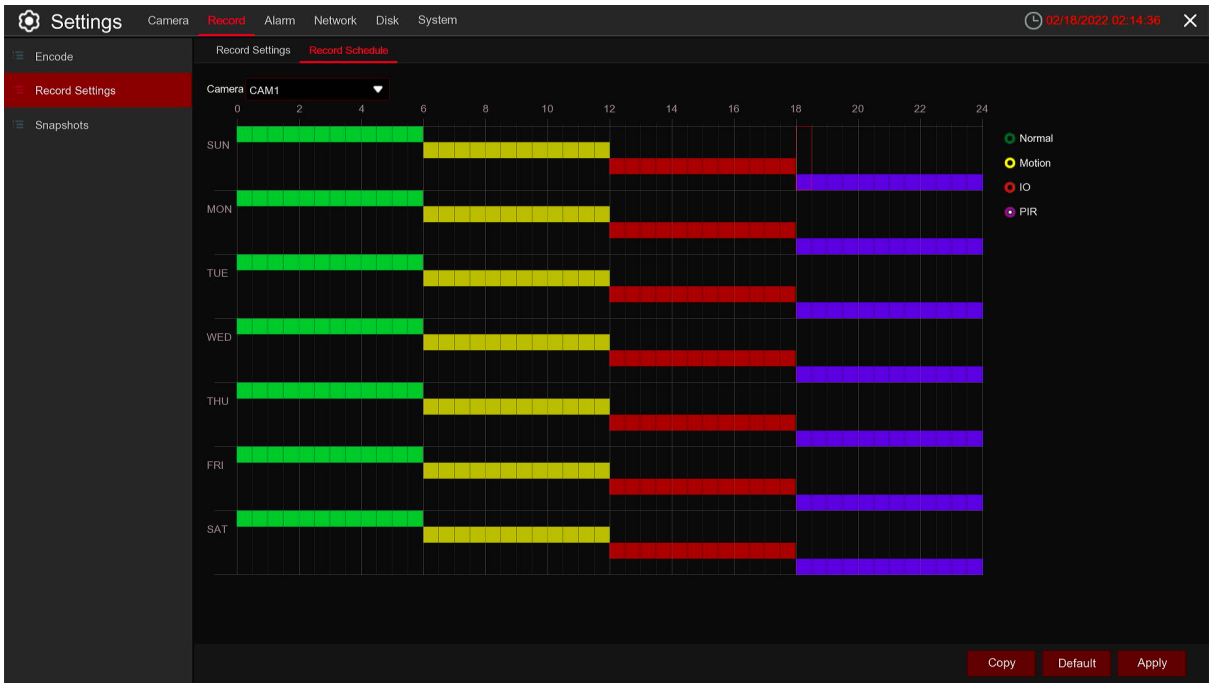
5.2.2.1 Record



Record Switch: Check to enable the recording in this Camera.
Stream Mode: Choose the recording quality. If you choose Dualstream, the system will record in both Mainstream & Substream.
PreRecord: If this option is enabled, the DVR starts recording a few seconds before an alarm event occurs. Use this option if your primary recording type is motion or I/O alarm based.

5.2.2.2 Record Schedule

This menu allows you to specify when the DVR records video and defines the recording mode for each Camera. The recording schedule lets you set up a schedule like, daily and hourly by normal (continuous) recording, motion recording, I/O alarm recording (if your DVR supports). To set the recording mode, click first on the mode radio button (Normal, Motion, IO), then drag the cursor to mark the slots. The recording schedule is valid only for one Camera. If you want to use the same recording schedule for other Cameras, use **Copy** function. Click **Apply** to save your settings.

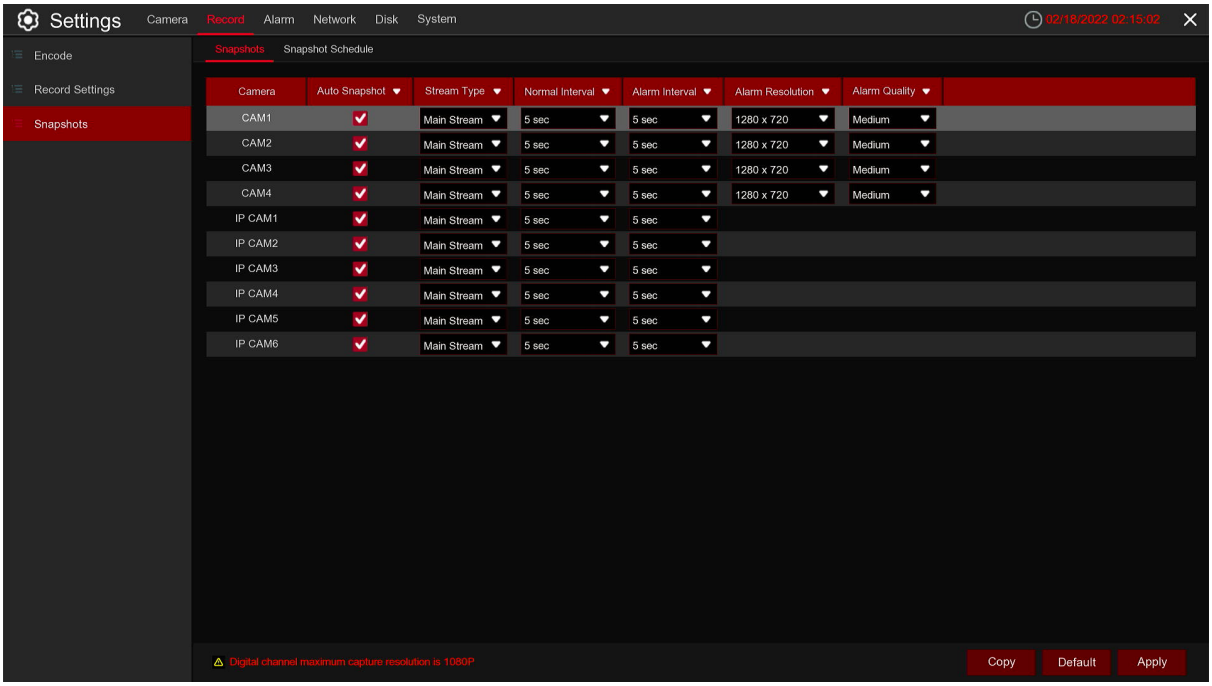


Camera: Select the Camera to set its recording parameters.
Normal: When the time slot is marked green, this indicates the Camera performs normal recording for that time slot.
Motion: When the time slot is marked yellow, this indicates the Camera records only when a motion is detected during that time slot.
IO: When the time slot is marked red, this indicates the Camera records only when the sensor is triggered during that time slot.
No Record: A time slot marked black means that there is no recording scheduled for the time slot.

5.2.3 Snapshot

This menu allows to configure the image Snapshot function.

5.2.3.1 Snapshot



Enable Snapshot: Enable or disable automatic capturing on the Camera.

Stream Type: Select the image resolution by mainstream or substream.

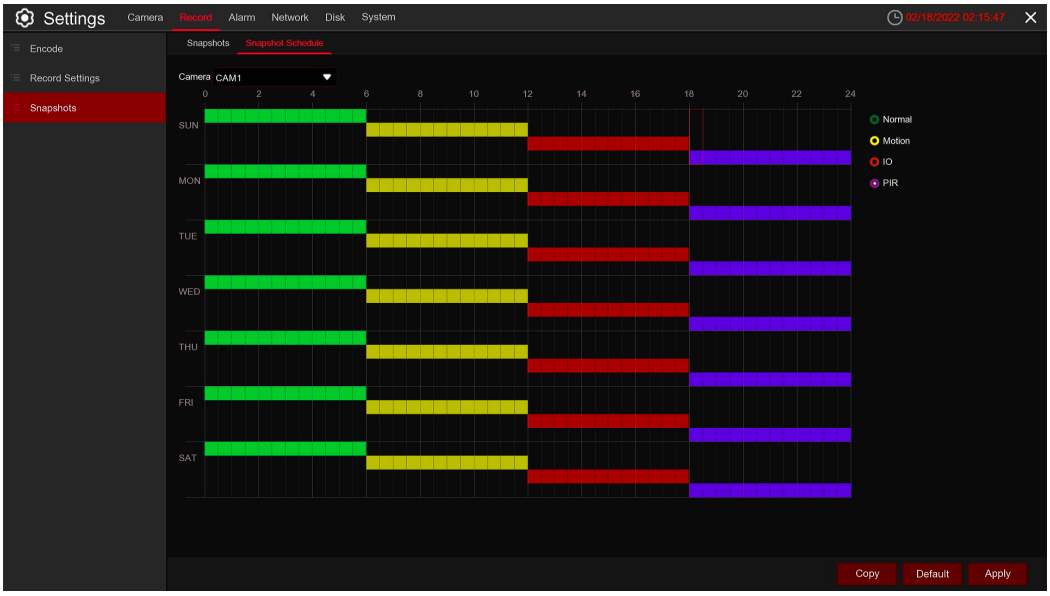
Normal Interval: Time interval to Snapshot an image in normal recording.

Alarm Interval: Time interval to Snapshot an image when motion, IO alarm is triggered.

Alarm Resolution: To set the Snapshot resolution when alarm triggered. Only optional for analog Cameras.

Alarm Quality: The Snapshot quality when alarm triggered,the higher the quality,the clearer the image.

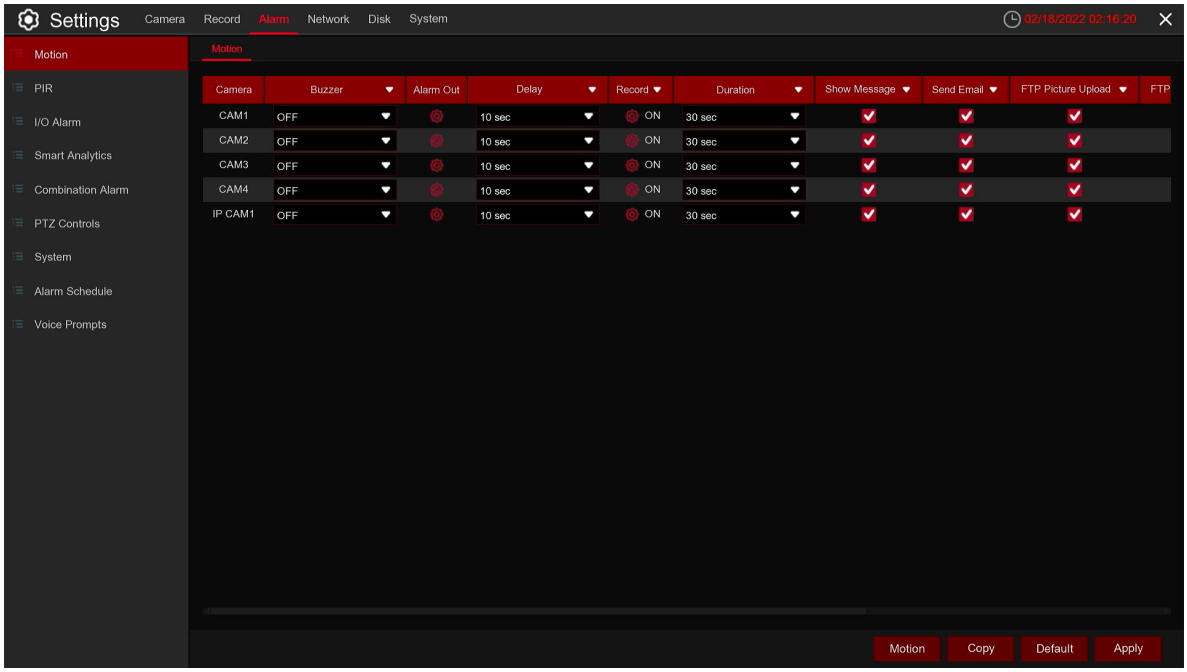
5.2.3.2 Snapshot Schedule



Normal: When the time slot is marked green, this indicates the Camera performs normal Snapshot for that time slot.
Motion: When the time slot is marked yellow, this indicates the Camera Snapshot images only when a motion is detected during that time slot.
IO: When the time slot is marked red, this indicates the Camera Snapshot images only when the sensor is triggered during that time slot.
No Snapshot: A time slot marked black means that it won't Snapshot any images for the time slot, but you can manually Snapshot images if you enable the manual Snapshot function in the Camera.

5.3 Alarm Parameters

In these section, you can configure the alarm parameters.

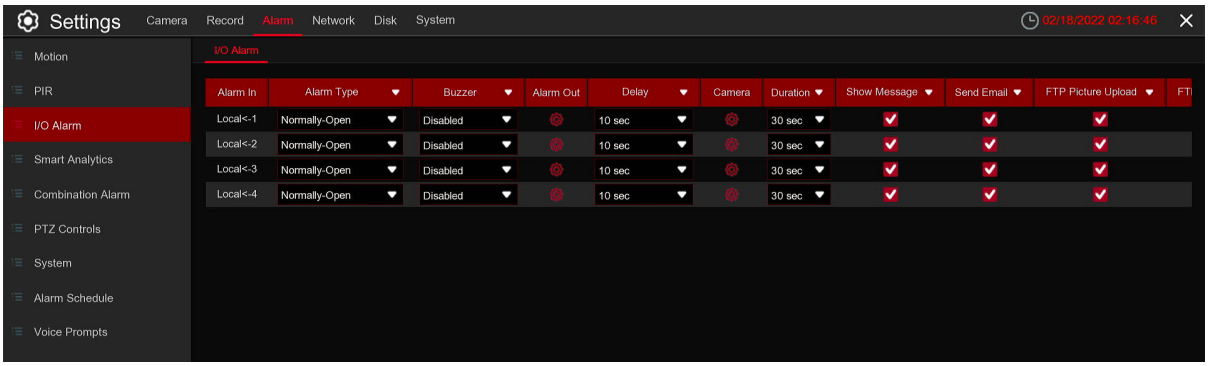


5.3.1 Motion Detection

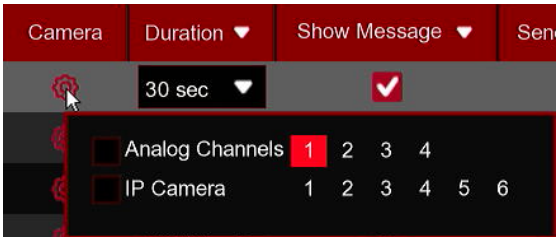
Steps are same as 5.1.5 Motion.

5.3.2 I/O

This is an optional function, it will appear if your DVR supports sensor I/O, you connect external sensor I/O alarm devices to work with the DVR.



Alarm In: I/O Camera.
Alarm Type: There are 3 types for your choice: Normally-Open, Normally-Close, and OFF. Choose the one to match your sensor type, or choose OFF to close the sensor trigger function.
Buzzer: The DVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when a sensor is triggered.
Alarm out: Tick to enable external alarm device to emit an alarm tone when a sensor is triggered.
Delay: you can set how long the buzzer will sound when external sensor is triggered (10s, 20s, 40s, and 60s).
Record: Click icon and choose which Camera(s) you want to record when the motion detection is triggered.



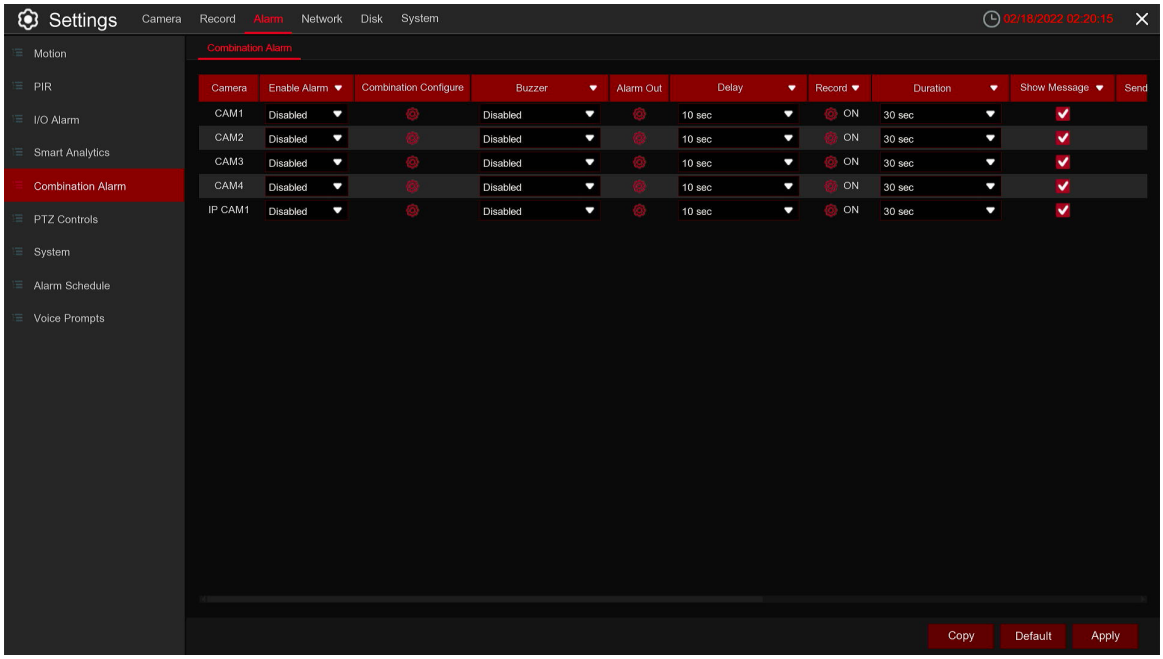
Duration: You can set how long alarm record will last when alarm ends (30s, 1 minutes, 2 minutes, 5 minutes).
Show Message: Display the alarm messages on the screen when sensor is triggered.
Send Email: Set to send email to specified email when sensor is triggered.
FTP Picture Upload: To upload alarm images to FTP server when I/O alarm is triggered. To enable FTP, please view 5.4.4 FTP.
FTP Video Upload: To upload alarm videos to FTP server when I/O alarm is triggered. To enable FTP, please view 5.4.4 FTP.
Picture to Cloud: To upload alarm images to clound storage when I/O alarm is triggered. Please view 5.5.2 Clound Storage.
Video to Cloud: To upload alarm videos to clound storage when I/O alarm is triggered. Please view 5.5.2 Clound Storage.
Full Screen: When sensor is triggered, the corresponding Camera will be switched to the full screen mode.
Voice Prompts: If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens for different time period. See how to add customized alert voice on 5.3.8 Voice Prompts.

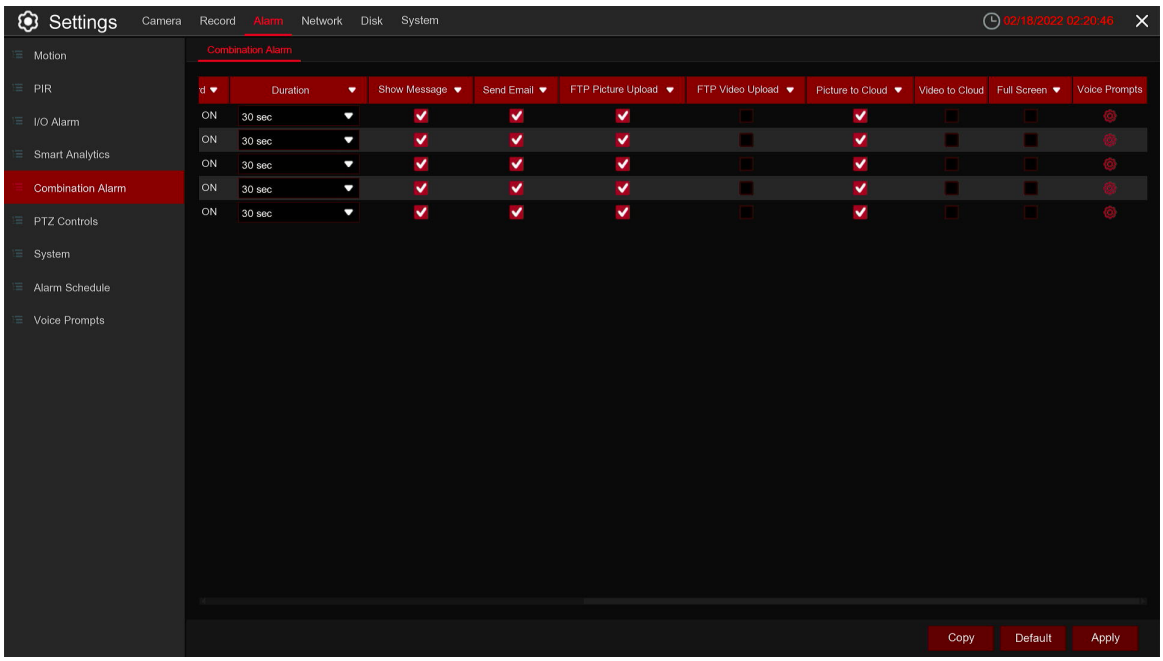
5.3.3 Smart Analysis

Steps are same as 5.1.8 Smart.

5.3.4 Combination Alarm

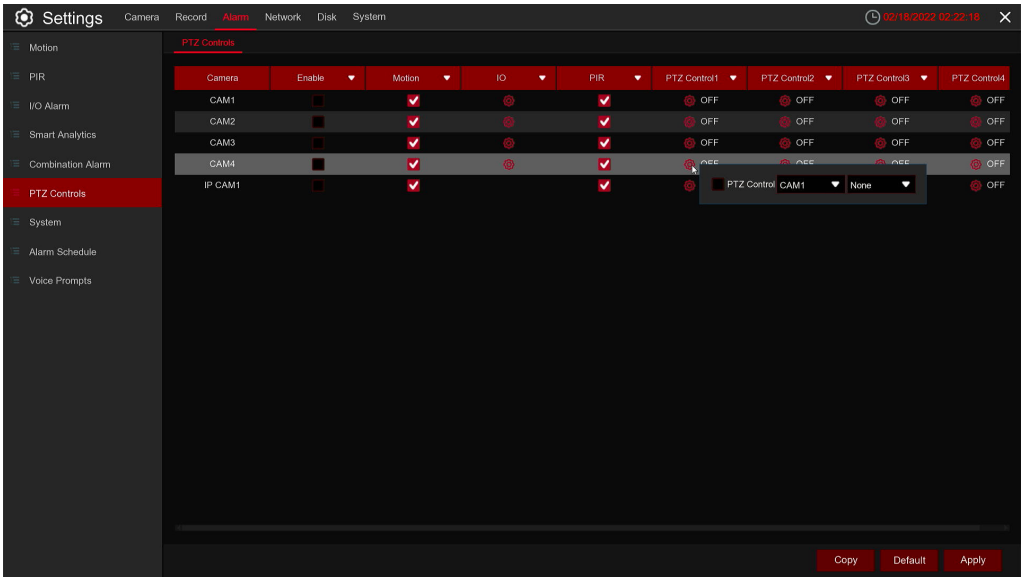
You can configure the ID / TD / PD & VD / SOD / FD Rare Sound Detection / Video Tampering alarm function here.





5.3.5 PTZ Linkage

If you had connected the PTZ cameras, you can set the linkage between PTZ cameras and Motion Alarm and/or external I/O sensor alarm. With the linkage function, you can turn your PTZ cameras focus to the preset point when a motion or I/O alarm happens.



Switch: Enable or disable the PTZ linkage function.

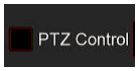
Motion: Motion detection alarm will trigger the PTZ linkage function it is checked.

IO: IO alarm will trigger the PTZ linkage function it is checked.

PTZ1-4: Maximum four present points can be set.Click icon to associate the PTZ cameras with preset points. View preset point at 5.1.4.1 PTZ control.

Click here

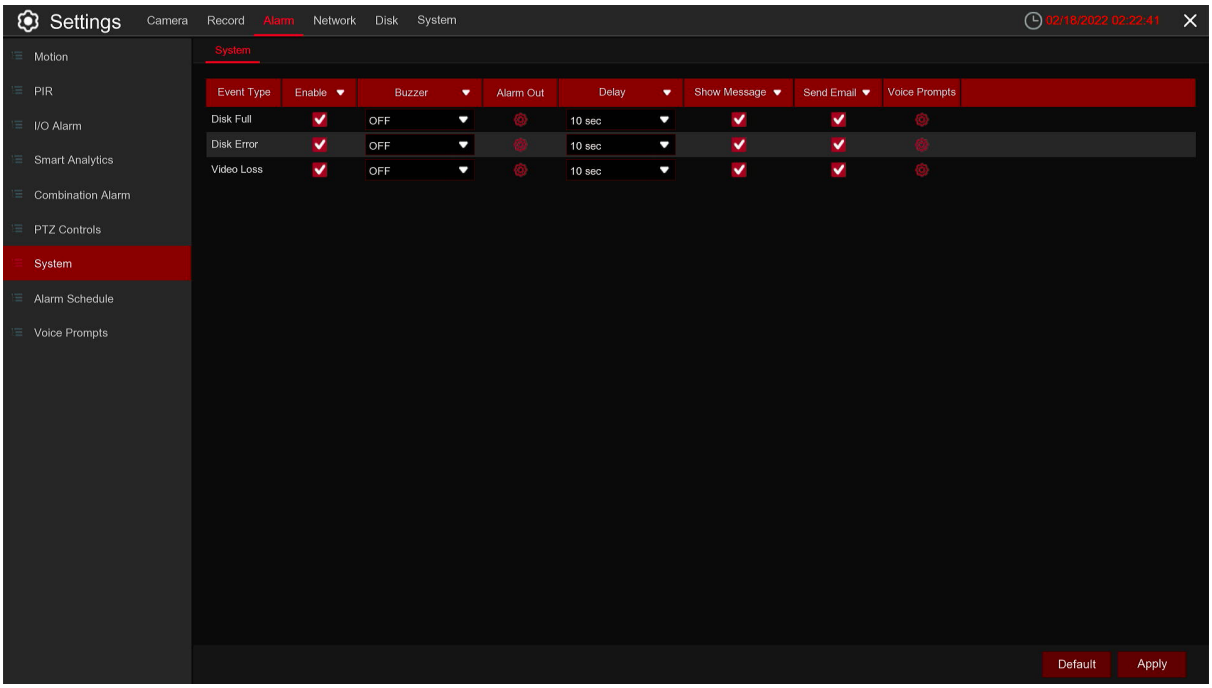
to choose the camera and present points that need to link.

Select it 

to enable the linkage.

5.3.6 Exception

This menu allows you to set the type of events that you want the DVR to inform you.



Event Type: Select the event type from below options:
- **No Space on Disk:** When an HDD is full.
- **Disk Error:** If the HDD is not detected properly.
- **Video Loss:** If a camera is not connected properly.

Switch: Check the box to enable the monitoring of the event.

Buzzer: Set the buzzer duration when the event occurs (Off/10s/20s/40s/60s). To disable buzzer, select OFF.

Delay: This is an optional function. Determine how long the external alarm device to sound (10s, 20s, 40s, 60s) if your DVR support to connect external alarm device.

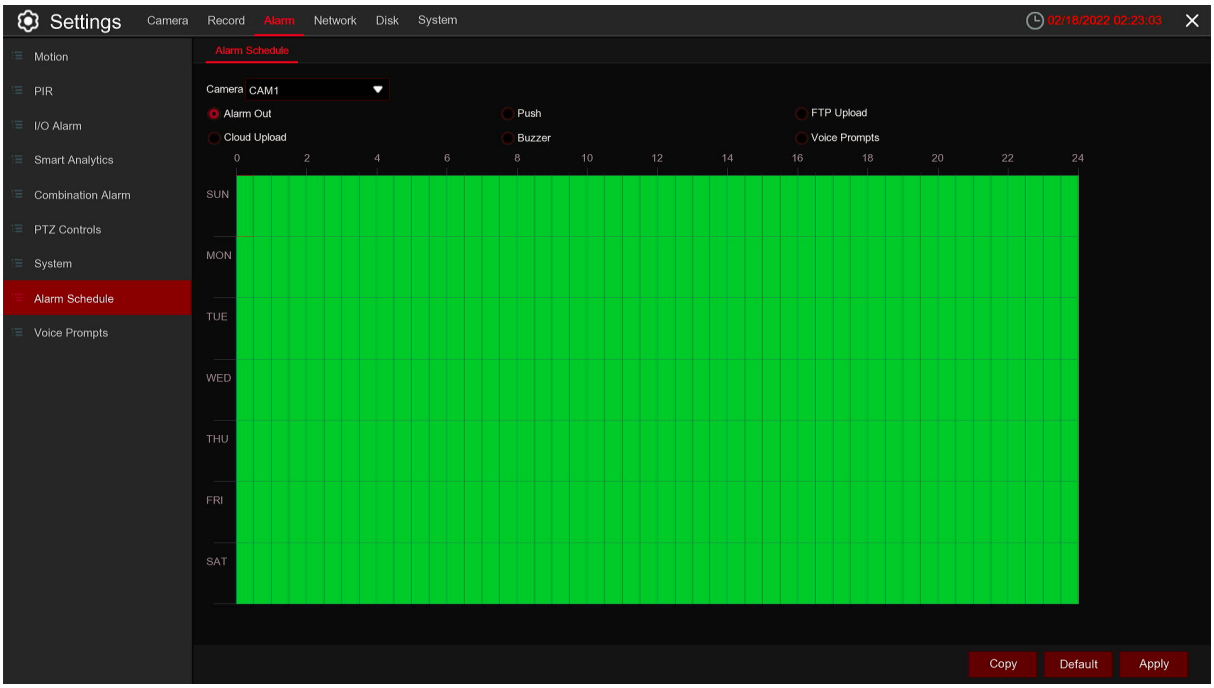
Alarm Out: This is an optional function. Click to enable the external alarm device to sound. This is an optional function.

Show Message: Check the box to display a message on the screen when No Space on Disk, Disk Error, or Video Loss event happens.

Send Email: Let the DVR to send you an auto-email when an event occurs.

5.3.7 Alarm Schedule

This menu can set the schedule of various alarms.



Camera: Select the Camera.

Alarm Out: Set the schedule for alarm out.

Push: Set the schedule for push.

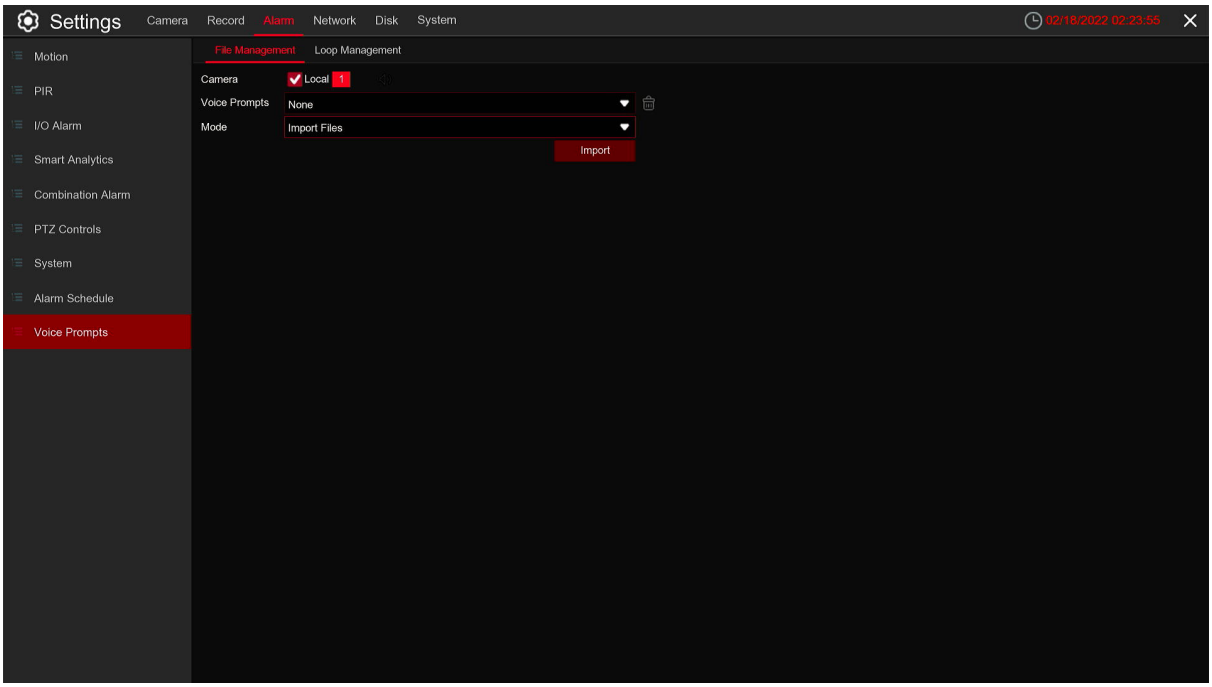
FTP Upload: Set the schedule for FTP uploading.

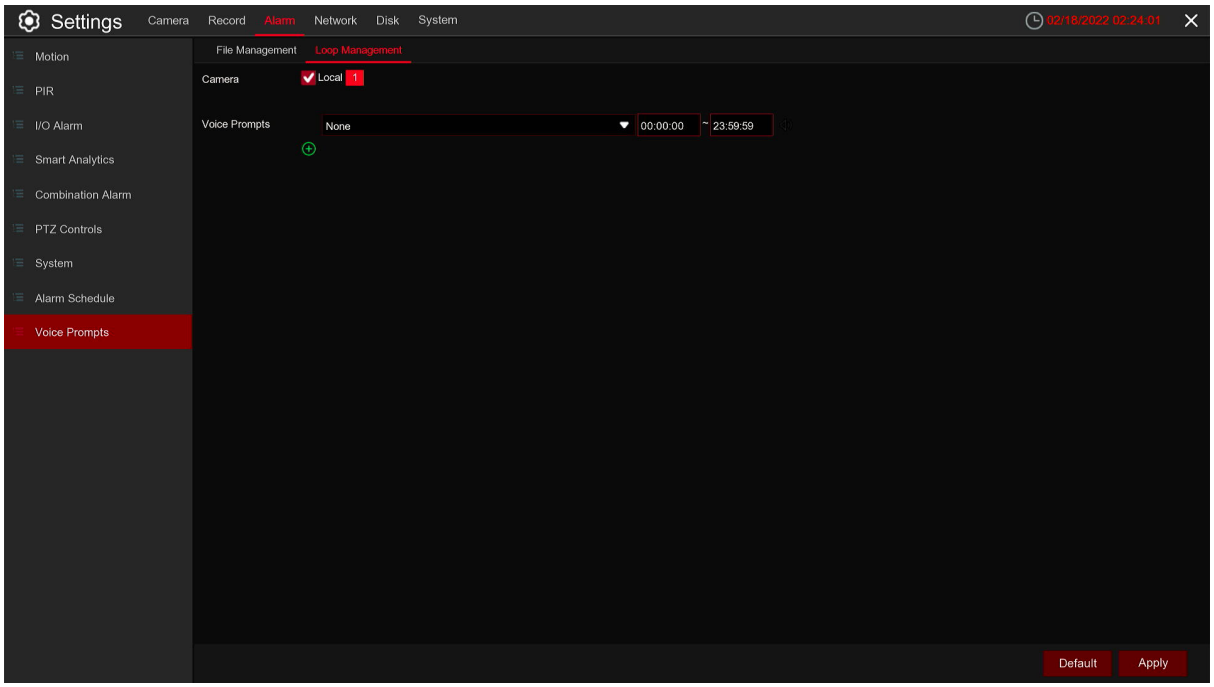
Cloud Upload: Set the schedule for cloud upload.

Buzzer: Set the schedule for buzzer.

5.3.8 Voice Prompts

If your DVR or IP camera connects with a speaker, you can select an customized alert voice when the alarm happens. In the page, you're able to manage your customized voice files.



