USAVision sys

UA-XVR1620

User's Manual

Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

UVSUAAI-UM-C

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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. Do not put the equipment in the dusty field

Do not put the equipment in the dusty field.

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 upper cover

Warning: Do not remove the cap of DVR so as to avoid electric shock.

8. Handle with care

If DVR does not work normally because of hitting on the hard 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 Front Panel

Item	Description
Power LED	Show constant green when power is supplied.
HDD LED	Blink red when the HDD is writing or reading data. No LED when no HDD is installed.
USB port	Connect the supplied mouse or USB flash memory.

1.2 Rear Panel

Item	Description
e-SATA	Connect to e-SATA HDD for recording & backup.
Audio Input (1-4)	Connect with audio input signals, RCA port.
Audio Input (5-16)	Connect to the input ports with supplied connector.
CVBS	Connect to your TV or monitor, BNC port.
Audio Output	Audio signal output, RCA port.
Video Input	Connect with video input devices, BNC port.
VGA	Connect to your TV or a monitor with VGA input.
RS-485	Connect to PTZ devices.

Sensor & Alarm	Optional. Connect to external sensor & alarm devices.
HDMI	Connect to your digital TV or monitor with HDMI input.
LAN	Connect to your home network.
USB port	Connect the supplied mouse or USB flash memory.
Power	Connect to the supplied power adaptor.
Reset	Load default settings of the DVR. **Note**: The Reset button is below the USB port. Poke the Reset button to load default settings.
Power Switch	Turn on / off power supply.

Chapter 2 DVR Installation & Connection

2.1 HDD Installation

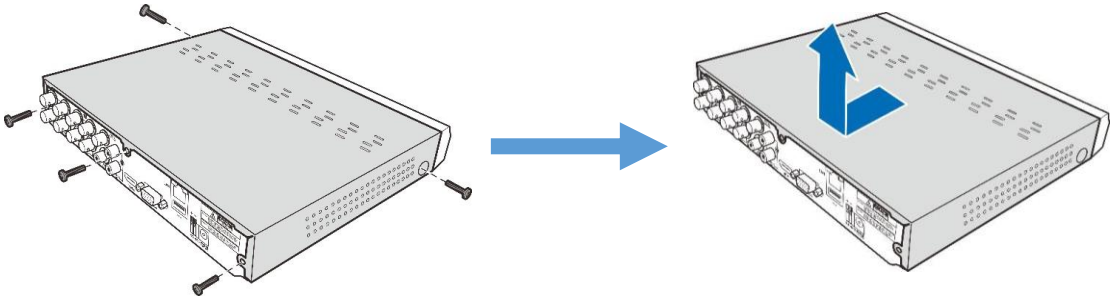
Follow the instructions below to install the HDD in the DVR for video data storage.

Caution: DO NOT install or remove the hard drive while the power is turned ON.

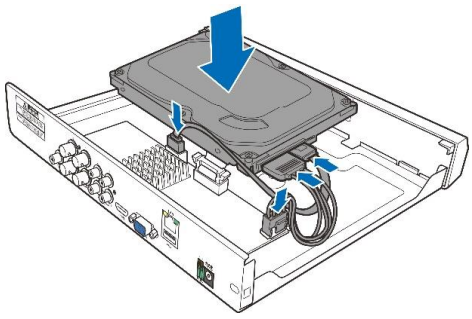
Note:

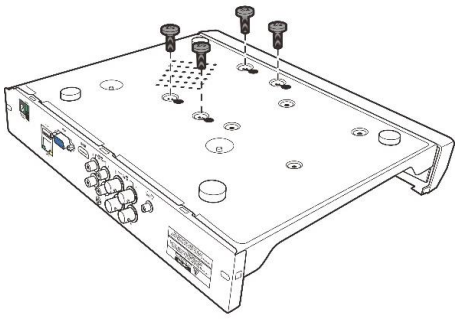
1. The DVR supports 3.5” and 2.5” SATA HDD of up to 10 TB only.
2. The following procedures are for reference only. The practical operation may be different depending on the model you purchased.

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

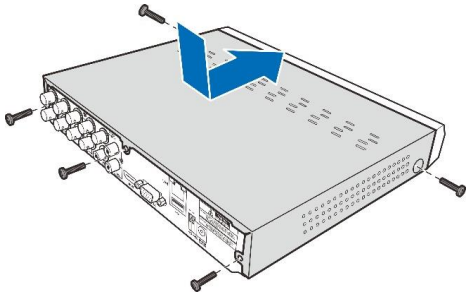


(2) Connect the data and power cables to the HDD and place the HDD on the DVR case. Carefully flip the DVR case and secure the HDD to the DVR with the screws.

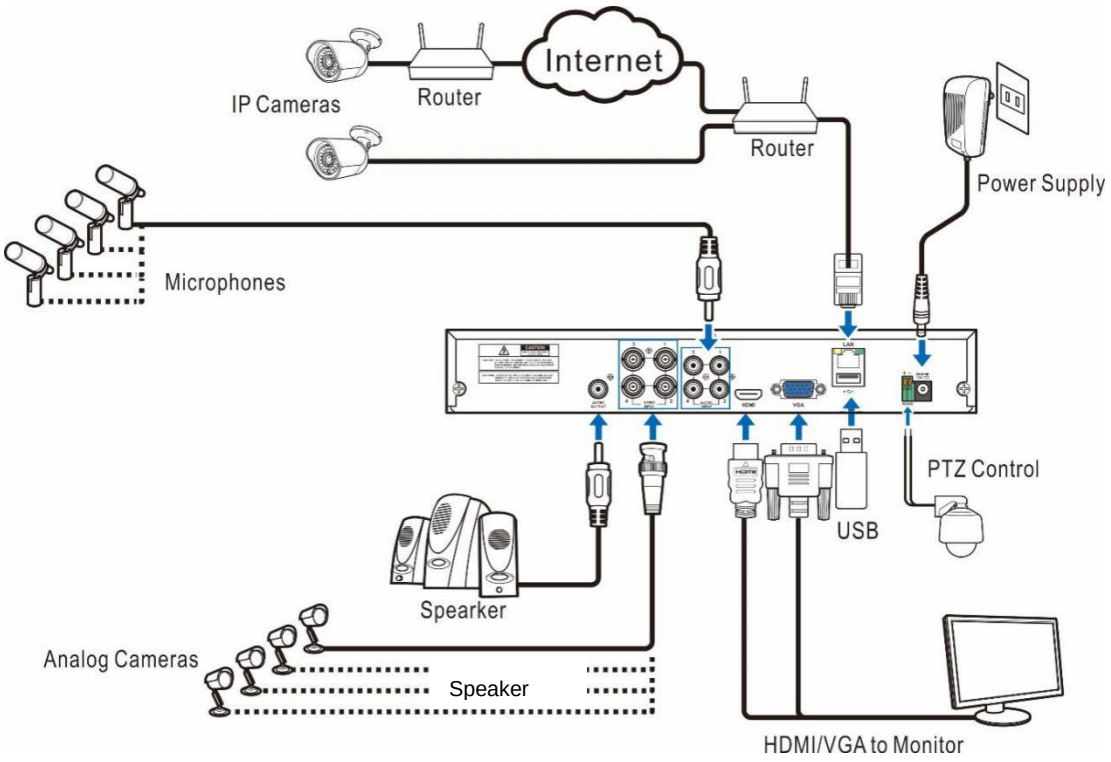




(3) Put the upper cover back carefully, and fix the cover with screws.



2.2 Connection Diagram

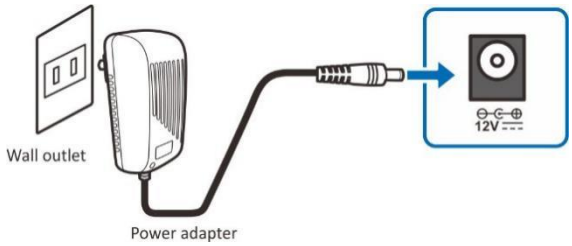


Note: Above diagram is for reference only. The practical connection may be different depending on the DVR you purchased.

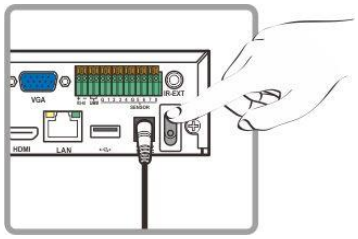
2.3 Power Supply Connection

Caution: Use only the supplied power adapter of 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.

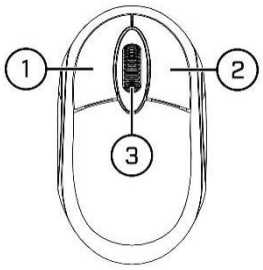


For specific models, press the **Power Switch** to turn on the power.



Chapter 3 DVR Common Operations

3.1 Using the Supplied Mouse



[Left Button]

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

[Right Button]

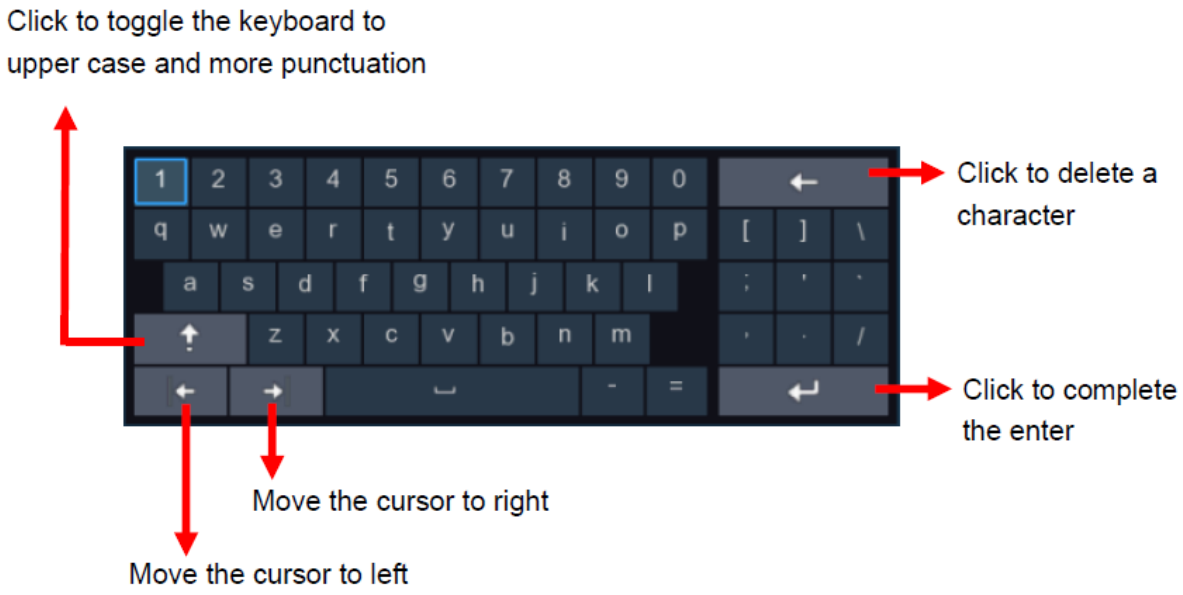
- Click once to open the Taskbar on the Live Viewing screen. View Taskbar on *4.2.2 Task Menu Bar*.
- In menus, click to go back / close menus.

[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.

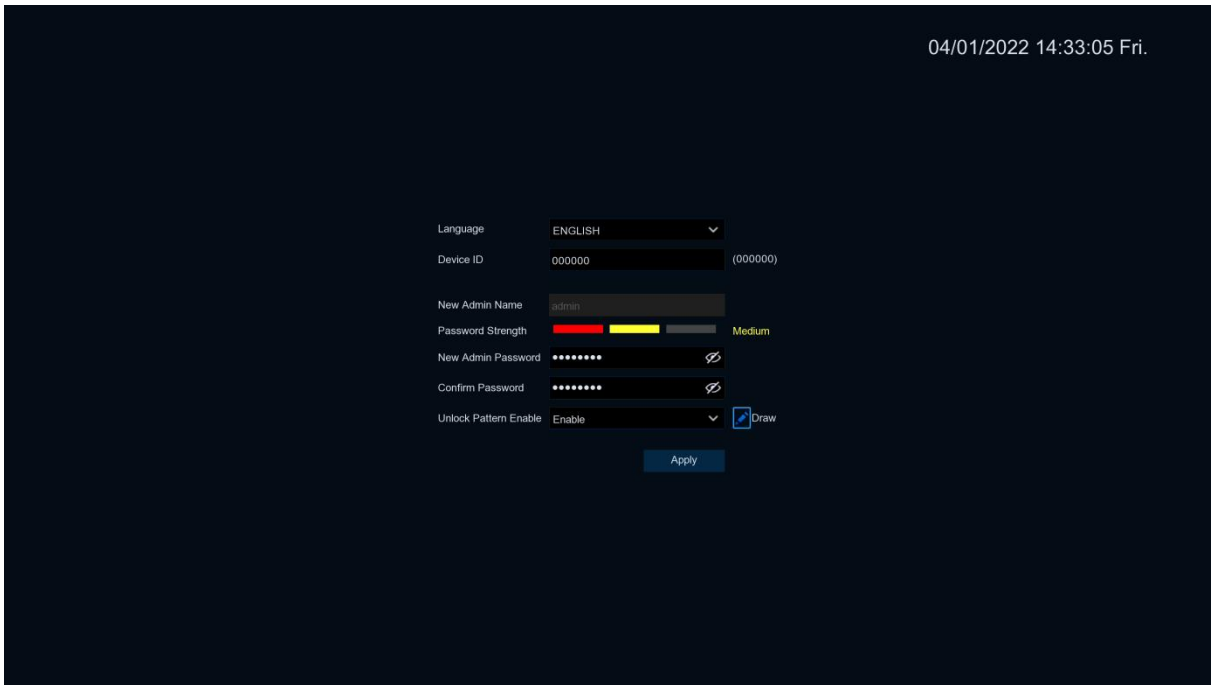
3.2 Using the Virtual Keyboard

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



3.3 Password

For the first time when you run the DVR, 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.

Device ID: Input the device ID. Default ID is 000000. View more about Device ID on 5.7.1 General.