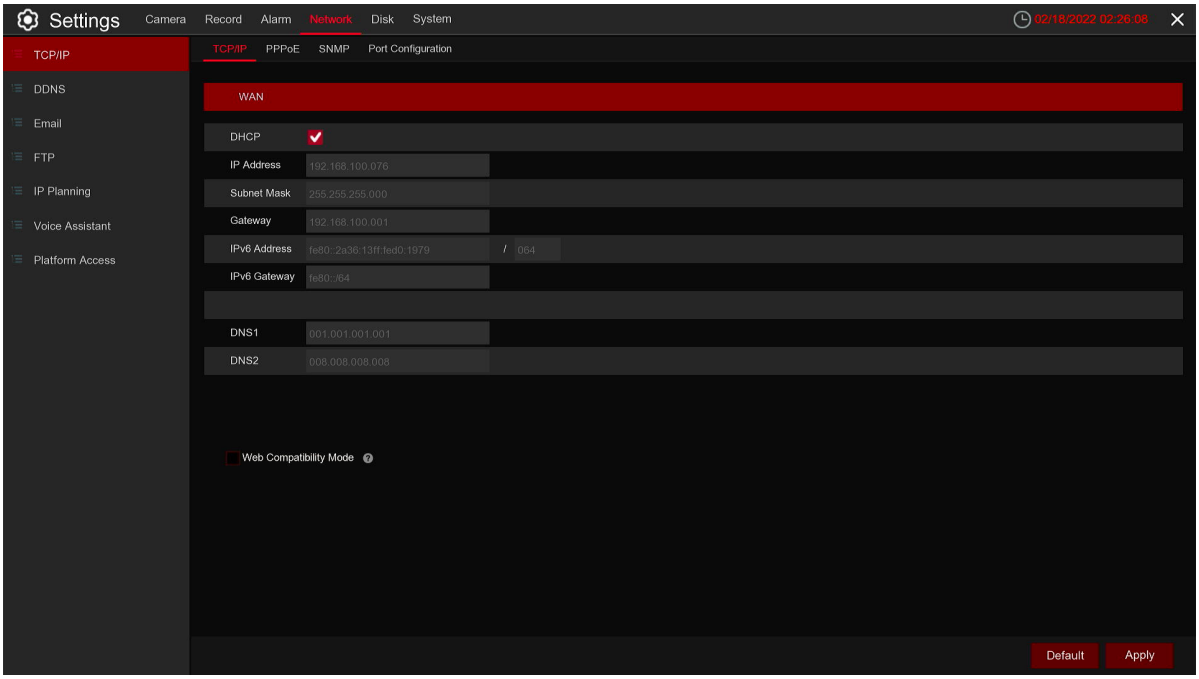


The system provides 3 different methods to create customized voices: **Import Files, Local Conversion and Internet Server Conversion.**

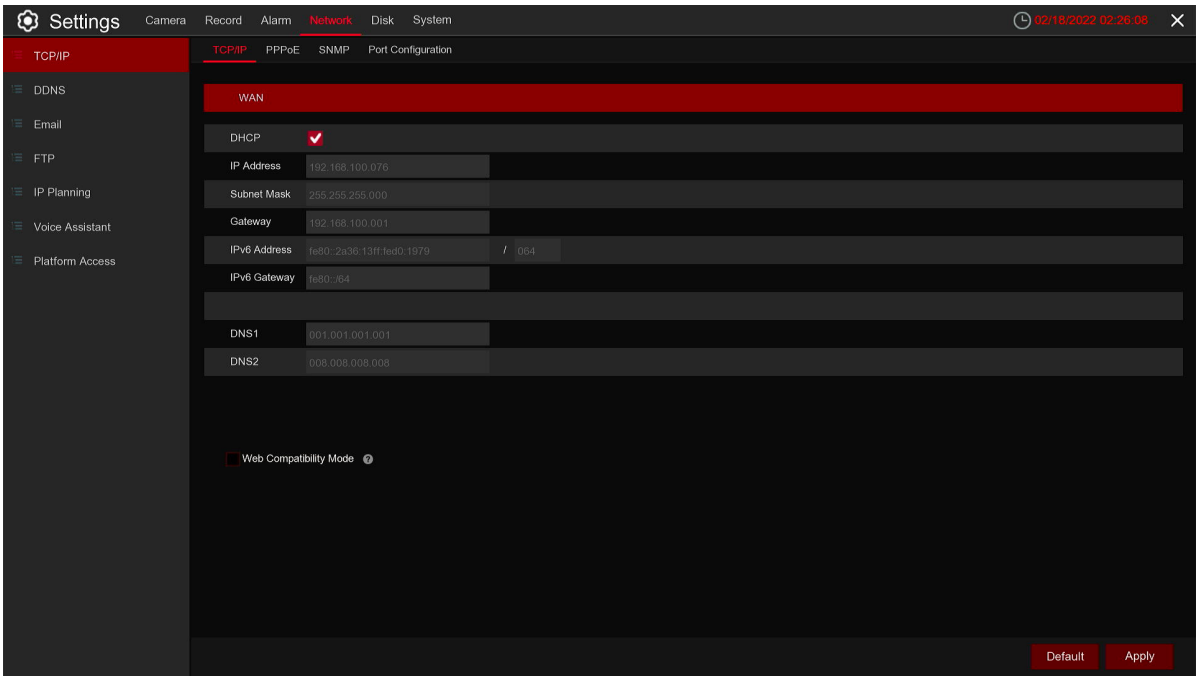
Import Files: Supports to import MP3, WMA and WAV files from USB memory and / or web page. Choose Import Files Models, and then click the Import button, and choose the audio file from your USB memory. It is allowed to add only 1 file at a time. You can add multiple files at a time in the web page.

5.4 Network

This menu allows you to configure network parameters, such as PPPoE, DHCP. The most common types are DHCP. Most probably your network type is DHCP, unless the network is manually addressed. If you need an authentication user name and password to the Internet, then choose PPPoE.



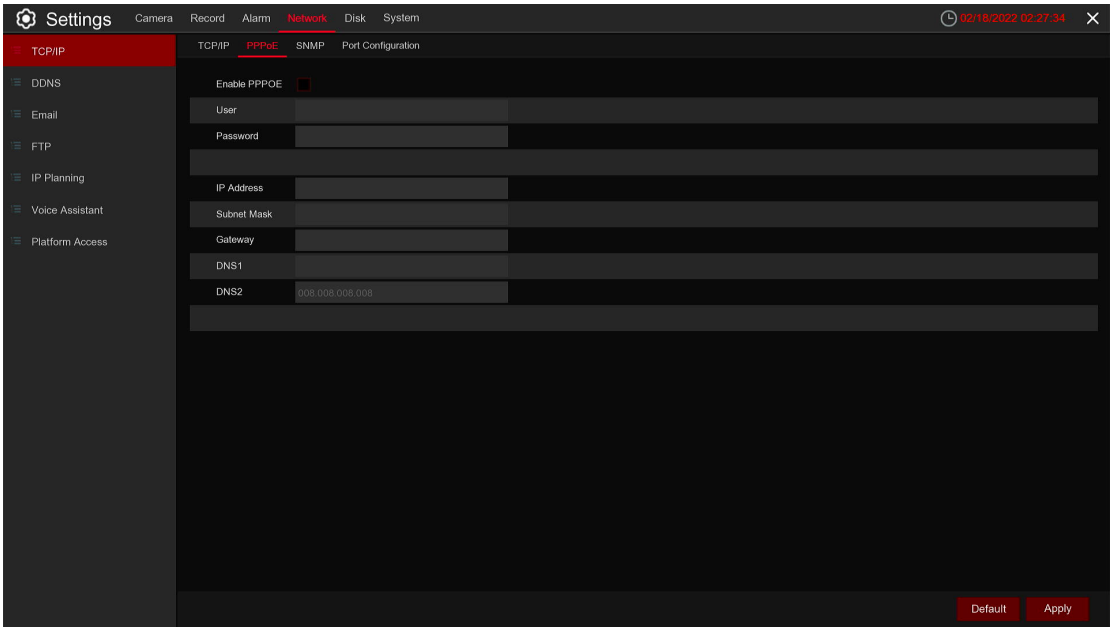
5.4.1 General



If you connect to a router allows to use DHCP, please check the DHCP box. The router will assign automatically all the network parameters for your DVR. Unless the network is manually addressed below parameters:

IP Address: The IP address identifies the DVR in the network. It consists of four groups of numbers between 0 to 255, separated by periods. For example, "192.168.001.100".
Subnet Mask: Subnet mask is a network parameter which defines a range of IP addresses that can be used in a network. If IP address is like a street where you live then subnet mask is like a neighborhood. The subnet address also consists of four groups of numbers, separated by periods. For example, "255.255.000.000".
Gateway: This address allows the DVR to access the Internet. The format of the Gateway address is the same as the IP Address. For example, "192.168.001.001".
IPv6 Address: Please fill the IPv6 address to be set if your network support IPv6.
IPv6 Gateway: Please fill the gateway to be set if your network support IPv6.
DNS1/DNS2: DNS1 is the primary DNS server and DNS2 is a backup DNS server. Usually should be enough just to enter the DNS1 server address.
Web Compatiblility Mode: If the selected browser does not support web page connection to the device, enable this mode. The system will select a less secure decryption method, please choose it carefully.

5.4.1.1 PPPoE

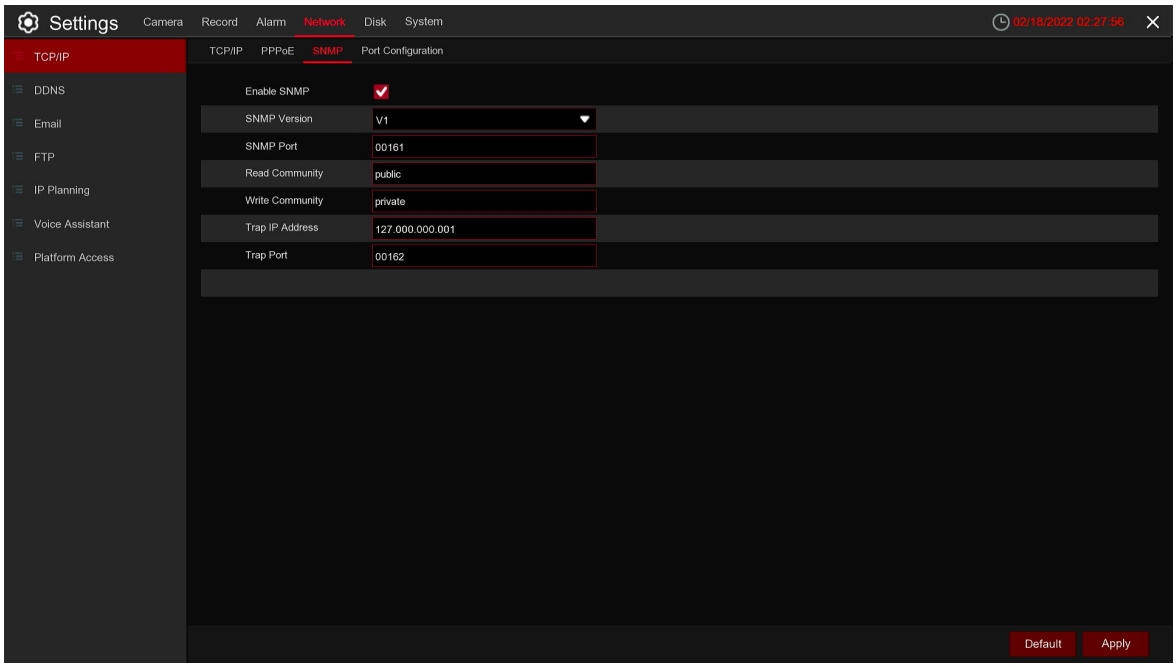


This is an advanced protocol that allows the DVR to connect to the network more directly via DSL modem. Check the "Enable PPPOE" box, and then enter the User name & Password of the PPPoE.

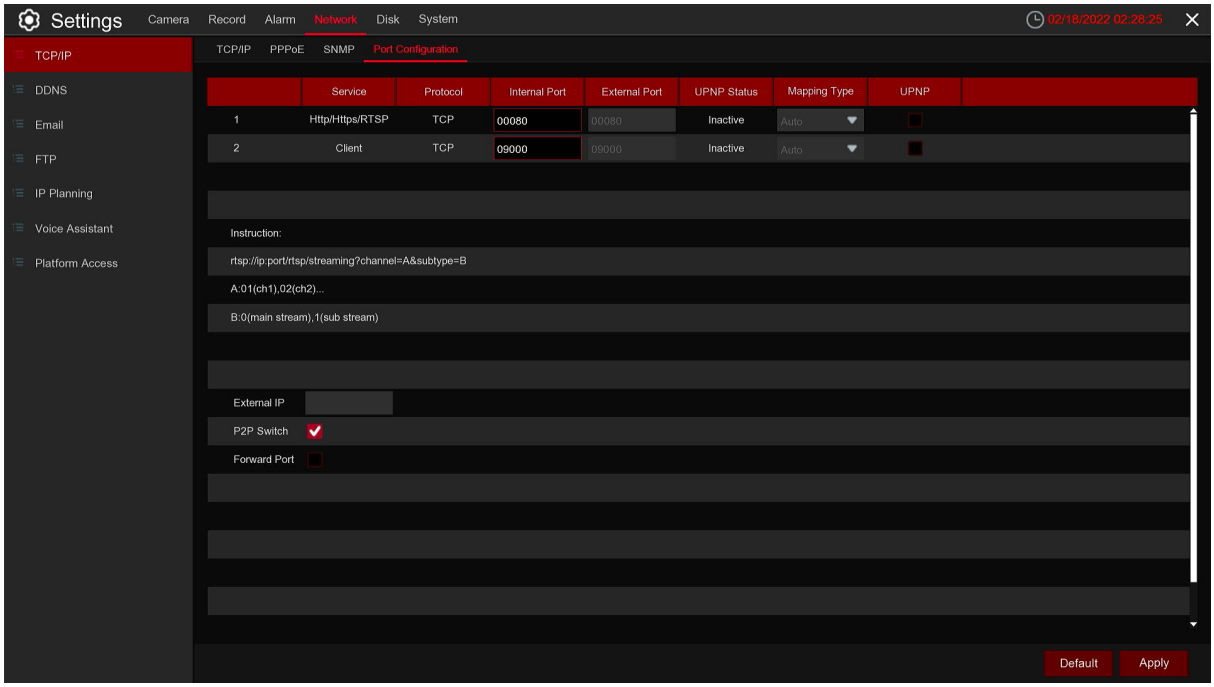
Click **Apply** to save, system will reboot to active the PPPoE setting.

5.4.1.2 SNMP

Simple Network Management Protocol (SNMP) is a standard application layer protocol designed for IP networks to manage network nodes (like servers, workstations, routers, switches, and HUBS).Only available for some models which firmware support.



5.4.1.3 Port Configuration

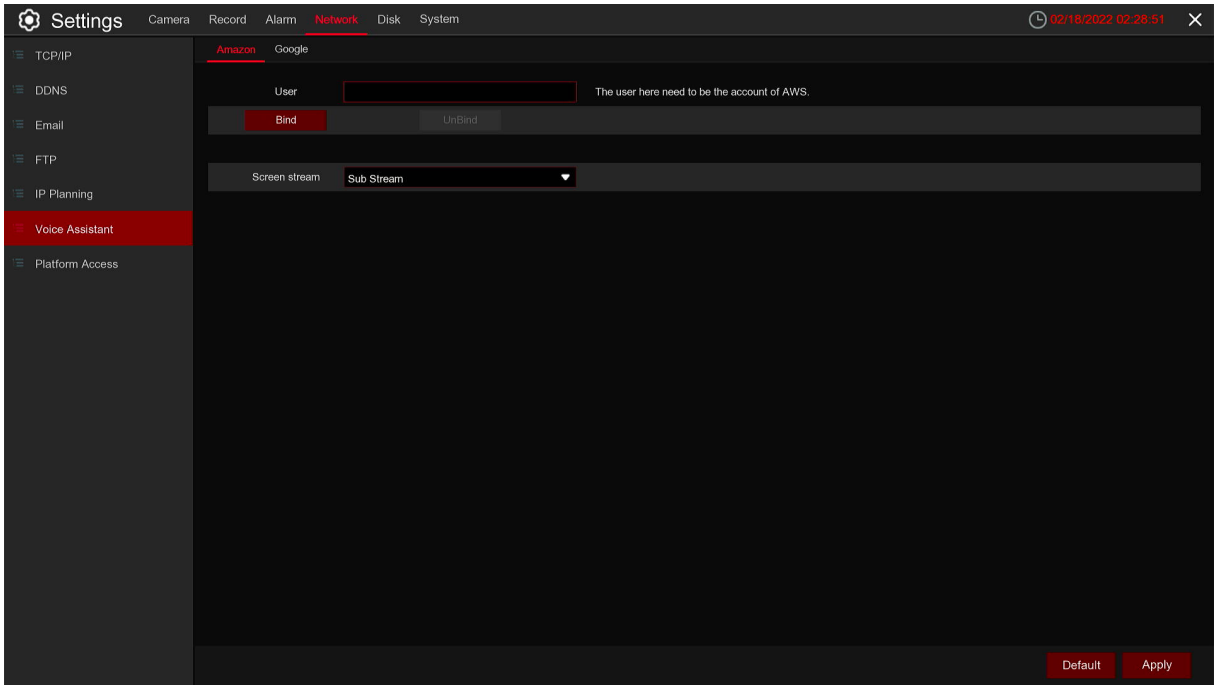


Web Port: This is the port that you will use to log in remotely to the DVR (e.g. using the Web Client). If the default port 80 is already taken by other applications, please change it.
Client Port: This is the port that the DVR will use to send information through. If the default port 9000 is already taken by other applications, please change it.

RTSP Port: Default is 554, if the default port 554 is already taken by other applications, please change it.
UPNP: If you want to log in remotely to the DVR using Web Client, you need to complete the port forwarding. Enable this option if your router supports the UPnP. You need to enable UPnP both, on DVR and router. In this case, you do not need to configure manually port forwarding on your router. If your router does not support UPnP, make sure the port forwarding is completed manually
P2P Switch: P2P connection can't work once switch disable.

5.4.1.4 Voice Assistant

Only available for some models.This menu allows you to project a preview onto the screen via Google or Amazon cast Screen.

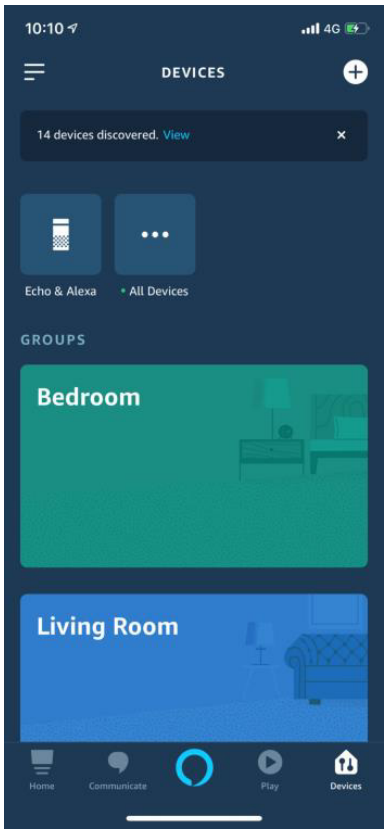


(Can choose Amazon or Google)
User: Input the Amazon account
Bind: Bind on account.
UnBind: Unbind the account.
Screen stream: Set the cast screen stream.

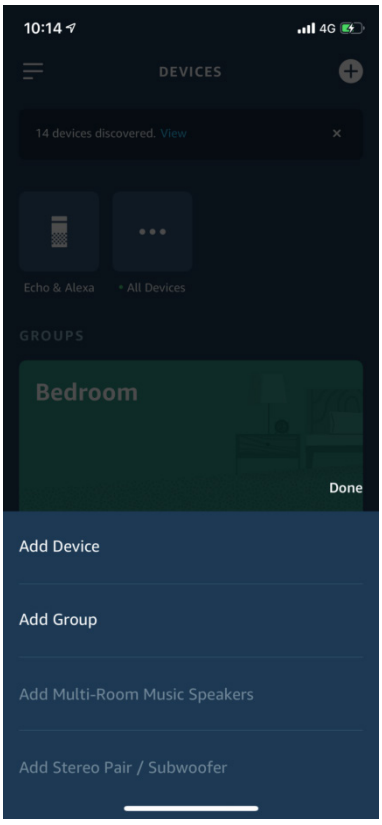
For Amazon: After binding finished,just need to give a voice command Discover to the remote controler of fire stick TV,then can add the device bound to the linked account.Open Amazon alexa APP, click the Device at the right cornerto check the added devices.

Also can add the device on APP,the steps as below:

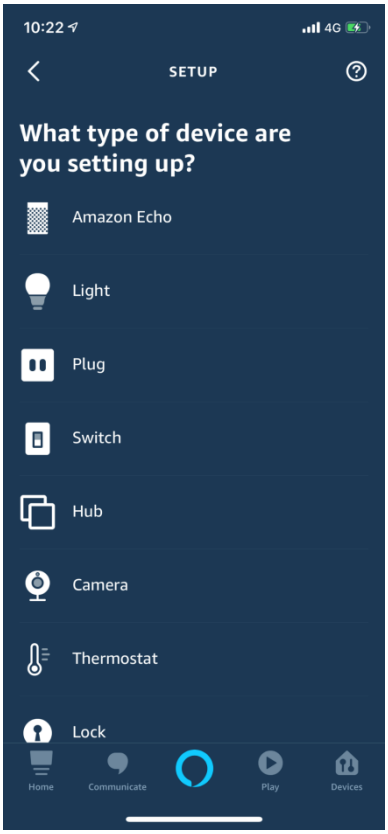
1. Open Amazon alexa, Click Device at the lower right corner,the click + at the top right corner.



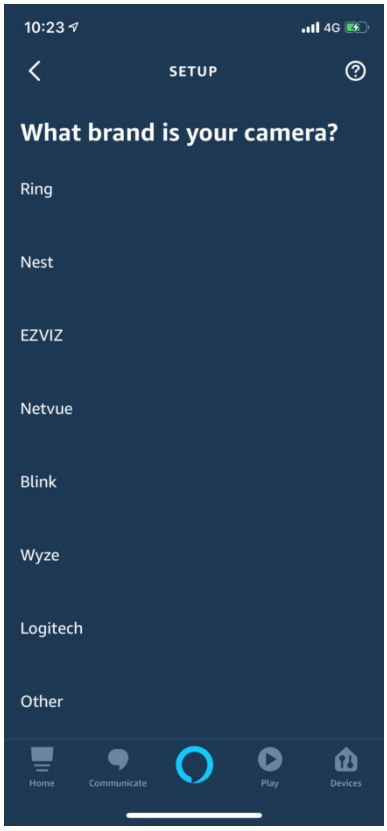
2. Click Add Device



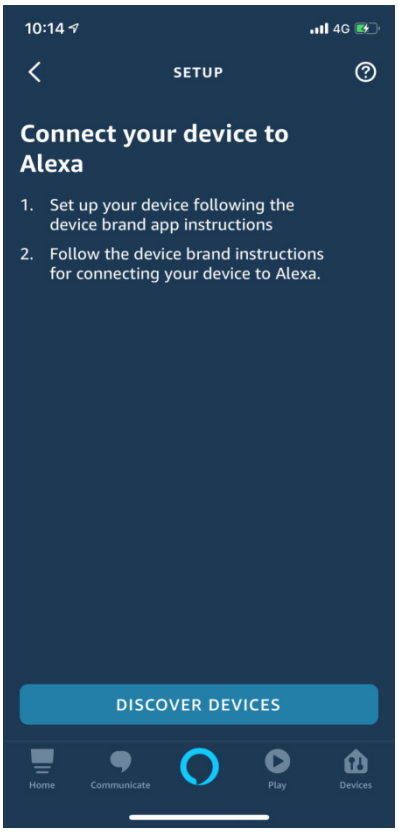
3. Glide and choose the device type: Camera



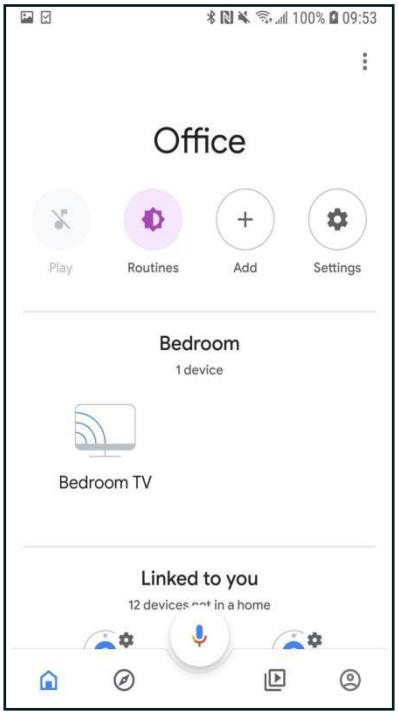
4. Glide again and choose brand: Other



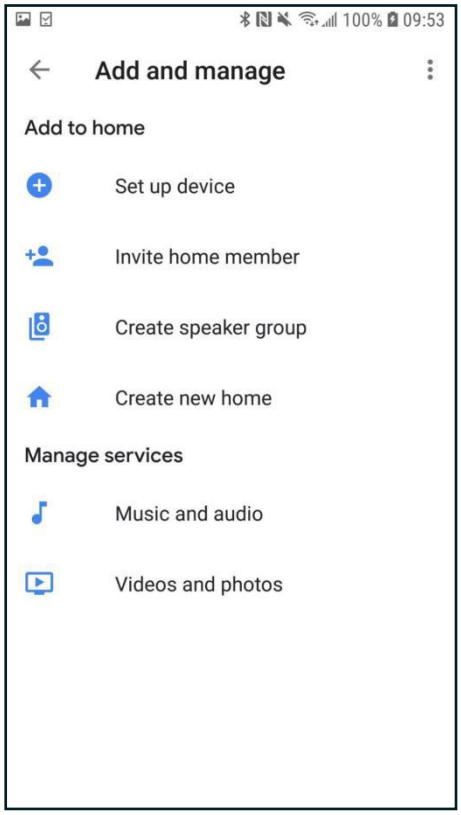
5. Click DISCOVER DEVICES at the bottom,then start to search the devices bound to the linked account; click Device at the lower right corner to view the searched Device once searching completed.



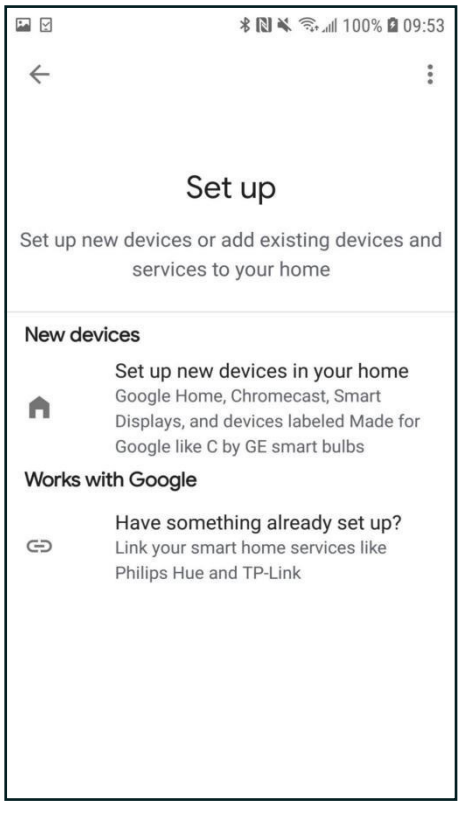
Google:
1. Open Google Home as below,then click Add



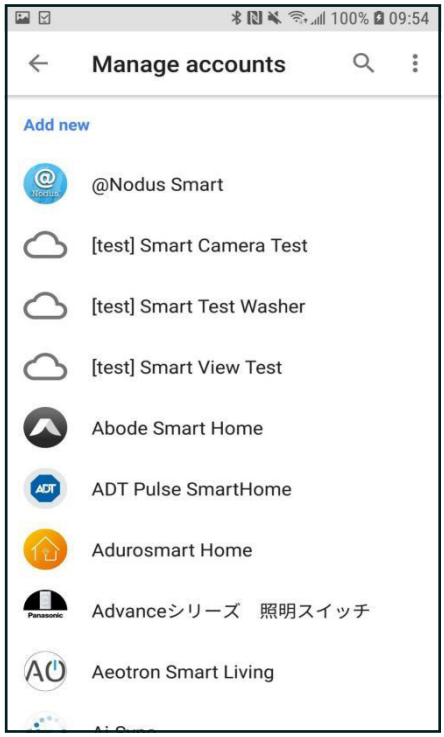
2. Click Set up device as below



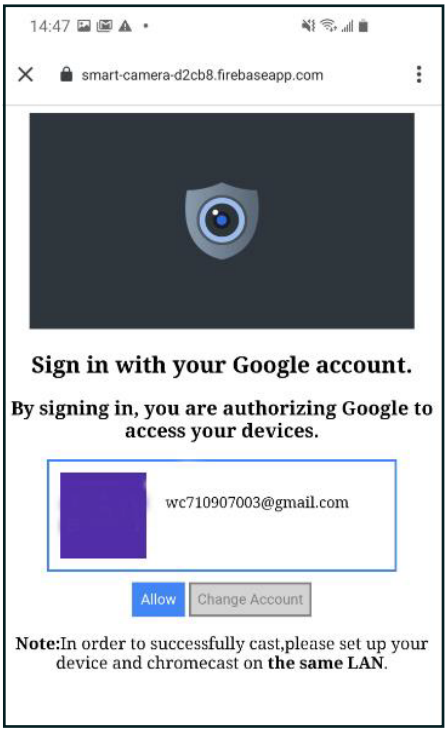
3. Select Works With Google on the Set up page as below



4. Select Smart Camera View to link the account:



5. For the first time, click Sign In with Google to log in to your Google account; If it is not first login, the button will change to the following figure,It will be Signed in with Google if not the first time,no need to do anything at this moment,then it will log in to link automatically.Can see the device bound under the linked account once the process completed.



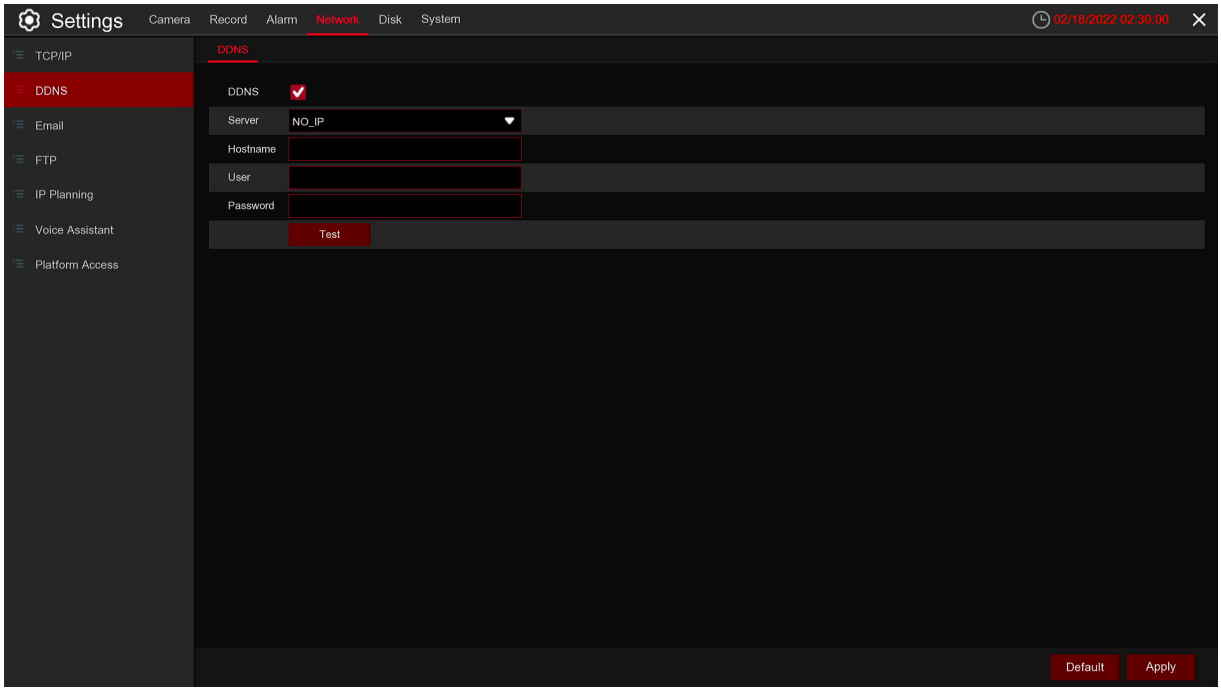
can use voice commands to play the preview once connected:
Amazon: you can command as below while pressing the fire stick on the remote controler: When you want screen casting:

show the Office camera
show my feed from the Office camera
Stop screen Casting:
Stop
stop the Office camera feed
hide the Office camera
go home
Google:Sentences can be as following when using Google Assistant or Google Home.

Screen Casting:
Play Office on Living Room TV (Living Room is casting device name)
Stop Casting:
cancel
Stop
stop the streaming

5.4.2 DDNS (Dynamic Domain Name Server)

This menu allows you to configure DDNS settings. The DDNS provides a static address to simplify remote connection to your DVR. To use the DDNS, you first need to open an account on the DDNS service provider's web page.



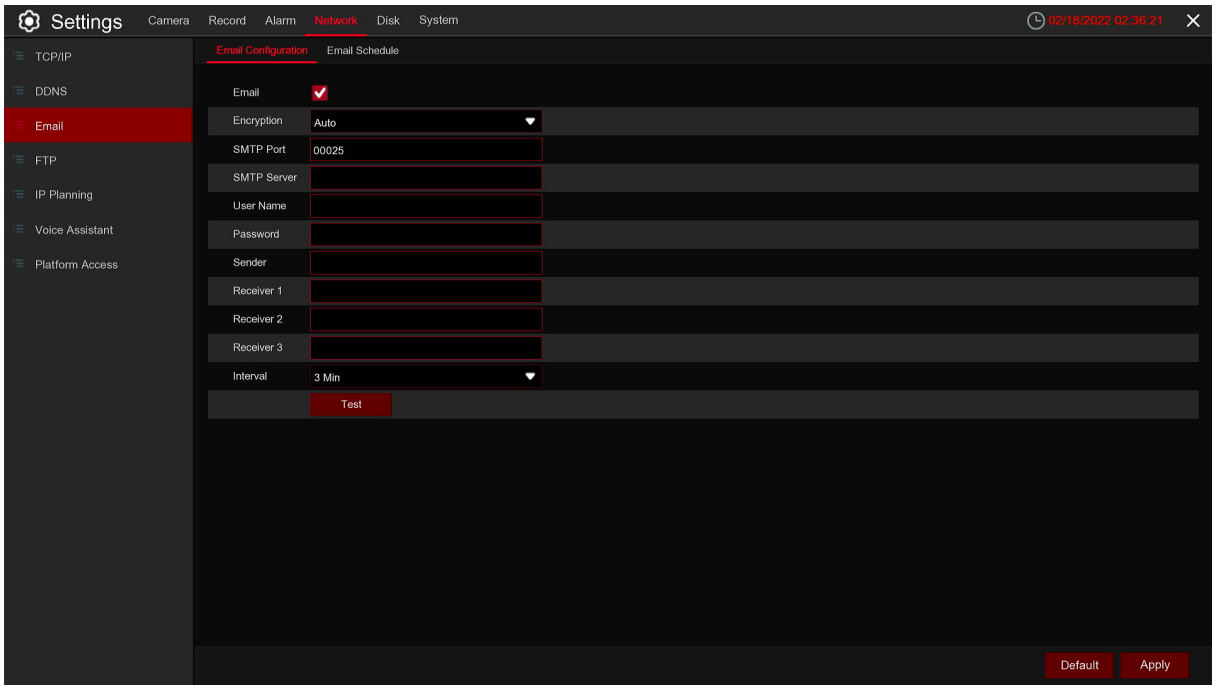
DDNS: Check to enable DDNS.
Server: Select the preferred DDNS server (DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT).
Domain: Enter the domain name you created on the DDNS service provider's web page. This will be the address you type in the URL box when you want to connect remotely to the DVR via PC. Fox example: dvr.no-ip.org.

User/Password: Enter the user name and password you obtained when creating an account on the DDNS service provider's web page.

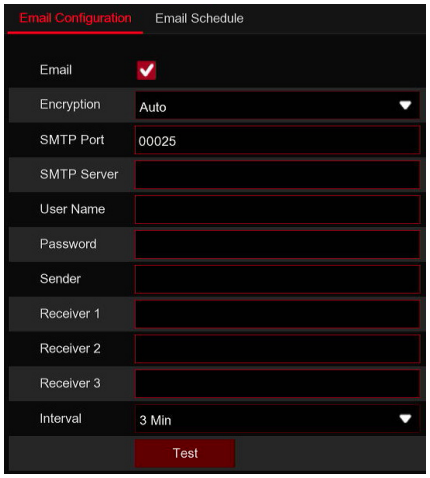
After all parameters are entered, click **Test DDNS** to test the DDNS settings. If the test result is "Network is unreachable or DNS is incorrect", please check whether the network works fine, or the DDNS information is correct or not.

5.4.3 Email

This menu allows you to configure email settings. Please complete these settings if you want to receive the system notifications on your email when an alarm is triggered, HDD becomes full, HDD is in error state, or Video Loss occurs.



5.4.3.1 Email Configuration



Email: Check to enable.

Encryption: Enable if your email server requires the SSL or TLS verification. If you are not sure, set to be **Auto**.

SMTP Port: Enter the SMTP port of your email server.

SMTP Server: Enter the SMTP server address of your email.

User Name: Enter your email address.

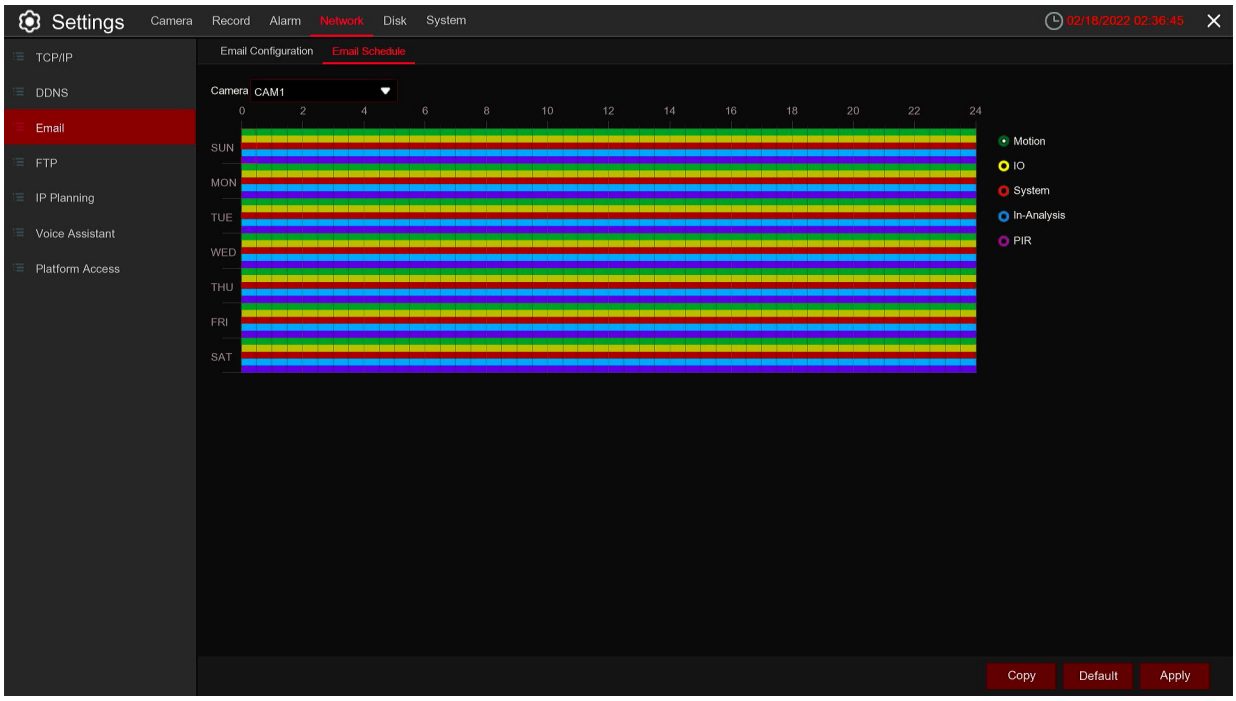
Password: Enter the password of your email.

Receiver 1~3: Enter the email address where you want to receive the event notifications from the DVR.

Interval: Configure the length of the time interval between the notification emails from the DVR. To make sure all settings are correct, click **Test Email**. The system sends an automated email message to your inbox. If you received the test email, it means the configuration parameters are correct.

5.4.3.2 Email Schedule

You need to configure the schedule to fully implement the Email notification.



The color codes on email schedule have the following meanings:

Motion: Green area

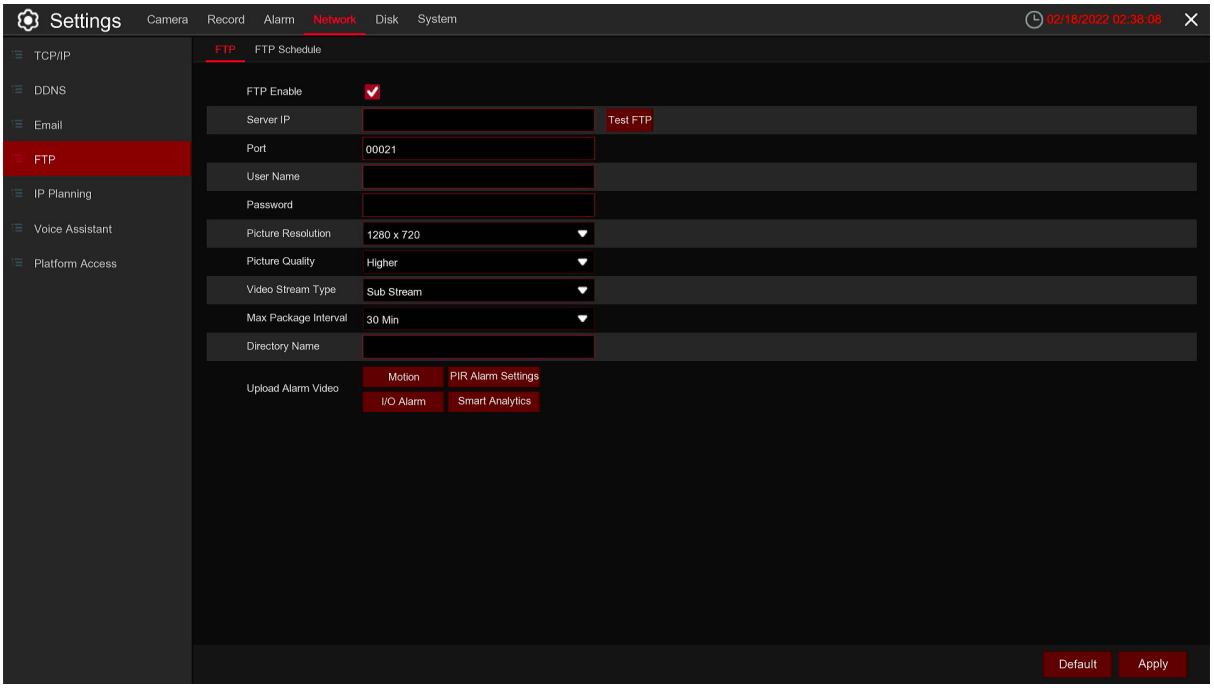
IO: Yellow Area

Exception: Red area

In-Analysis: Blue Area

5.4.4 FTP

This menu allows you to enable FTP function to view and load captured Snapshots from DVR to your storage device over FTP.



FTP Enable: Click to enable FTP function.

Server IP: Enter your FTP server IP address or domain name.

Port: Enter the FTP port for file exchanges.

Name/ Password: Enter your FTP server user name and password.

Picture Resolution: Set the resolution of the image uploaded to FTP

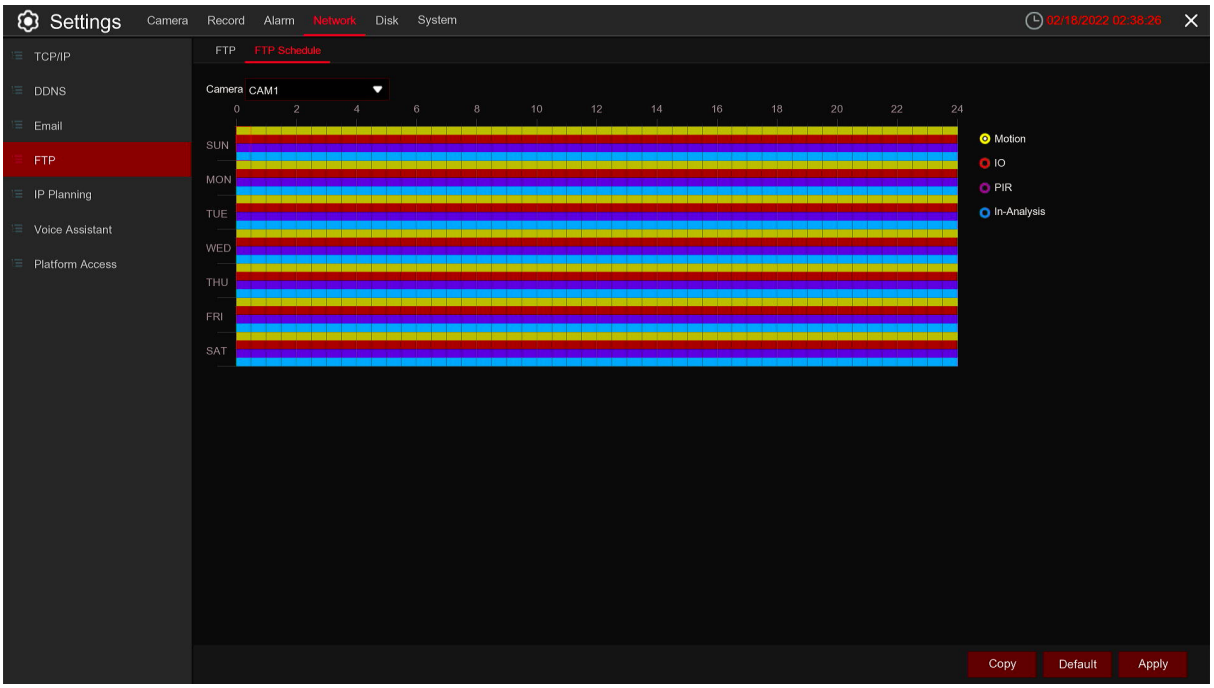
Picture Quality: Set the quality of the image uploaded to FTP

Video Stream Type: Set the vedio stream type uploaded to FTP,mainstream and substream for optional.

Max Package Interval: Set the Max Package Interval of video.

Directory Name: Enter the default directory name for the FTP file exchanges.

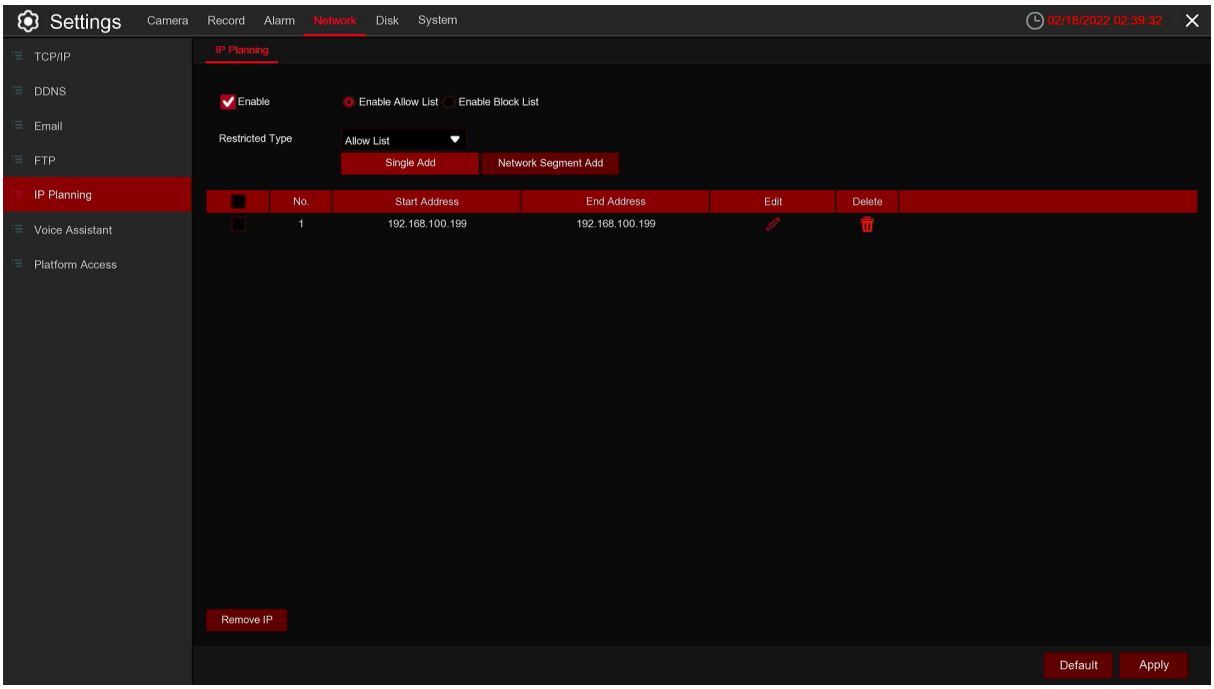
Test FTP: Click to test the FTP settings.



FTP Schedule: Need to configure the plan to perform FTP file uploading.
The color codes on email schedule have the following meanings:
Motion: Green area
IO: Yellow Area
In-Analysis: Blue Area

5.4.5 IP Filter

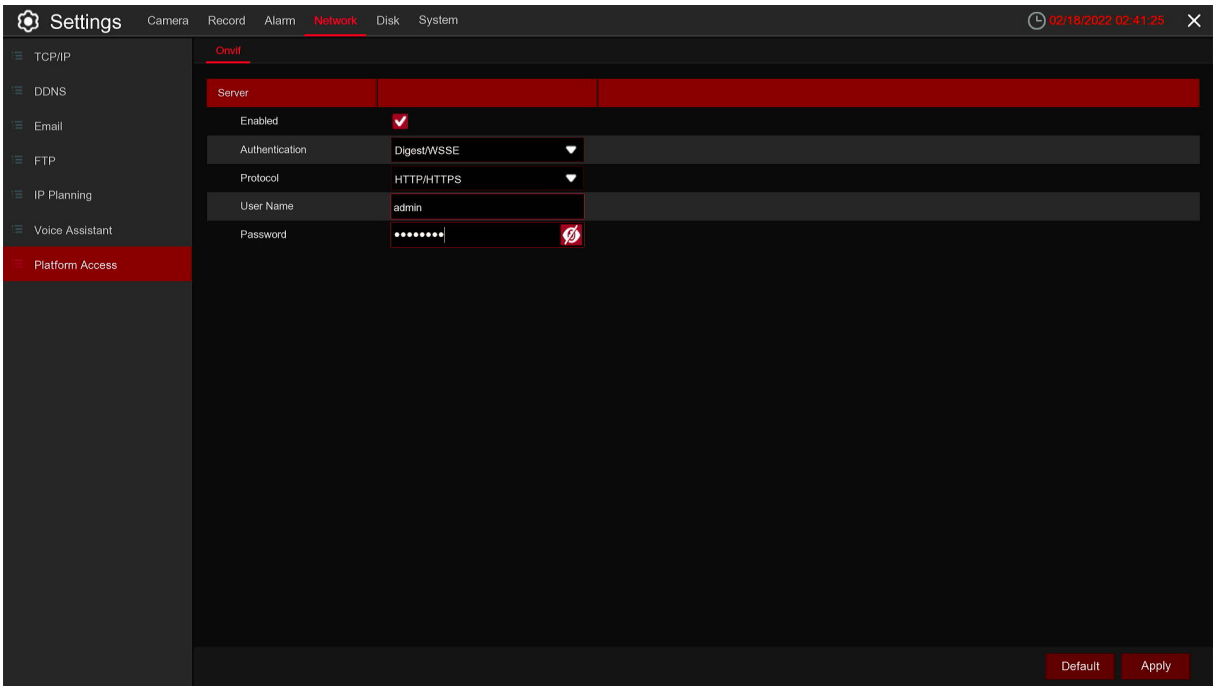
This function allows you to set a blacklist and whitelist so that only the IP addresses in the whitelist can connect to the device.



Enable: Enable or Disbale the IP filter function. Can use the blacklist or whitelist once enabled. Restricted
Type: Select the list (blacklist or whitelist) to set.
Start Address: Input the **Start Address**.
End Address: Input the **End Address**.

5.4.6 Platform Access

This function is mainly used to connect 3rd party platform, like ECMS / NVMS via Onvif protocol.



Enable: Check to enable this function.

Authentication: Login authentication type, options including Digest_sha256, Digest / WSSE, WSSE and None. Choose one of them to match to your 3rd party platform.

Protocol: Choose http, http or both of them.

User Name: To set a user name for platform connection.

Password: To set a password for platform connection.

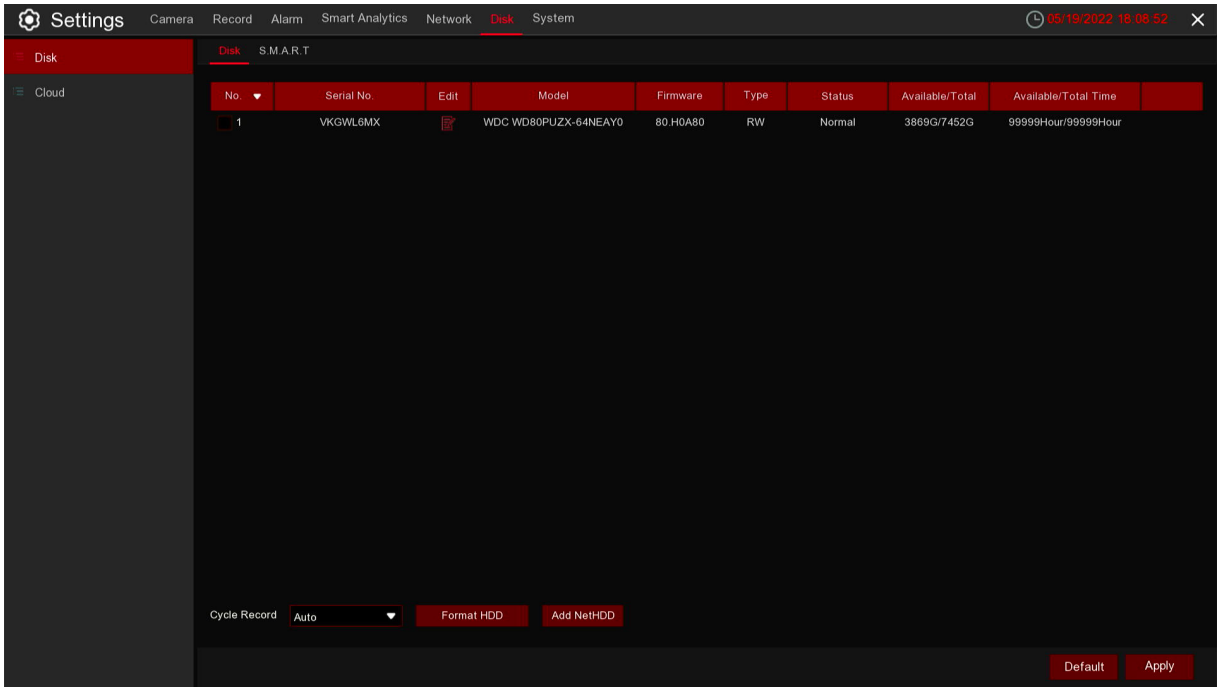
5.5 Device

In this section, you can configure the internal HDD & Cloud storage function.

5.5.1 Disk

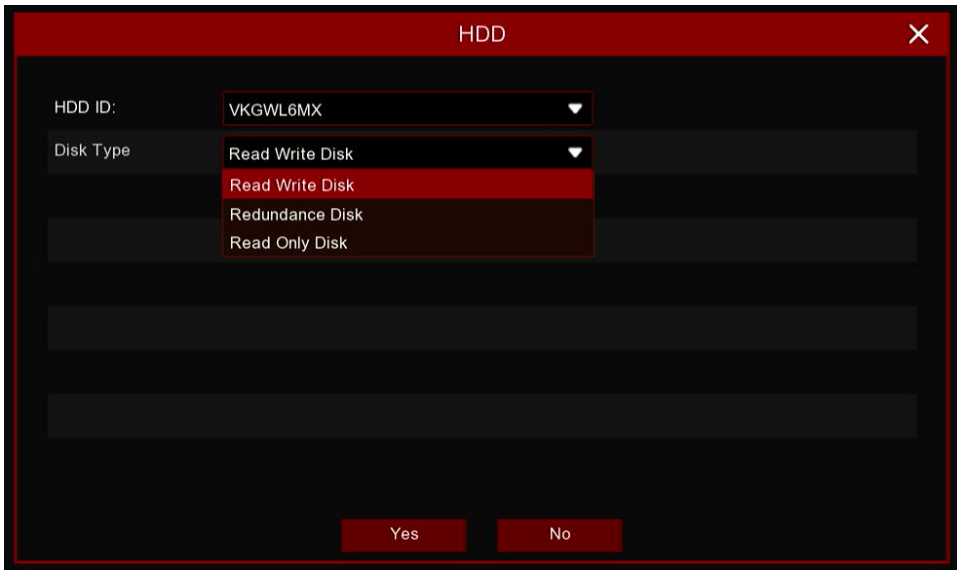
This menu allows you to check & configure the internal HDD(s). You need to format the HDD only at the first startup and if you replace a new HDD.

5.5.1.1 Disk settings



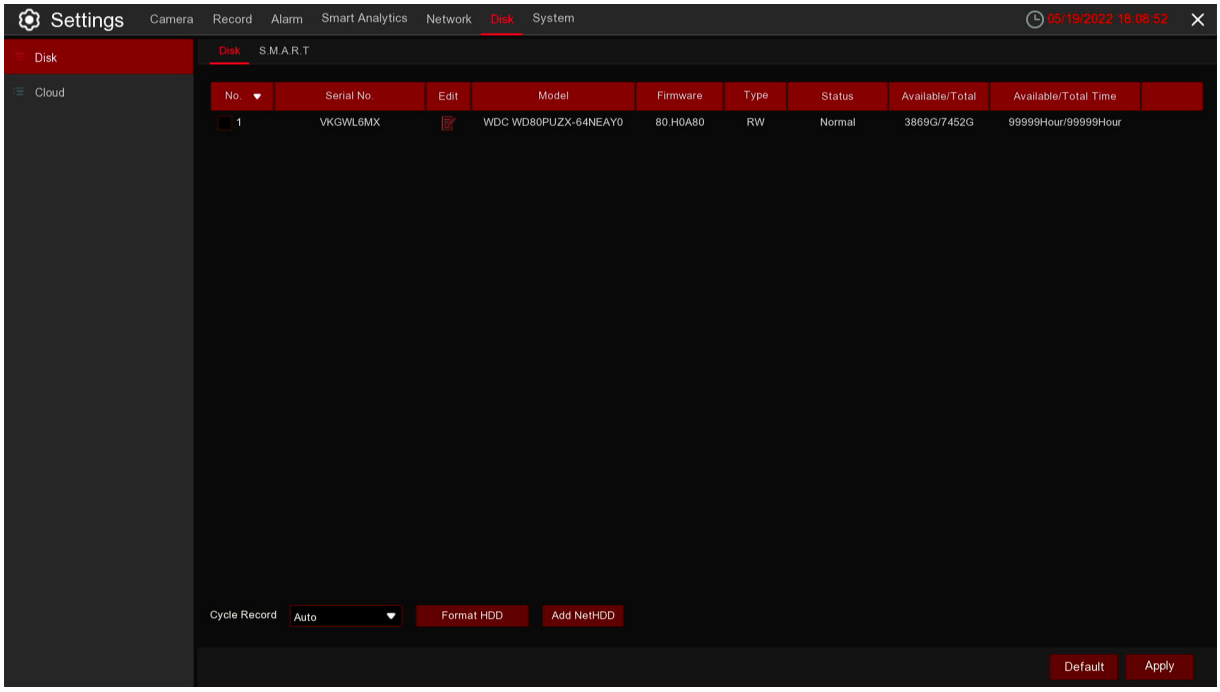
Format HDD: Select the HDD you want to format and then click **Format HDD**. To start formatting, you need to enter your user name and password and then click **OK** to confirm to continue formatting.
Overwrite: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose the option 7 days then only the last 7 days recordings are kept on the HDD. To prevent overwriting any old recordings, select **OFF**. If you have disabled this function, please check the HDD status regularly, to make sure the HDD is not full. Recording will be stopped if HDD is full.
Record on ESATA: This menu only displayed when your DVR is coming with an e-SATA port on the rear panel. It will allow to record the video to external e-SATA HDD to enhance your HDD capacity. If the e-SATA recording function is enabled, e-SATA backup function will be disabled.

If your DVR supports to install multiple HDDs, the edit icon appears in your system, you can click it to edit the HDD as below:

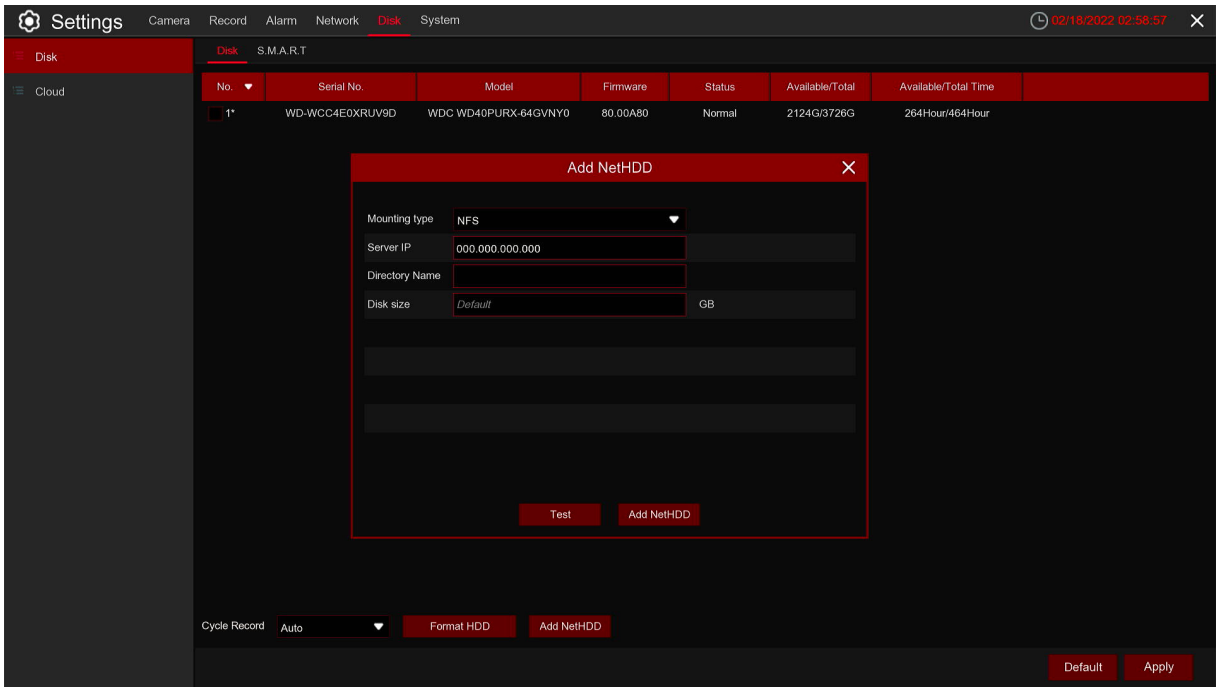


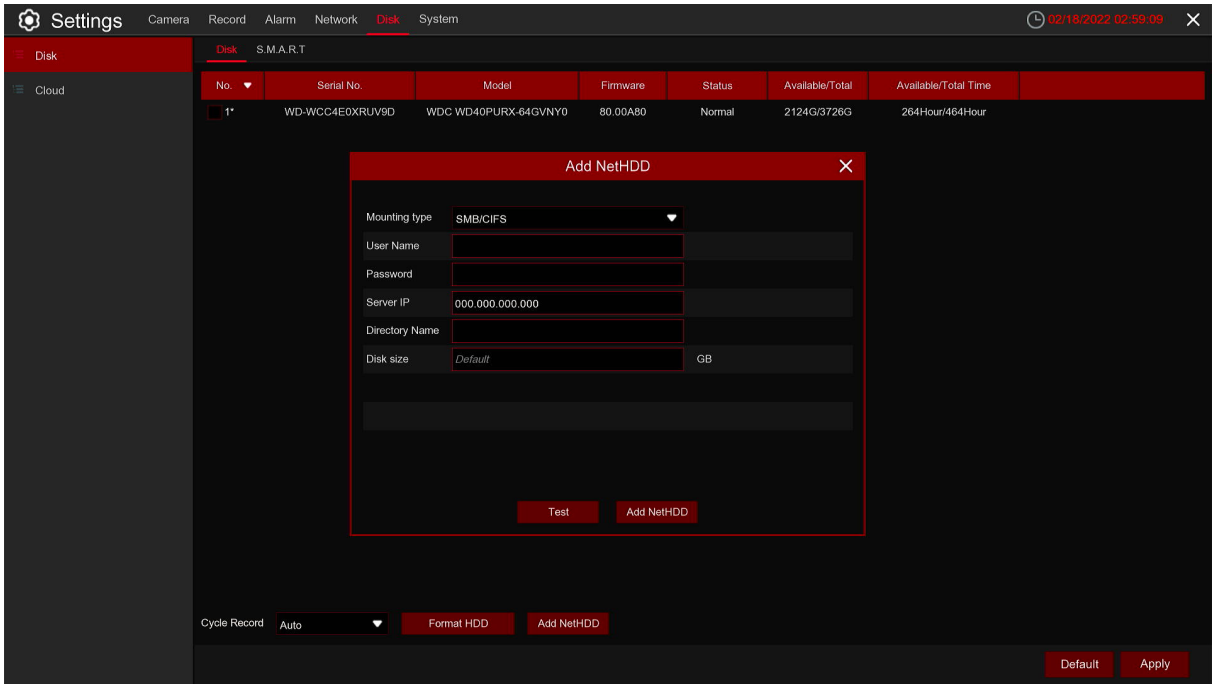
Disk Type: Read-write, read-only, and redundant.
Read-write mode is the normal status for a HDD to save recording or search recording to play. To prevent important video data from being overwritten during cyclic recording, the HDD can be set as **Read-only** mode. New recording will be not able to save into this read-only HDD. You can still search recording from this read-only HDD to play.

A **Redundant** HDD can be used to automatically backup video footage on the recording (read-write) hard drive. When a redundant HDD is set, the system can be set to record cameras in parallel to both the recording hard drive and the redundant hard drive in case of hard drive failure. Only some devices support NAS (Network Hard Drive). NAS is a dedicated data storage server. You can add a hard disk on a remote server to completely separate the storage device from the server, facilitating centralized data management. The figure below only shows the NAS function, and does not represent all the functions of the DVR.



Click Add Net HDD to add Net HDD.

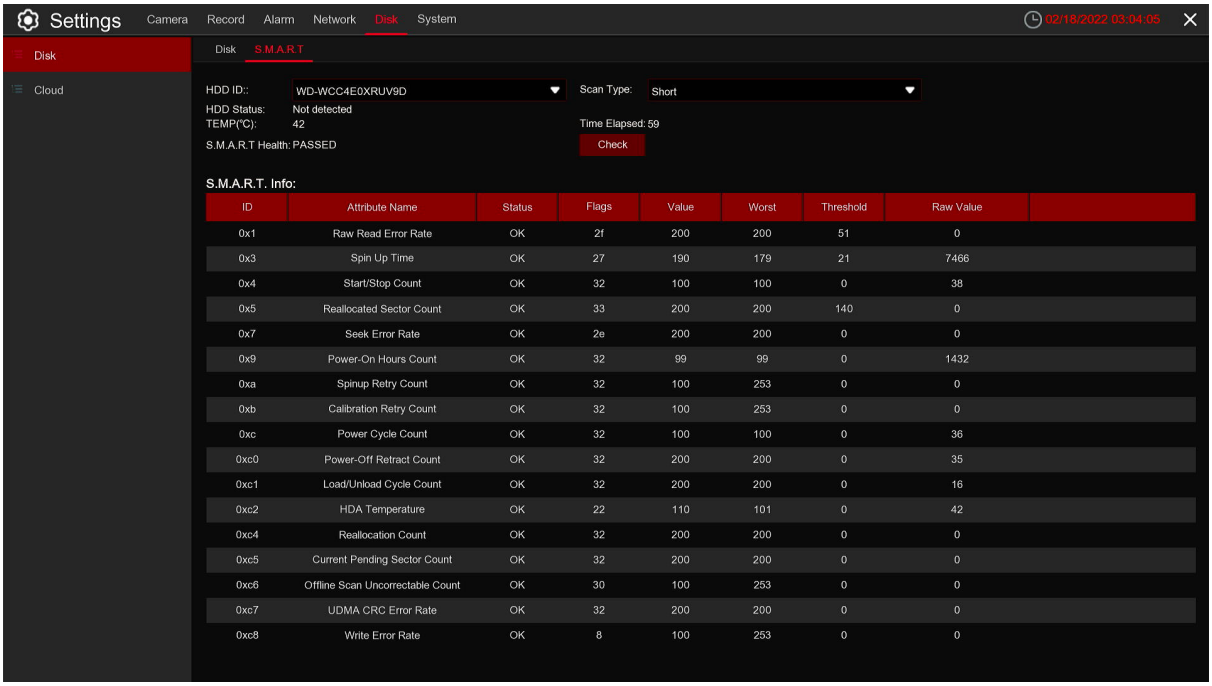




Choose the mount type, there are two types: NFS and CIFS. Enter the NAS server address **Server IP**, the path name **Directory Name**, and the disk size **Disk size**. Under the CIFS protocol, you also need to enter the username and password of the NAS. Click **Test** to test whether the network hard disk is connected. Click **Add NetHDD** to add a network hard disk. The network hard disk settings are equivalent to ordinary hard disks.

5.5.1.2 S.M.A.R.T

This function can be used to display technical information on the hard drive installed inside your DVR. You can also perform a test (there are three types available) to evaluate and detect potential drive errors.



ID	Attribute Name	Status	Flags	Value	Worst	Threshold	Raw Value
0x1	Raw Read Error Rate	OK	2f	200	200	51	0
0x3	Spin Up Time	OK	27	190	179	21	7466
0x4	Start/Stop Count	OK	32	100	100	0	38
0x5	Reallocated Sector Count	OK	33	200	200	140	0
0x7	Seek Error Rate	OK	2e	200	200	0	0
0x9	Power-On Hours Count	OK	32	99	99	0	1432
0xa	Spinup Retry Count	OK	32	100	253	0	0
0xb	Calibration Retry Count	OK	32	100	253	0	0
0xc	Power Cycle Count	OK	32	100	100	0	36
0xc0	Power-Off Retract Count	OK	32	200	200	0	35
0xc1	Load/Unload Cycle Count	OK	32	200	200	0	16
0xc2	HDA Temperature	OK	22	110	101	0	42
0xc4	Reallocation Count	OK	32	200	200	0	0
0xc5	Current Pending Sector Count	OK	32	200	200	0	0
0xc6	Offline Scan Uncorrectable Count	OK	30	100	253	0	0
0xc7	UDMA CRC Error Rate	OK	32	200	200	0	0
0xc8	Write Error Rate	OK	8	100	253	0	0

Self-check Type: There are three types available:

Short: This test verifies major components of the hard drive such as read/write heads, electronics and internal memory.

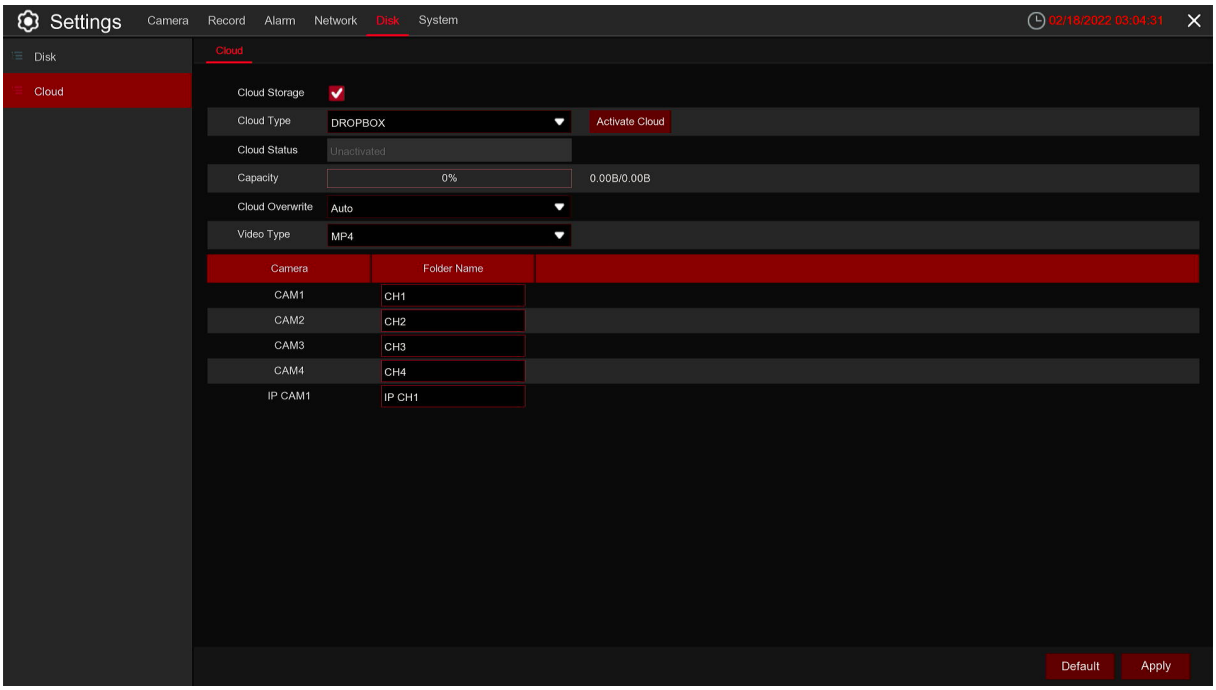
Long: This is a longer test that verifies the above as well as performing a surface scan to reveal problematic areas (if any) and forces bad sector relocation.

Conveyance: This is a very quick test that verifies the mechanical parts of the hard drive are working.

Note: When performing the test, your DVR will continue to work normally. If you find a hard disk S.M.A.R.T error, you can continue to use the hard disk, but there is a risk of losing recorded data. It is recommended to replace the hard disk with a new one.

5.5.2 Cloud Storage

Your DVR has the ability to upload snapshots to the cloud service via Dropbox which is a free service that allows you to easily store and share snapshots and always have them on hand when you need them.



Before activating the cloud function, we recommend that you create a Dropbox account using the same email address and password used for your DVR. Go to www.dropbox.com, input your name, email address and password, agree to the terms & conditions then click the sign up button.

Cloud Storage: Check to enable the function.

Cloud Type: To select cloud type, Dropbox and Google Drive are optional.

Cloud Status: To show cloud activation status

Capacity: To show the remaining space of cloud storage.