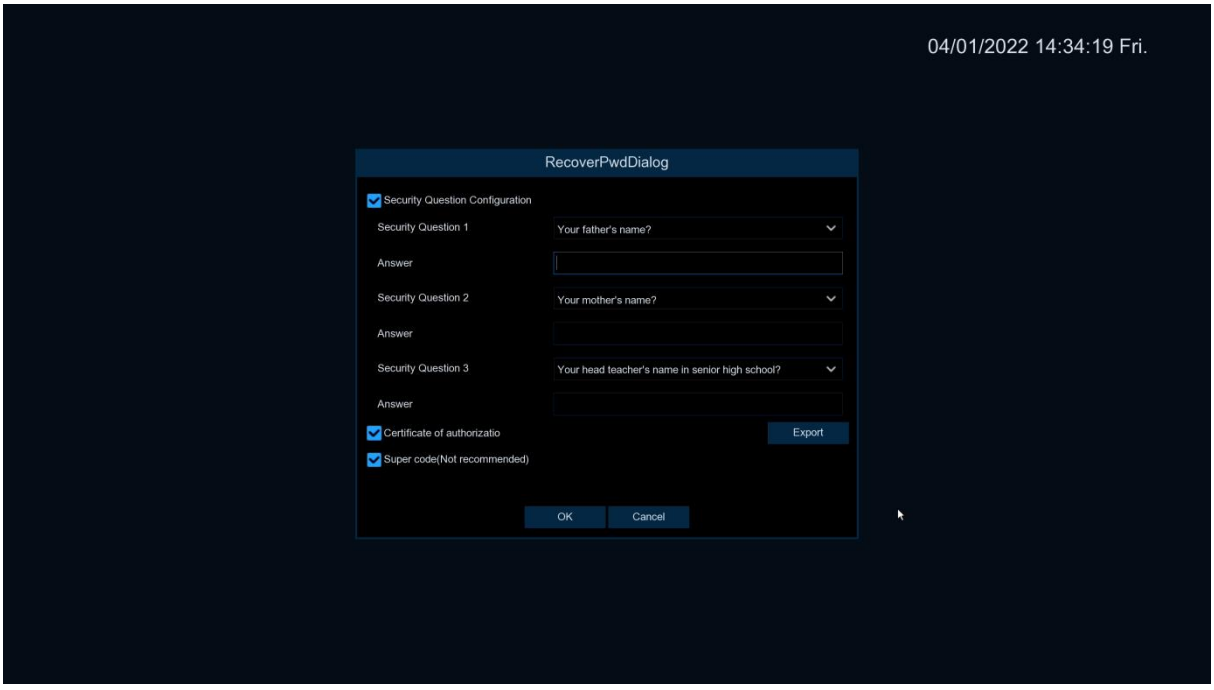
New Admin name: To set your own administrator name.

New Admin Password: To set your own password. The password must be a combination of 8 characters.

Confirm Password: Enter your own password again.

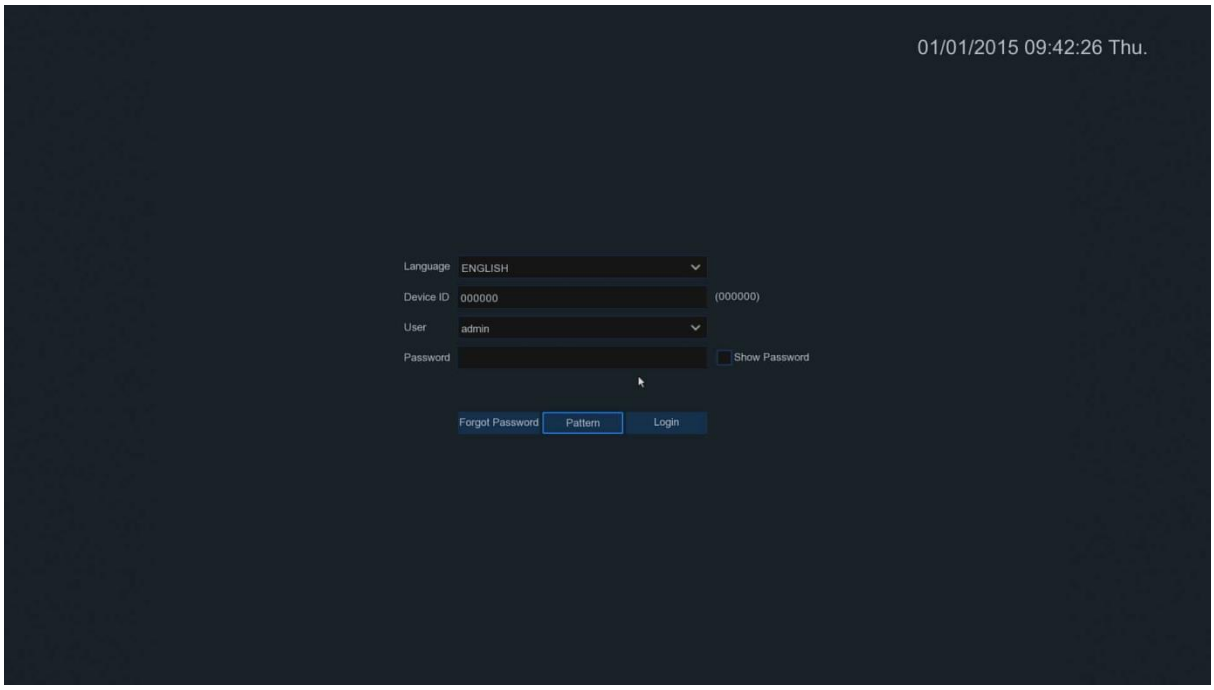
Unlock Pattern Enable: Enable unlock pattern. Click the right edit icon to start setting the pattern password. After confirming twice, you can set the gesture password successfully.

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

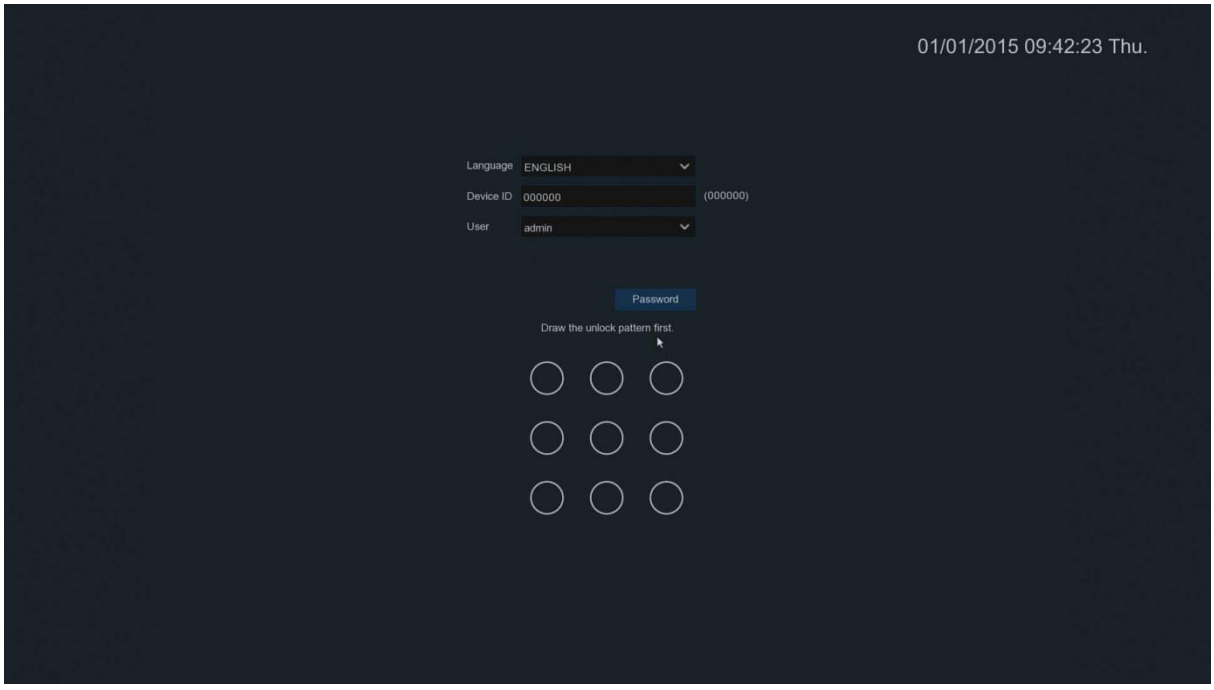


1. **Security Question Configuration:** Reset the main user password through the security question and open the password retrieval interface. Choose three security questions and fill in the corresponding answer with a maximum of 64 characters.
2. **Certificate of authorization:** Enable and click **Export** to download the certificate. On the password retrieval interface, switch to the Certificate of authorization mode, and click **Import** to select the key file certificate.txt. After the Import is successful, enter the new password to modify the main user's password.

3. **Super code (Not recommended):** According to the Mac of the camera and the time prompted by the super verification code, the verification code can be calculated based on certain rules. By filling in the verification code, the main user's password can be modified.



Pattern: Click to enter the pattern login page.



Notice:

If you forget two kinds of password, you will not be able to login the system. Select **Recover Password** on the login page to reset password. This password is used on the login interface and User setting to change password.

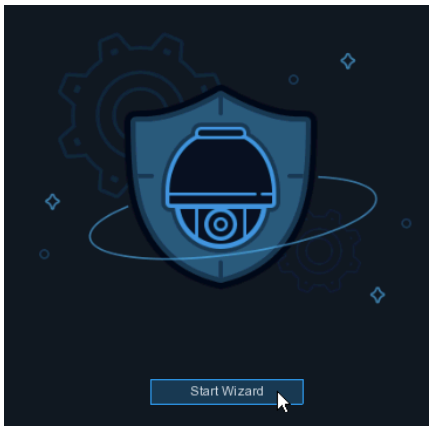
Chapter 4 DVR Starting up

4.1 Start Wizard

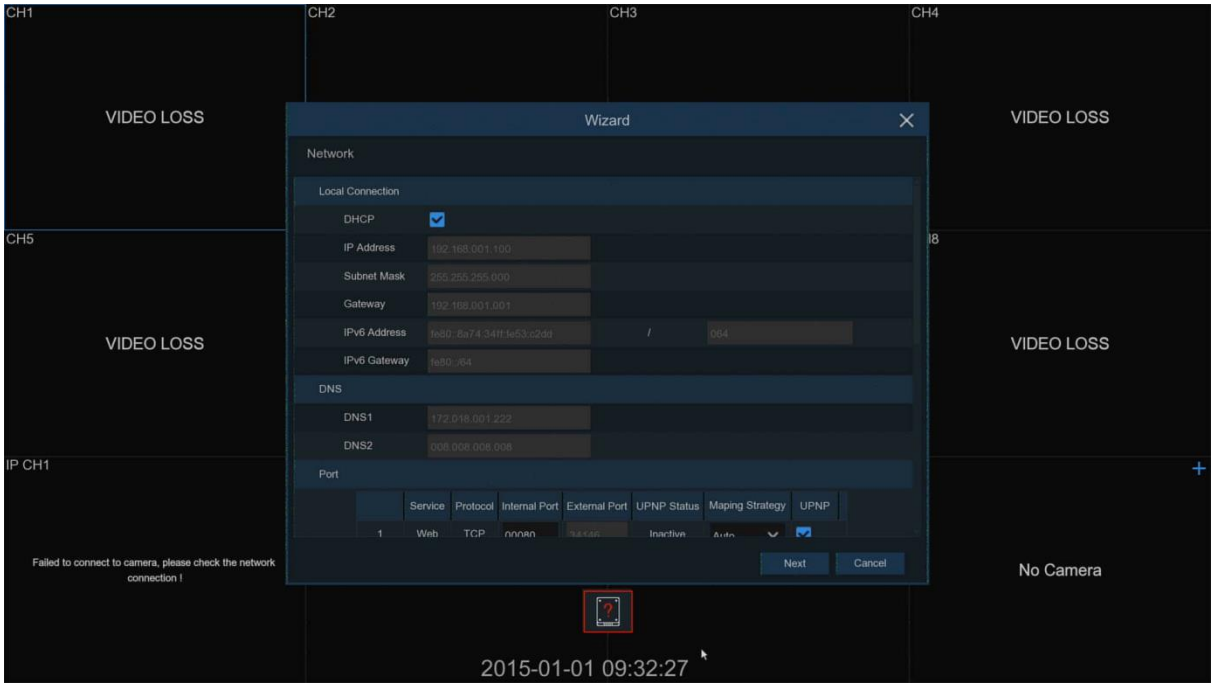
Startup Wizard will help to configure the system and get the DVR works quickly.

4.1.1 Start Wizard

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



4.1.2 Network Configuration



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

[Local Connection]

- **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. 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”.

[DNS]

- **DNS1/DNS2**: DNS1 is the primary DNS server and DNS2 is a backup DNS server.

[Port]

- **Web Port:** This is the port that you will use to remotely log in to the DVR. If the default port 80 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 devices.

- **UPNP:** If you want to remotely log in 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 manually configure 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 enter the User name and the password of the PPPoE.

4.1.3 Date/Time

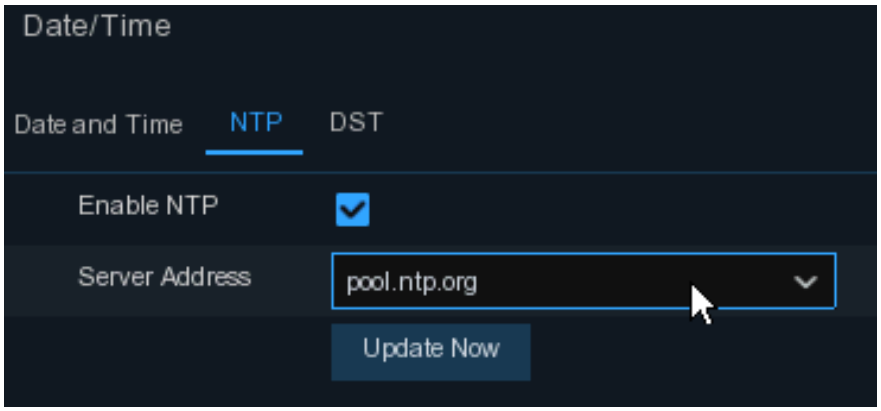
This menu allows you to configure the Date, Time, Date Format, Time Format, Time Zone, NTP and DST.

[Date and Time] Click on the calendar icon to set the current system date.

- **Date:** Click the calendar icon to set the system date.
- **Time:** Click to set the system time.
- **Date Format:** Choose from the drop-down list to set preferred date format.
- **Time Format:** Choose time format between 24Hour and 12Hour.
- **Time Zone:** Set the correct time zone.