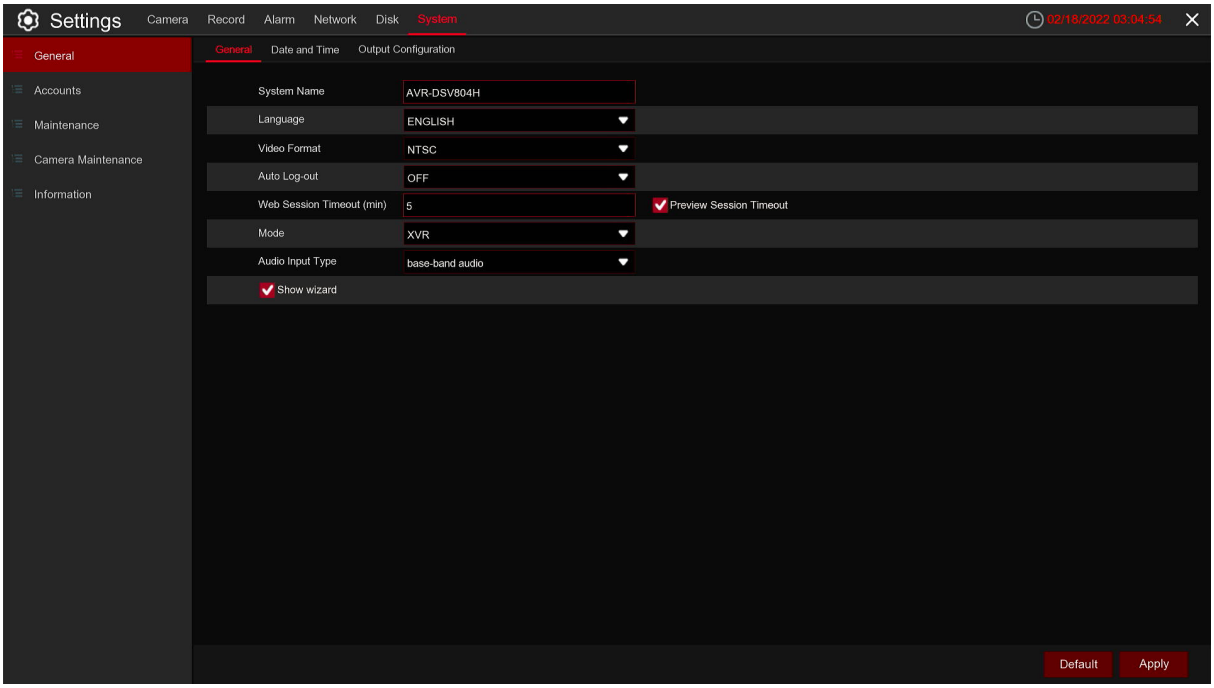
Drive Name: Enter the cloud storage name for your DVR.

Activate Cloud: Click to activate the function. After a short moment, you will see a message on-screen. An activation link has been sent to your email (the email address which you had set to receive email alerts in 5.4.3 Email). Check your email then click the link to activate. You will be taken to the Dropbox website. Click “Allow” to finalize the activation. Repeat these steps if you would like to enable cloud storage for the other cameras available.

5.6 System

Change general system information such as date, time and region, edit passwords and permissions, and more.

5.6.1 General



Device Name: Enter the DVR name. The name can contain letters and numbers.

Device ID: Enter the DVR device ID. The device ID is used to identify the DVR and can only be made up of numbers. For example, two DVRs are installed in the same location, one of which has a device ID of 000000, and the other has a device ID of 111111. When you want to operate a DVR with the remote control, both DVRs may receive signals from the controller and act at the same time. If you only want to control the DVR with ID 111111, you can use the remote control to enter the device ID 111111 in the login page for further operation.

Language: Select the language in which you want to display the system menu. Multiple languages are available.

Video Format: Choose a video format that suits your region.

Menu Timeouts: Click the drop-down menu and select the time to exit the main menu when the DVR is idle. You can also disable this function by selecting off (password protection will be temporarily disabled)

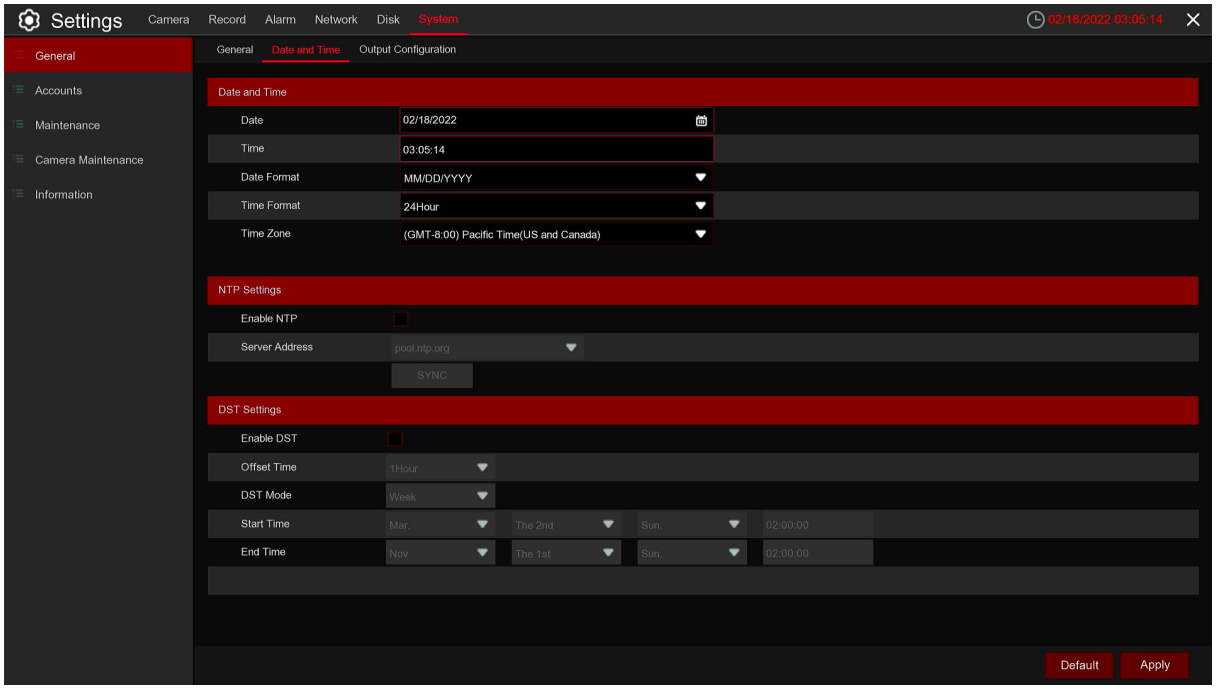
Web Session Timeout (min): Set the time to automatically log out of the web after a period of no operation when using the wed side to log in.

Preview/Playback Session Timeout: After enable, in the preview or playback, to avoid automatic logout of the web side.

Mode: XVR or DVR, XVR mode will allow you to add IP cameras to the DVR. If the mode is changed from xvr to DVR, all added IP cameras will be removed.

Show Wizard: Check this option if you want to display the startup wizard every time you open or restart a DVR

5.6.1.1 Date and Time



Date: Click the calendar to change the date.

Time: Click the time box to change the time.

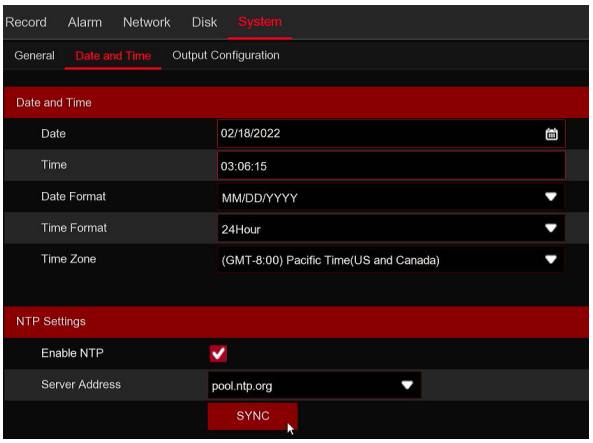
Date Format: Select the preferred date format.

Time Format: Select the preferred time format.

Time Zone: Select the time zone associated with your region or city.

5.6.1.2 NTP Settings

The NTP (Network Time Protocol) function allows your DVR to automatically sync its clock with a time server. This gives it the ability to constantly have an accurate time setting (your DVR will periodically sync automatically).



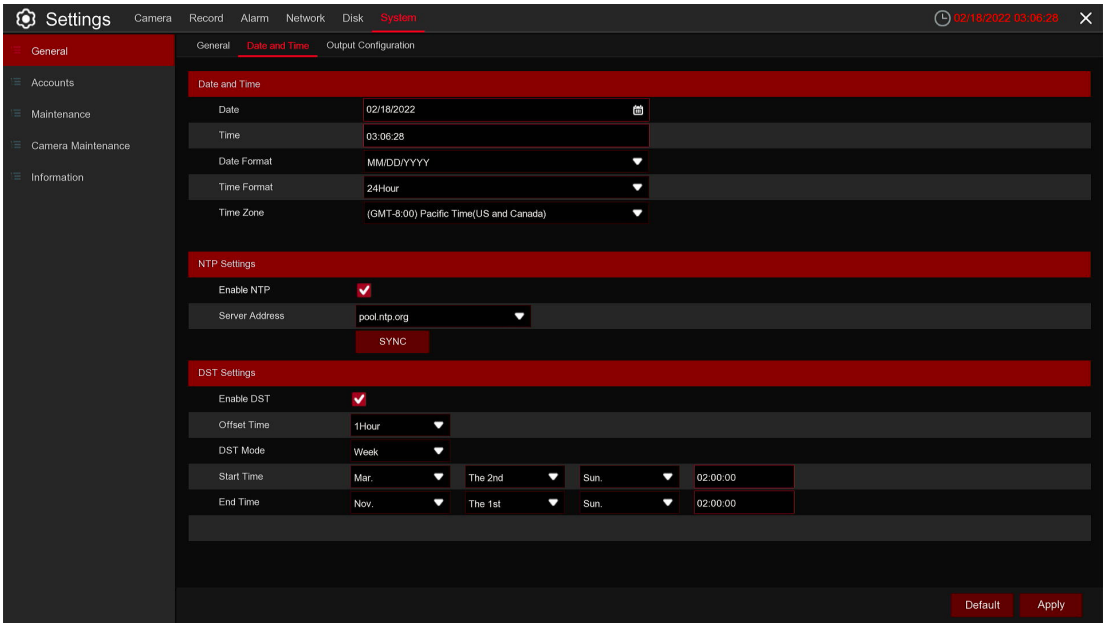
Check to enable the **NTP**, and select a **Server Address**, click Update Now to manually sync the date & time.

Click **Apply** to save your settings.

When NTP function is enabled, system will update the system time at 00:07:50 per day, or every time when the system is starting up.

5.6.1.3 DST Settings

The DST (Daylight Saving Time) function allows you to select the amount of time that Daylight Saving has increased by in your particular time zone or region.



Enable DST: If Daylight Saving applies to your time zone or region, check this option to enable.

Time Offset: Select the amount of time that Daylight Saving has increased by in your time zone. This refers to the difference in minutes, between Coordinated Universal Time (UTC) and the local time.

Enable DST: You can select how Daylight Saving starts and ends:

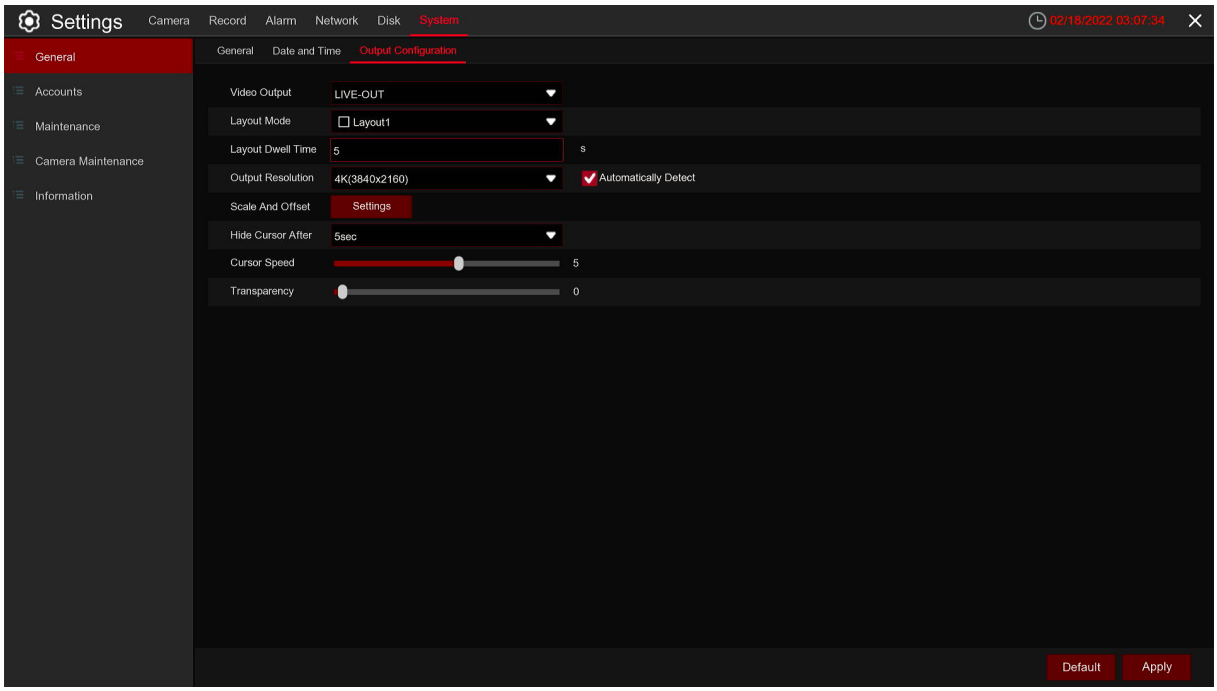
Week: Select the month, a particular day and time when Daylight Saving starts and ends. For example, 2 a.m. on the first Sunday of a particular month.

Date: Select the start date (click the calendar icon), end date and time when Daylight Saving starts and ends.

Start Time / End Time: Set the start time and end time for Daylight Saving.

5.6.2 Output Configuration

This menu allows you to configure video output parameters.

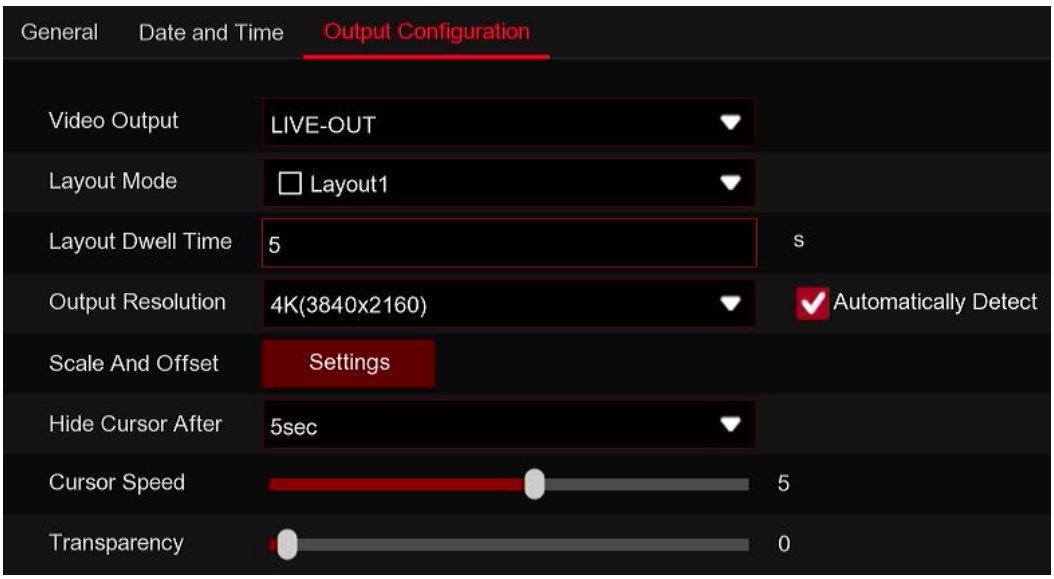


Video Output: To choose the output options:

LIVE-OUT is used to configure the main output parameters.

SPOT-OUT is an optional option to config the VGA spot output parameters.

5.6.2.1 LIVE-OUT



Choose **LIVE-OUT** from the Video Output drop-down menu.

SEQ Mode: Select how many video Cameras you would like to display when your DVR is in sequence mode.

SEQ Dwell Time: Enter in seconds the maximum length of time you would like to display a video Camera in sequence mode before displaying the next video Camera (300 seconds is the maximum).

Output Resolution: Select a display resolution that is suitable for your TV. 1920 x 1080 will suit most TVs. If your DVR supports 4K output resolution, you can select either 2K (2560 x 1440) or 4K (3840 x 2160) to take advantage of the higher resolution that your 4K TV provides.

Scale and Offset: The DVR supports to adjust the size & position of the display screen to match your monitor or TV. Click **Setup** button to adjust.

Scale: To adjust the size of the displayed screen by scale.

X Offset: To move the displayed screen to left or right.

Y Offset: To move the displayed screen to up or down.

Click once or long press the left button of your mouse on the arrow to adjust the size and position, or you can scroll the wheel of the mouse to adjust. Click the right button of your mouse to exit, and click **Apply** to save your modifications.

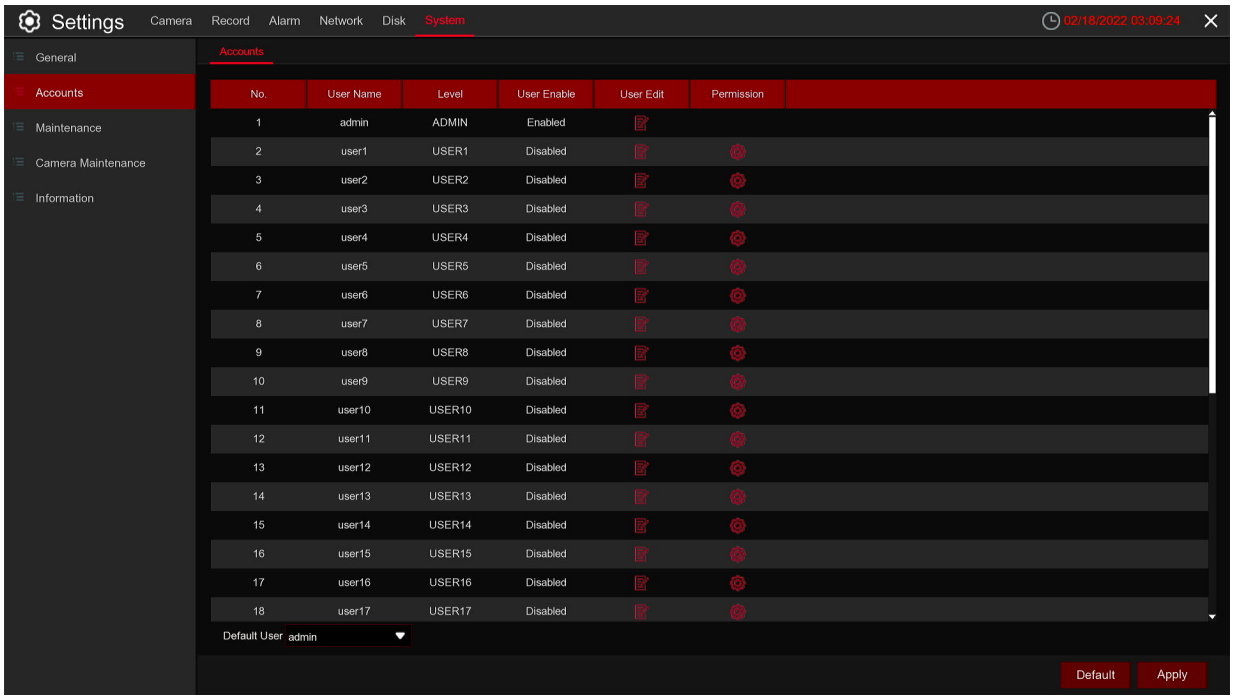
Cursor Hidden Delay: Click the drop-down menu to select the time your DVR will hide the mouse cursor when idle. You can also disable this by selecting "OFF" (password protection will be temporarily disabled).

Cursor Acceleration: To adjust the speed to move the mouse cursor.

Transparency: Click and hold the slider left or right to change how transparent the Menu Bar and Main Menu will appear on-screen. Adjust accordingly.

5.6.3 Accounts

This menu allows you to configure the user name, password and user permission.

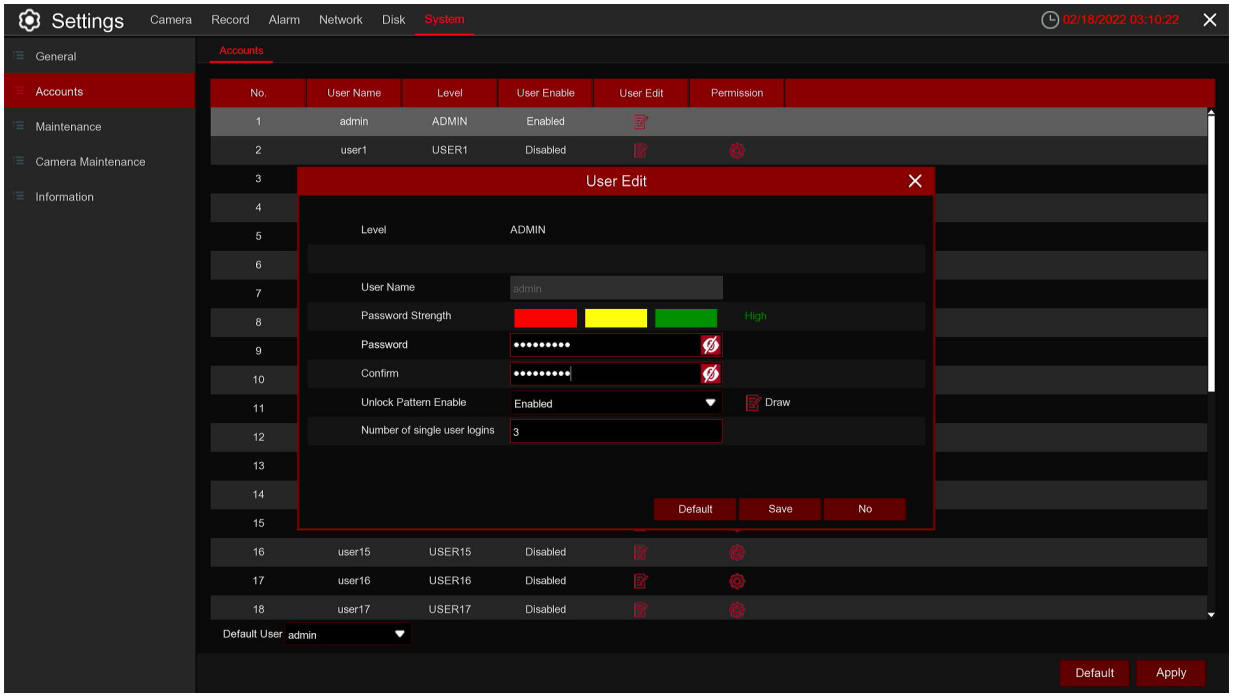


The system supports the following account types:

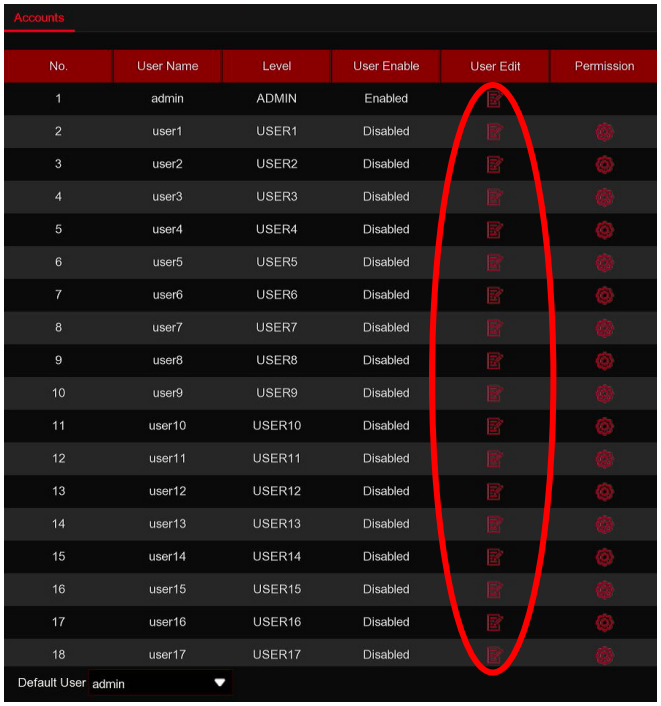
- **ADMIN** – **System Administrator:** The administrator has full control of the system, and can change both administrator and user passwords and enable/disable password protection.
- **USER** – **Normal User:** Users only have access to live viewing, search, playback, and other functions. You may set up multiple user accounts with varying levels of access to the system.

5.6.3.1 Changing Password

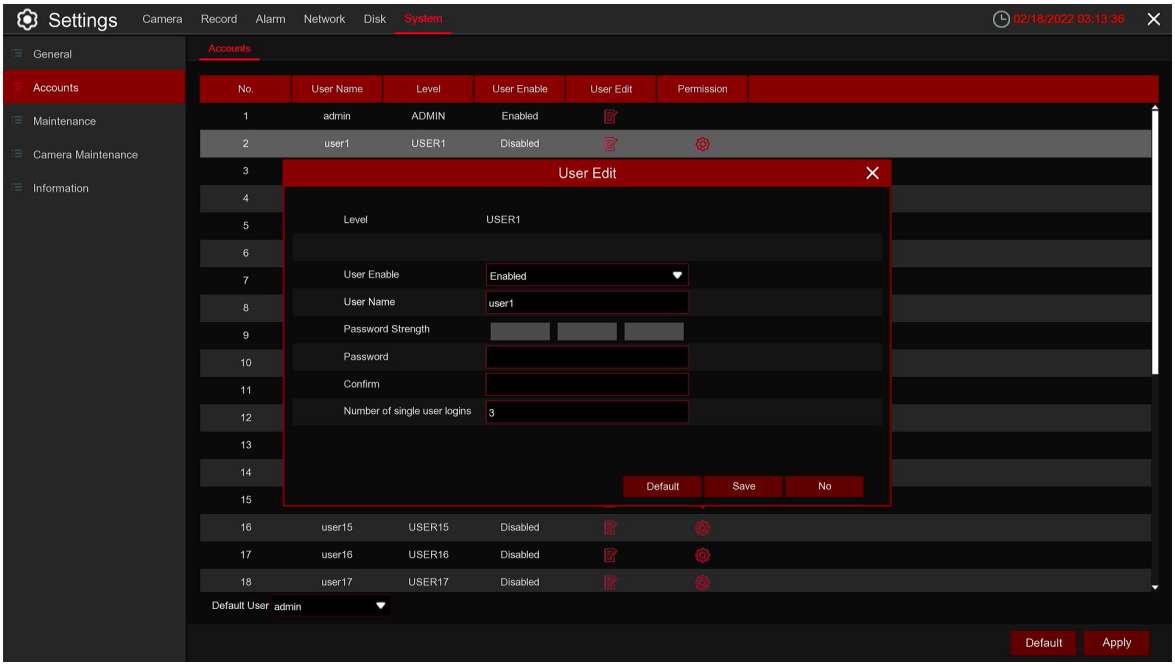
To change the password for the administrator or user accounts, click the User Edit icon . The password has to be a minimum of 8 characters and can contain a mixture of numbers and letters. Enter your new password again to confirm, and then click **Save** to save your new password. You will be required to input your old password to authenticate.



5.6.3.2 Add New Users



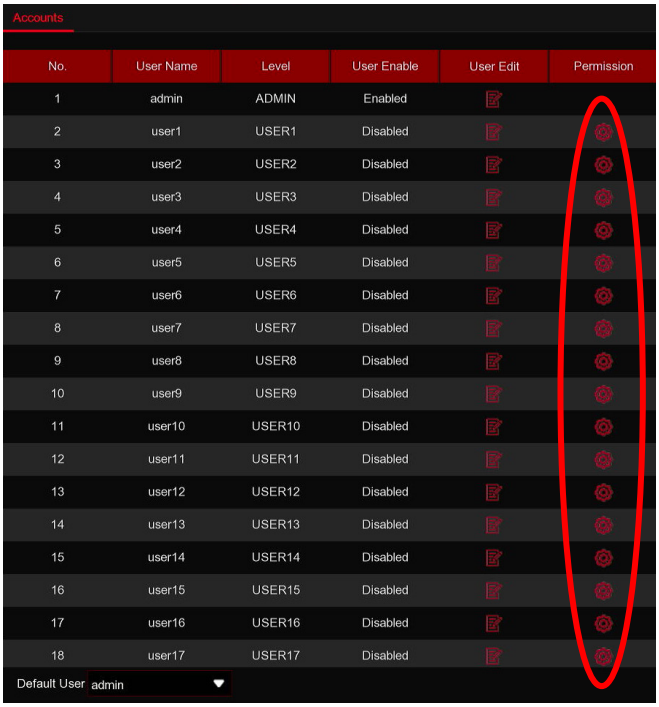
1. Select one of the user accounts that is currently disabled, click the User Edit icon .



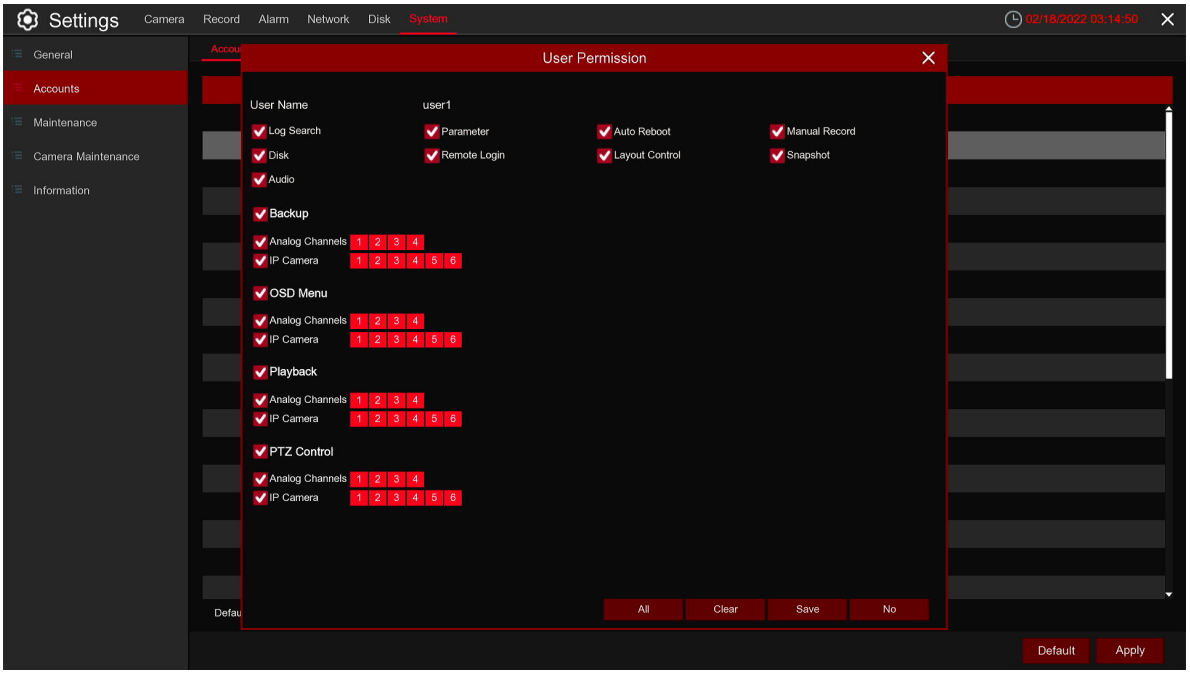
1. Select **Enable** from the drop-down next to **User Enable**.
2. Click the field next to **User Name** to change the user name for the account.
3. Select **Enable** from the drop-down next to **Password Enable**.
4. Click the field next to **Password** to enter the desired password.
5. Click the field next to **Confirm** to reenter the password.
6. Click **Save**. You will be required to input your Admin password to authenticate.

5.6.3.3 Setting User Permissions

The administrator account is the only account that has full control of all system functions. You can enable or disable access to certain menus and functions of each user account.



1. Click the edit icon under Permission tab.

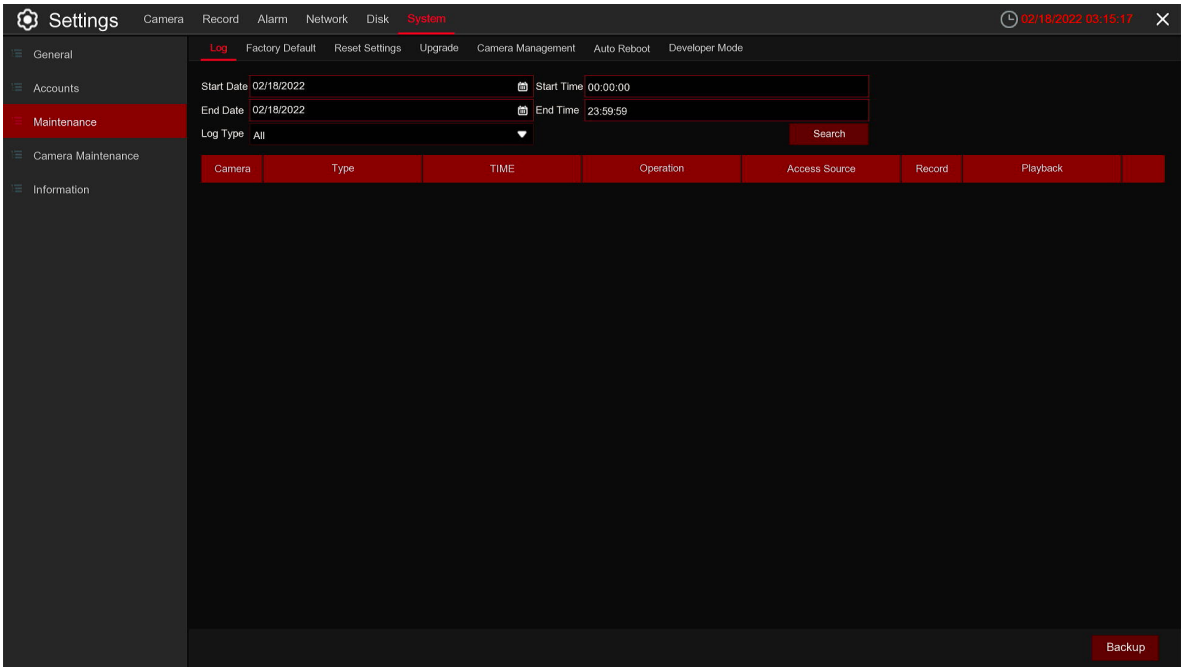


2.Check the boxes next to any system menus or capabilities you would like the user to access. Click **All** to check all boxes. Click **Clear** to check none of the boxes.

3.Click **Save** to save your modifications.

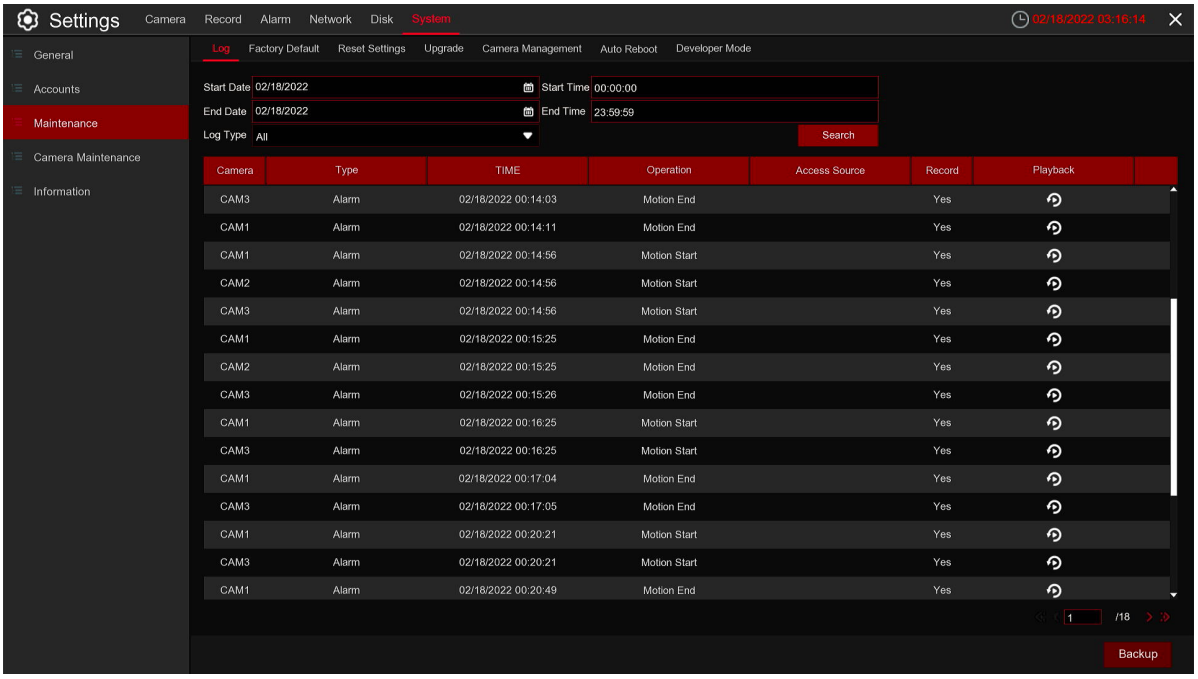
5.6.4 Maintenance

In this section, you will be able to search & view the system log, load default settings, upgrade the system, export & import system parameters and manager system auto reboot.



5.6.4.1 Log

The system log shows you important system events, such as motion alarms and system warnings. You can easily create a backup file of the system log for a set time period to a USB flash drive.

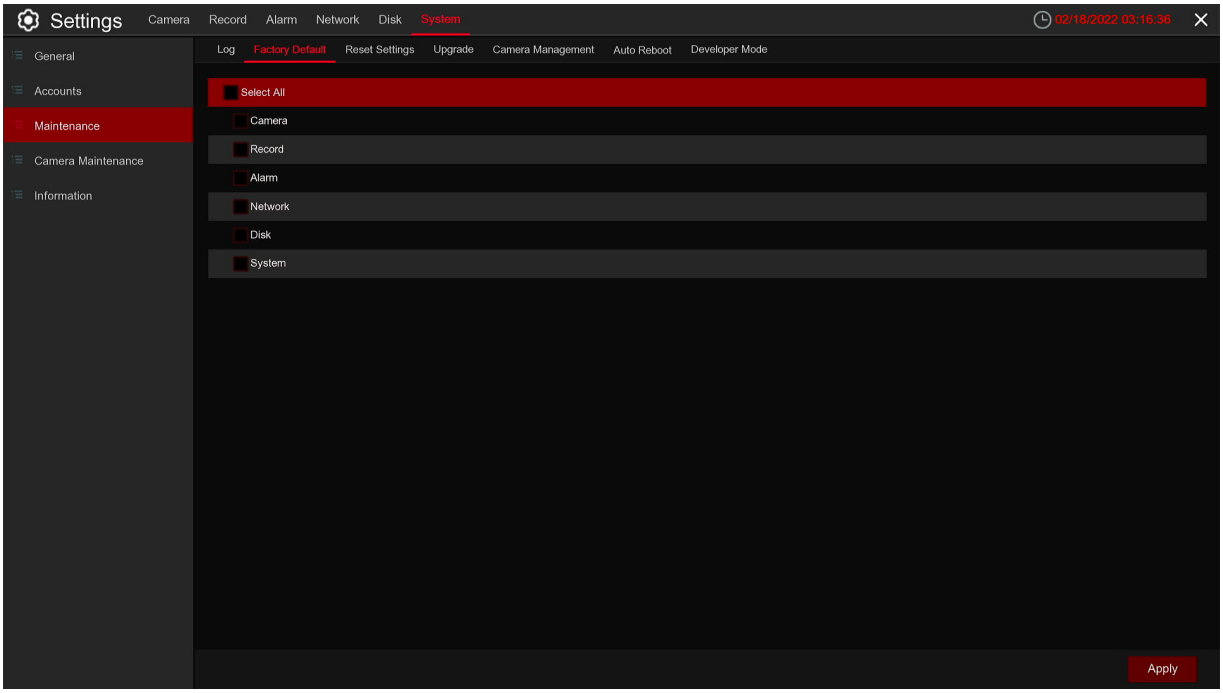


Log Searching and Backing Up:

1. Click the field next to **Start Date** & **Start Time** to choose the starting date & time for your search from the on-screen calendar.
2. Click the field next to **End Date** & **End Time** to choose the end date & time for your search from the on screen calendar.
3. Select the type of events you would like to search for from the dropdown next to **Log Type**, or select **All** to see the entire system log for the selected time period.
4. Click **Search**.
5. Browse system log events from your search period:
   • Video events can be played back instantly by clicking in the **Playback** column. Right-click to return to your search results.
   • Use the « < / > » buttons in the bottom-right corner of the menu to move between pages of system log events.
6. Click **Backup** to create a backup of the system log for your search period. Please make sure your flash derive has been connected to the DVR's USB port.
7. The backup drive menu appears. Navigate to the folder you want the backup file to be saved in, then click **OK** to begin.

5.6.4.2 Load Default

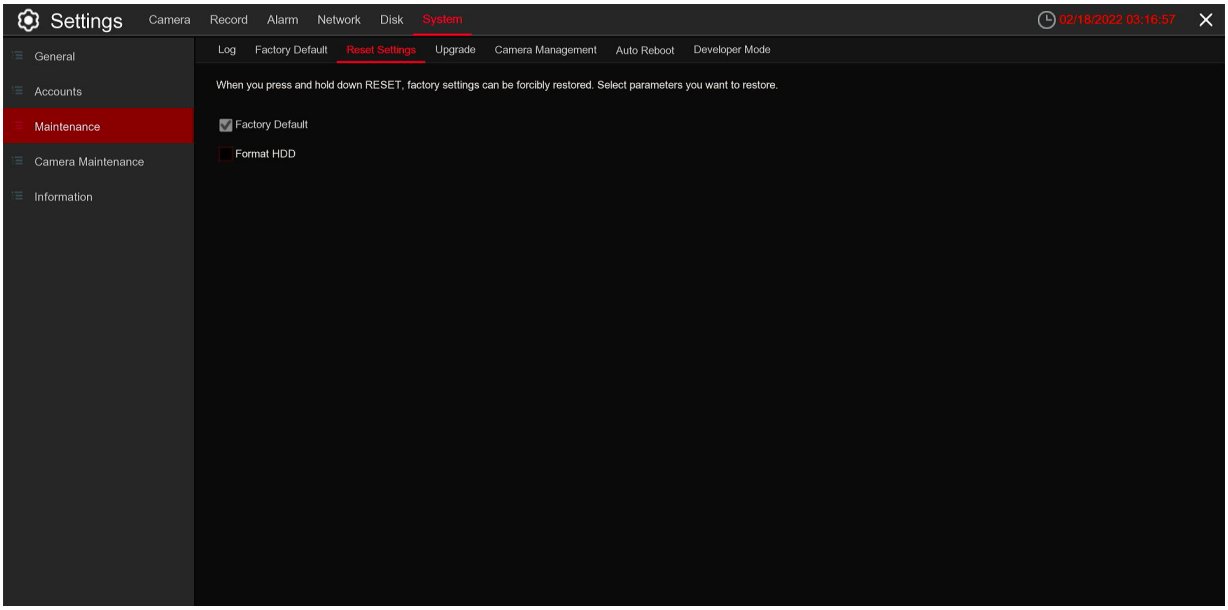
Reset the DVR settings to its out-of-box state. You can choose to reset all settings at once, or just settings on specific menus. Restoring default settings will not delete recordings and snapshots saved to the hard drive.



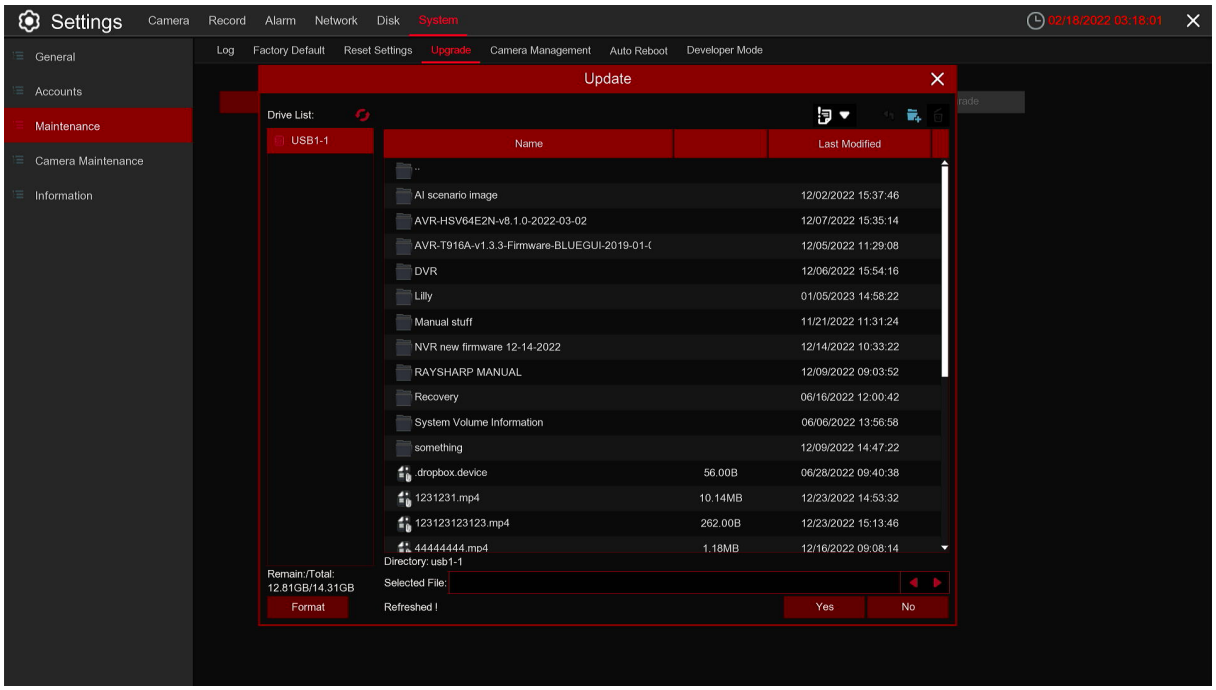
Check the items you want restore, or check **Select All** to choose all items. Click **Apply** to load default settings of your chosen items.

5.6.4.3 Reset Settings

If your DVR supports reset button on the rear panel, you can press and hold down the button to forcibly reset to factory settings. You can select parameters you want to restore.



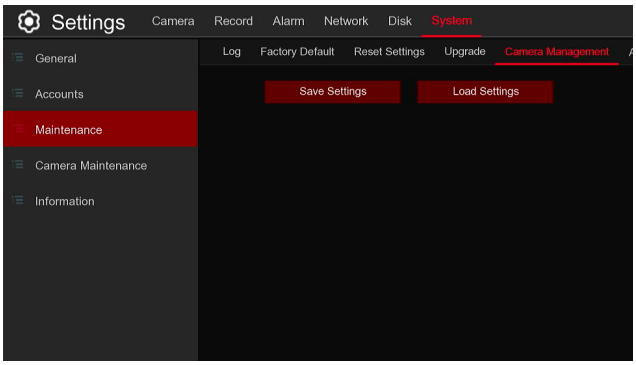
5.6.4.4 Upgrade



1. Copy the firmware file (.sw file) to your USB drive, and insert the USB flash drive into the DVR's USB port.
2. Click Select File button to choose the firmware file in your USB flash drive, then Click OK.
3. Click **Upgrade** button to start system upgrade. The system upgrade will last around 5-10 minutes, please do NOT power off the DVR or remove the USB from DVR during firmware upgrade.

5.6.4.5 Parameter Management

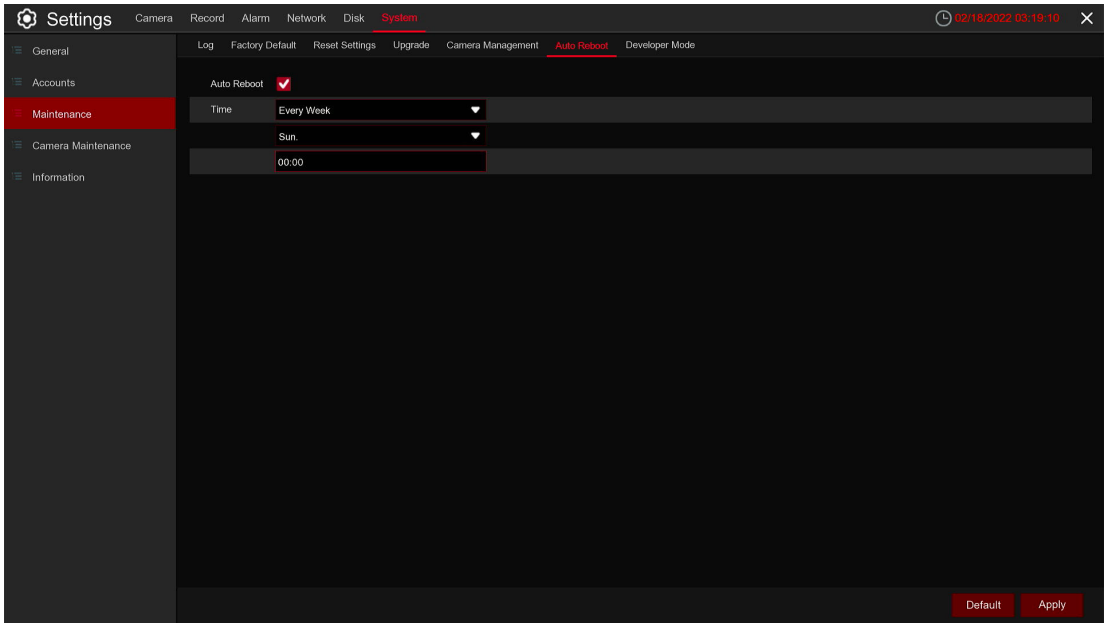
You can export the main menu settings you have configured to a USB flash drive, or import an exported setting file from USB flash drive to the DVR.



Save Settings: Click to save the DVR current system settings to the USB device. You will be required to input the Admin password to authenticate.
Load Settings: Once you have created a system settings export, you can import the settings on another DVR. Click **Load Settings** button to navigate to the system settings file you want to import from your USB flash driver. You will be required to input the Admin password to authenticate.

5.6.4.6 Auto Reboot

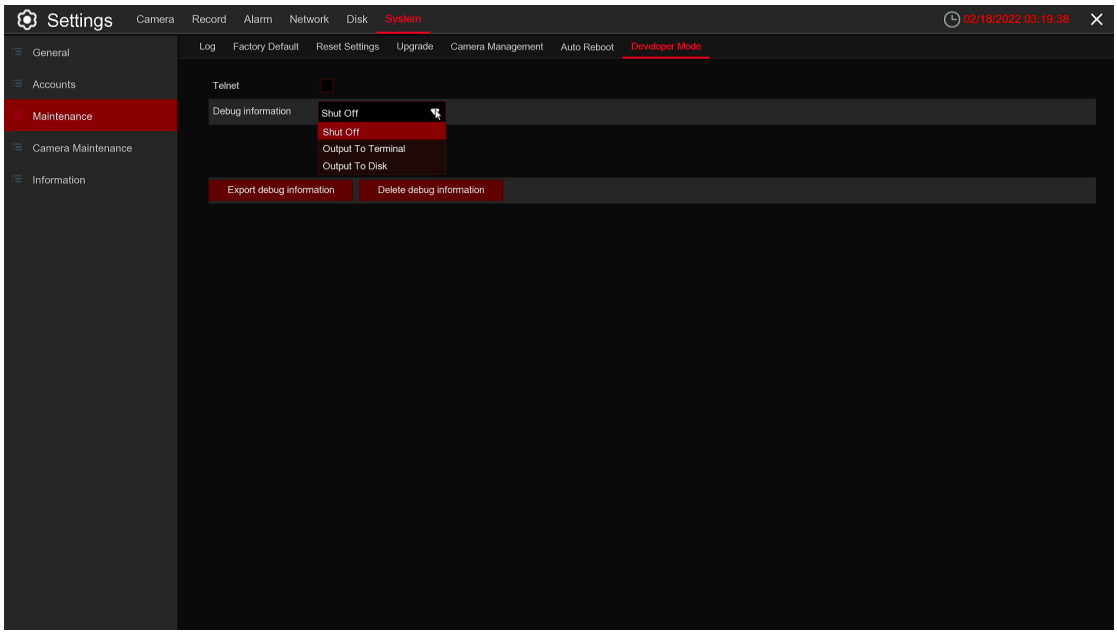
This menu allows the system to auto reboot the DVR regularly. It is recommended to leave this function enabled, as it maintains the operational integrity of your DVR.



Auto Reboot: Check to enable.
Time: You can set the DVR to reboot by day, week or month.

5.6.4.7 Developer Mode

Only some devices support. This menu can save the serial port log to the USB flash disk.

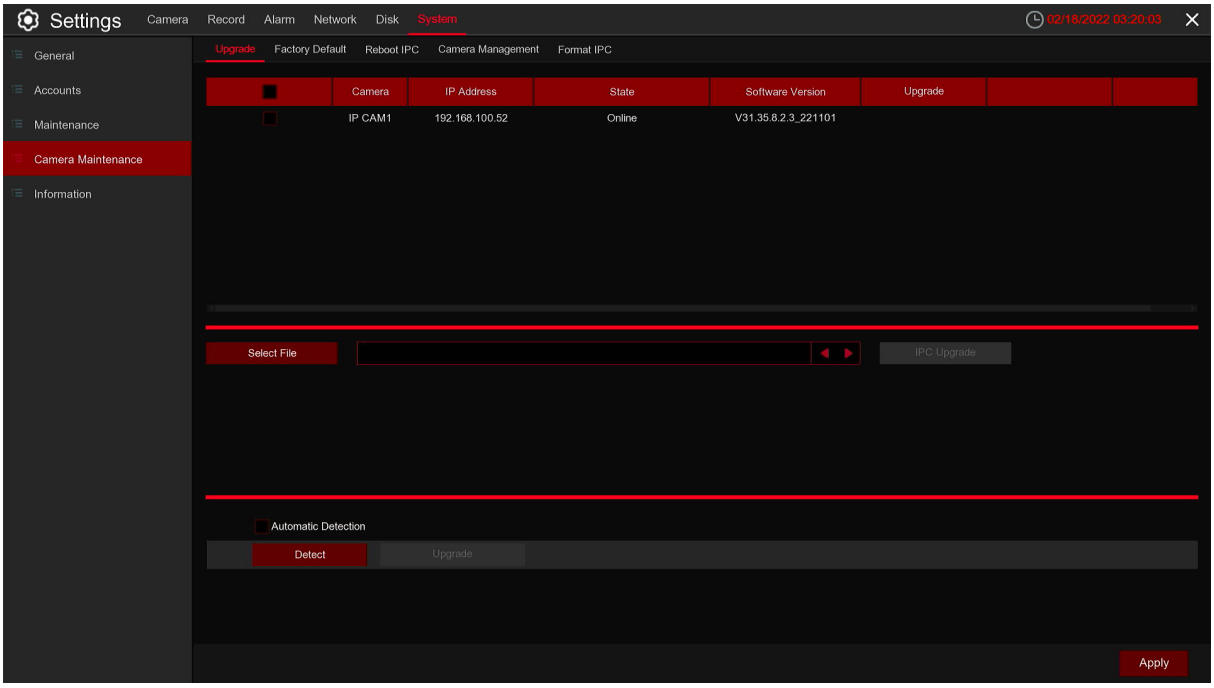


Telnet: Enable it, can use Telnet to login device.
Collect logs: Enable it to collect logs.
Export Log: Export logs to USB disk.
Delete Log: Delete all collected logs.

5.6.5 IP Camera Maintain

This menu allows you to upgrade the IP camera's firmware and restore default settings of IP camera.

5.6.5.1 Upgrade IP Camera



1. Choose one of the IP cameras you want to upgrade firmware
2. Click **Select File** select the update file from your USB flash drive, then click **OK**.
3. Click IPC Upgrade button to start upgrading. You will be required to input the Admin password to authenticate. Please do NOT power off the DVR and IP camera or remove the USB during the upgrading.

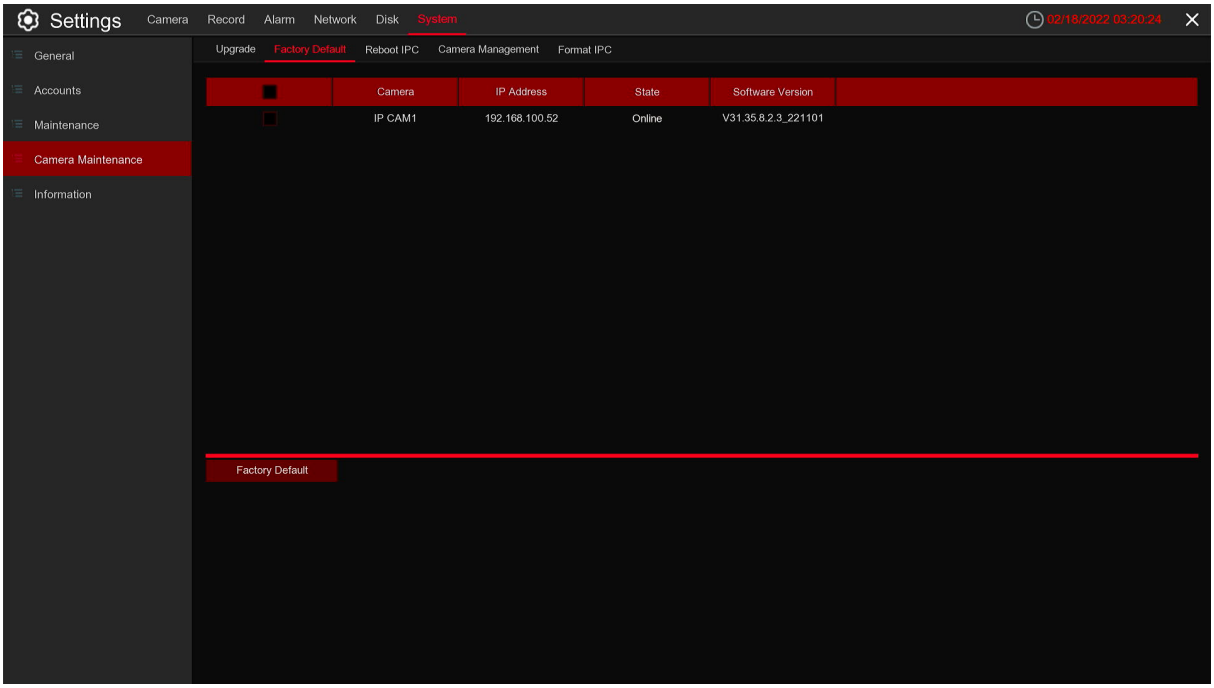
Auto Upgrade: Some IPC supports upgrading using the upgrade package in FTP. You only need to open FTP in the IE menu of IPC. Then upload the upgrade package to upgrade IPC FTP on DVR. Select **enable** / **disable** to enable or disable the feature.

Check For update: Automatically detect upgrades. Check whether there is the latest upgrade package in the FTP server at regular intervals and when starting up. If yes, you will be prompted whether to upgrade.

Detect: Manually check for the latest upgrade package.

Upgrade: If the latest upgrade package is detected, click to upgrade.

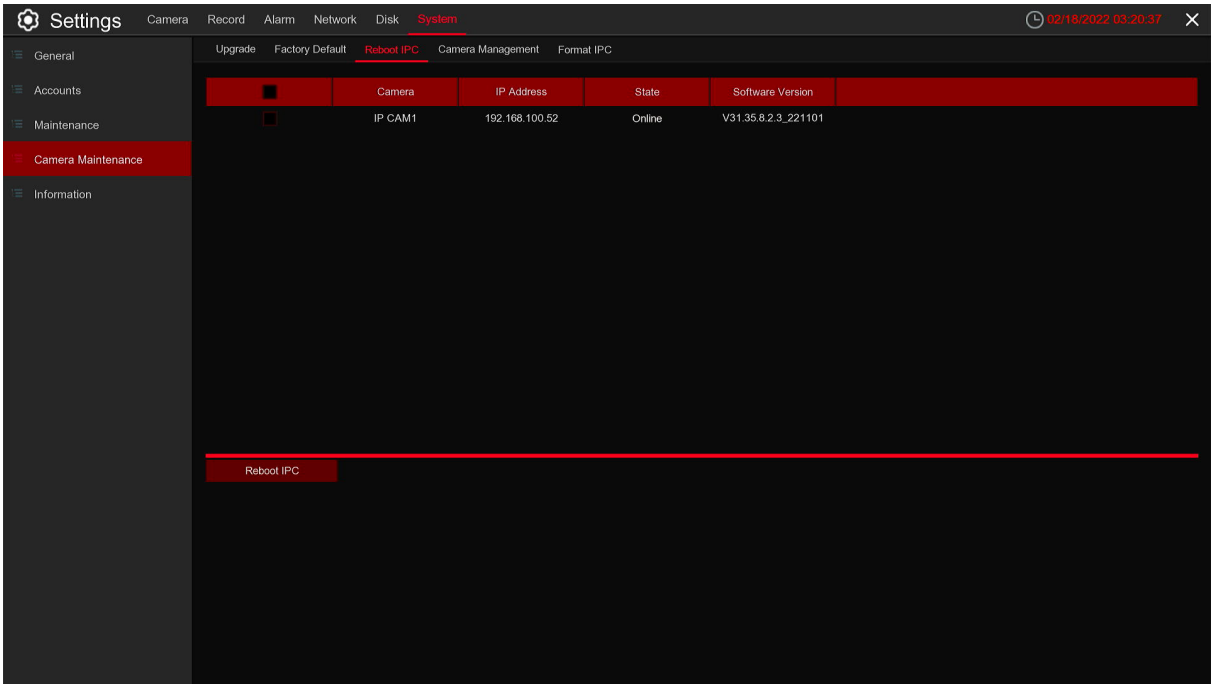
5.6.5.2 Load Default Settings for IP Camera



1. Choose the IP cameras you want to restore.
2. Click **Load Default** to restore settings. You will be required to input the Admin password to authenticate.

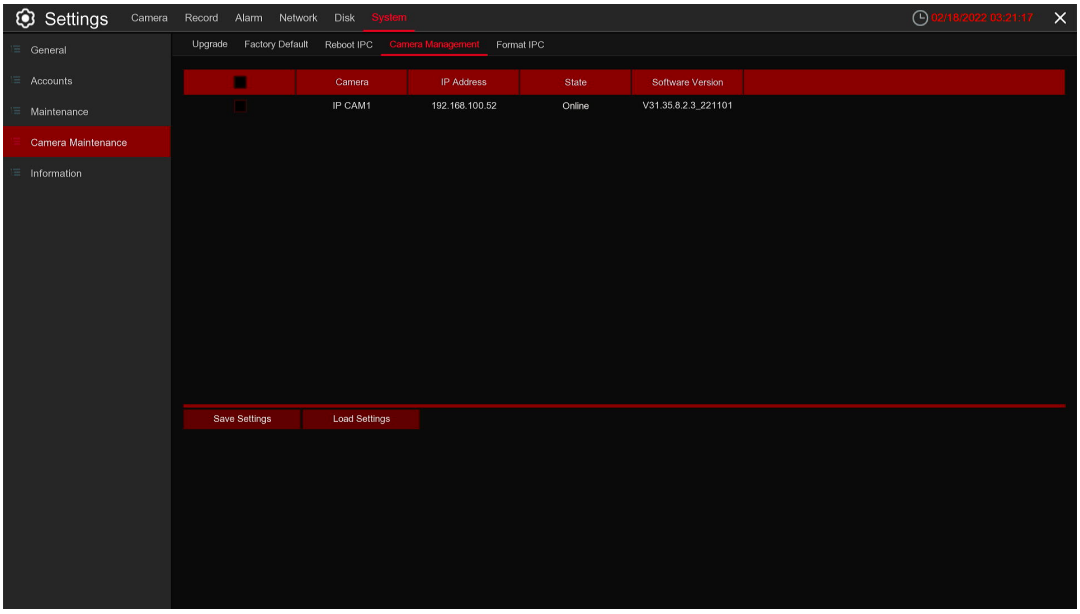
5.6.5.3 Reboot IPC

You can restart IPC in this menu. Check IPC and click **reboot IPC**.



5.6.5.4 Manage IPC parameters

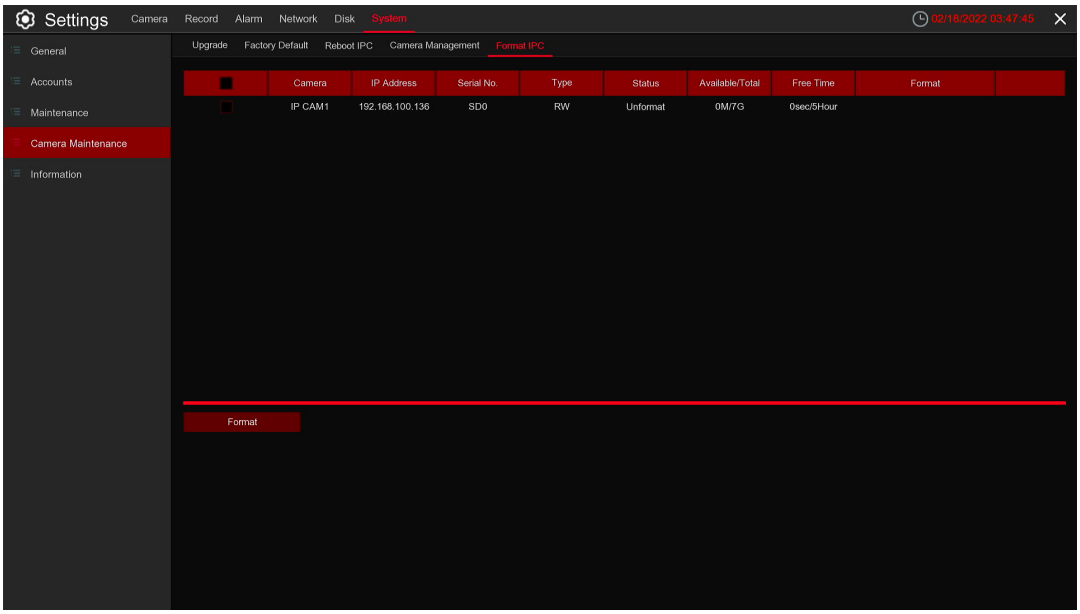
This menu can import / export IPC parameters.



Export parameters, check IPC, click Save settings, and the USB flash disk path will pop up. After selecting the path, click OK to export IPC to USB flash disk; Check IPC and click load settings to import parameter files from USB flash disk into the IPC.

5.6.5.5 Format IPC

This menu allows to format the SD card installed inside your IP camera.



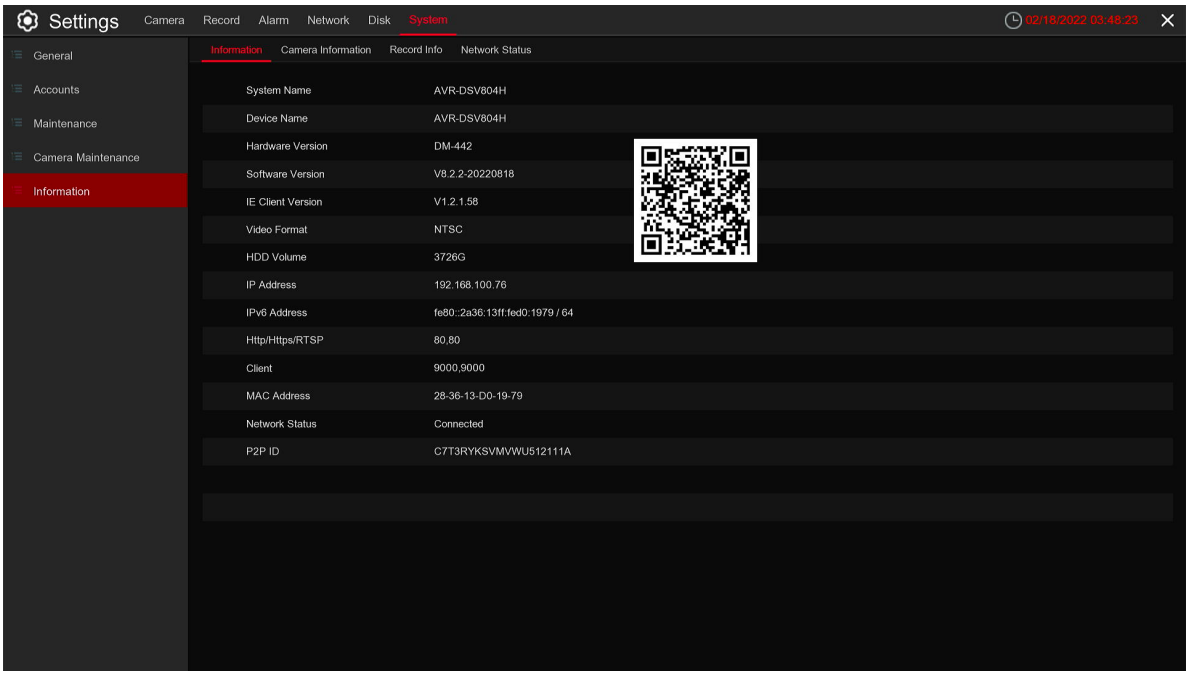
1. Choose the IP camera's SD card you wish to format.
2. Click Format to format your settings. You will be required to input the Admin password to authenticate.

5.6.6 System Information

This menu allows you to view the system information, Camera information, record information & network status.

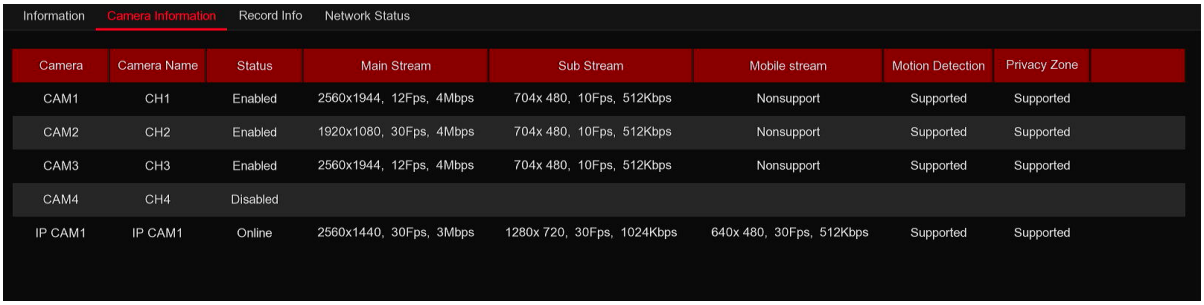
5.6.6.1 Information

View system information such as device ID, device model name, IP address, MAC address, firmware version and more.



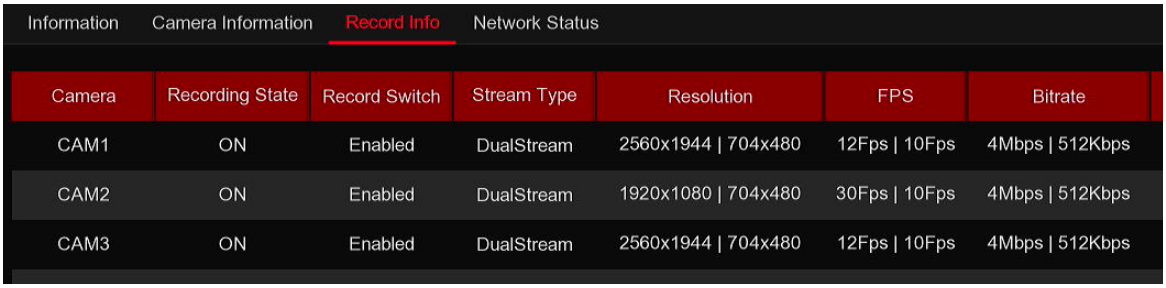
If your DVR supports P2P function, you will find the P2P ID & P2P QR code in the information page. You can scan this QR cord with mobile app to remote view the DVR.

5.6.6.2 Camera Information



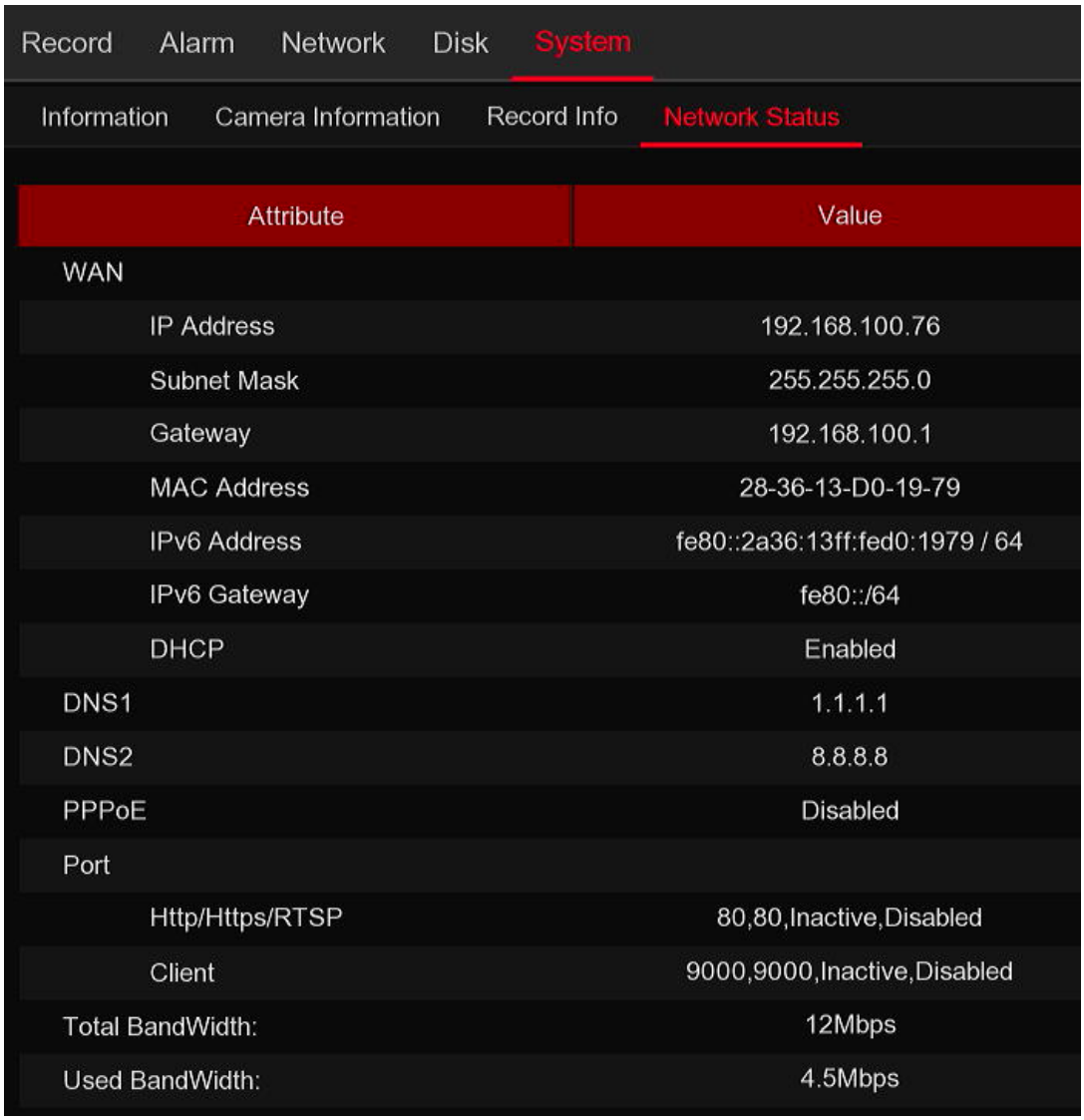
View Camera information for each connected camera such as alias, mainstream and substream recording specifications, motion detection status & privacy zone.