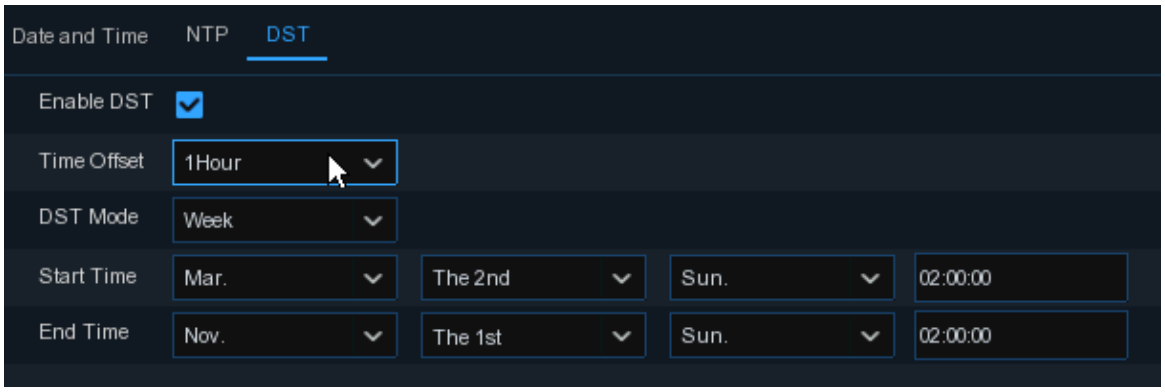
[NTP]

NTP stands for Network Time Protocol. This feature allows you to synchronize the date and time automatically on the DVR over Internet. Note that the DVR needs to be connected to the Internet to enable this function.



Check the **Enable NTP** box and select the desired NTP server address.

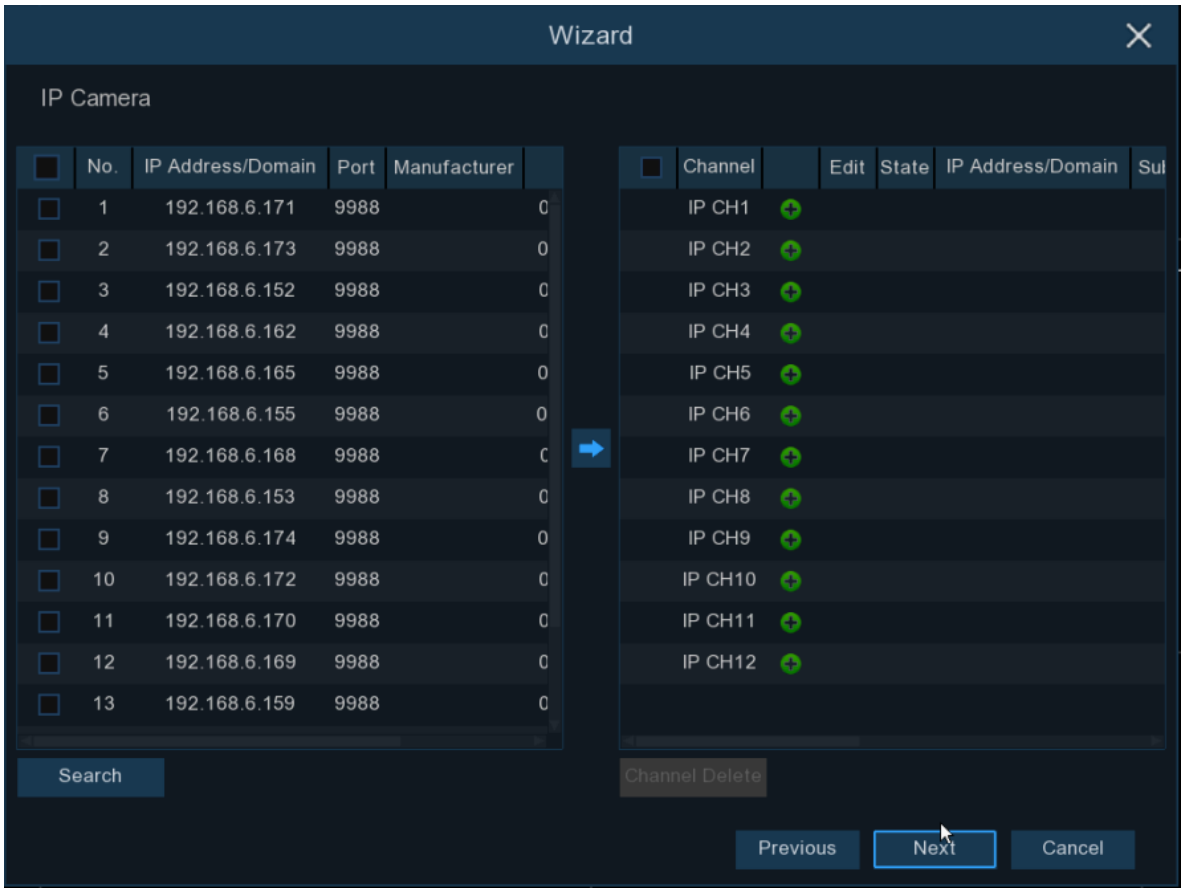
[DST]



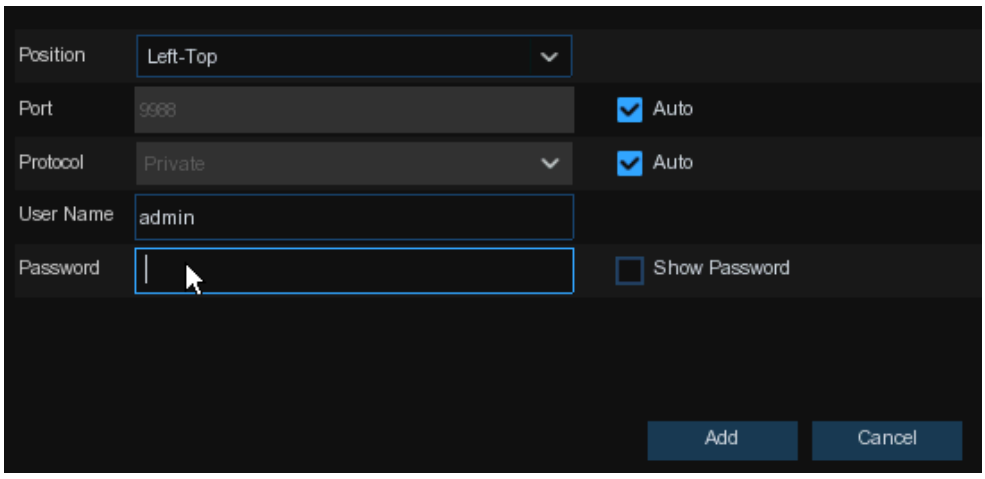
- **Enable DST**: Enable if Daylight Saving Time (DST) is observed in your region.
- **Time Offset**: Select the amount of time to offset for DST.
- **Time Mode**: Choose to set the daylight saving time in weeks or in days.
- **Start Time/End Time**: Set the start time and end time for daylight saving.

4.1.4 IP Camera

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

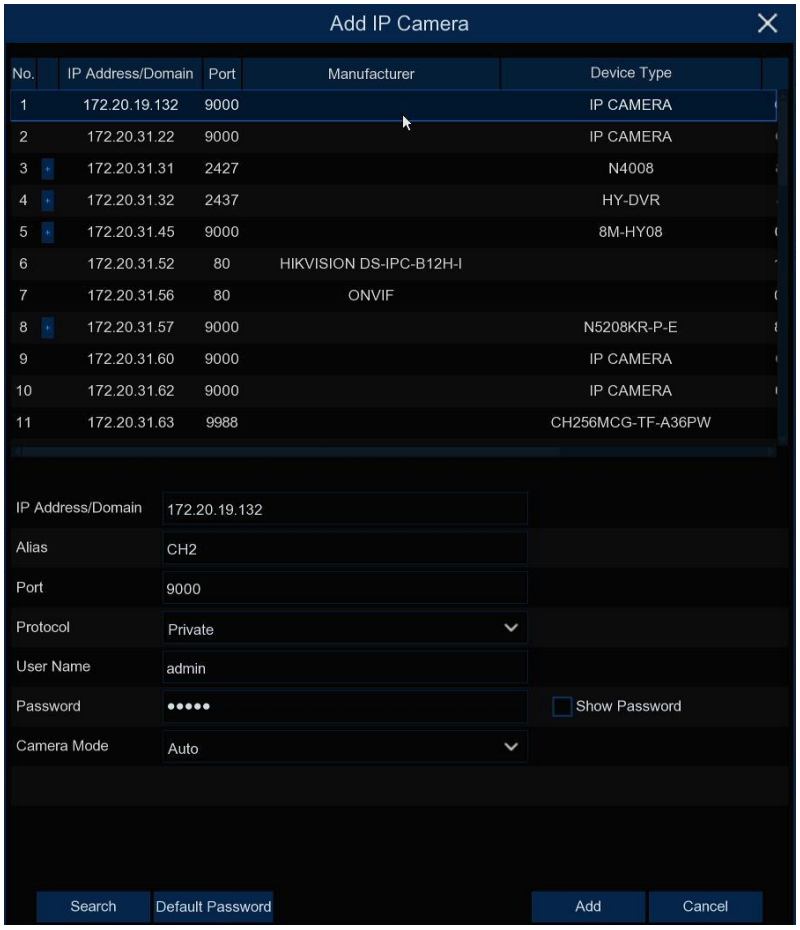


Click **Search** to search IP cameras in the same network. Choose the IP camera(s) you want to add, and then click icon to add to the DVR.



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

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



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

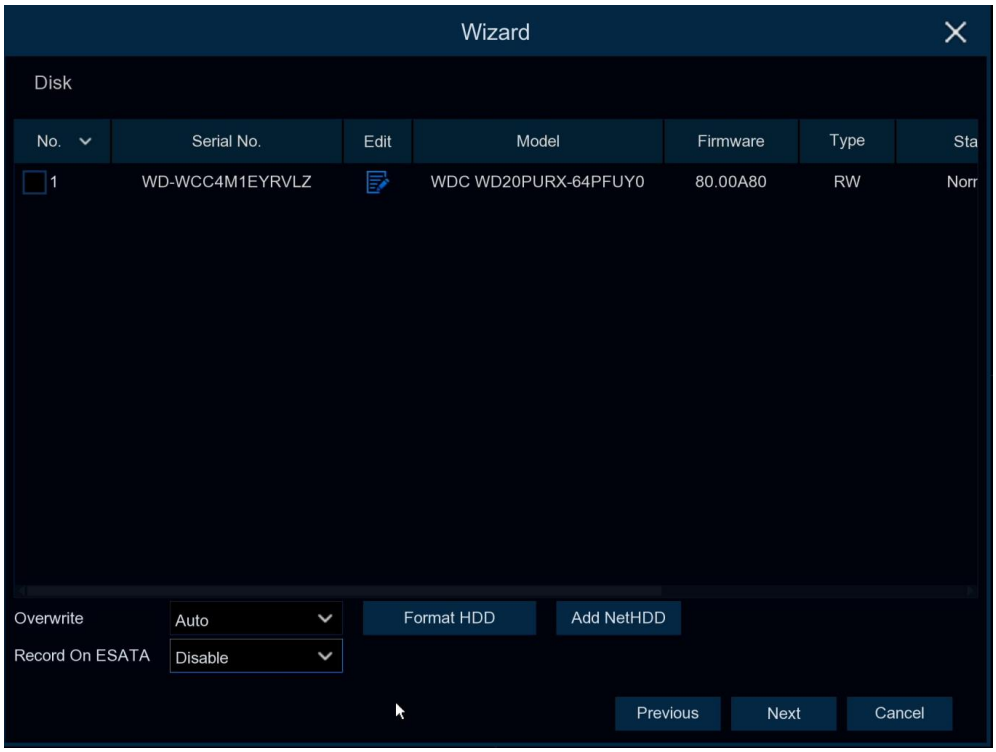
- **IP Address/Domain:** IP address or domain name of the IP camera.
- **Alias:** Name of the IP camera.
- **Port:** Port of the IP camera.
- **Protocol:** Choose the protocol of the IP camera from the dropdown menu.
- **User Name:** User Name of the IP camera.
- **Password:** Password of the IP camera.
- **Camera Mode:** Select the mode of the IP camera from the drop-down menu.

Note:

1. The system fills in the ID and password using **admin/admin123.** for UA-B580F3 / UA-R500F2 / UA-R560F2 / UA-R580F2 / UA-R800F2 by default. Make sure to enter the correct ID and password of the IP cameras if the login credentials have been changed on the IP cameras before connecting to UA-HD DVR models.

2. The default password is 123456 for the following IP camera models: UA-B20004F / UA-B40004F / UA-B4000VF-S / UA-D20004F / UA-D40002F / UA-D4000VF-S / UA-R40002F-SA. To modify the password on the camera's Web interface, refer to *Network Cameras User Manual* for details.

4.1.5 Disk



- **Format HDD**: If the HDD is installed in the DVR for the first time, it must be formatted. Select the HDD and click **Format HDD** button to format the HDD.
- **Overwrite**: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose **7 days**, only the last 7 days recordings will be stored on the HDD. To prevent overwriting any old recordings, select **Disable**. If you have disabled this function, please check the HDD status regularly to make sure the HDD is not full.
- **Add NetHDD**: Refer to *5.5.1.1 Disk* for details.
- **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.

4.1.6 Resolution

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

4.1.7 Mobile

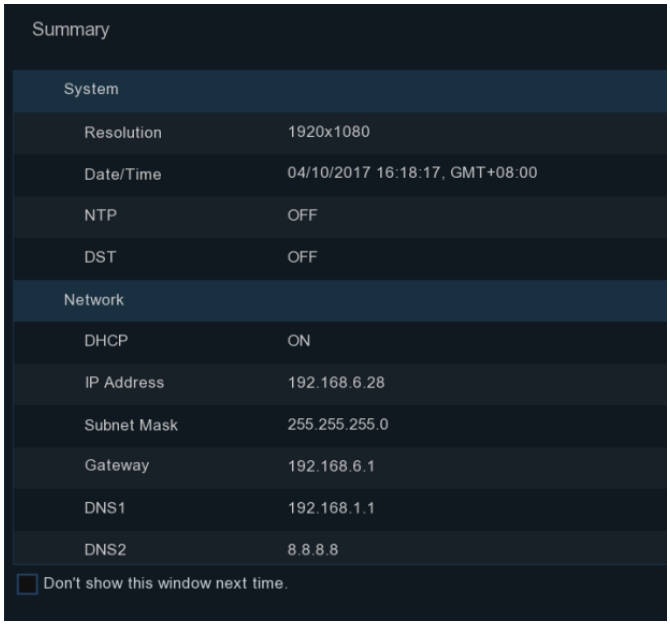
Scan the QR code with your mobile app GV-Eye to view the DVR remotely. Refer to *Chapter 8 Remote Access via Mobile Devices* for details.

Note: This function is only applicable to GV-Eye V2.9.1 or later.

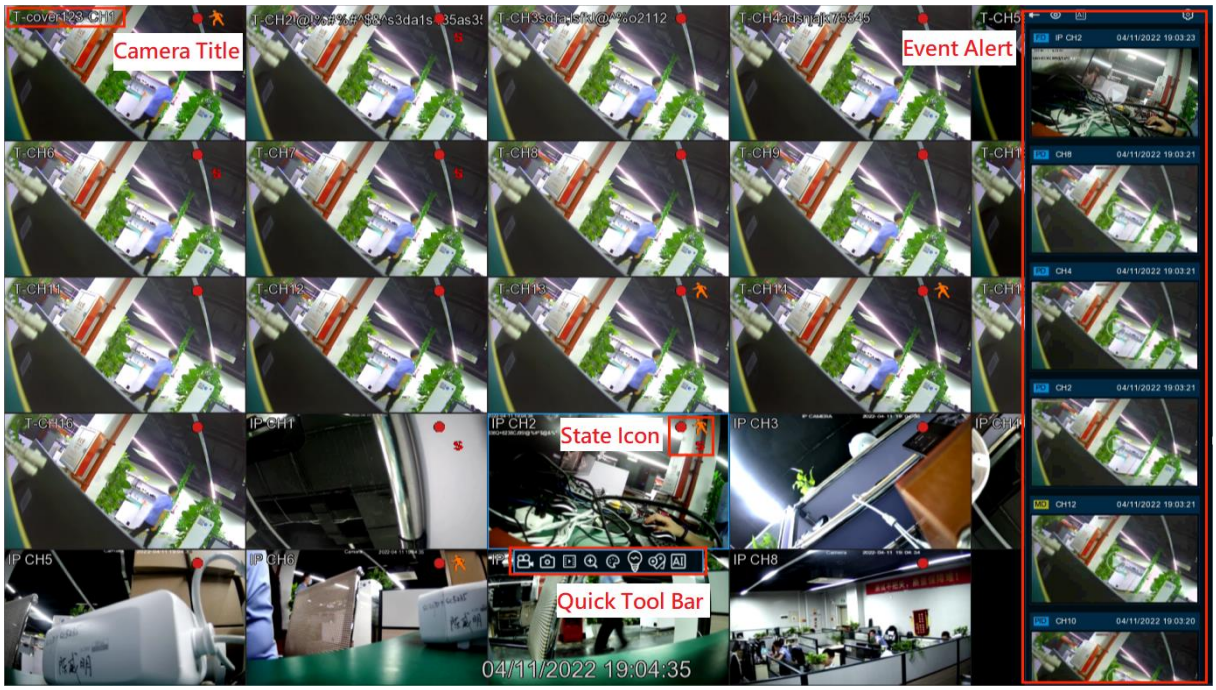
4.1.8 Summary

You can check the system summary information you had set in the start wizard and finish the wizard.

Click **Don't show this window next time** if you don't want to display Start Wizard when the system reboots. Click **Finish** button to save and exit **Start Wizard**.



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

State Icon

: Trigger Intelligence Detection

: Trigger PIR Detection

: 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.

Off-line: The analog camera is disconnected.

No Camera: IP camera is disconnected.

Decoding Failed: The DVR doesn't support this kind of IP camera compression standard, please change to H.264 compression standard.

Resource Not Enough： Insufficient resources, the main code flow does not support all drawings at the same time/MJPEG format can only display one channel.

Band Not Enough： Insufficient bandwidth, the channel cannot be online

Failed to connect to camera： IPC connection failed

User name or password error: IPC username and password are wrong

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 channel 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 Capture** must be enabled to use this feature. For details, see *5.2.3 Capture*.

Click to play the latest 5 minutes recording of this channel

Click to enter PTZ control panel

Click to zoom-in the channel. When the icon appears, press and hold the left button of your mouse to drag the area you want to zoom in.

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

Switch the real -time video stream between the main code stream and the sub -code stream. HD is the main code out of the picture, SD is a sub -code outflow picture.

Click to enable/disable white light alarm. Further information please check 5.1.8 Deterrent. This menu won't change the white light setting parameter.

Click to enable/disable alarm of this channel. Further information please check 5.1.8 Deterrent. This menu won't change the white light setting parameter.

Click to add customized tag. It can be playback the tag in "Searching".

AI statistics are turned on, the mouse hovers on the icon to view AI statistics information

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 channels in a sequence

Quick playback. You can choose to play the latest recording for all channels 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 channels between mainstream and substream (for live view resolution)

Click icon to switch between the original proportional screen or the stretching screen.

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.

Click to restore the live view sequence.

/ Click to disarm all alarms on the live view image at once.

No Internet connection

Network was blocked

Network connection well

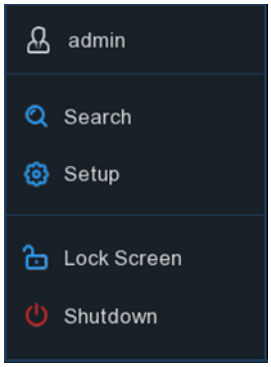
Manually turn on/off all channels white light and siren

Manually turn on/off channels recording and IO alarm

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

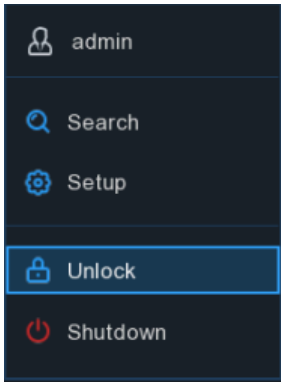
4.2.3 Start Menu

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



- **admin**: To switch user. To enable multi-user, refer to *5.6.3 Multi-user*.
- **Search**: Search & Playback. Refer to *Chapter 7 Search, Playback and Backup* for details.
- **Setup**: DVR System Setup. Refer to *Chapter 5 DVR System Setup* for details.
- **Lock Screen**: Lock and unlock screen. Refer to *4.2.3.1 Unlock and Lock Screen* for details.
- **Shutdown**: Shut down, reboot, and log out the system. Refer to *4.2.3.2 Shutdown* for details.

4.2.3.1 Unlock and Lock Screen

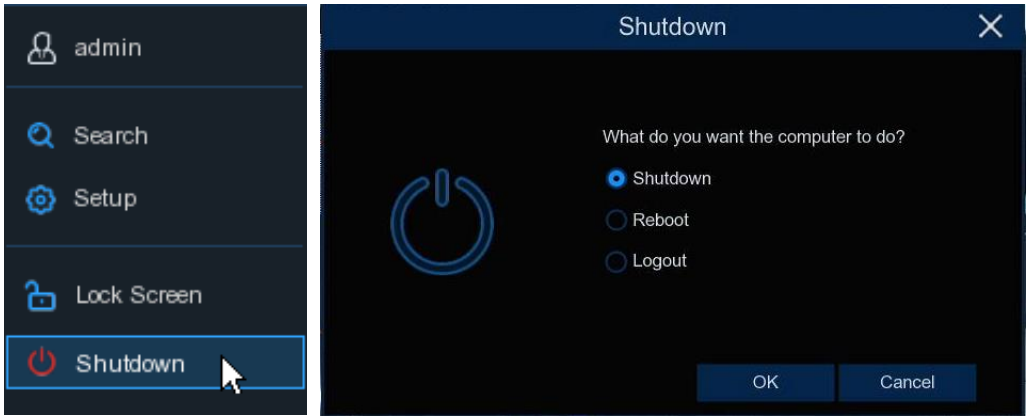


The screen will be locked to prevent unauthorized OSD operation while the DVR is not in menu operation for 1 minute.

If necessary, you can also lock the screen operation manually. To do so, go to **Start Menu**, click the Lock Screen icon to lock the system immediately.

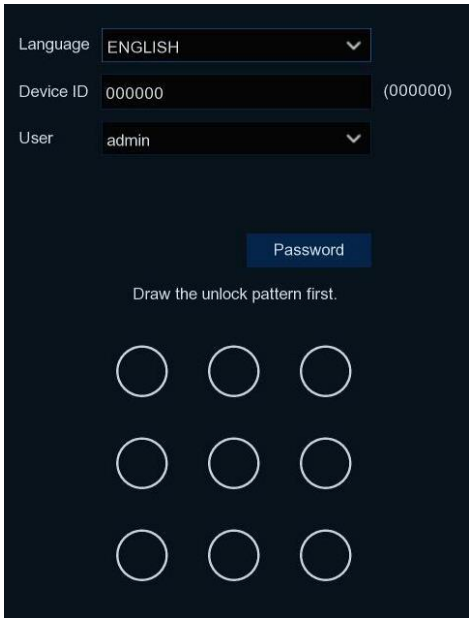
If the system is locked, you can click the **Unlock** icon to unlock the system for further operation. You can optionally click **Pattern** to unlock the system.

4.2.3.2 Shutdown



Click the **Shutdown** button from **Start Menu** and select the desired action. Click **OK** and type the password when the **Authentication** window appears.

If you choose **Logout**, the live viewing screen will disappear. You will need to log in the system for further operations.



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

Password: Get into the unlocked interface.

Chapter 5 DVR System Setup

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

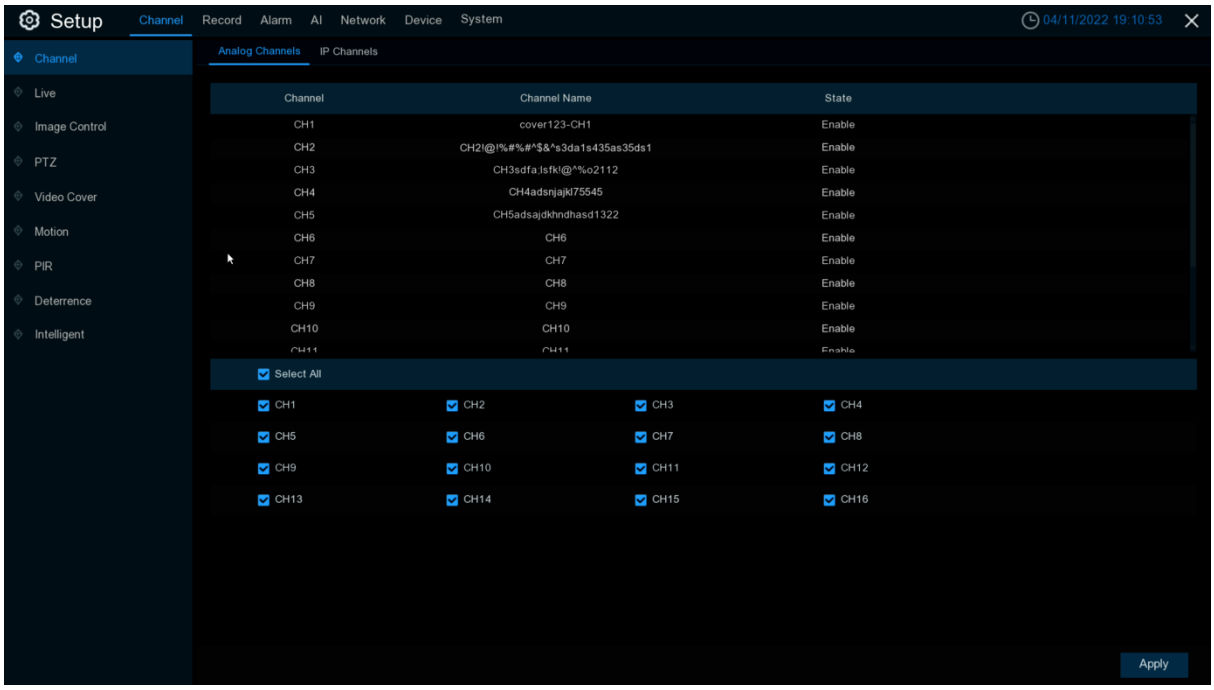
5.1 Channel

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 Channel

5.1.1.1 Channel configure

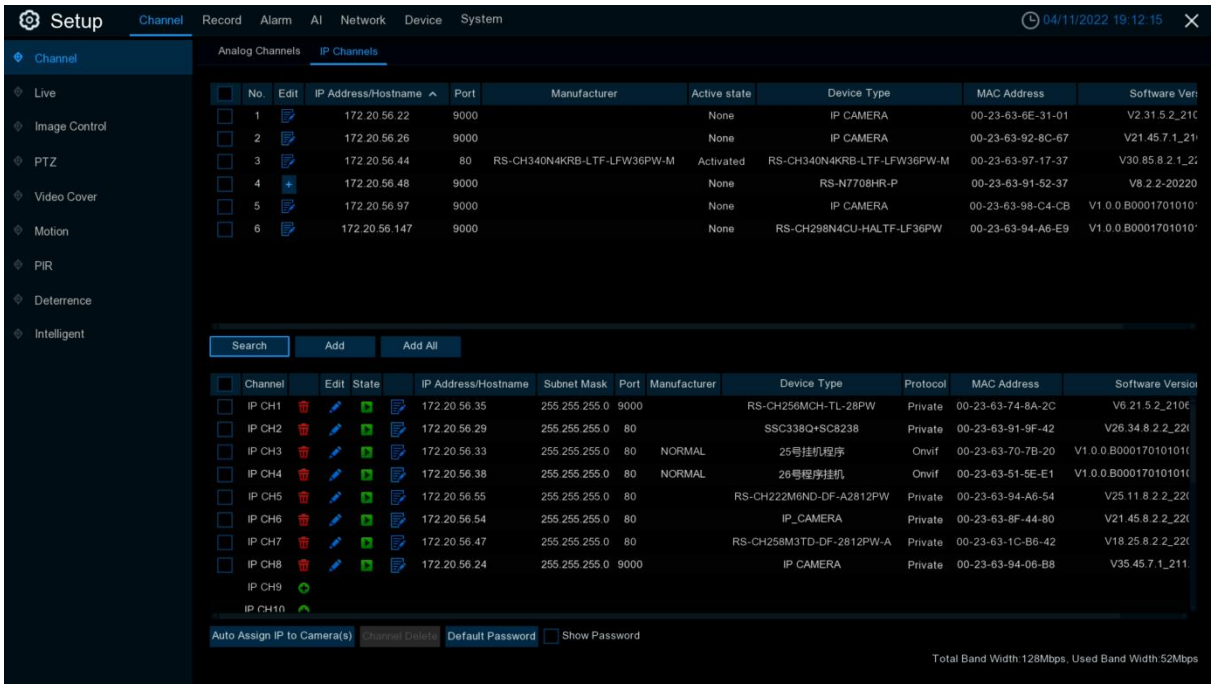
Part of channels support Wireless camera. See the pictures below.