5.6.6.3 Record Information



View recording information for each connected camera such as bitrate, stream type, recording resolution and frame rate (FPS).

5.6.6.4 Network Status



View network information.
Total Band Width: It shows the DVR's total input band width for IP cameras.
Used Band Width: It shows the used band width of IP cameras.

Chapter 6 Search, Playback & Backup

The Search function gives you the ability to search for and play previously recorded videos as well as snapshots that are stored on your DVR's hard drive. You have the choice of playing video that matches your recording schedule, manual recordings or motion events only. The Backup function gives you the ability to save important events (both video and snapshots) to a USB flash drive.

6.1 Using Search Function

Click Search button in the Start Menu to enter search section.

1. Choose the IP cameras you want to restore.
2. Click **Load Default** to restore settings. You will be required to input the Admin password to authentic

1. **Search Options:** the system provides various search & playback methods: General, Events, Sub-periods, Smart & Pictures
2. **Search Date:** search by a date to play back.
3. **Search Type:** the system provides different search types to narrow your search.
4. **Camera Selection:** to choose the Cameras you want to search & play.
5. **Video Playback Controls:** to control the video playback.

Enlarge the video playback to full screen

Rewind, x2, x4, x8 and x16

Slow Play, 1/2, 1/4 and 1/8, 1/16 speed

Play

Pause

Play frame by frame. Click once to play a frame of the video

Stop

Fast Forward, x2, x4, x8 and x16

Digital Zoom: Click to zoom in then click-and-drag on a camera image during playback to zoom in on the selected area. Right-click to return to regular playback.

Video Clip. Quickly save a section of video to a USB flash drive. View more on 6.1.1.1 Video Clip Backup

Save Video Clip.

Volume Control: scroll the slider bar to increase or decrease volume.

Snapshots: to capture a Snapshot image to your USB flash drive. If the video playback is in split-screen view, move the mouse cursor to the Camera you want to capture, and then click the icon to save the Snapshot.

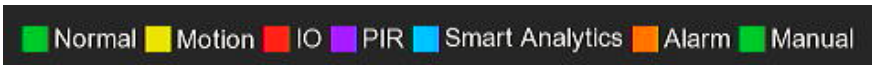
Add default bookmark

Add custom bookmarks

6. **Timeline:** Continuous recordings are shown with colored bars to represent different types of recording (legend shown in the bottom-right corner of the display). Use the timeframe options (

) to view a smaller or larger time period.

Different types of recording shown in different colors:



Continuous Recording in **Green** color;

Motion Recording in **Yellow** color;

I/O Recording in **Red** color;

Motion & I/O Recording in **Orange** color;

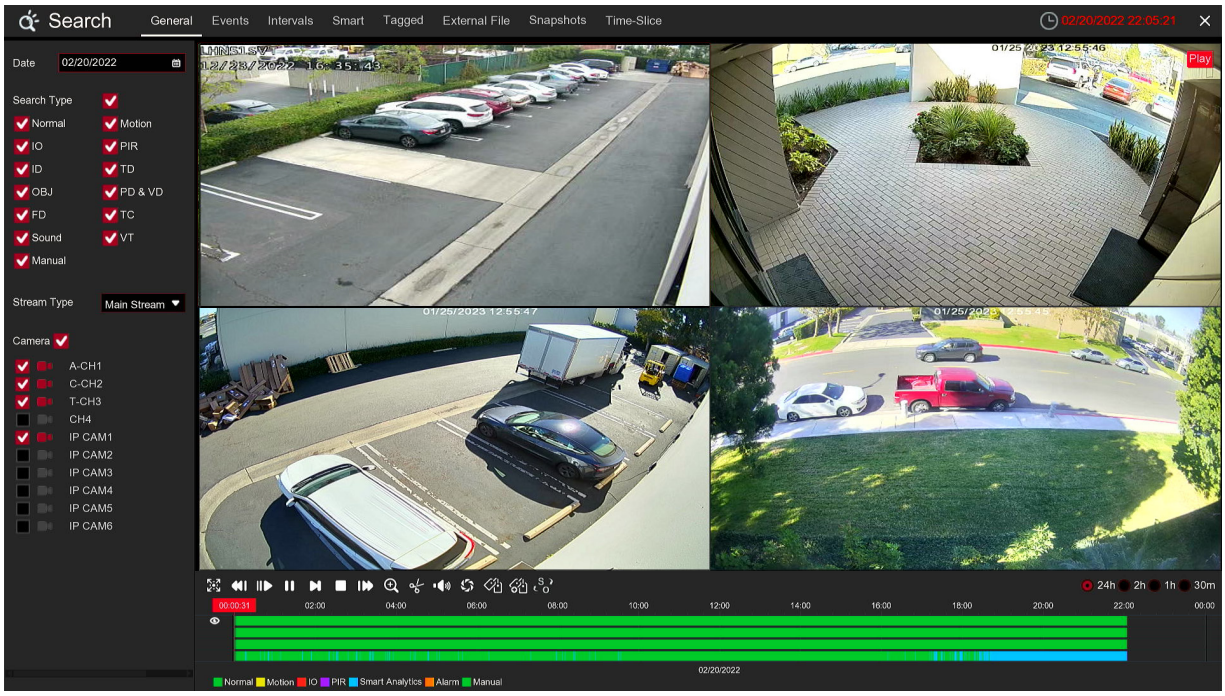
Intelligent Recording in **Blue** color;

PIR Recording in **Purple** color;

7. **Playback Status:** display the video play status.

6.1.1 Search & Play Video in General

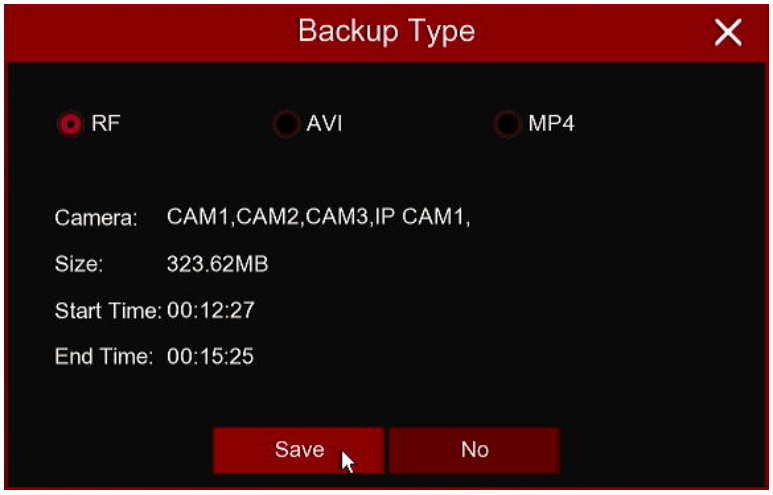
This menu gives an option to search & play recording for a selected date.



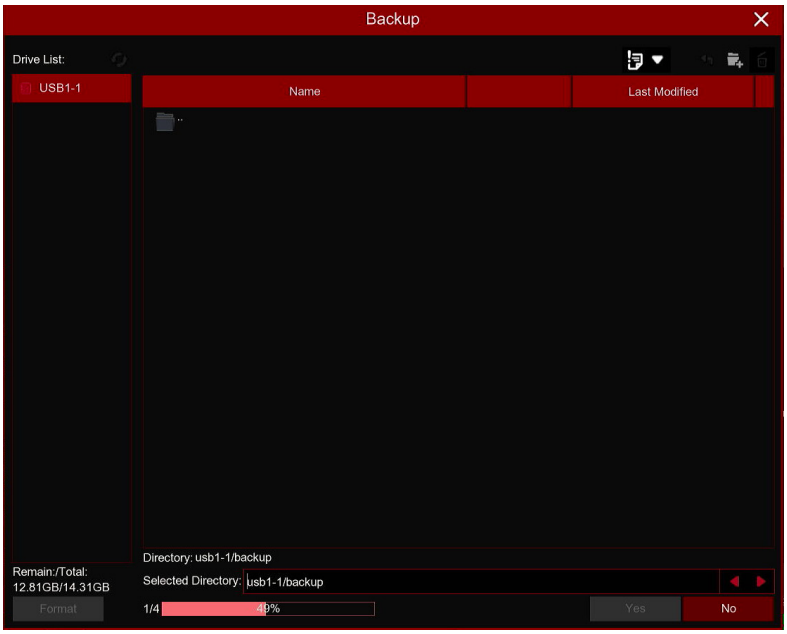
1. Select a date to search for video recording from the calendar.
2. Choose a search type.
3. Check Cameras you would like to search, or check **Camera** to search all connected Cameras.
4. The search result will display on the timeline from 00:00 to 24:00.
5. Click ▶ button to start playback.
6. Control the playback with buttons on **Video Playback Controls**.
7. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.
8. If you want to quickly save a section of video during playing back to a USB flash drive, use the ✂ **Video Clip** backup function.

6.1.1.1 Video Clip Backup

1. Insert your USB flash drive to the DVR.
2. Start a video recording playback.
3. Click icon.
4. Check the Camera(s) you want to make a video clip backup.
5. Move the mouse cursor to the timeline where you want to start the video clip.
6. Press and hold the left button of your mouse, and drag the drag the cursor to the timeline where you want to end the video clip.
7. The icon has been changed to icon, click to save the video clip.
8. Select a file type for your backup files, click **Save** button to save the video clips. Please make sure your USB driver has enough space to save the video clips.



9. The backup drive menu appears. Navigate to the folder you want the backup files to save in.
10. Click **OK** to begin. The progress bar at the bottom of the window shows you the progress of the backup.



6.1.2 Event Search, Playback & Backup

Event search lets you view a list of video recordings with the Camera, start and end time, and recording type conveniently summarized. You can also quickly back up events to a USB flash drive.

To search, play & back up for events:

1. Choose the date & time you want to search.
2. Check the recording types you want to search, or check **Search Type** to choose all.
3. Choose the Cameras you want to search, or check **Camera** to choose all Cameras.
4. Click icon to start search.
5. Events fitting your search criteria are displayed in list form. You can double click the left button of your mouse upon one of the events to play the video immediately.
6. Click icons in the bottom-right corner of the menu to browse between pages of events, or input the page you want to browse.
7. You can switch the view of list form in by clicking below icons which is show at the right bottom corner of the screen:

Thumbnails view. You can view the snapshots of the events.

List view. The events will be displayed in list.

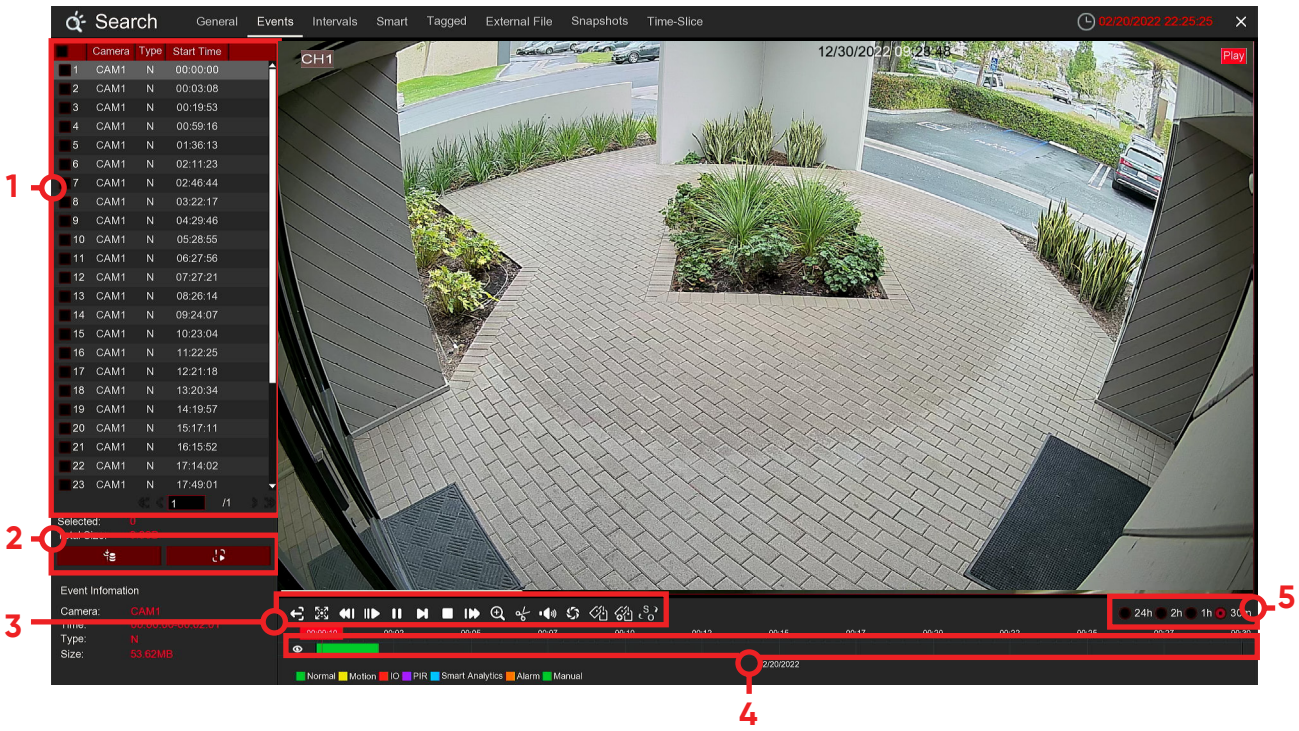
Detailed view. You can view the details of the events.

	Camera	Type	Date	Start Time	End Time	Size	Playback	Lock
1	CAM1	N	02/20/2022	00:00:00	00:02:01	53.62MB		
2	CAM1	N	02/20/2022	00:03:08	00:19:53	432.93MB		
3	CAM1	N	02/20/2022	00:19:53	00:59:16	1015.66MB		
4	CAM1	N	02/20/2022	00:59:16	01:36:13	1015.50MB		
5	CAM1	N	02/20/2022	01:36:13	02:11:23	1015.77MB		
6	CAM1	N	02/20/2022	02:11:23	02:46:44	1015.63MB		
7	CAM1	N	02/20/2022	02:46:44	03:22:17	1015.68MB		
8	CAM1	N	02/20/2022	03:22:17	04:29:46	1015.80MB		
9	CAM1	N	02/20/2022	04:29:46	05:28:55	1015.64MB		
10	CAM1	N	02/20/2022	05:28:55	06:27:56	1015.81MB		
11	CAM1	N	02/20/2022	06:27:56	07:27:21	1015.65MB		
12	CAM1	N	02/20/2022	07:27:21	08:26:14	1015.83MB		

In the detailed view mode, you can lock the video events to keep events from being overwritten in the hard drive. Click the icon to lock or click to unlock the events.

8. When you click the left button of your mouse upon one of the event, system will show the event information on the left bottom corner of the screen.
9. Check the box next the number of the event to select files, or check the box next **Select** to select all events in the page.
10. The number of selected files, total size information will be displayed at the right bottom of the screen.
11. After selecting file, you can click icon to save the video to USB flash drive. Or click icon into event playback control window to play the video

6.1.2.1 Event Playback Control

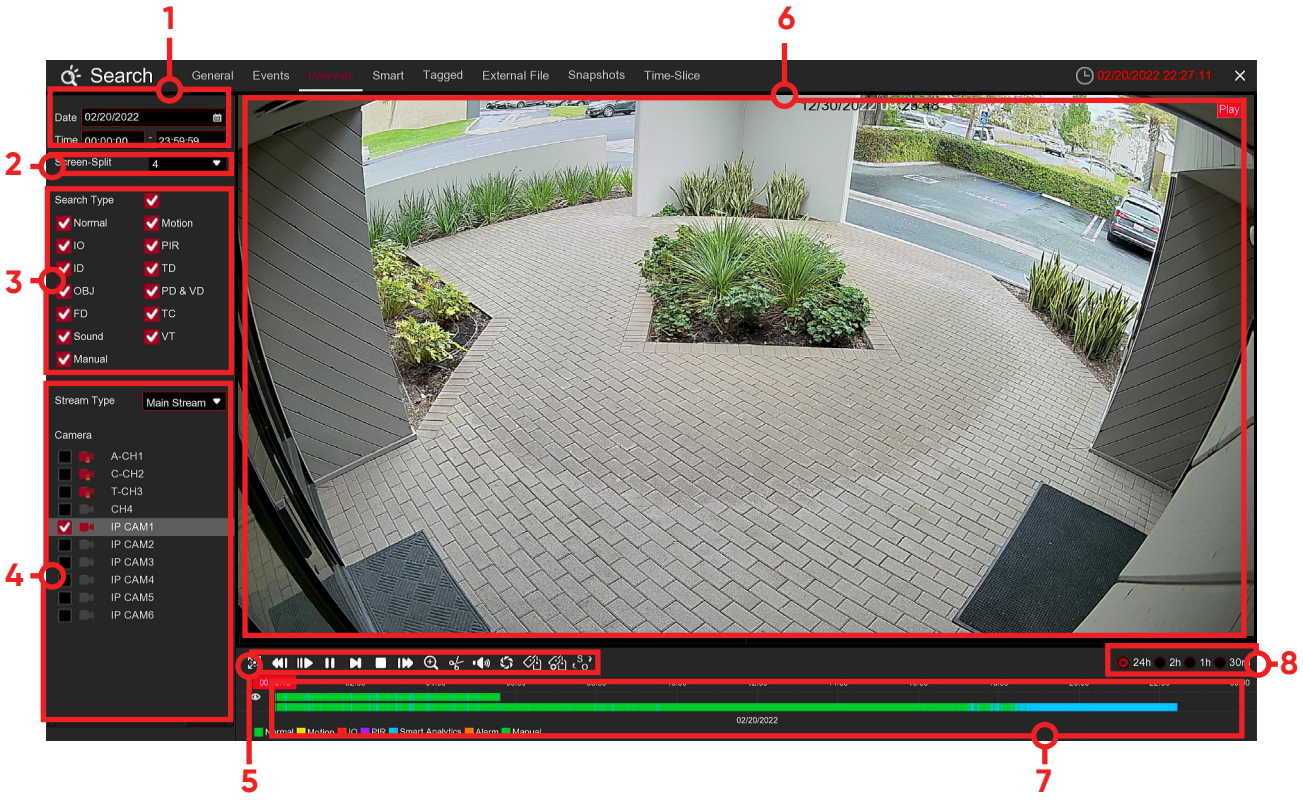


1. Event List, you can select the events here.
2. Click icon to save your selected event videos to USB flash drive. Click icon to play video.
3. Control the playback with buttons on **Video Playback Controls**. You can click icon or click right button of your mouse to exit the playback and return to event search window.

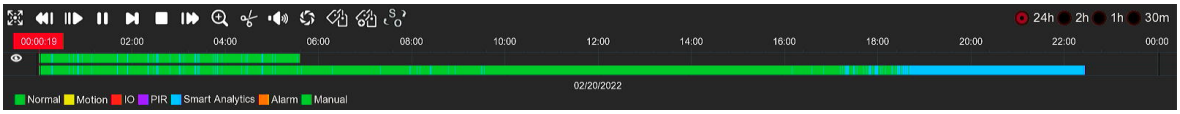
4. The event you are playing now will be displayed on the timeline.
5. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.

6.1.3 Sub-periods Playback

Sub-periods playback allows you to play multiple normal recordings and motion events simultaneously from a single Camera. With normal and event recordings, the video is divided evenly depending on the split-screen mode that has been selected. For example, if the video is an hour long and you have selected Split-screens x 4, each split-screen will play for 15 minutes.



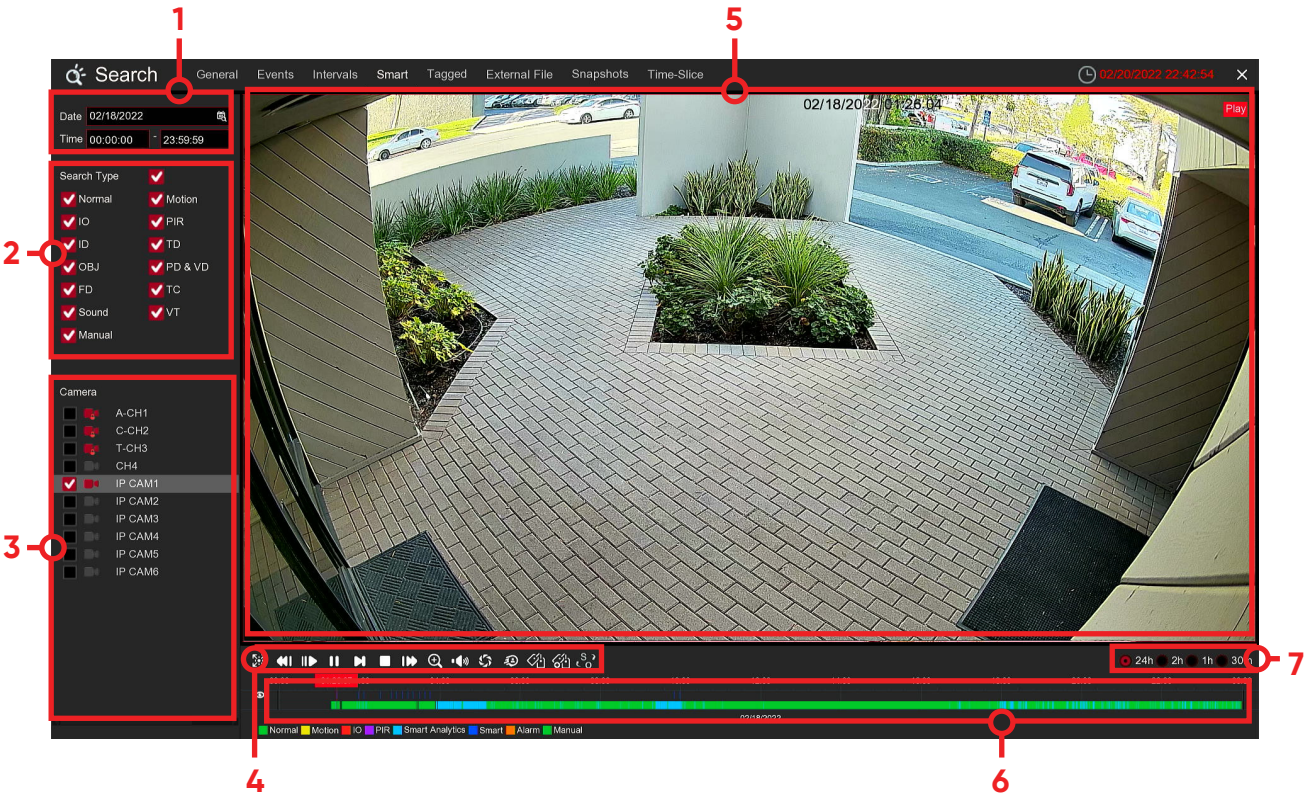
To search & play video in sub-periods:
1. Choose the date & time you want to search.
2. Choose the split-screens you want the videos to be played in.
3. Check the recording types you want to search, or check **Search Type** to choose all.
4. Choose the Cameras you want to search. Please note that this function only supports to search & play one Camera at a time.
5. Click the play button ▶ to start playing. Control the playback with buttons on **Video Playback Controls.**
6. Videos are being played in split-screens.
7. Click the left button of your mouse upon a particular split-screen, the time period of the video split-screen will be displayed on the timeline. The color bar on the top of the timeline indicates the time span of the video split-screen you have clicked. The color bar on the bottom of the timeline indicates the time span for the whole videos you have searched.



8. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.

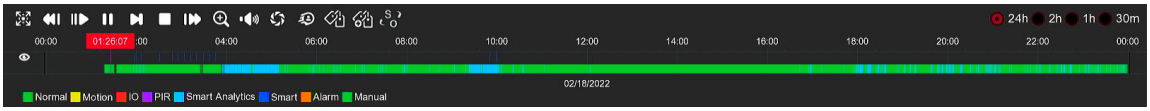
6.1.4 Smart Search & Playback

Smart mode allows you to easily search & play the motion events in one or more specific areas of the Camera.



To start a smart search & playback:

1. Choose the date & time you want to search.
2. Check the recording types you want to search, or check **Search Type** to choose all.
3. Choose the Camera you want to search, the motion recording in the selected Camera will be searched automatically. Please note that this function only supports to search & play one Camera at a time.
4. Click the play button ▶ on the to start playing. Control the playback with buttons on **Video Playback Controls**.
5. Videos are being played in the screen.
6. The color bar on the top of the timeline indicates the time span of the motion recordings you have searched. The color bar on the bottom of the timeline indicates the complete time span for the whole recordings you have specified.

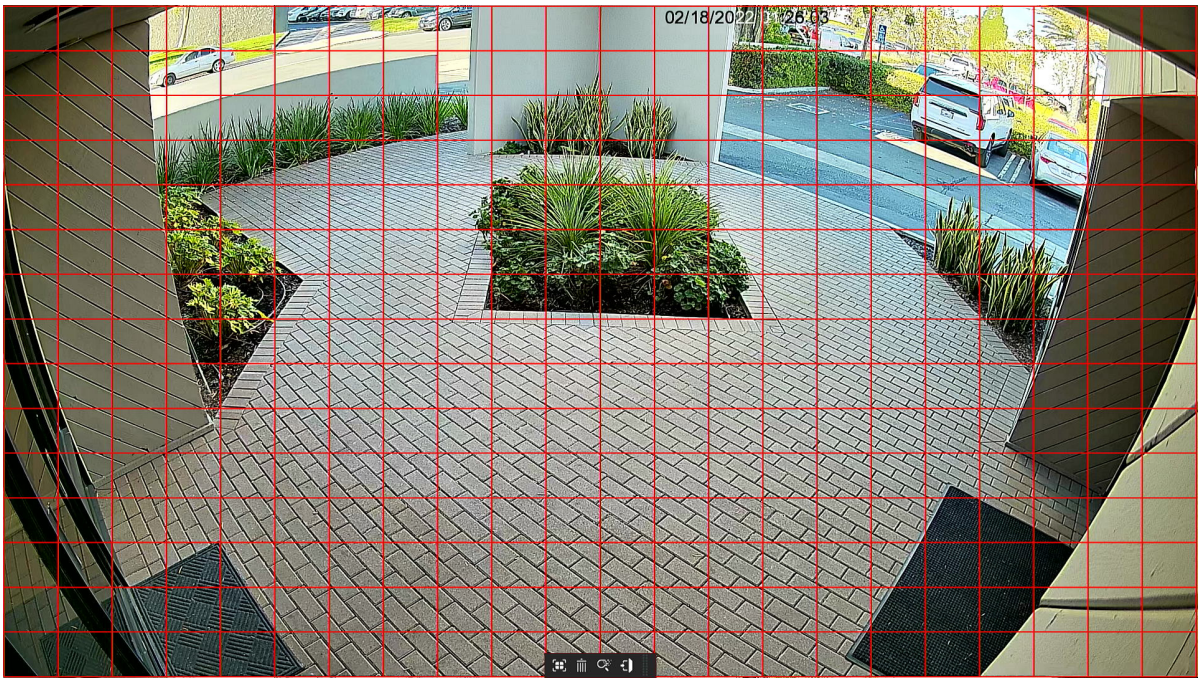


7. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.

6.1.4.1 Smart Search Area

The smart search function searches the motion recordings in the whole area of Camera by default. You can specify one or more particular areas to narrow your search.

Click this icon on **Video Playback Controls**, the camera will be shown in full screen and the Smart controls bar will be visible.



You can click and hold the edge of the controls bar to reposition it.

Smart Controls Bar

Click this to define a full screen detection area

Click this to delete all areas created.

Click this to search and play video based on the areas defined.

Click this to return to the playback interface.

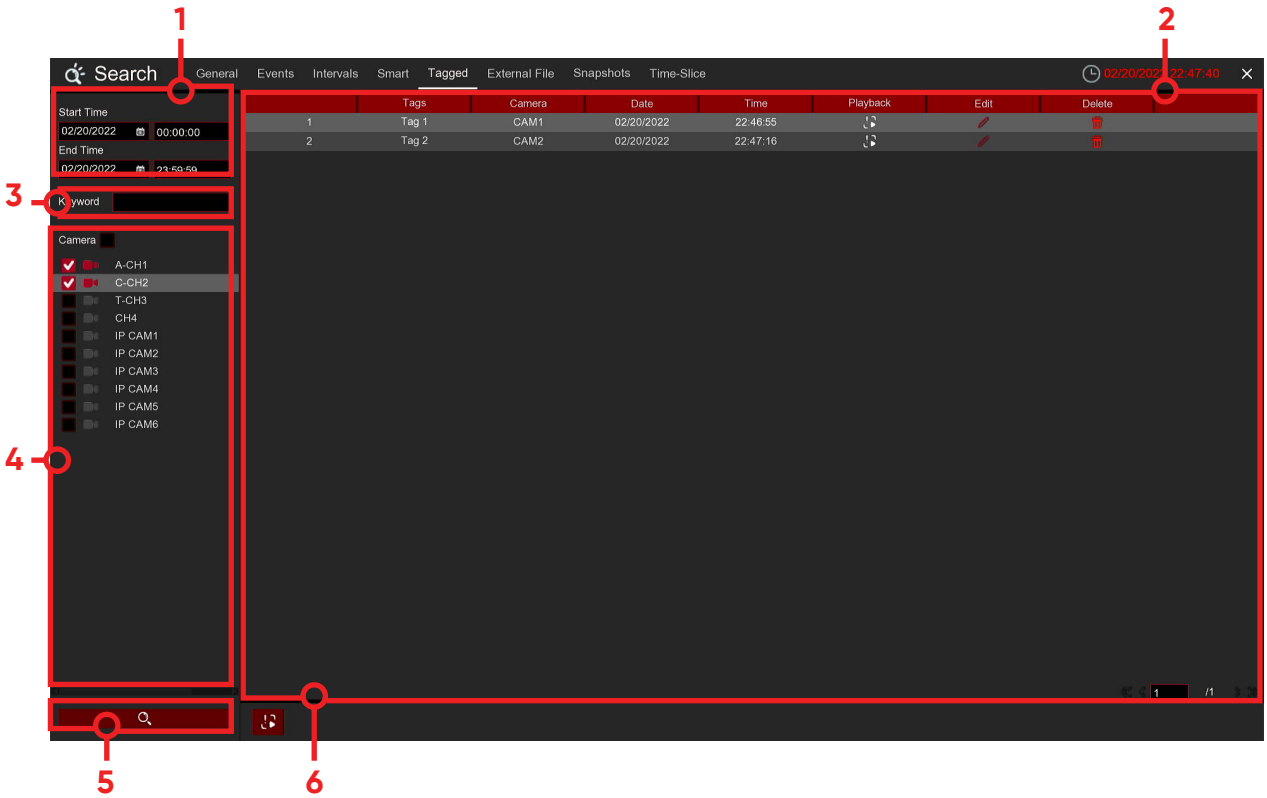
To define one or more specific areas, please do the following:

1. Click and drag to select the area that you want to define. Multiple areas can be defined. You can also use the same action to remove sections of the defined area or to delete it entirely. When finished, click the search button to play video based on the areas defined.

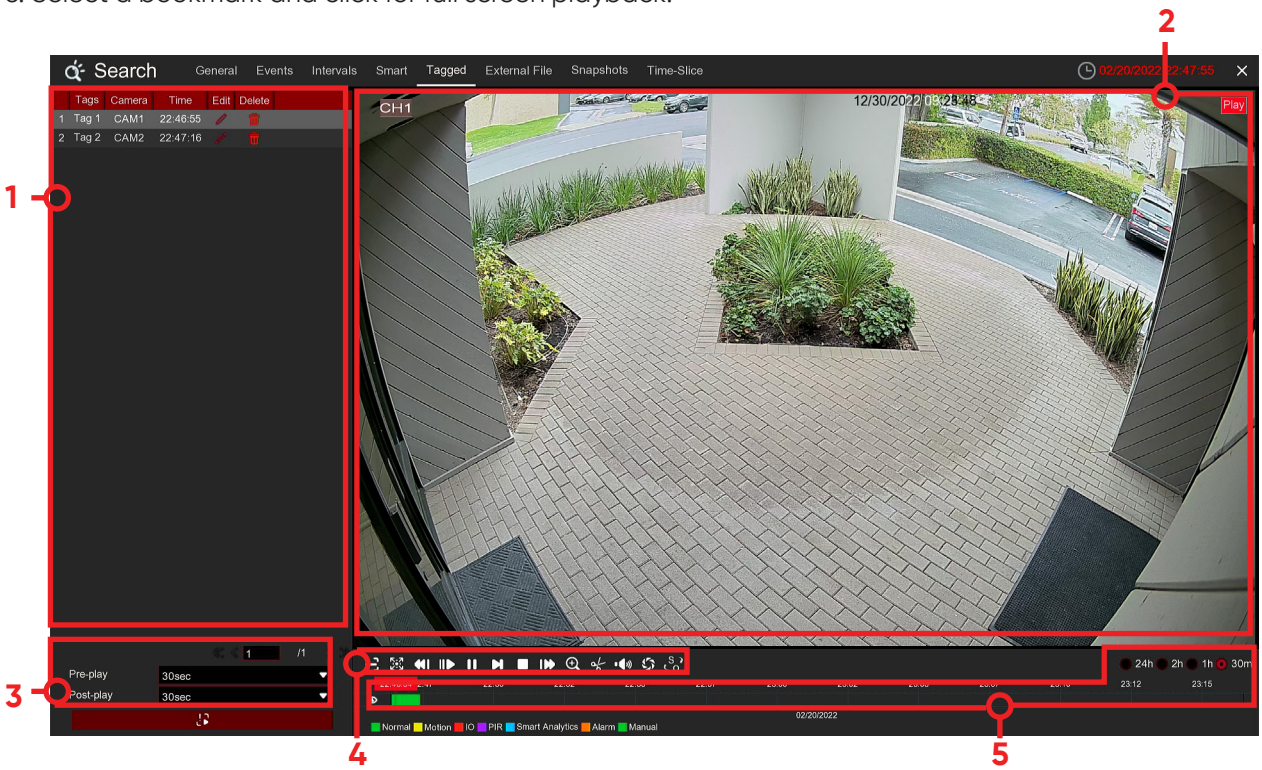
2. You'll be returned back to the playback interface. Segments matching your search criteria will be shown on the timeline in blue color.

6.1.5 TAG Playback

In tag playback, you can find all added tags. And perform playback, editing and deletion operations. Click Edit to modify the label name, and click Delete to delete the label.