The DVR supports to disable analog channels to increase IP channels. If you want to disable an analog channel, uncheck the box and Click **Apply** to save. To disable an analog channel can increase an IP channel input. To do so, you need to enable the XVR mode in advance at **System → General → Mode**, view more on 5.6.1 General**.**

5.1.1.2 IP Channels

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



Edit: Modify camera's information, Active IPC, Select to add other DVR channels

IP Address/Domain: IP Camera's IP address or domain

Port: IP camera connection port

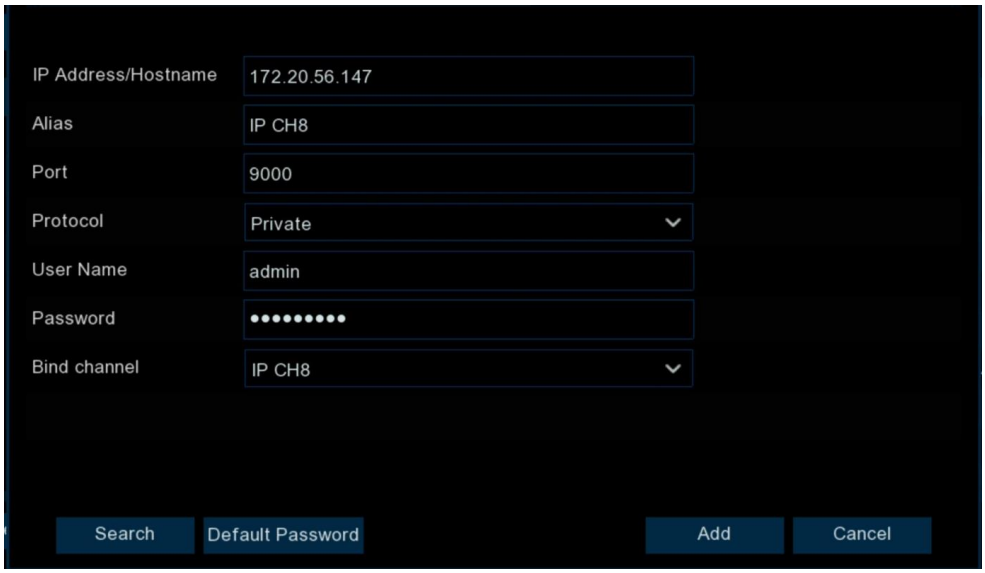
Manufacturer: IP Camera manufacturer information

Device Type: IP Camera device type

MAC Address: IP Camera MAC address information

Software Version: IP Camera software version information

Click **Search** icon to search the local IP camera. Click **Add** icon to add single IP camera. Click **Add All** icon to add all of IP cameras.



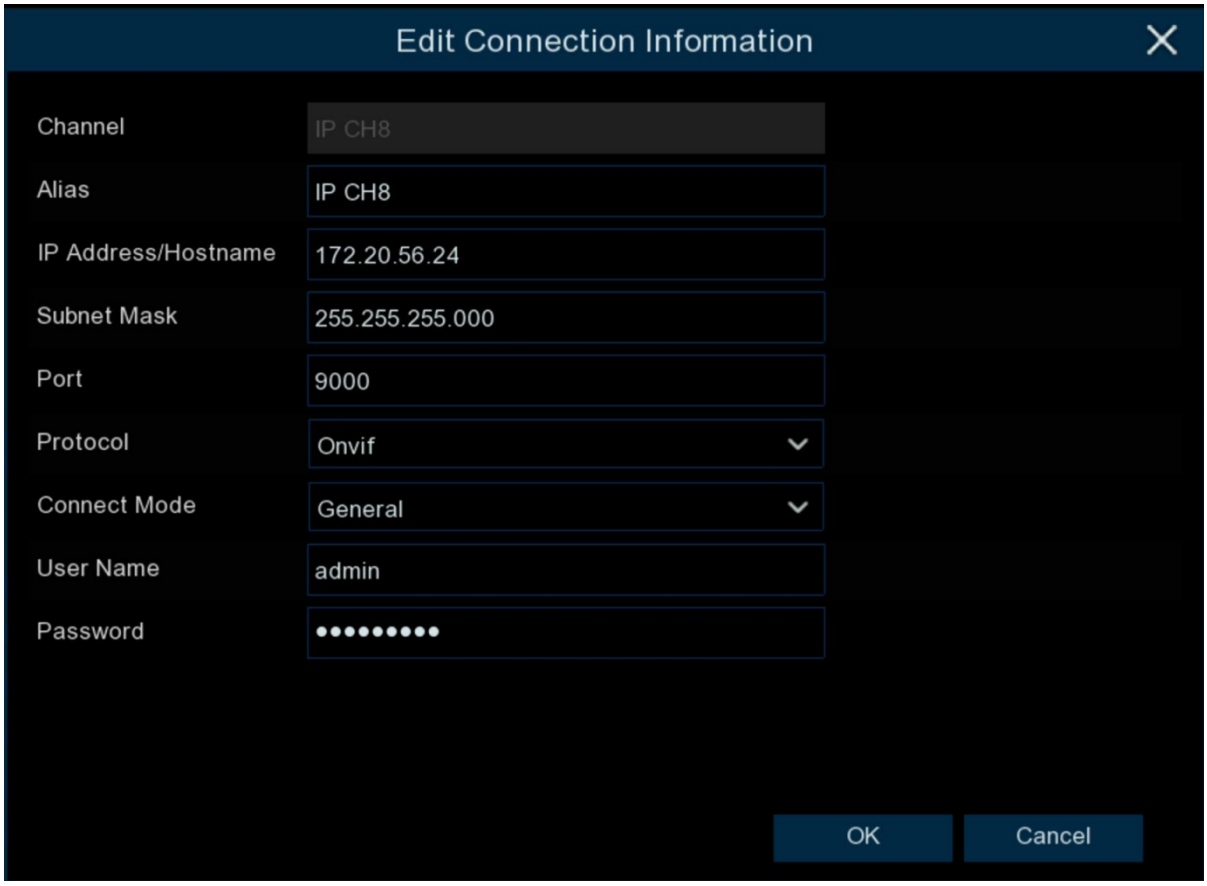
Click **Search** button to search IP cameras, and then Click one of the IP camera on the device list.

Alias: Name of the IP camera

Protocol: Choose the protocol of the IP camera from the drop-down menu, including private protocol, ONVIF protocol, and RTSP protocol.

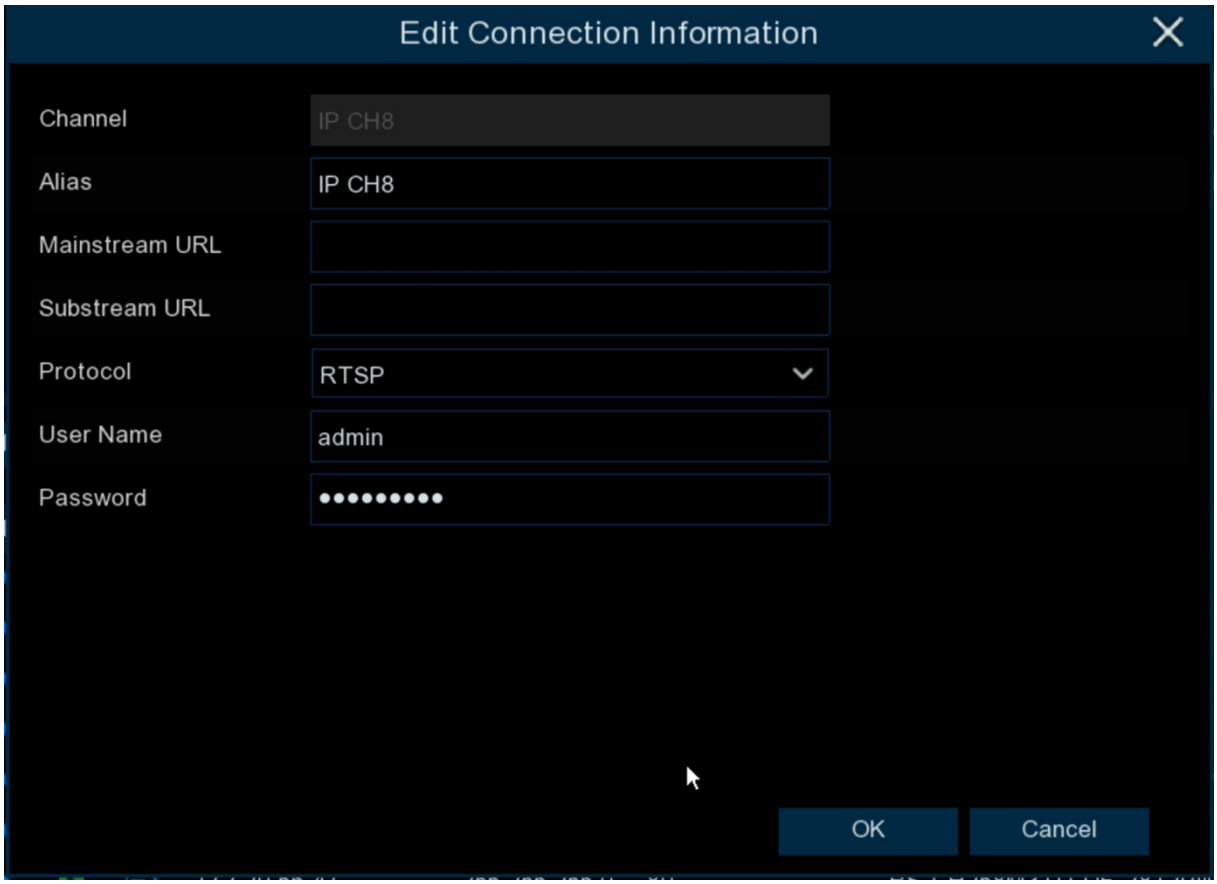
Note: When selecting the Private protocol, if PORT is an IPC media port, the old private protocol is connected to the IPC; if the port is the IPC HTTP port, the API protocol is connected to the IPC. Currently there are only 8.2.2 and subsequent versions of the subsequent versions. DVR and IPC support the use of the API protocol connection

Connect Mode: Select ONVIF protocol, the option shows. From the drop-down menu select **General** or **Security**. **General** means ONVIF HTTP protocol; **Security** means device will request whether IP camera supports HTTPS, if so, provide certificate. If no, connect via HTTP.



Mainstream URL: Using RTSP protocol shows this option, fill up the IP camera mainstream RTSP URL.

Substream URL: Using RTSP protocol shows this option, fill up the IP camera sub stream RTSP URL.



User Name: User Name of the IP camera

Password: Password of the IP camera

Bind channel: Choose a channel of the DVR you want to attach to

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.

Channel Delete: Choose one or more added IP cameras, and Click this button to delete.

Default Password: To set IP camera's default password

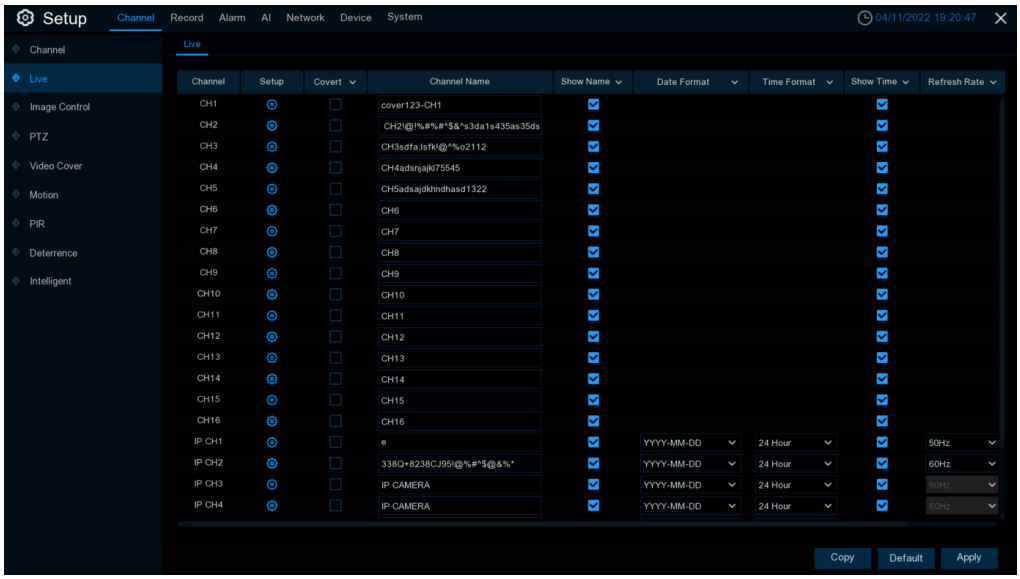
Click Edit icon and enter the IP camera edit menu.

Show Password: select to fill up DVR password, every channel password proclaim in writing

Note: When the IPC connected to the channel is an inactive state and the IPC is connected to the API protocol, the DVR will use the password of the connection IPC set by the channel to activate the IPC "admin123" to activate the IPC.

5.1.2 Live

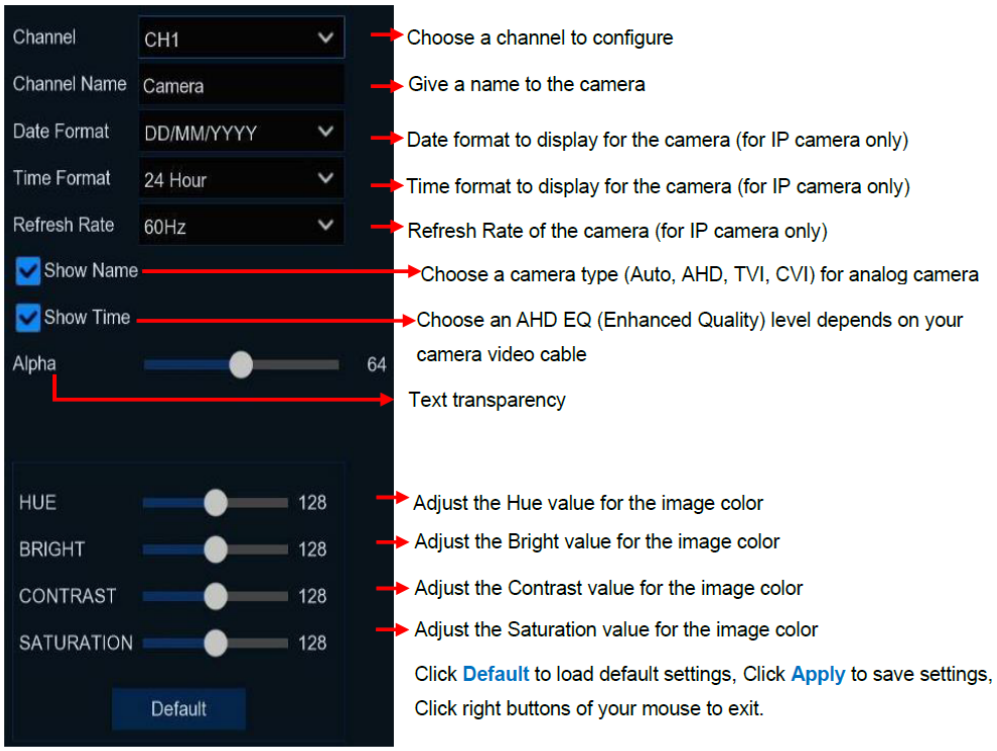
To configure camera parameters.