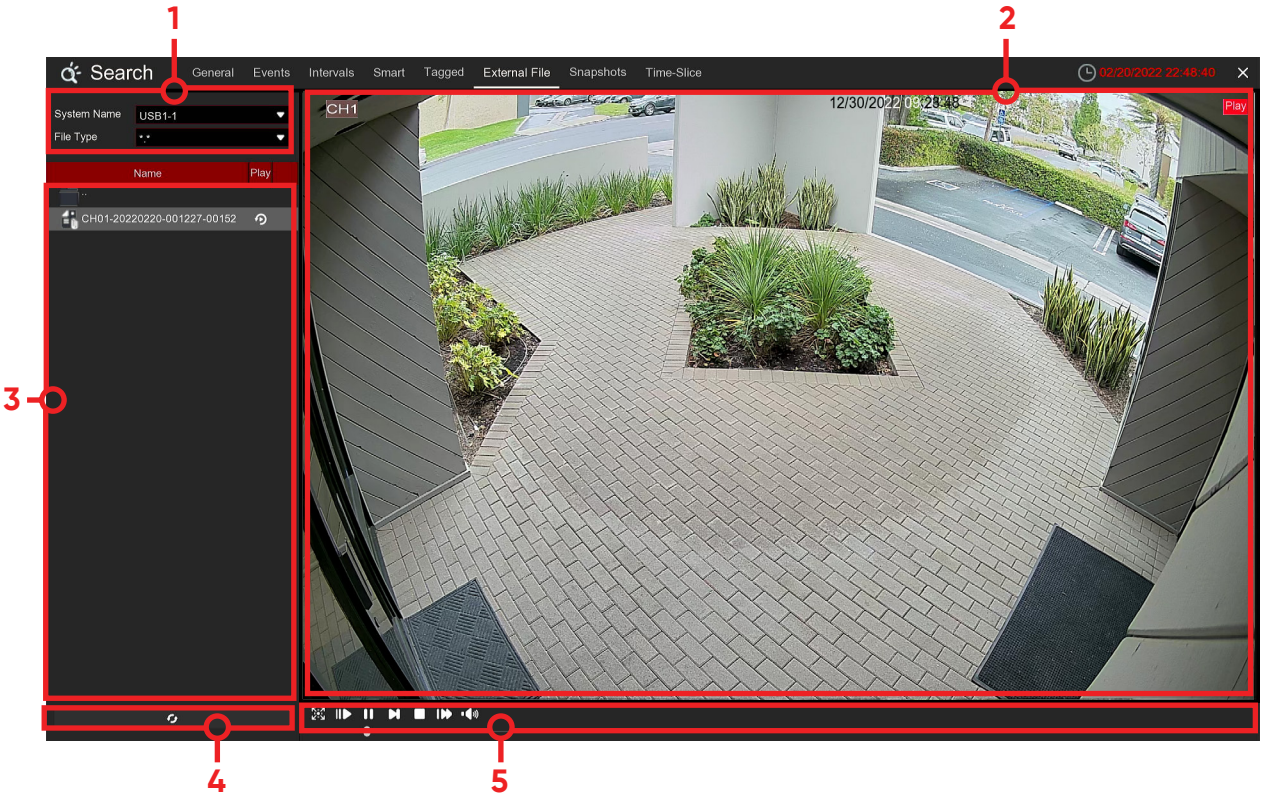


1. Select the start and end time of the search.
2. The results of qualified search elements will be displayed in the form of list.
3. Keyword filtering: you can filter the search results by keyword.
4. Select Cameras and click **Camera** to select all Cameras.
5. Click to search.
6. Select a bookmark and click for full screen playback.



1. Playlist, where you can select video.
2. Play window.
3. Select this node as the center, and the video length will increase forward or backward.
4. Use the buttons on “video playback controls” to control playback. Click the icon or right-click to exit playback and return to the slice playback window.
5. The played event is displayed on the timeline. Use the time range option (24h 2h 1h 30m) to view smaller or larger time periods.

6.1.6 External File Playback



1. Select USB flash disk and file code type
2. Play window
3. Select the file path to play
4. Click refresh
5. Use the buttons on “video playback controls” to control playback.

6.1.7 Picture Search & View

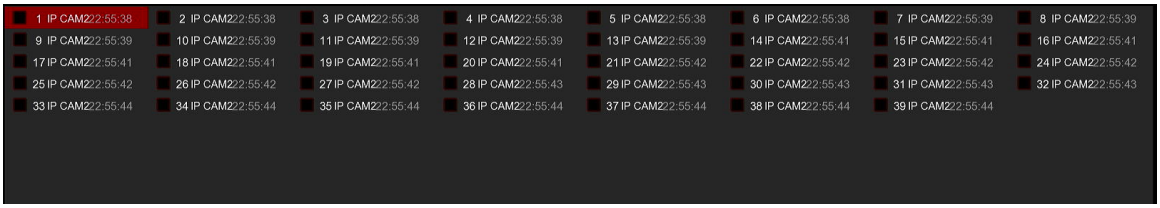
This function can be used to search, play and copy snapshots to a USB flash drive.

To search, play & back up pictures:

1. Choose the date & time you want to search.
2. Check the picture Snapshot types you want to search, or check **Search Type** to choose all.
3. Choose the Cameras you want to search, or check **Camera** to choose all Cameras.
4. Click button to start search.
5. Pictures fitting your search criteria are displayed in list form. You can double click one of the pictures to get a larger view.
6. Click icons in the bottom-right corner of the menu to browse between pages of pictures, or input the page you want to browse.
7. You can switch the view of list form in by clicking below icons which is show at the right bottom corner of the screen:

Thumbnails view. You can view the snapshots of the events.

List view. The events will be displayed in list.

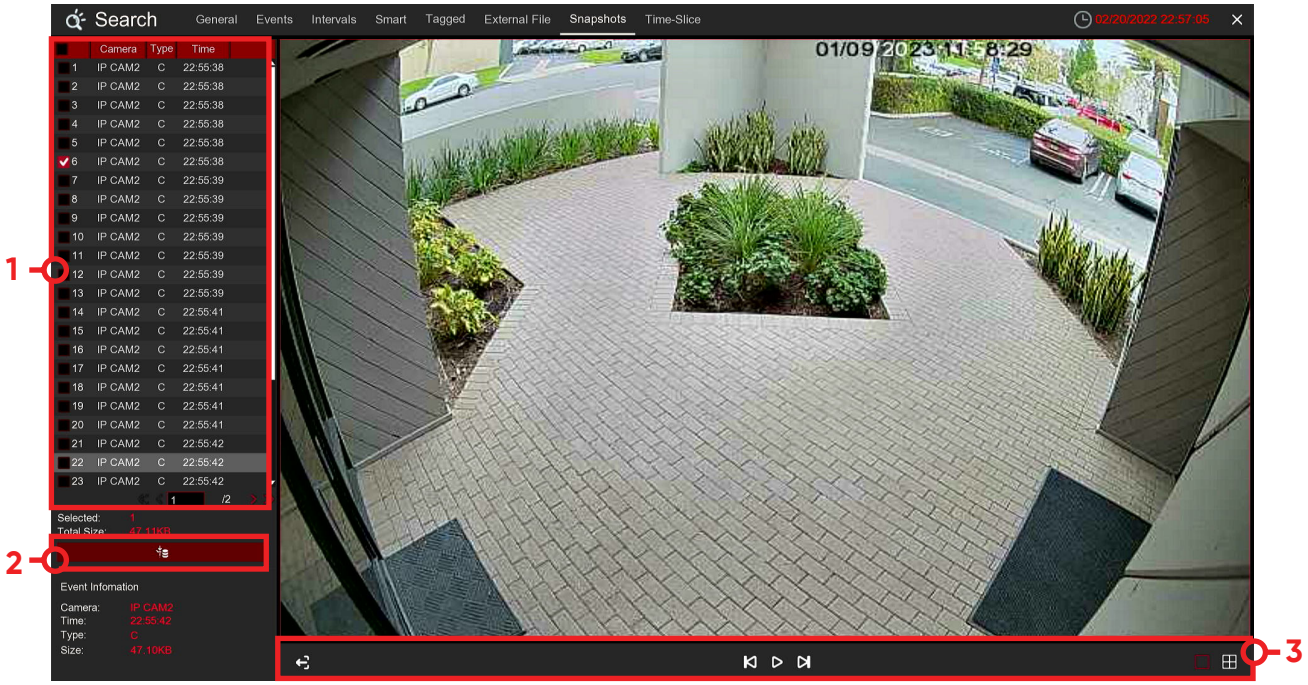


Detailed view. You can view the details of the events.

	Camera	Type	Date	Time	Size	Playback
1	IP CAM2	C	02/20/2022	22:55:38	47.11KB	
2	IP CAM2	C	02/20/2022	22:55:38	47.11KB	
3	IP CAM2	C	02/20/2022	22:55:38	47.11KB	
4	IP CAM2	C	02/20/2022	22:55:38	47.11KB	
5	IP CAM2	C	02/20/2022	22:55:38	47.11KB	
6	IP CAM2	C	02/20/2022	22:55:38	47.11KB	

8. When you click the left button of your mouse upon one of the pictures, system will show the picture information on the left bottom corner of the screen.
9. Check the box next the number of the event to select files, or check the box next **Select** to select all pictures in the page.
10. The number of selected files, total size information will be displayed at the right bottom of the screen.
11. After selecting file, you can click button to save the pictures to USB flash drive. Or click button to go into picture preview control window.

6.1.7.1 Picture Preview Control

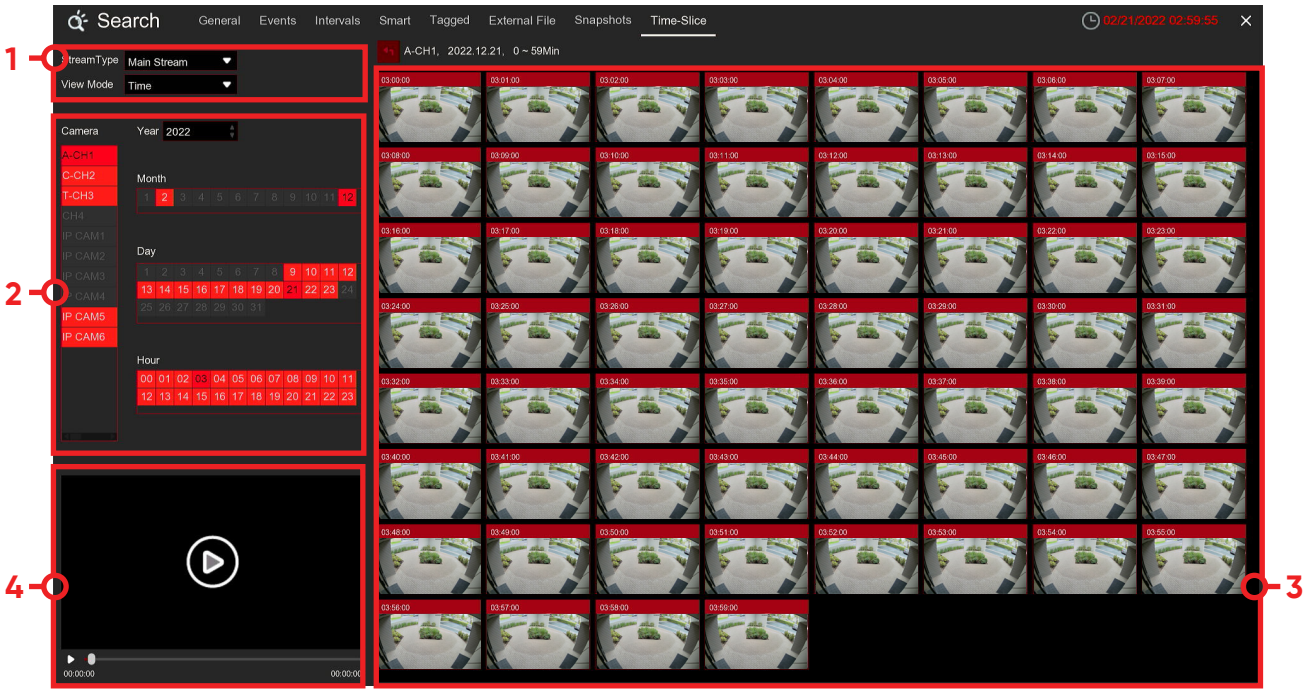


1. Picture List, you can select the pictures here.
2. Click button to save your selected pictures to a USB flash drive. Click button to view the pictures in slideshow.
3. Press button to exit preview control window and go back to picture search window.
Press button to pause, press to resume slideshow.
Press button to display previous snapshot or group of snapshots, press to display the next snapshot or group of snapshots.

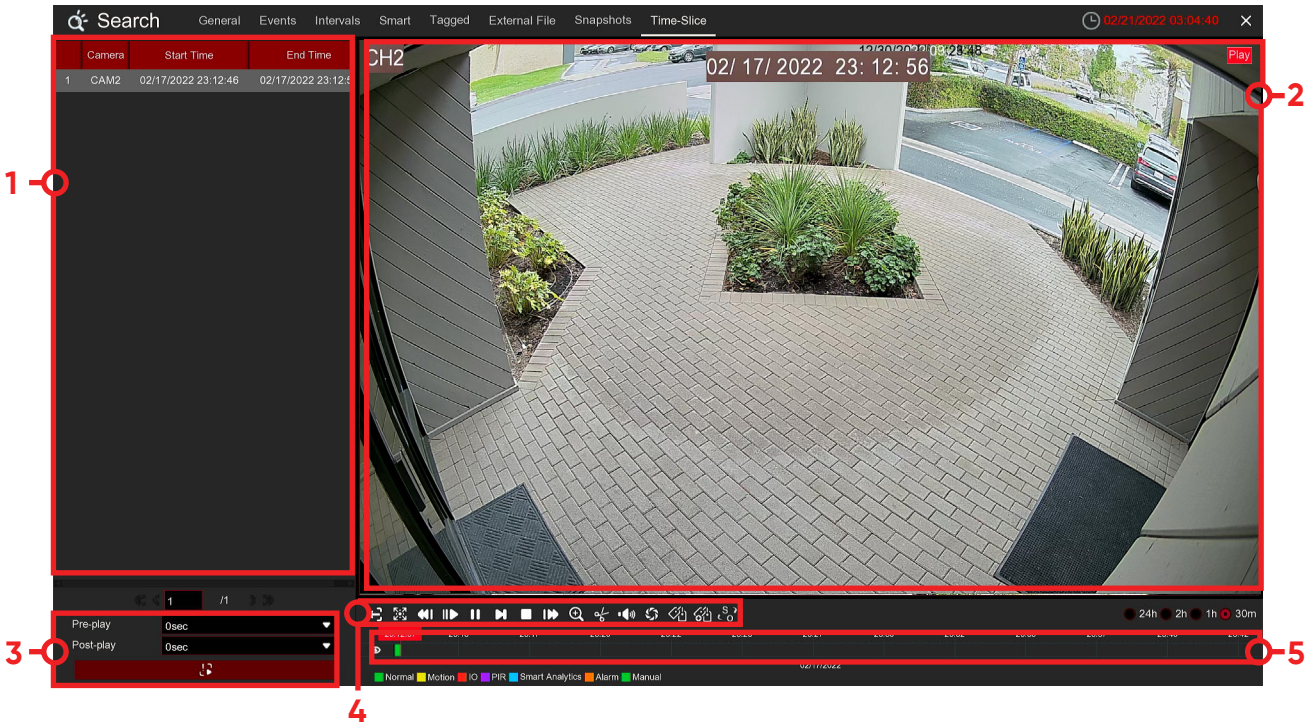
Click button to view a single snapshot at a time, click button to view four snapshots at a time, press buttons to view nine snapshots at a time.

6.1.8 SPLIT PLAYBACK

Video playback allows you to see 60 minutes of video clips within an hour on a certain day, a certain month, a certain year, with 1 minute for each clip.



1. Select Camera and stream
2. Select the Camera and date to play
3. The results that meet the search criteria are displayed in the form of a list. You can use the left mouse button on one of the events to play the video in a small window.
4. Small window play preview. Click the enlarge button in the upper right corner of the small window to enter full screen play mode



1. Play list, where you can select video.
2. Play window.
3. Select the node as the center to increase the video length forward or backward.
4. Use the buttons on “video playback controls” to control playback. Click the icon or right-click to exit playback and return to the split playback window.
5. The events that play are displayed on the timeline. Use the time range option (24h 2h 1h 30m) to view smaller or larger time periods.

Chapter 7 Remote Access via Web Client

Use the Web Client to remotely access your DVR at any time via a PC. Before you access the Web Client, you need to ensure that the internet settings of the DVR are configured properly.

7.1 Basic System Environment Requirements

The minimum requirements for hardware and OS required to run Web Client are given as below.

Item	Minimum	Recommended
CPU	Intel® Core™ i5 CPU	Intel® Core™ i5 CPU or higher
RAM4	G or more	8G or more
Hard Drive	500G or more	1000G or more
Display RAM	2G or more	4G or more
Display Resolution	1280*1024	1920*1080
OS	Windows 7 or above Mac OS X® 10.9 or above	
DirectX	DirectX 11	
Direct3D	Acceleration Function	
Ethernet Adapter	10/100/1000M Ethernet Adapter	
IE	Microsoft Internet Explorer Ver. 11,10,9,8 or above	
Mozilla Firefox	V51 or below. It doesn't support V52 or above version.	
Google Chrome	V44 or below. It doesn't support V45 or above version.	
Mac Safari	5.1 or above	

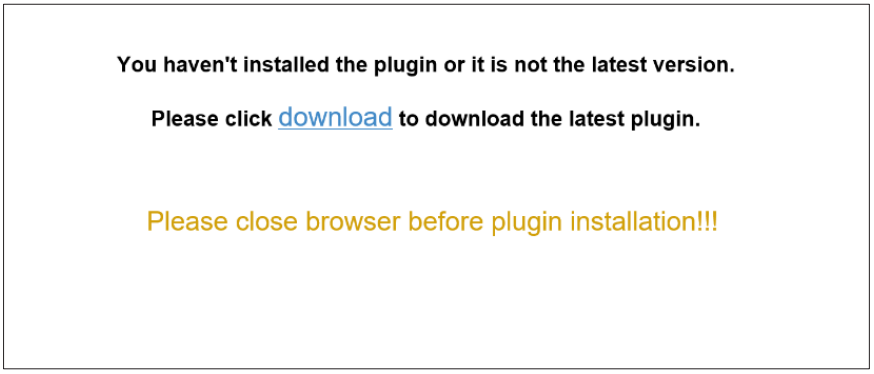
7.2 Web Plugin Download and Installation

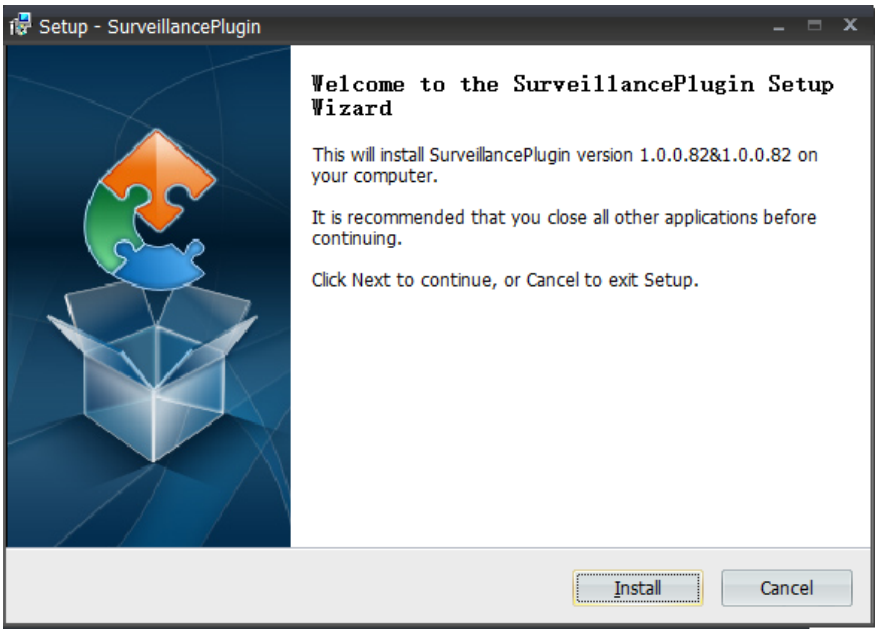
To access the Web Client, do the following:

For IE/Chrome/Firefox:

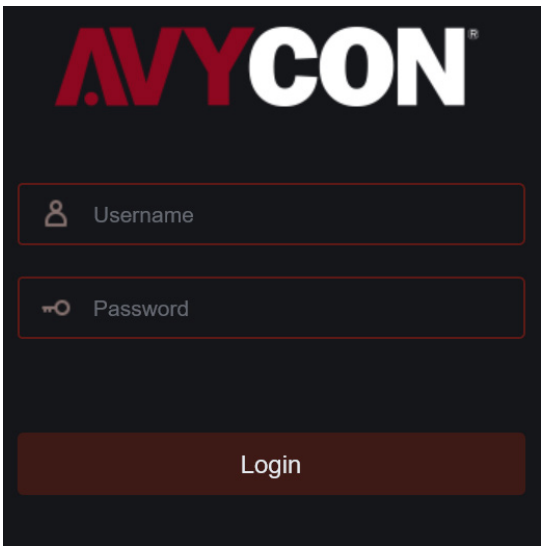
1. Launch the explorer on your PC and enter the DVR IP address or DDNS domain name (Host Name) you have set on DVR in the URL box.

2. For the first time you run the web client, system will require to install the web client plugin. Click **download** to download the plugin and install to your computer.



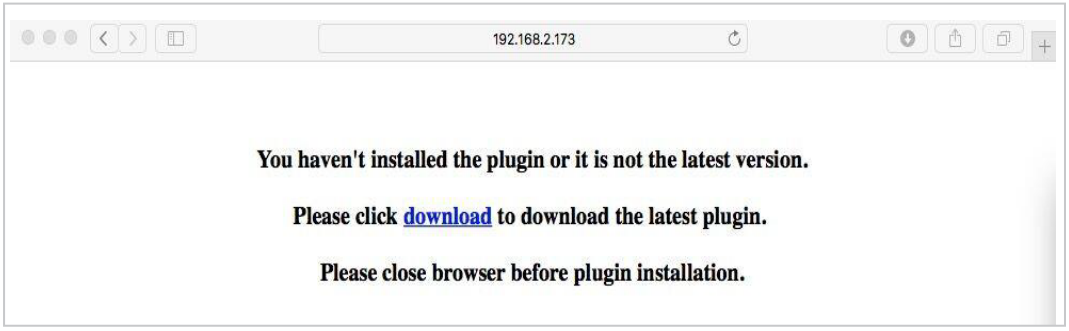


3. After installing the plug-in, close & launch again your browser and repeat step 1 to open the login page. Input your user name and password to login the web client.



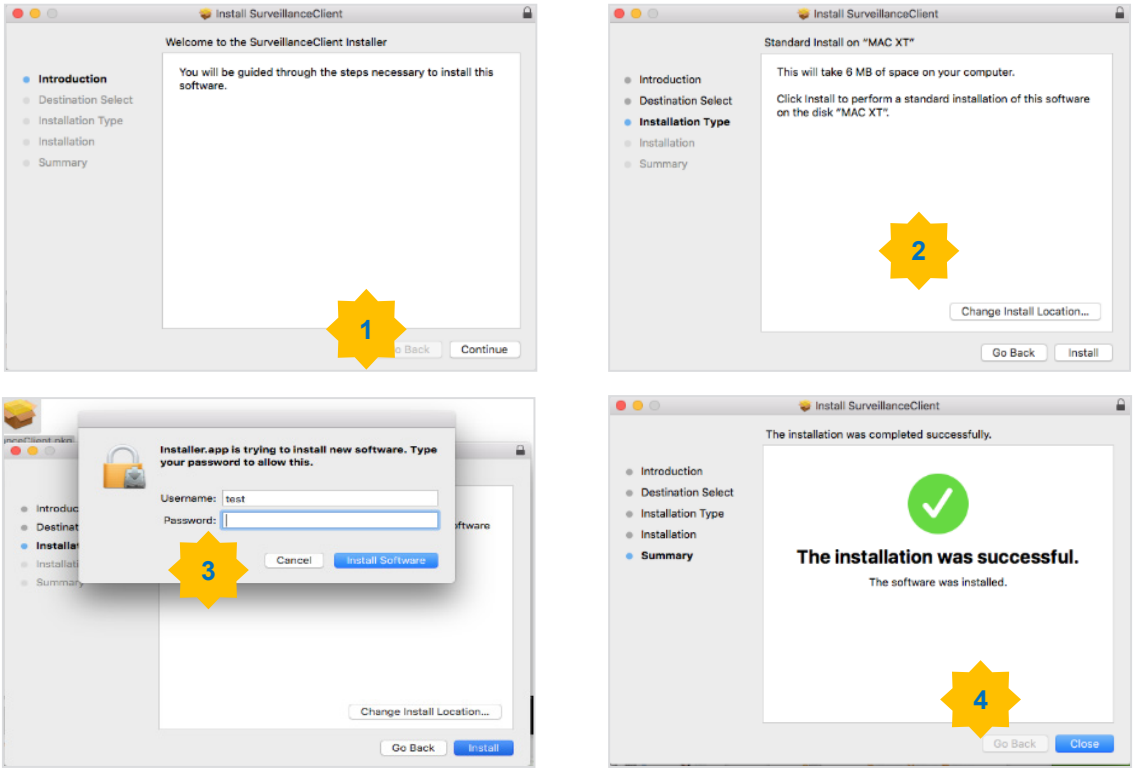
For Mac Safari:

1. Launch the Safari in your Mac, and enter the DVR IP address or DDNS domain name (Host Name) you have set on DVR in the URL box.



2. Download the plug-in "SurveillanceClient.dmg", locate the downloaded file and double click it.

3. Click on “Continue” --> “Install”. Enter user name and password for Mac computer, Click on “Install Software” --> “Close” to finish installation.



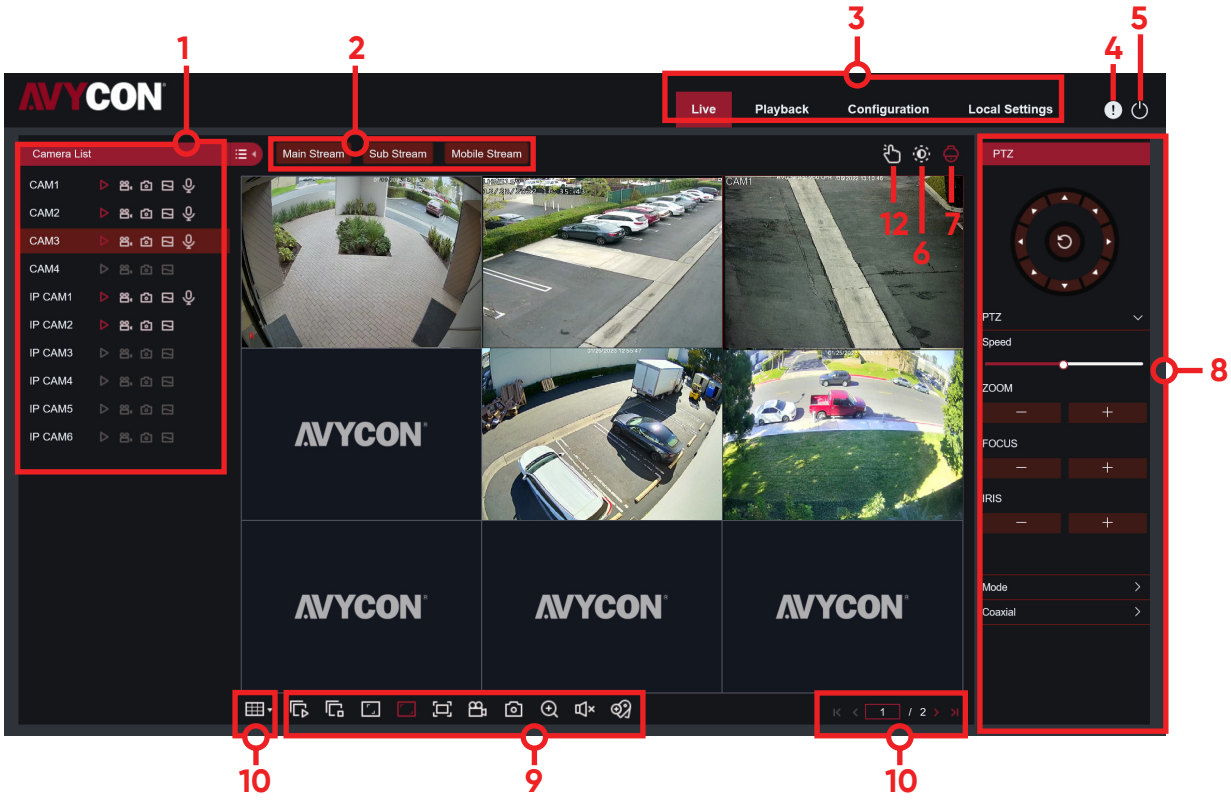
4. Close Safari and open again to repeat step 1 to open the Web Client login page.

7.3 Web Client Manager

The web client supports to fully control the DVR with administrator account. Please make sure to protect your user name & password for preventing illegal login.

7.3.1 Live Interface

This is the first screen that opens after you have logged in to the Web Client. Here you can open or close live preview, record video to local computer manually, take snapshots of the screens, PTZ control, color adjustment, etc.



1. Camera List: Open the Camera list for quick camera function
Click button to display and hide the Camera List.

Turn the Live video stream on/off. The button is in red color if the live video stream is on.

Manual Recording buttons. Click to start manually recording live stream video. Click again to stop recording. Manual recordings are saved to your computer. While in recording, the button is in red color.

Manual snapshot button. Click to save a snapshot of the current live display to your computer.

Bitrate button. Set camera to use mainstream, substream or mobile stream video settings. Mobile stream is available for IP Cameras only.

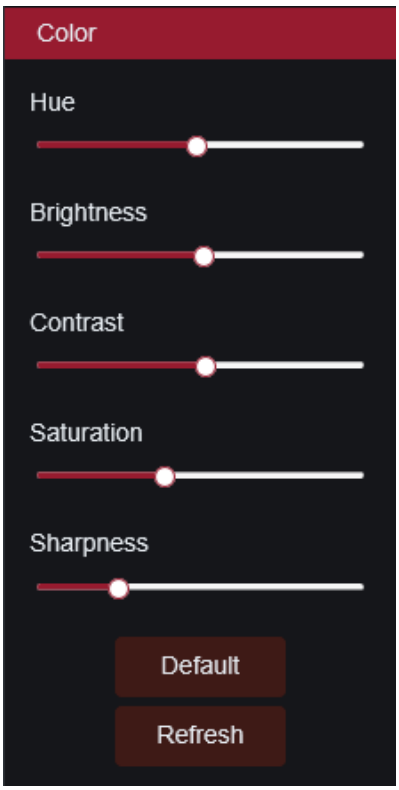
2. Live Video Stream Options:
Mainstream: View all live videos using high-quality mainstream video settings.
Substream: View all live videos using middle-quality substream video settings.
Mobile Stream: View all live video using lower-quality mobile stream video settings to conserve bandwidth. Available for IP Cameras only.

3. Main Menus:
Live: View live video from cameras.
Playback: View recorded video which is saved in DVR's HDD.
Remote Setting: Access functions of the DVR setting menus.
Local Settings: Set download locations for recordings and snapshots taken using Web Client, and choose file type for video files.

4. Information: Hover over to see system details.

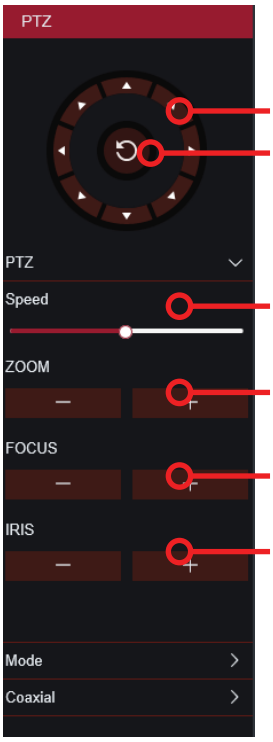
5. Exit.

6. Color Controls. Click to display or hide the color controls.



7. PTZ Controls: Click to display or hide the PTZ controls for using PTZ cameras. **PTZ Controls**

8. PTZ Controls



Directional Arrows: Click to move the PTZ camera

Automatic line scan.

PTZ Speed: Click to set the speed of the PTZ camera's movement.

Zoom: Click –/+ to zoom in or out.

Focus: Click –/+ to adjust focus.

Iris: Click –/+ to adjust iris.

9. Live View Control Buttons:

Open the images on Live window.

Close all the Live Cameras

Original Proportions: Shows live video at the original proportions

Stretch: Stretch live video to fit the full area for each Camera on screen

To enlarge the web client to full screen

Manual Recording: Click to start manually recording for all displayed Cameras. Click again to stop recording. Manual recordings are saved to your computer.

Snapshot: Click to save snapshots of all current displayed Cameras to your computer.

Digital Zoom: Click upon on a live image, then click-and-drag over an area of the live image to enlarge. Right-click to return to the normal display.

Volume Control.

White light control, which can manually turn on the white light warning (supported by some models).

Alarm bell control, can be manually activated alarm bell warning (some models support).

Click add custom label. The label can be found in the playback (6.1.5 Tag Playback).

10. Navigation: Shows current page number for the Cameras shown on screen. Use the arrow keys to switch between pages.

11. Page View: Click to select how many Cameras appear on screen at a time.

12. Manual trigger alarm: the external alarm of each Camera can be triggered manually.

7.3.2 Playback

You can search & play recording videos stored in the HDD inside the DVR, and download the videos to your computer.

To search recordings:
1. Click **Playback** in the top-right corner of the window.
2. Select a day on the calendar to search for recordings from. Days with recordings appear with a red underline.
3. Select the recording type to search for from the dropdown next to **Type**, or select **All** to search for all recordings.
4. To choose the video stream you want to search & play. If you want to play Substream recordings, please make sure you had set the DVR to record with Dualstream at 5.2.2.1 Record.
5. Check the Cameras you would like to search for recordings from. Check **Synchronous playback** to play all Cameras at once.
6. Click **Search**.
7. Recordings that fit your search will be displayed in the timeline. Click a section of video where you would like to begin playback and click the play button.

7.3.2.1 Playback Control Buttons

Play the recordings

Pause

Stop

Go Forward One Frame: Move frame-by-frame through playback. Only available when the **Synchronous playback** option is not checked.

Click upon one of the Cameras which is being played and then click record button to record current video to your computer. Click again to stop recording.

Click upon one of the Cameras which is being played and then click Snapshot button to take a Snapshot and save to your computer.

Opens the Download menu, which allows you to download several video recordings at once.

		Start Time	End Time	Status	File Size
1	☐	2022-02-18 01:18:05	2022-02-18 01:24:09	Not Downloaded	16.03M
2	☐	2022-02-18 01:24:07	2022-02-18 01:24:40	Not Downloaded	1.62M
3	☐	2022-02-18 01:24:38	2022-02-18 01:30:59	Not Downloaded	15.61M
4	☐	2022-02-18 01:33:58	2022-02-18 01:55:56	Not Downloaded	53.30M
5	☐	2022-02-18 01:55:54	2022-02-18 01:56:25	Not Downloaded	1.57M
6	☐	2022-02-18 01:56:22	2022-02-18 02:00:24	Not Downloaded	11.47M
7	☐	2022-02-18 02:00:21	2022-02-18 02:00:55	Not Downloaded	1.58M
8	☐	2022-02-18 02:00:52	2022-02-18 02:04:05	Not Downloaded	8.44M
9	☐	2022-02-18 02:04:02	2022-02-18 02:04:38	Not Downloaded	1.64M
10	☐	2022-02-18 02:04:33	2022-02-18 02:05:50	Not Downloaded	3.53M
11	☐	2022-02-18 02:05:48	2022-02-18 02:06:23	Not Downloaded	1.66M
12	☐	2022-02-18 02:06:21	2022-02-18 02:09:51	Not Downloaded	9.48M
13	☐	2022-02-18 02:09:47	2022-02-18 02:10:22	Not Downloaded	2.05M
14	☐	2022-02-18 02:10:17	2022-02-18 03:25:51	Not Downloaded	195.65M

14 Row / Page 1 / 23Page

Start Download Stop Download

Choose the files you want to download, press **Start Download** button to begin, you will see the download status. Press **Stop Download** button to stop.

Playback Speed: Click to choose the playing speed.

Play All Cameras: Click to play all Cameras you have chosen to searched. Only available when the **Synchronous playback** option is not checked.

Stop All Cameras: Click to stop playing all Cameras. Only available when the **Synchronous playback** option is not checked.

Digital Zoom: Click upon on a playing video, then click-and-drag over an area of the video to enlarge. Right-click to return to the normal display.

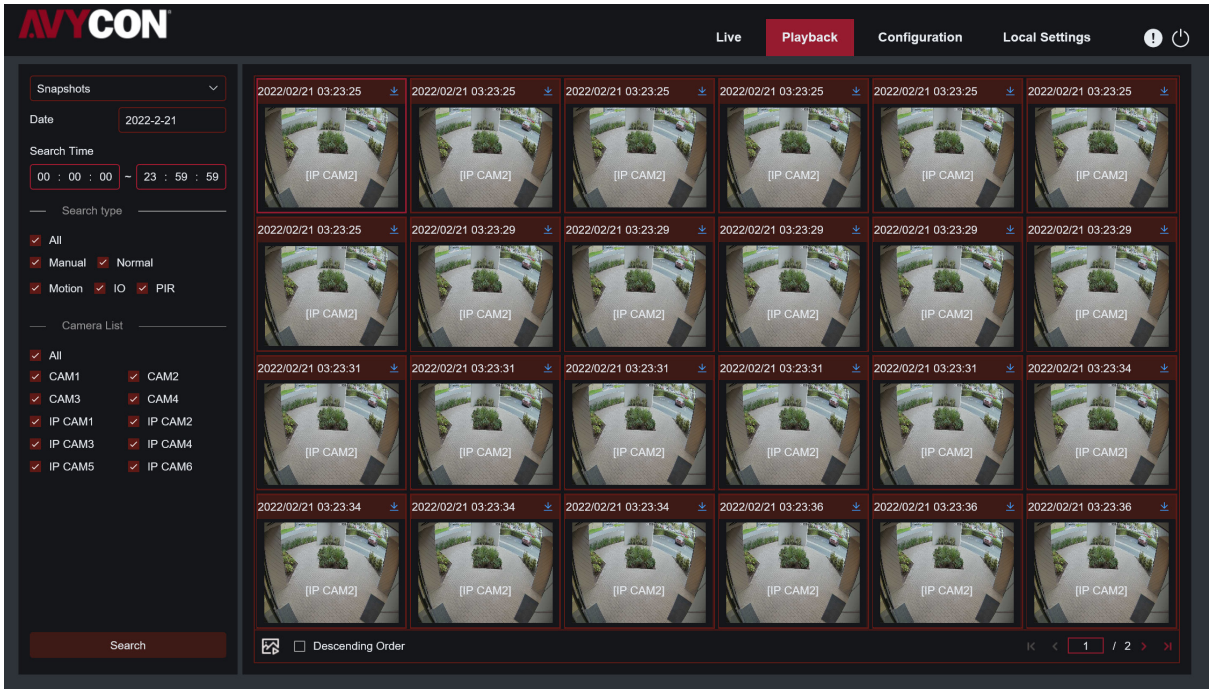
Original Proportions: Shows the playing video at the original proportions

Stretch: Stretch the playing video to fit the full area for each Camera on screen.