Channel: Display channel name.

Covert: After selected, the current channel will hide the live image in local UI.

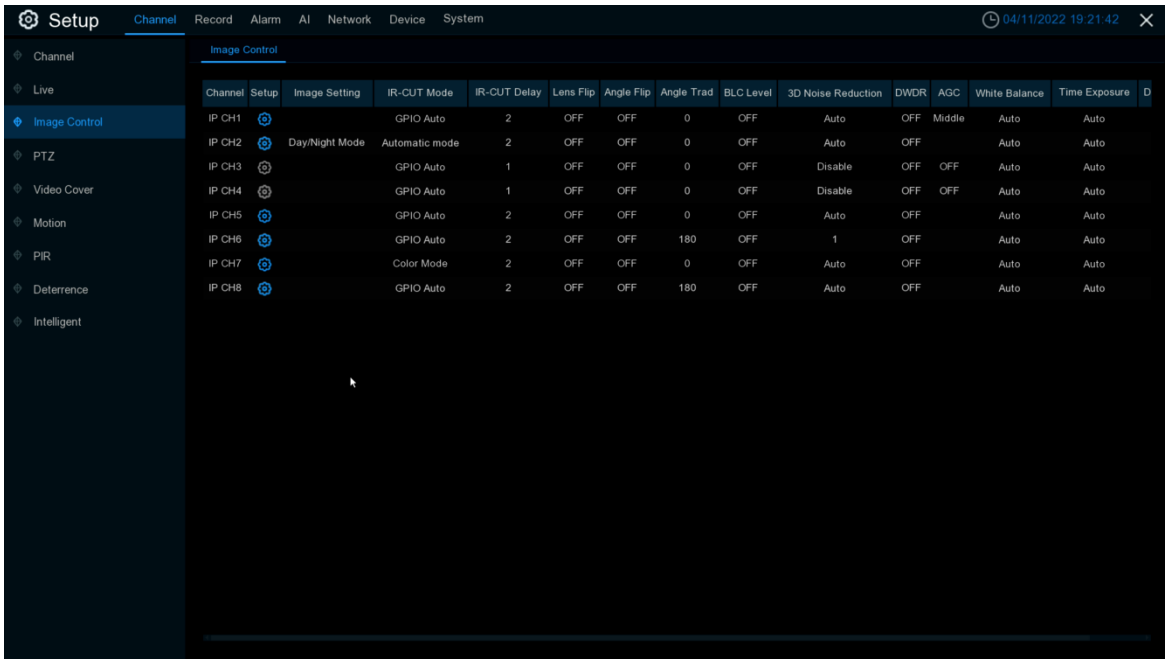
Setup: Click icon into the setup page.



Note: 3 MP / 5 MP resolution is not supported by CVI signal.

5.1.3 Image Control

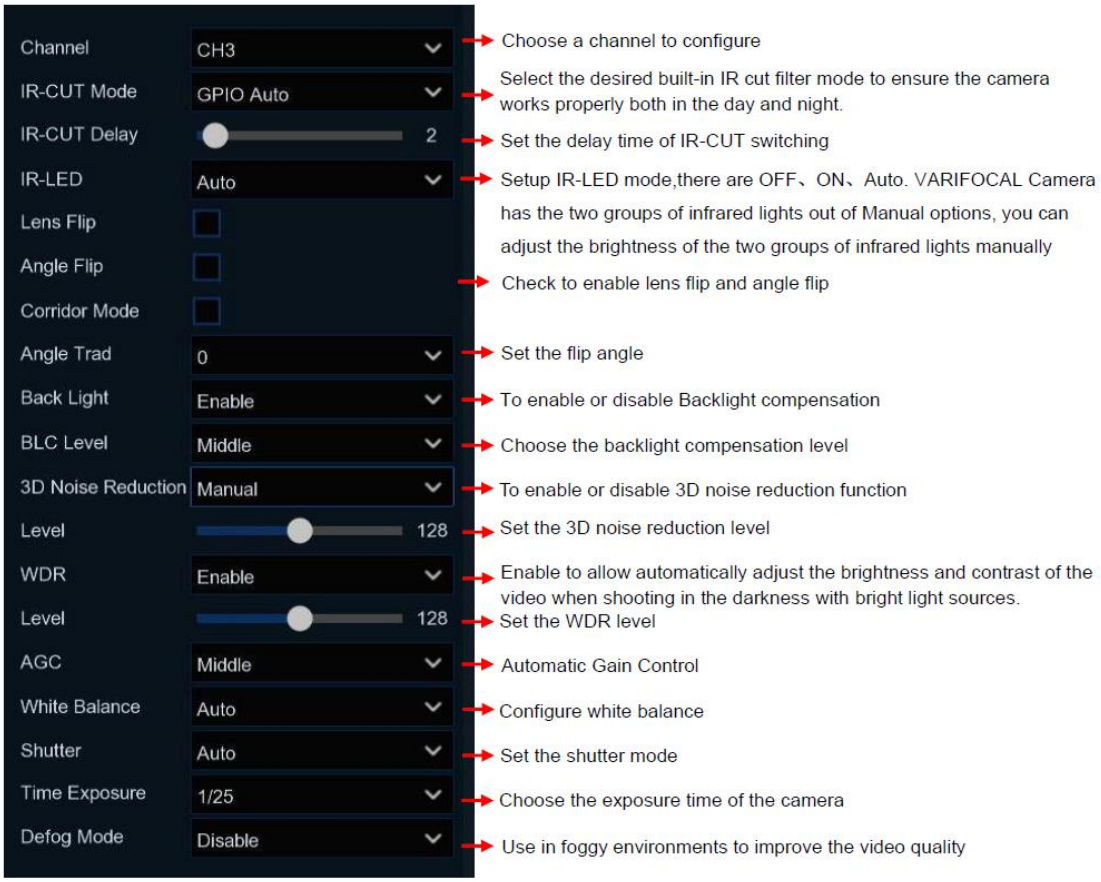
This menu allows you to control image settings for supported IP cameras.



Channel: Channel name.

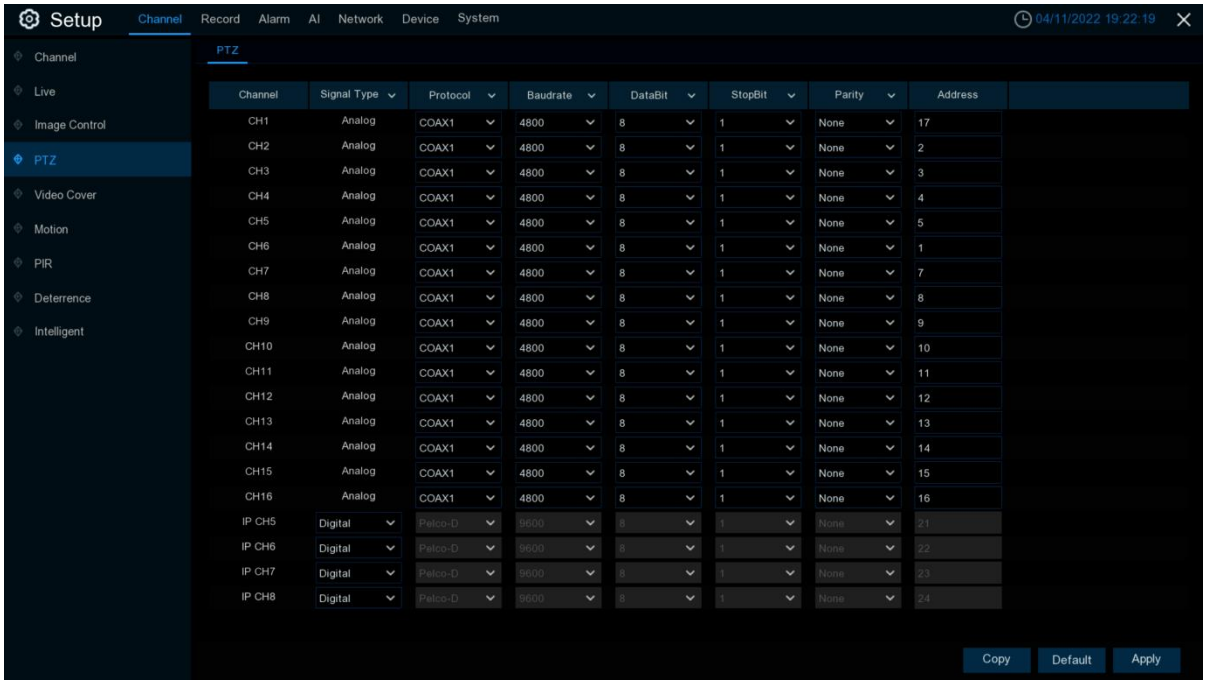
Setup: Click icon into the setup page.

Note: Some devices support **Corridor Mode**. The function of the Corridor Mode is to rotate the lens 90 degrees clockwise.


Channel
CH3
Choose a channel to configure
IR-CUT Mode
GPIO Auto
Select the desired built-in IR cut filter mode to ensure the camera works properly both in the day and night.
IR-CUT Delay
2
Set the delay time of IR-CUT switching
IR-LED
Auto
Setup IR-LED mode,there are OFF、ON、Auto. VARIFOCAL Camera has the two groups of infrared lights out of Manual options, you can adjust the brightness of the two groups of infrared lights manually
Lens Flip
Angle Flip
Check to enable lens flip and angle flip
Corridor Mode
Angle Trad
0
Set the flip angle
Back Light
Enable
To enable or disable Backlight compensation
BLC Level
Middle
Choose the backlight compensation level
3D Noise Reduction
Manual
To enable or disable 3D noise reduction function
Level
128
Set the 3D noise reduction level
WDR
Enable
Enable to allow automatically adjust the brightness and contrast of the video when shooting in the darkness with bright light sources.
Level
128
Set the WDR level
AGC
Middle
Automatic Gain Control
White Balance
Auto
Configure white balance
Shutter
Auto
Set the shutter mode
Time Exposure
1/25
Choose the exposure time of the camera
Defog Mode
Disable
Use in foggy environments to improve the video quality

5.1.4 PTZ

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



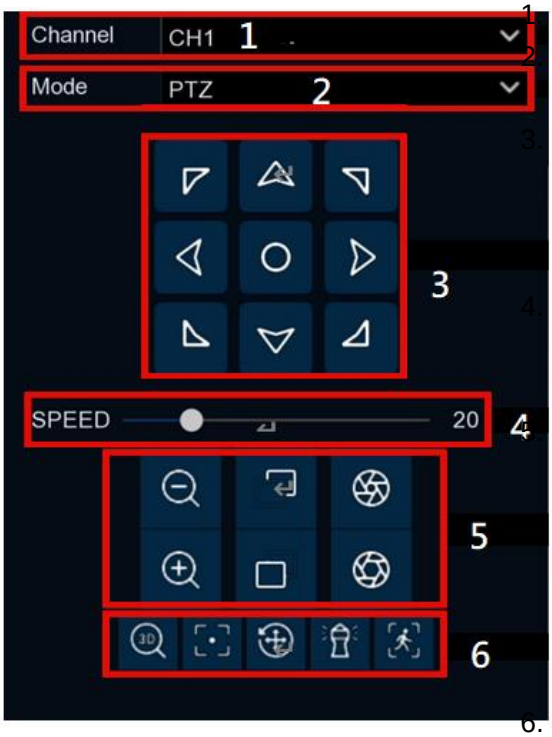
Channel: Channel name
Signal Type: Analog for analog channels, Analog & Digital for IP channels.
Protocol: Choose the communication protocol between the PTZ capable camera and DVR. If your camera support UTC (Up the Coax) function, you can choose COAX1 or COAX2 to display your camera OSD menu or control 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 channel on Live Viewing screen to open 4.2.1 quick toolbar, and choose the PTZ control icon .

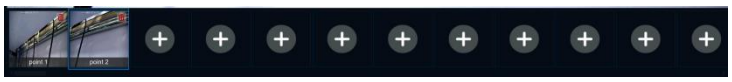
2) PTZ control panel will be displayed.



1. Click to select the channel of the PTZ camera.
2. PTZ Cruise Mode --PTZ, PRESET, Line Scan, Watch Mode, Tour, Pattern Scan.
3. Click the middle button, the PTZ will continue to rotate horizontally; long -pressing the surrounding direction keys can control the level of PTZ levels, vertical, etc.
4. PTZ speed adjustment horizontal bar is divided into 1-100 gears. The larger the value, the faster the rotation speed.
5. The first vertical icon is the closer and long -drawn of the lens, and the corresponding scene is enlarged and reduced; The second vertical icon is the lens focus, Click the definition of the adjustable scene; The third vertical icon-- Click to adjust the size of the aperture, corresponding to the bright image.
6. The first icon is 3D PTZ, after Clicking on, you can rotate to Click the image position by Clicking the screen. You can also turn to the frame to select the image position and zoom in/reduce the image through the frame. Turn on the right to the left to the selected position and shrink the multiples of the corresponding proportion. The second icon is automatic focus, click to automatically adjust the clarity of the scene; The third icon is to reset the preset point. After Clicking, the preset point of the settings will be reset; The fourth icon is the watch mode. After Clicking, you will start the actions of the Watching position according to the set watch; The fifth icon is manual tracking mode. After Clicking, use the left mouse button box to select the target to be tracked at the preview interface. The high-speed ball can automatically make the target always at the center of the vision.

Preset Mode：

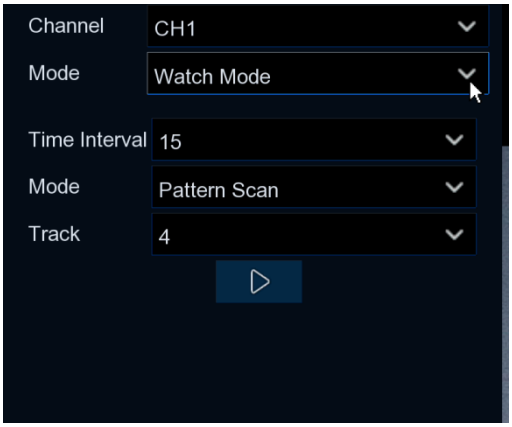
Click to view the image of preset point, as below picture；



Click or to add new preset point. The preset point screen is displayed below the preview interface, the preset point will be displayed on the left, the preset point that has been set is dark display, and the preset point gray display.