To enlarge the web client to full screen.

7.3.2.2 Picture playback

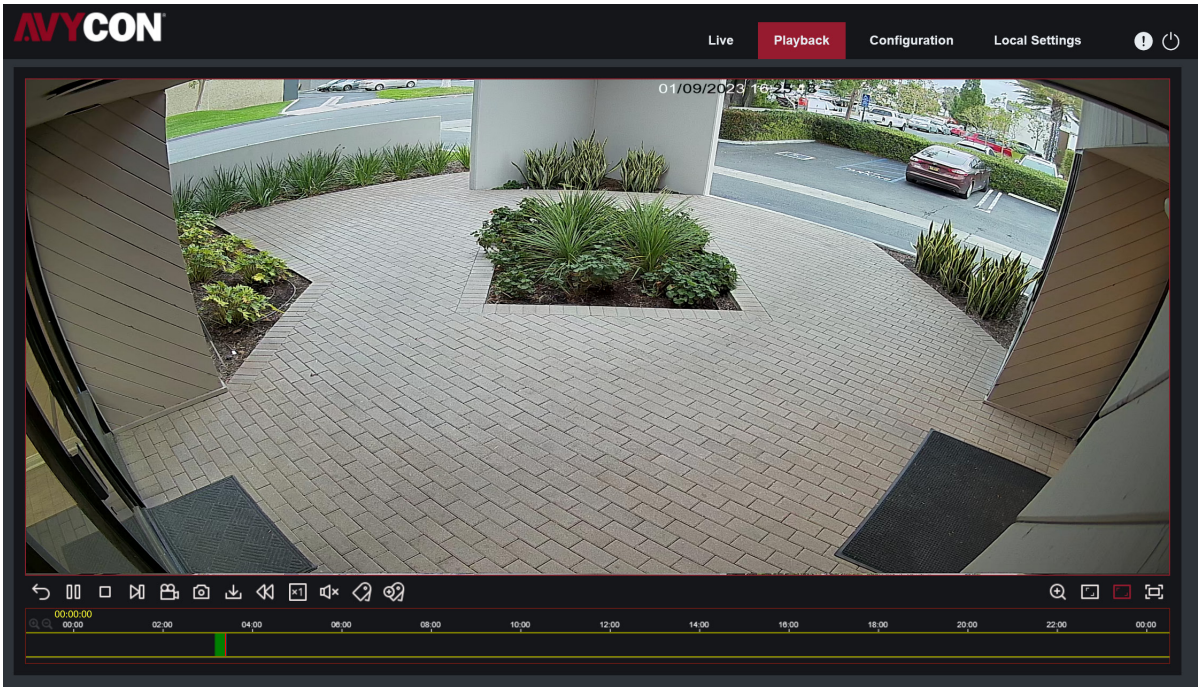
After setting the Snapshot in 5.2.3, you can search the Snapshotd image here.



Search snapshot:

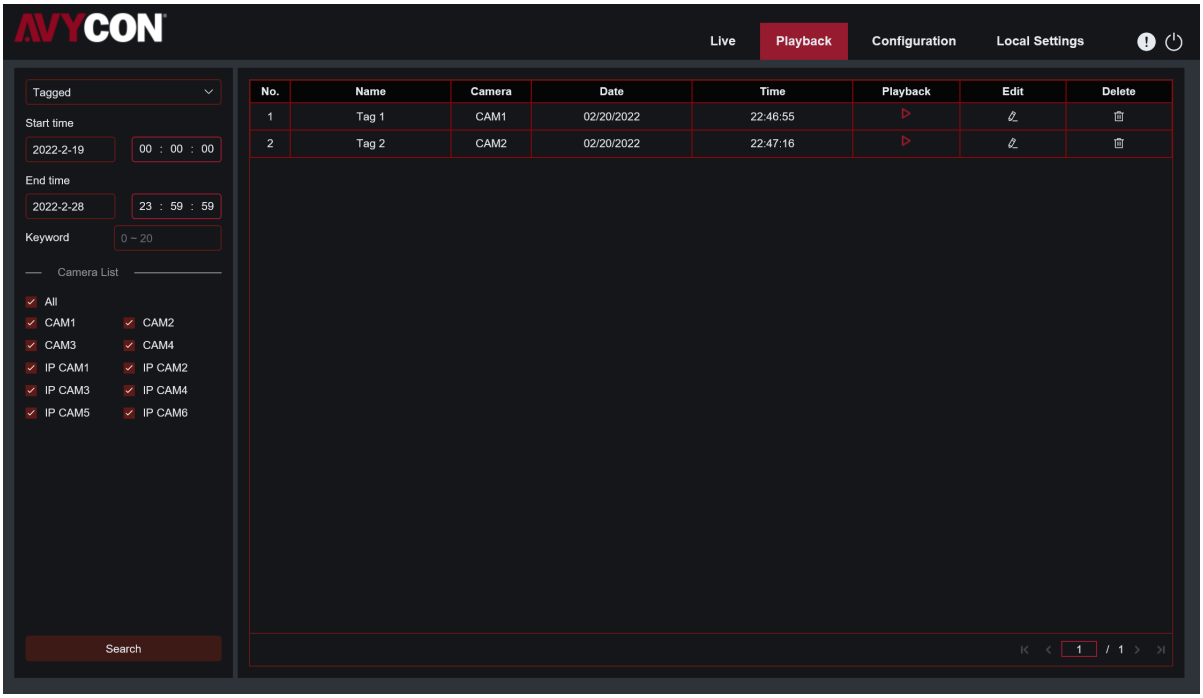
1. Click playback in the upper right corner of the window.
2. Select picture from the drop-down menu in the upper left corner.
3. Select a day to search on the calendar. The date with the snapshot is underlined in red.
4. Select the image type to search from the list in the search type menu, or select all to search all types.
5. Check the Camera to search for videos.
6. Click Search.

Pictures that match your search criteria will be displayed on the right. You can double-click any picture to enter the small clip playback interface.



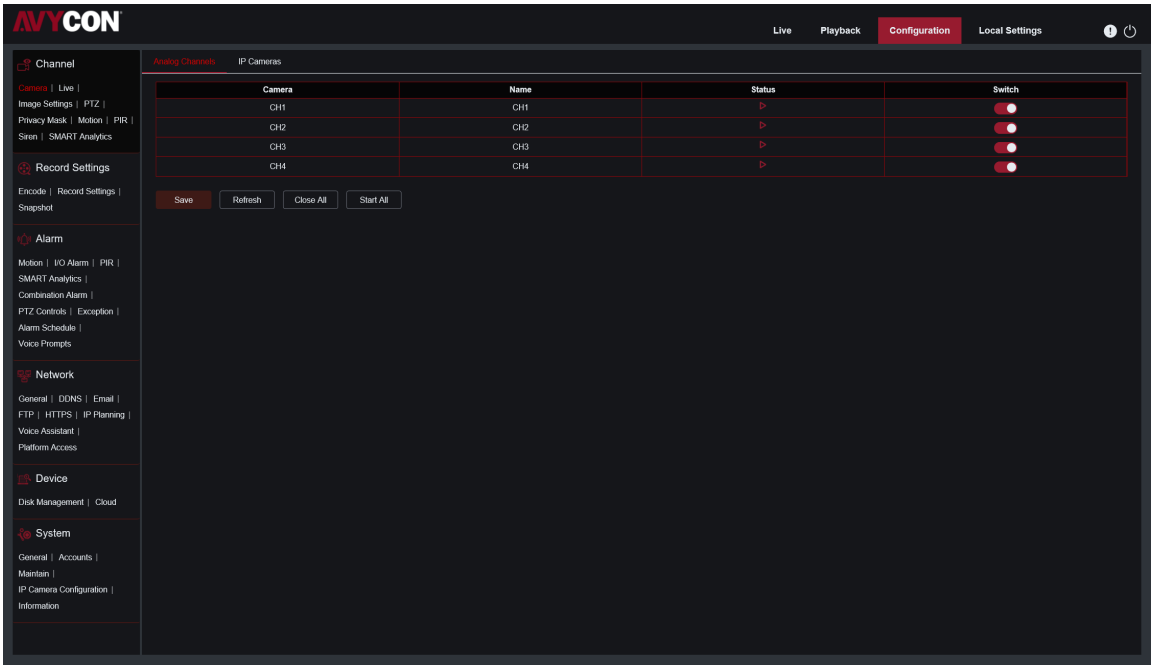
7.3.2.3 Tag Playback

In this menu, you can view all the tags that have been added.



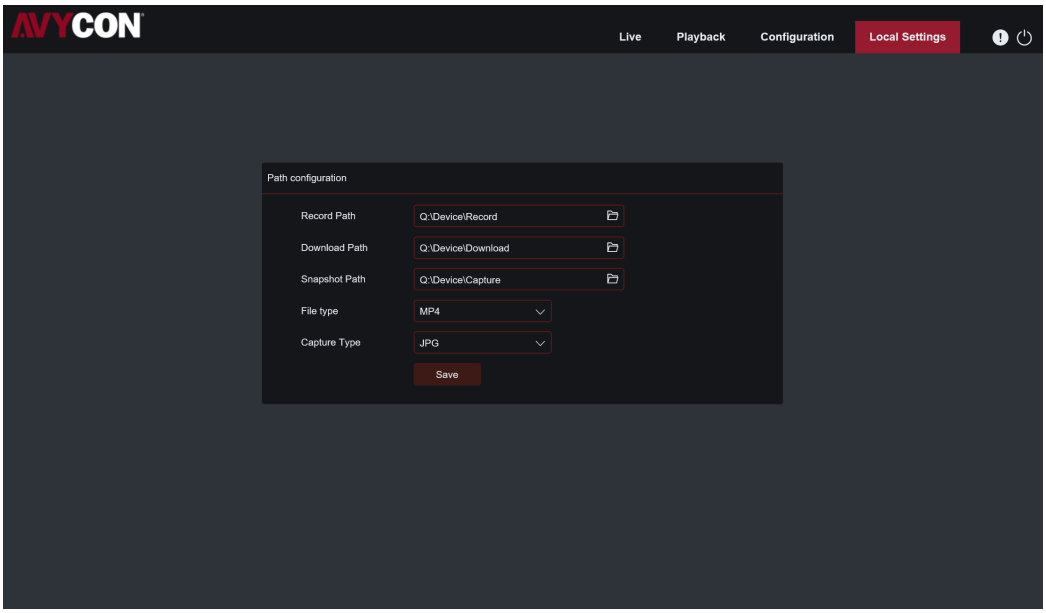
7.3.3 Configuration

Here you can remotely configure the settings of the DVR. Please see "**Chapter 5 DVR System Setup**" for more details on the DVR settings.



7.3.4 Local Setting

Set download locations for recordings and snapshots taken using Web Client, and choose file type for video files.



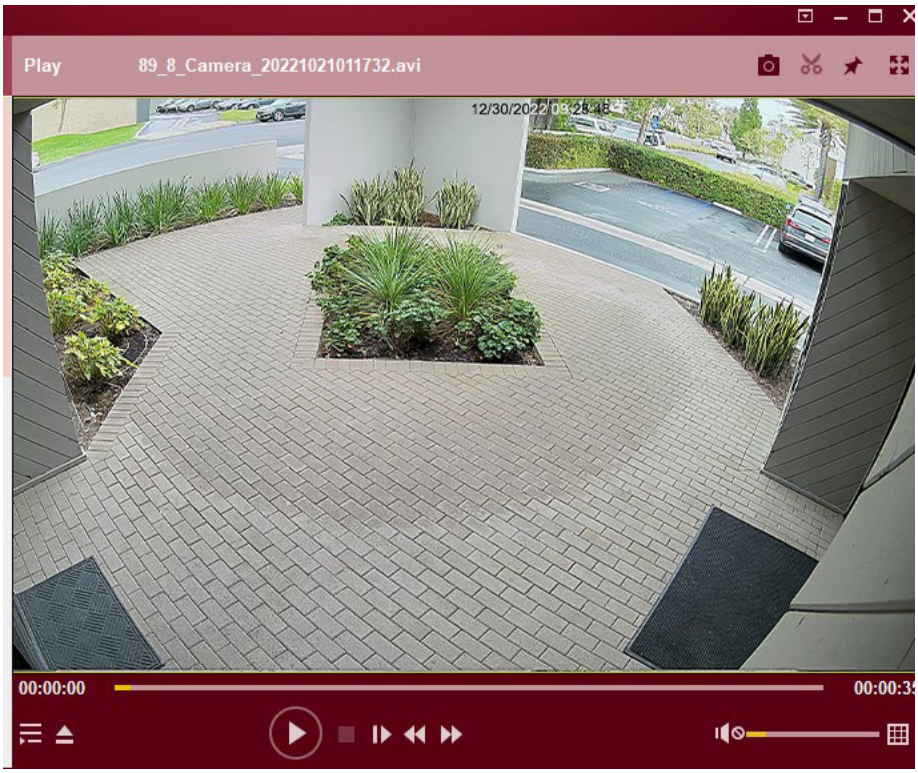
Record Path: Click to browse for and select the folder where you would like the manual video recordings to be saved on your computer.
Download Path: Click to browse for and select the folder where you would like to save the download video recordings to your computer.
Snapshot Path: Click to browse for and select the folder where you would like the manual snapshot, Snapshots to be saved on your computer.
File Type: Choose your preferred file type for manual recordings.
Cpture Type: Choose your preferred file type for manual Snapshot.
Save: Click to save the modifications.

Chapter 8 Viewing Backed Up Video on PC/Mac

This section will help you to play the backup files with the powerful video player which is attached in the CD.
For Mac users, please install the app "VideoPlayer_x.x.xx_xxxx_xx_x.dmg", for example: VideoPlayer_1.0.15_2017_01_6.dmg.
For PC users, please install the software "VideoPlayer_x.x.xx_xxxx_xx_xx.exe", for example: VideoPlayer_1.0.15_2017_01_06.exe.

Minimum System Requirements
• Intel Pentium 4 or above
• Microsoft Windows XP / Vista / 7 / 8 / 10
• 256MB RAM
• 16MB video memory

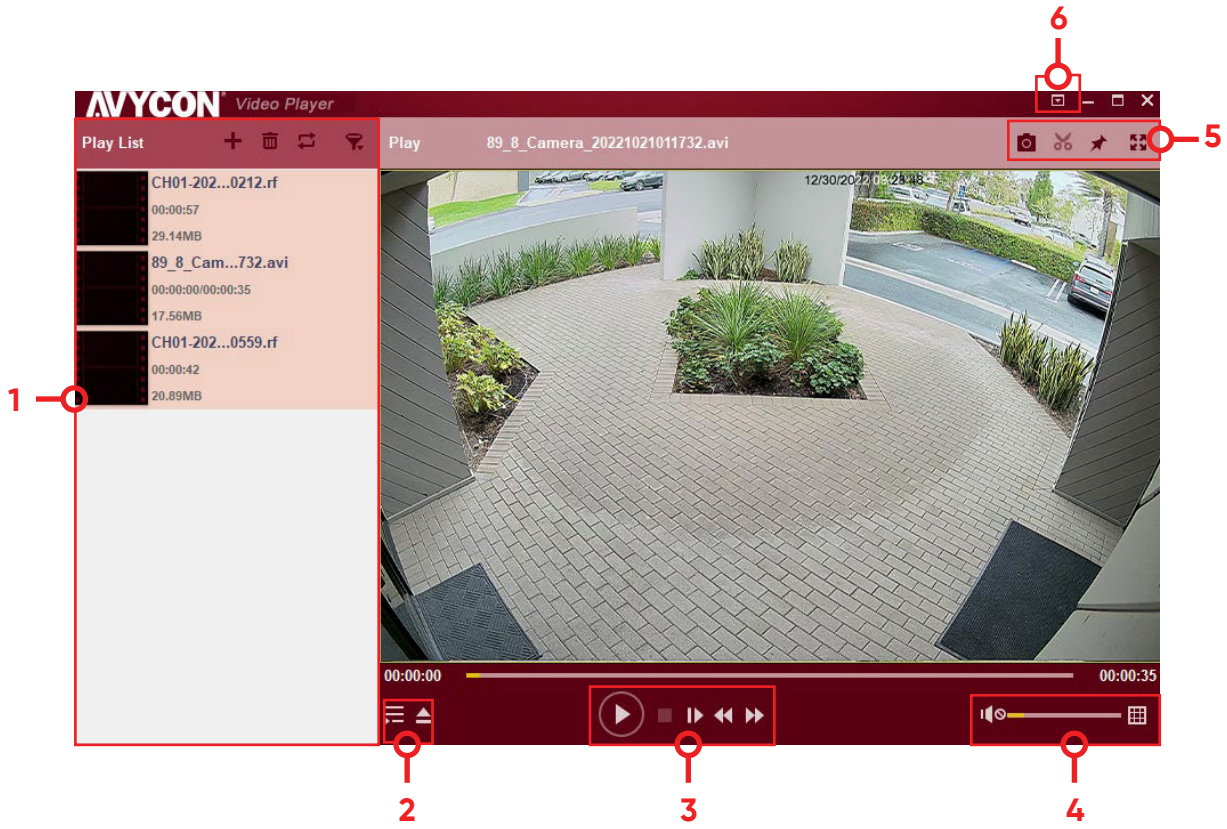
1. Install the Video Player software in the CD and run.



2. Copy the backup files to your computer.

Click **Open File** button or click **+** button on the Play List to load single or multiple video files. It supports to add & play ".rf", ".avi", ".mp4", ".264" and ".265" files. Click button to load a folder with backed-up videos.

Video Player Control



1. Play List

- Add files
- Remove files
- To choose play mode: play a single file and stop; play all listed files by sequence; repeat one file; repeat all files.
- Filter by file name

2.

- Hide/Show Playlist
- Click to open files or load a folder.

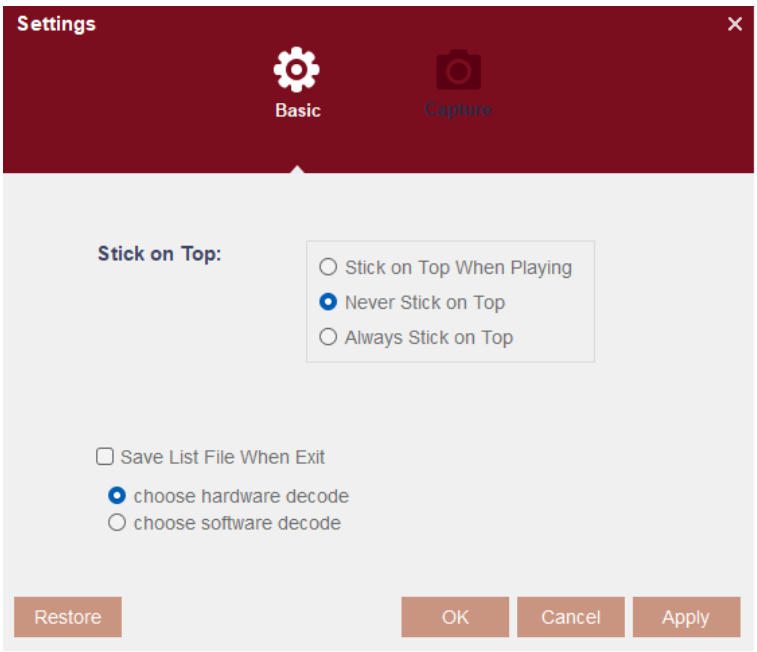
3. Play Controls

- Play
- Pause
- Stop
- Play frame by frame. Click once to play a frame of the video
- Slow Play, 1/2, 1/4 and 1/8, 1/16 speed
- Fast Forward, x2, x4, x8 and x16

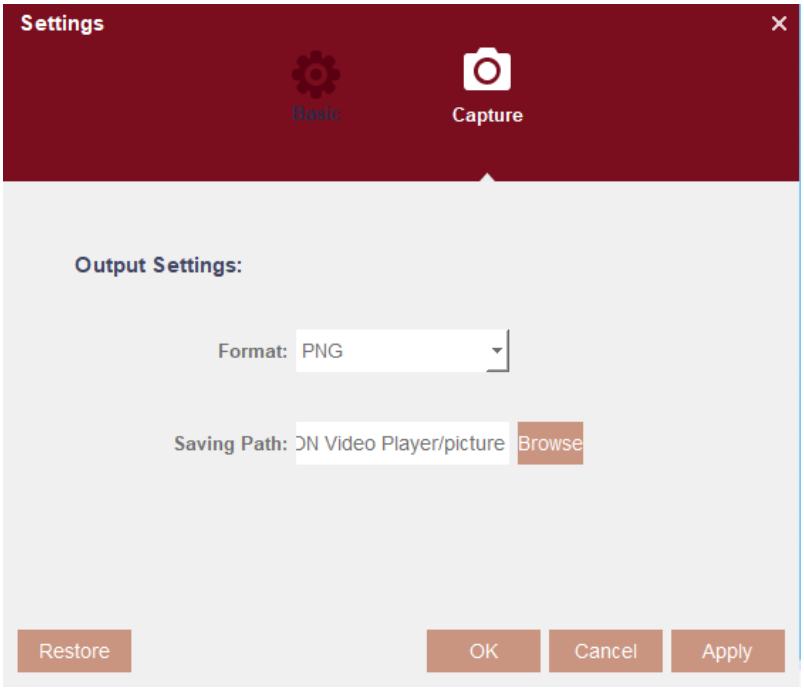
4. Volume control
Multi-screen play. It allows to play multiple videos at a time. When you choose multi-screen, you can drag the video in Play List to the play screen.

5. Take snapshot
To save a video clip to your computer. Press once to start, press again to end the video clip.
Keep the video player on top
Enlarge the video play screen to full screen

6. **Advanced Setup Menu** allows to choose the OSD language of the video player, and configure the setting of video player.



Basic Settings: Set on-top mode

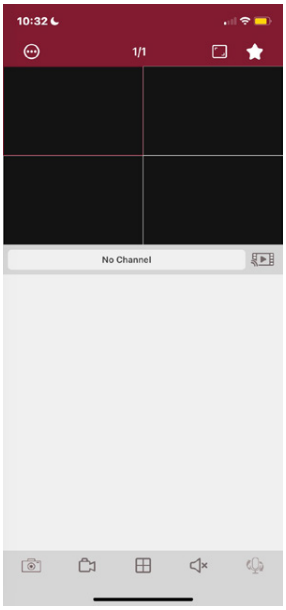


Snapshot Settings: Set the format and the path to save Snapshots.

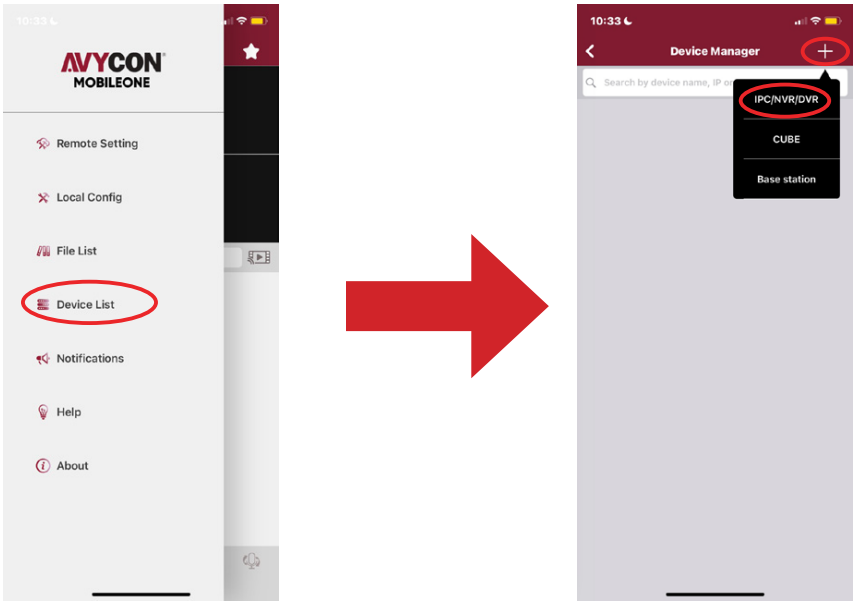
Chapter 9 Remote Access via Mobiel Devices

The DVR supports to remote access via mobile devices based on Android & iOS operating system.

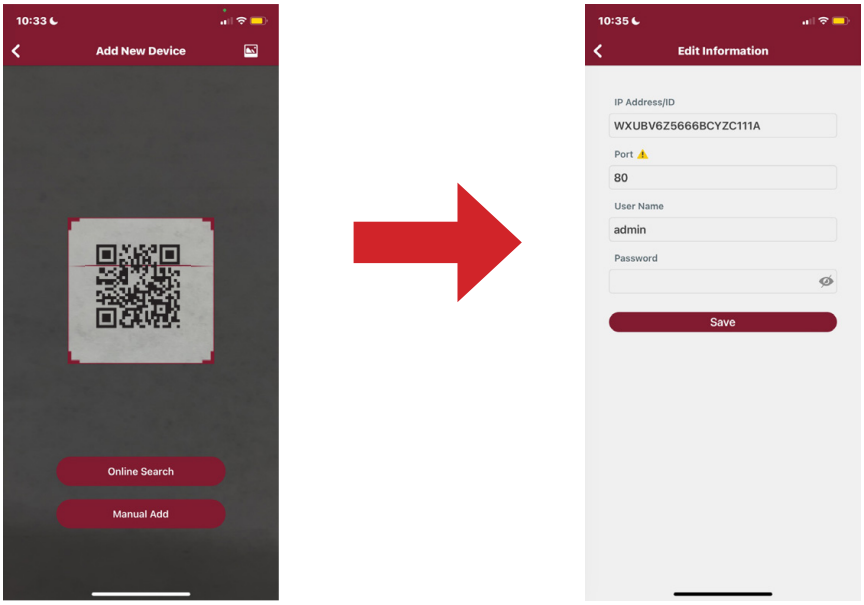
1. Search AVYCON ONE from Google Play Store for android devices or App Store for iOS devices and install.
2. Run the app, the GUI is displayed as below:



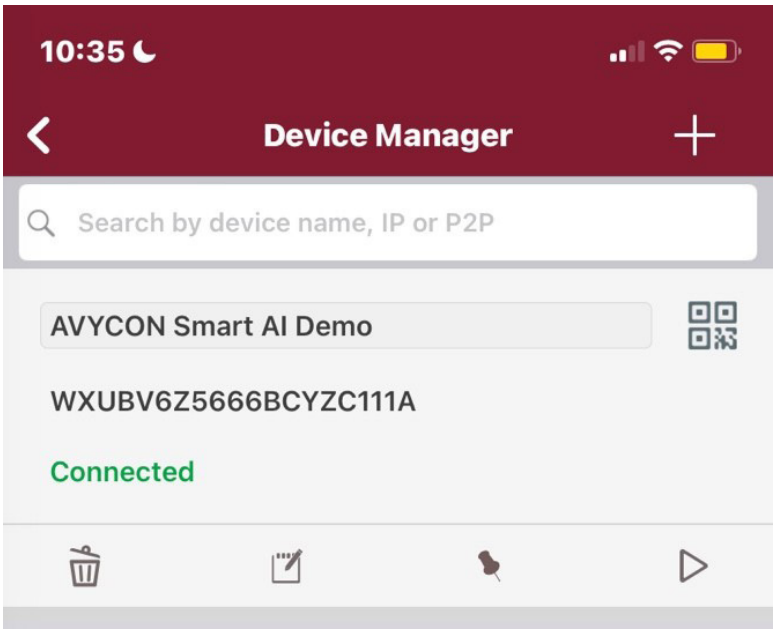
3. Touch the icon on the left top corner and then choose Device List to turn to the Device Manager page. Touch the + icon on the right top corner and then select “IPC/NVR/DVR”.



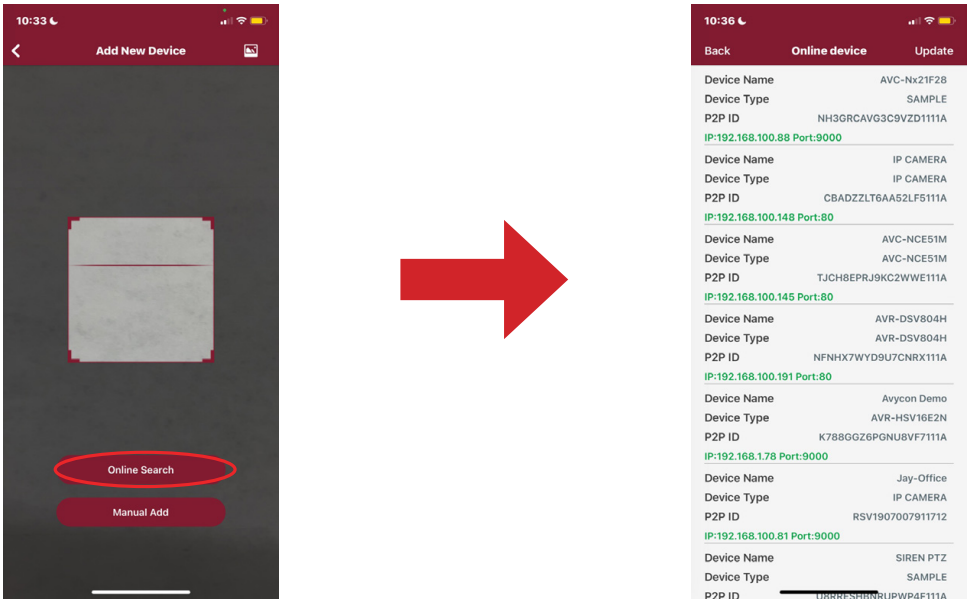
4. The app will open your phone camera to enter the scan mode. If your DVR supports P2P, scan the P2P ID QR code inside your system info page or on the top cover of your DVR. Input the media port, use name & password, and then click save.



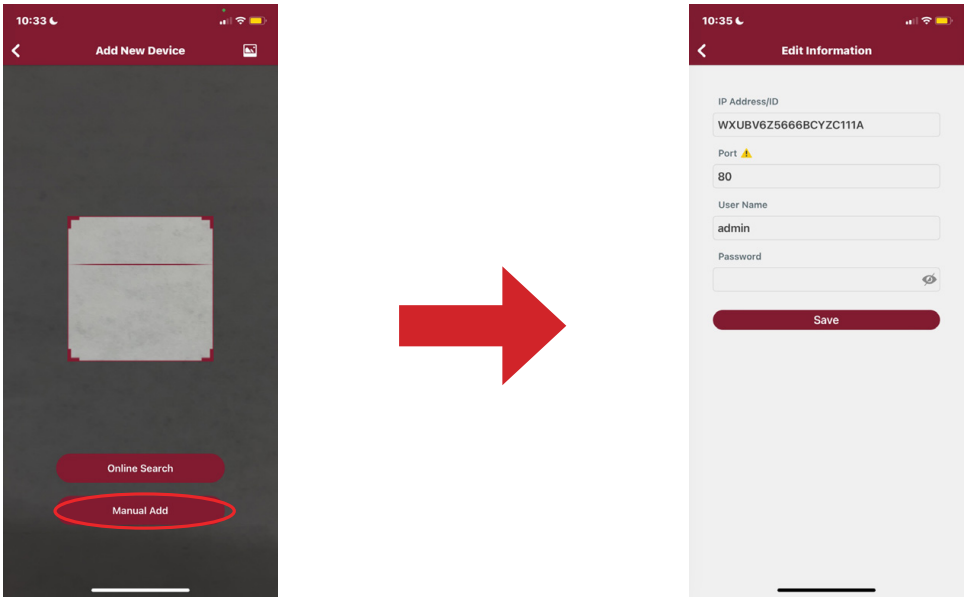
5. The added DVR will be displayed in the Device Manger page. Touch the play button to start live view.



6. If your mobile is connecting to the Wi-Fi which is in the same LAN with your DVR, you can choose to add the DVR by using Online Search. Touch on the device in the search result list, and then input the port, use name, password to add.



7. If your DVR doesn't support P2P, you must add the device manually. Touch on the Manual Add button, and then input the IP address or DDNS domain name, port, user name & password, click Save to add the DVR.



For more operations about the app, please check on the Help menu in the app.

Chapter 10 Appendix

10.1 Troubleshooting

1. Q: What can I do if the system does not detect the HDD?
   A: Check if the power supply system is properly connected and data cord and power cables are securely connected, and if something wrong with the HDD interface. Or you may check if your HDD is supported by referring to the specifications or descriptions.

2. Q: I have changed the password but forget the new password, how can I access the system?A: If you forget system password, please consult with our technical personnel. We strongly suggest user to set password easy to be remembered and relatively safe. If you have safety requirement, please do not set very simply password, such as 000000.

3. Q: We see abnormal video signal or even no video signal by connecting the DVR and camera together. Power supply for both devices is OK. What is wrong?
   A: Check network cable at DVR side to see if the cable is firmly connected and if it is worn out and needs to be replaced, or to check if NTSC or PAL is selected consistently.

4. Q: How to prevent DVR from being influenced by heat?
   A: The DVR needs to dissipate heat while it is running. Please place the DVR in a place with good air circulation and away from heat sources to ensure stability and life of the DVR.

5. Q: The remote controller of DVR doesn't work while the monitor screen is OK and panel keys are functional. Why?
   A: Operate again by aiming the remote controller at the IR receiver on front panel. If it still doesn't work, please check if the batteries in the remote controller are dying. If not, check if the remote controller is broken.

6. Q: I want to take out HDD from my PC and install it in DVR. Can it work?
   A: All HDDs supported by the system can be used. But remember, once DVR runs, the data on your HDD will be lost.

7. Q: Can I playback while recording?
   A: Yes. The system supports the function of playing while recording.

8. Q: Can I clear some records on HDD of DVR?
   A: In consideration of the file security, you may not clear part of records. If you want to remove all the records, you can format HDD.

9. Q: Why can't I log in DVR client?
   A: Please check if the network connection settings are correct and RJ-45 port is with good contact. And check if your account and password are correctly input.

10. Q: Why can't I find any records during playback?
    A: Please check if the data line connection for HDD is OK and system time is properly adjusted. Try a few times and restart. If it still doesn't work, check if the HDD is broken.

11. Q: Why DVR cannot control PTZ?
    A: Please check if:
    a) PTZ in the front side is malfunctioned.
    b) Setting, connection and installation of PTZ decoder are not correct.
    c) PTZ setting of DVR is not correct.

d) Protocol of PTZ decoder does not match that of DVR.
e) Address of PTZ decoder does not match that of DVR.
f) If many decoders are connected, the farthest side of AB line of PTZ decoder should be added 120Ω resistance to realize reflection suppression and impedance matching. Otherwise, PTZ control will be unstable.

12. Q: Why doesn't dynamic detection work?
    A: Please check if the motion detection time and motion detection regional setting are correct and if the sensitivity is set too low.

13. Q: Why doesn't alarm work?
    A: Please check if the alarm setting, alarm connection and alarm input signals are correct.

14. Q: Why does buzzer keep alarming?
    A: Please check the alarm setting, check if motion detection function is enabled and object motion is detected all the time and if I/O alarm is set as Always Off. Besides, refer to corresponding HDD alarm setting.

15. Q: Why can't I stop recording by pressing "STOP" button or click "Stop Recording" in context menu?
    A: Pressing Stop or Stop Recording can only stop manual record. If you want to stop Scheduled recording in certain time quantum, please change the setting to No Record. To stop Startup recording, please change record mode to scheduled recording or manual recording. Then you may stop recording by the prescribed methods. And another way of stopping recording is to set Camera as off status in record setting.

10.2 Usage Maintenance

1. To shut down DVR, please firstly shut down the system and then turn off the power. Do not turn off the power directly or HDD data will be lost or damaged.

2. Please keep DVR away from heat sources or places.

3. Clean the internal dust regularly. Make sure the good ventilation of DVR so as to ensure the good heat dissipation.

4. Please do not hot plugging audio and video cables, or cables connected to ports like RS-232 or RS-485. Otherwise the ports will be damaged.

5. Please check the HDD cable and data cable regularly to see if they are ageing.

6. Please prevent the audio and video signals of DVR from being intervened by other electronic devices, and prevent the HDD from being damaged by static electricity and induced voltage. If the network cable is frequently plugged, it is suggested to replace connecting line regularly, or the input signal may be unstable.

7. This is a class of product. It maybe bring wireless interference in life. Under this situation, it need user to make measures.

10.3 Accessories (For reference only)

☐ USB mouse

☐ Power Adapter

☐ Warranty Card

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

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