Click to rotate to the position of preset via the shortest route

Click Name box to modify preset name, Click Time box to modify stay time at preset point.

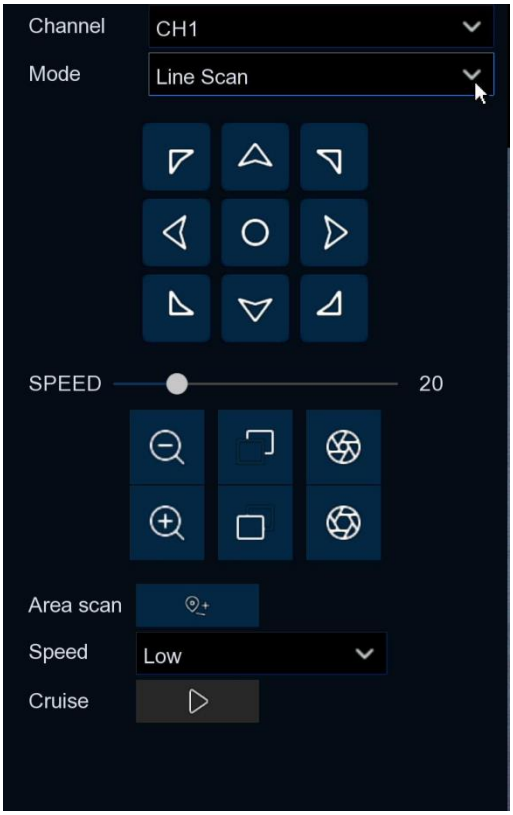


Watch Mode：

Time Interval: Watch point stay time, stop operation and keep to home position interval time.

Mode： Select watch mode, Default, Preset, Line Scan, Tour, Pattern Scan;

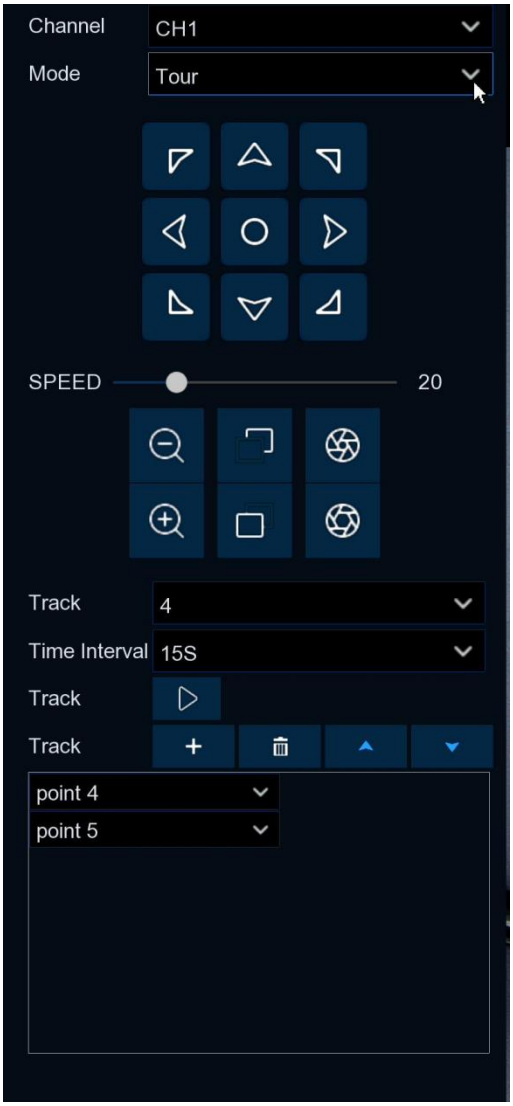
Click Start Cruise.



Line Scan:

Area scan: Click to record the start position, move PTZ ,Click to record the stop position;

Click start Line Scan cruise, PTZ in this mode was move at same horizontal direction.

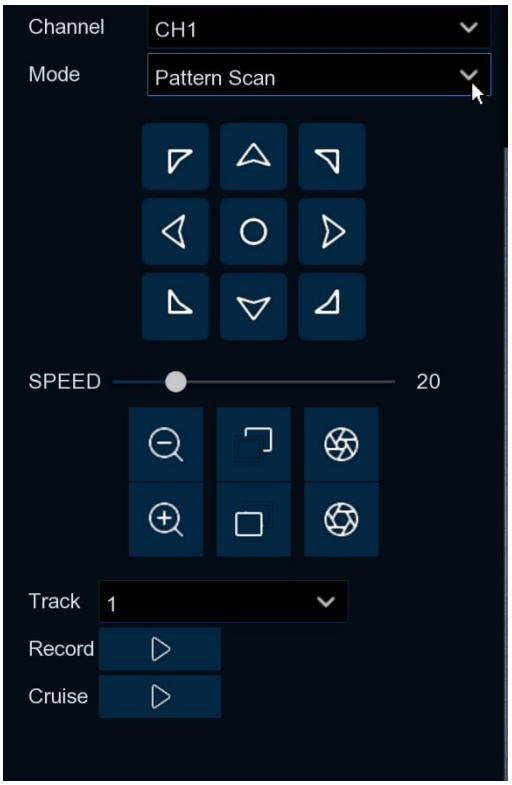


Tour:

Time Interval: Stay time at each preset point

Click + to add new preset. Click 🗑 to delete preset point. Click ▲/▼ move up or down the preset point,

Click ▷ to start cruise.



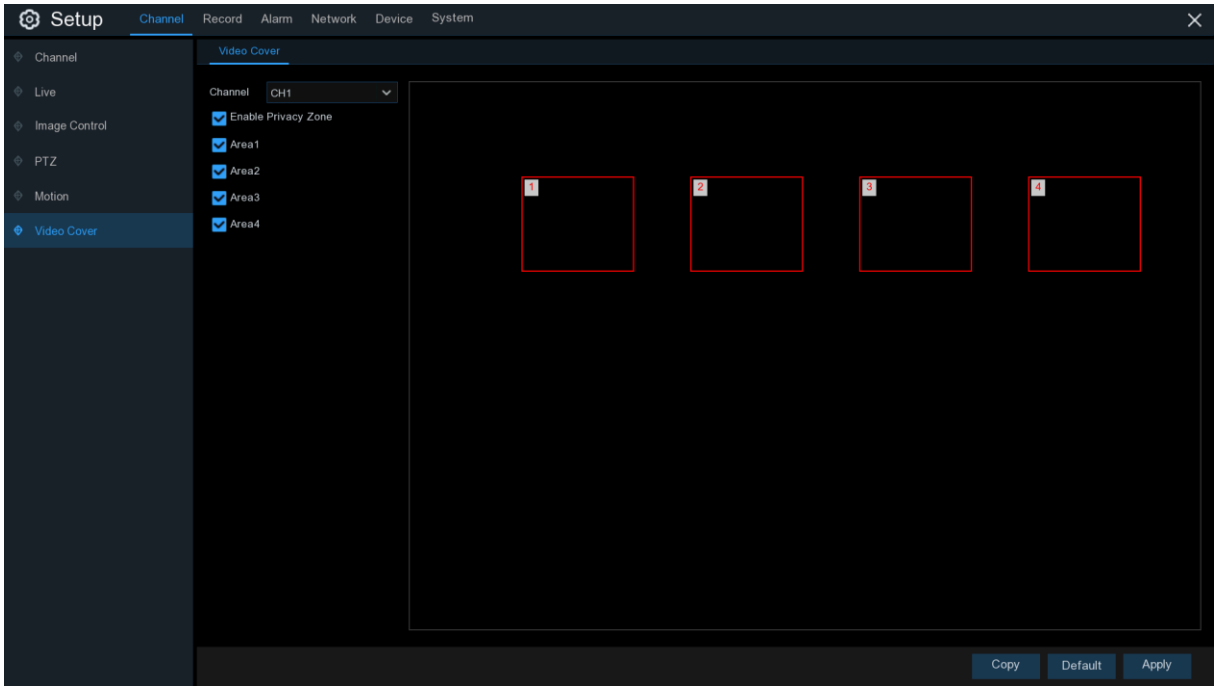
Pattern Scan:

Record: Click start record cruise route. Click stop record.

Cruise: Click start cruise on the previous record route.

5.1.5 Video Cover

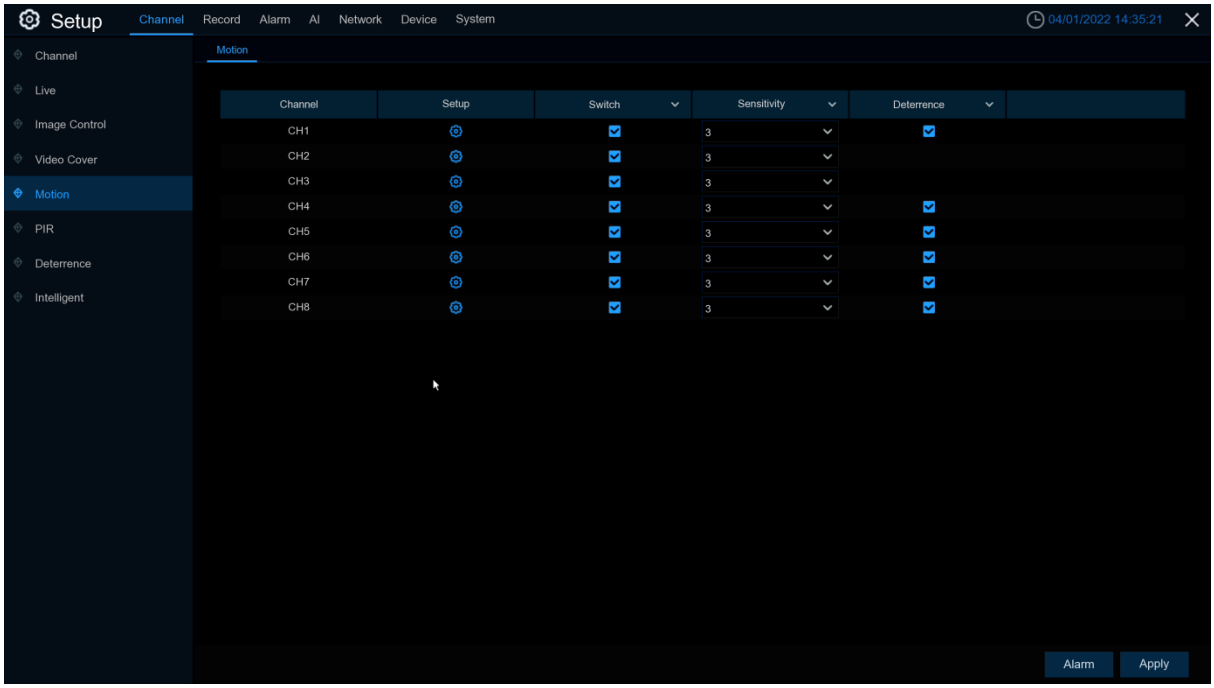
This menu allows you to create privacy zone(s) if you want to partially cover some certain part of the image. You can create up to 4 privacy zones in any size and location on the camera image. Enable the Privacy Zone, and choose how many zones you need. The zone(s) appear as “red box”. Click the edge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



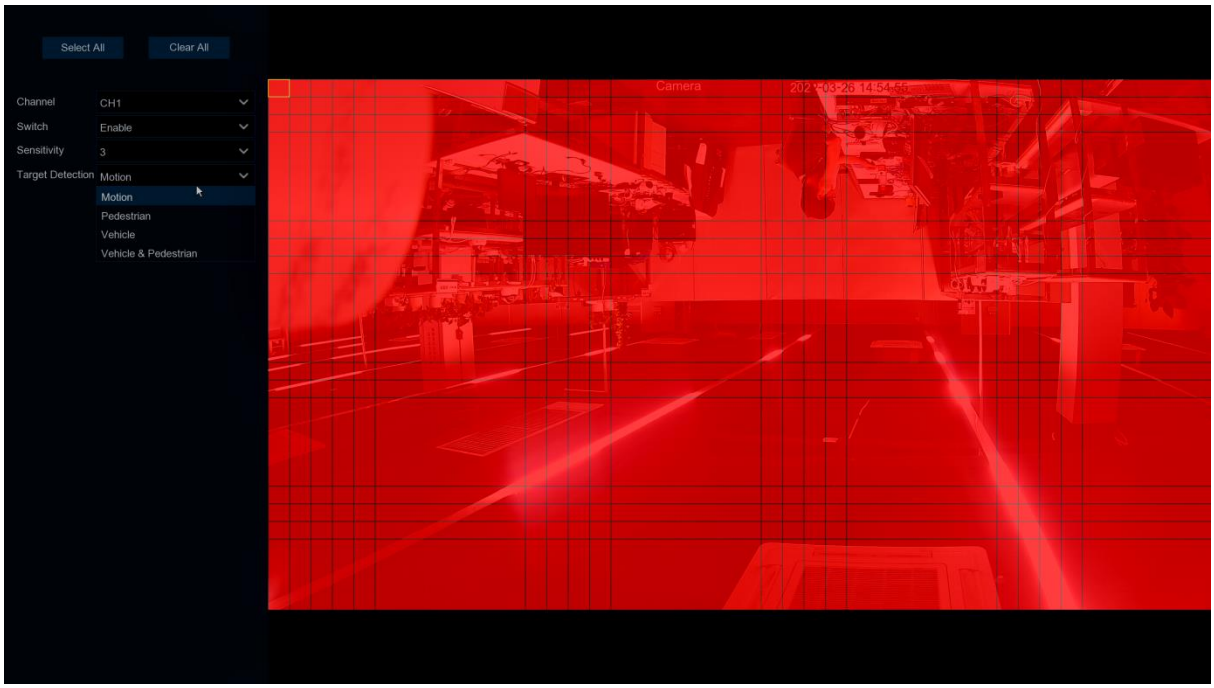
Note: The area of privacy zones you had set will be invisible in both live view & recording video.

5.1.6 Motion

This menu allows you to configure motion parameters. When motion has been detected by one or more cameras, your DVR will alert you for the potential threats by sending you an email alert with an attached image from the camera to use as a reference (if this option is enabled).



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.
Deterrence: Enable spotlight linkage alarm. When PIR alarm is triggered, the spotlight will be triggered
Setup: Click icon into the setup page.



Target Detection: Select trigger detection type. There are four options like **Motion**, **Pedestrian**, **Vehicle**, **Pedestrian & Vehicle.**

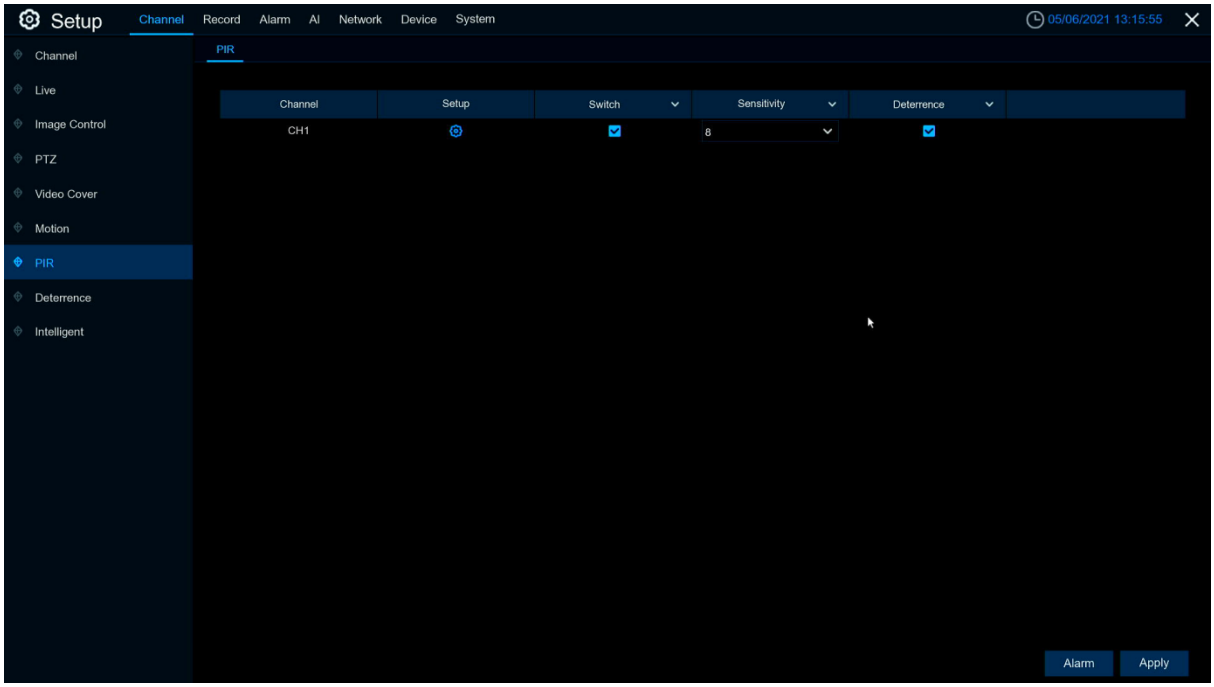
Motion Detection Area:

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 "**Apply**" to make the area setup effective.

Click **Alarm** button to configure the motion detection alarm function: 5.3.1 Motion Detection

5.1.7 PIR

This is an optional function. If your camera has PIR function, you can configure the PIR recording here.



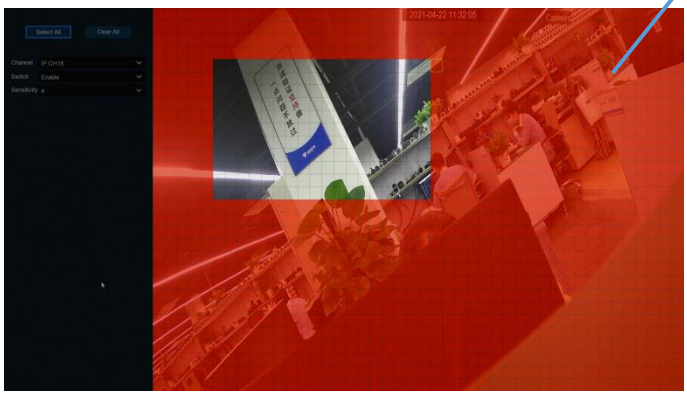
PIR alarm menu, while trigger PIR alarm, it's the same to motion to send notification information to email and APP.

Switch: Enable or disable PIR recording.

Sensitivity: Set the sensitivity level. Level 1 the lowest sensitivity level while level 8 is the highest sensitivity level.

Deterrence: Enable spotlight linkage alarm. When PIR alarm is triggered, the spotlight will be triggered

Setup: Click icon into the setup page.



PIR Detection Area:

Click **Select All** to set the whole screen of the camera as PIR 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.

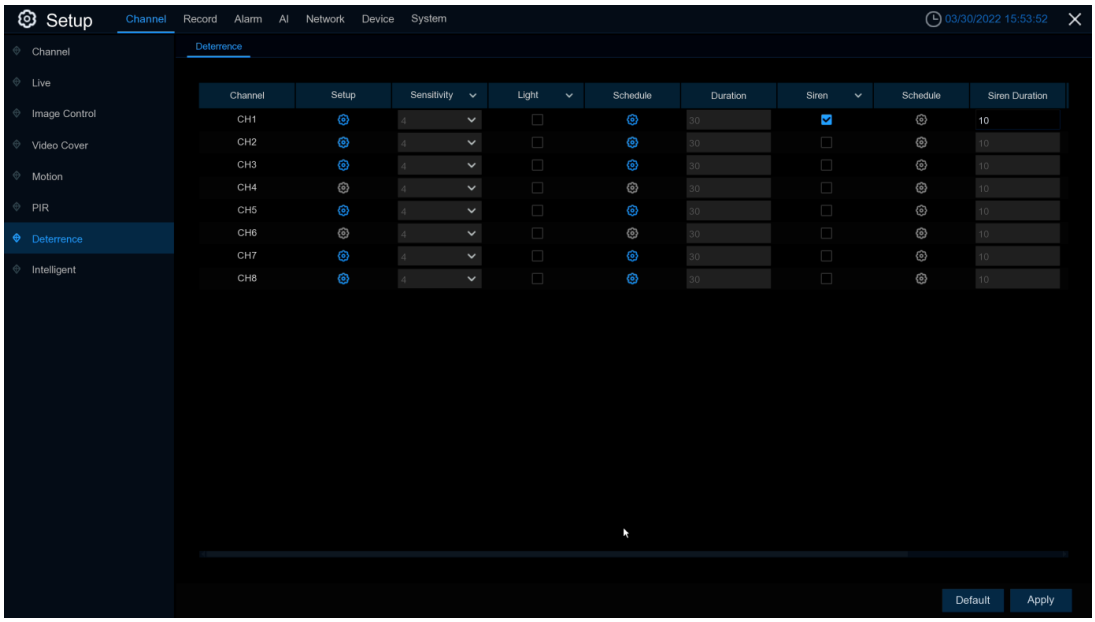
If you want to edit the size of the area, please check the box and change the position.

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

Click **Alarm** button to configure the PIR detection alarm function 5.3.2 PIR

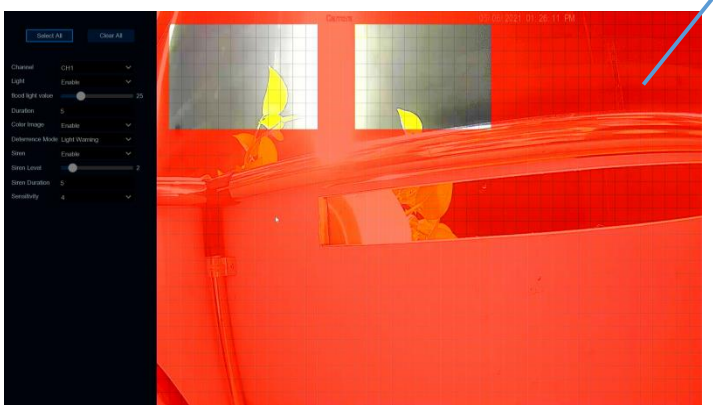
5.1.8 Deterrence

Spotlight alarm can be configured in this menu. Note that this function is only applicable when the DVR is connected to UA-B580F3 / UA-R580F2.



Channel: Channel name

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 **Apply** to make the area setup effective.

Light Switch: To enable spotlight alarm

Flood light valve: Set the sensitivity level, the higher the value, the easier it is to trigger alarm.

Duration: Set the spotlight alarm time period

Color Image: To enable or disable color mode.

Note: After turning on, trigger white light deterrence at night will switch the screen from the night vision to the color mode.

Deterrence Mode: Set white light mode, there are two kinds of mode like Light Warning and Light Strobe

Strobe Frequency: Flashing frequency of white light

Siren Switch: To enable alarm siren

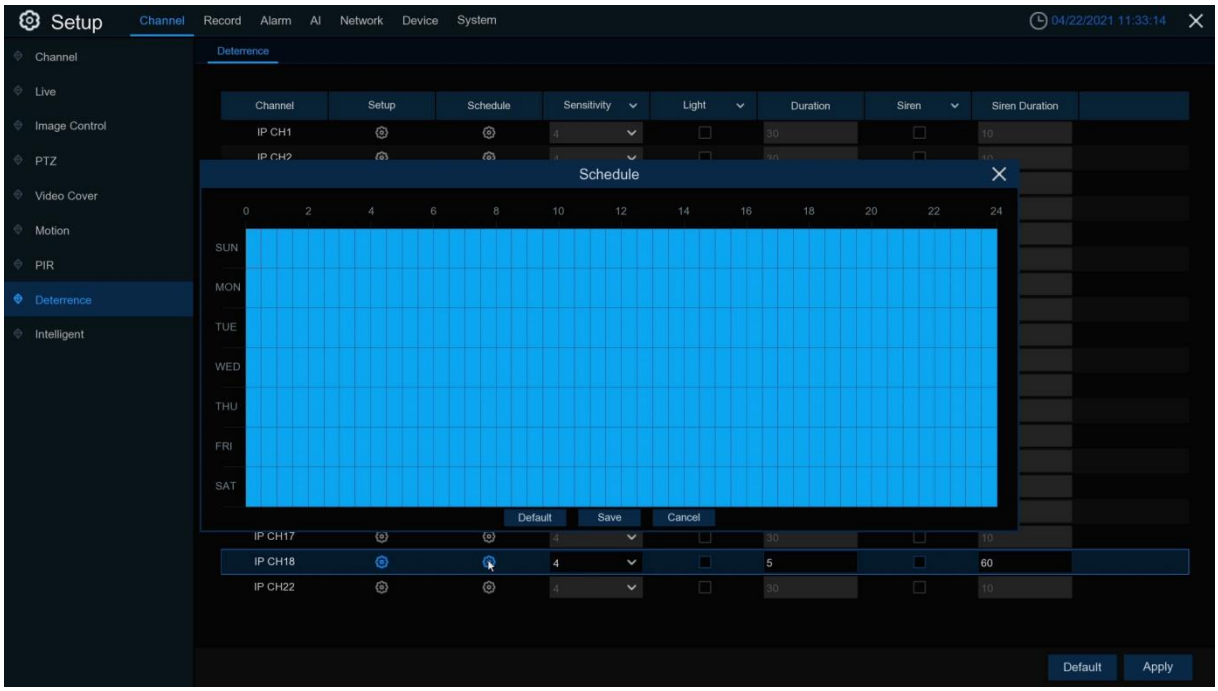
Siren Level: White light alarm sound level

Siren Duration： Set the alarm siren time period

Sensitivity: Set the sensitivity level. Level 1 the lowest sensitivity level while level 8 is the highest sensitivity level.

Schedule: Click icon into the setup page

When IP camera connected to DVR via client port, the setup page as below picture.

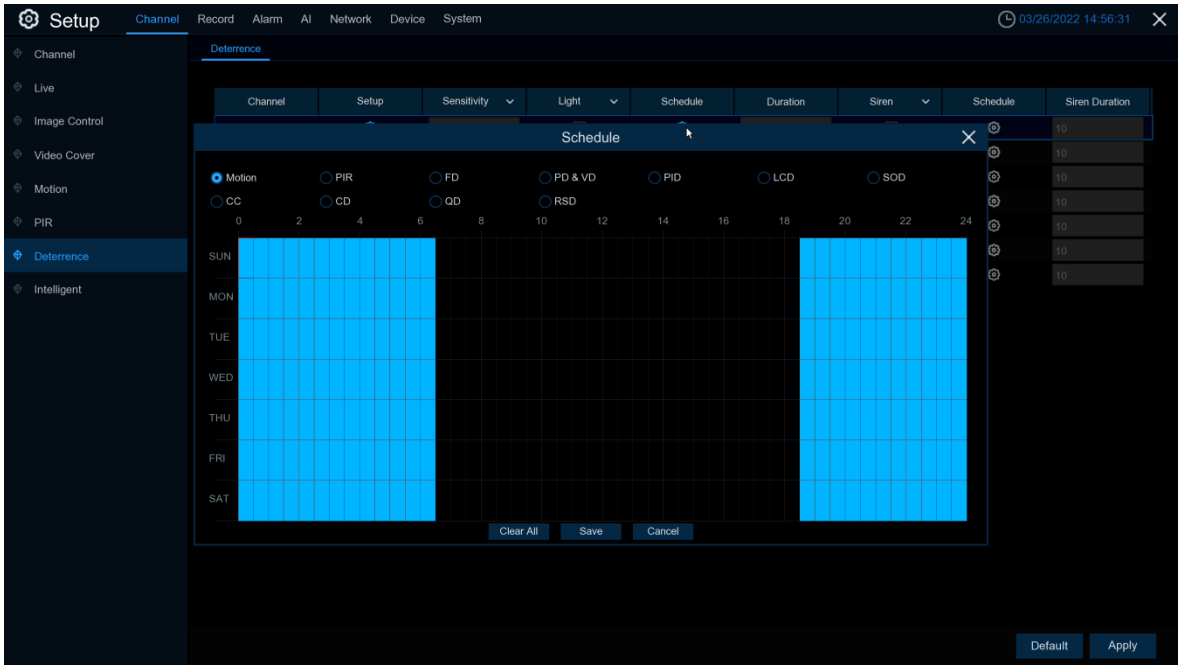


While schedule draw to blue, it means that during this period white light detection can be trigger.

Default: Load default

Note: On Motion or PIR setup page turn on **Deterrence** switch, while trigger motion or PIR, the white light will turn on.

When IPC connected to DVR via WEB port, the setup page as below picture:



Select different function pages to set up White light/Siren linkage alarm schedule.

Clear All: To delete all of pages blue mark.

5.1.9 Intelligent

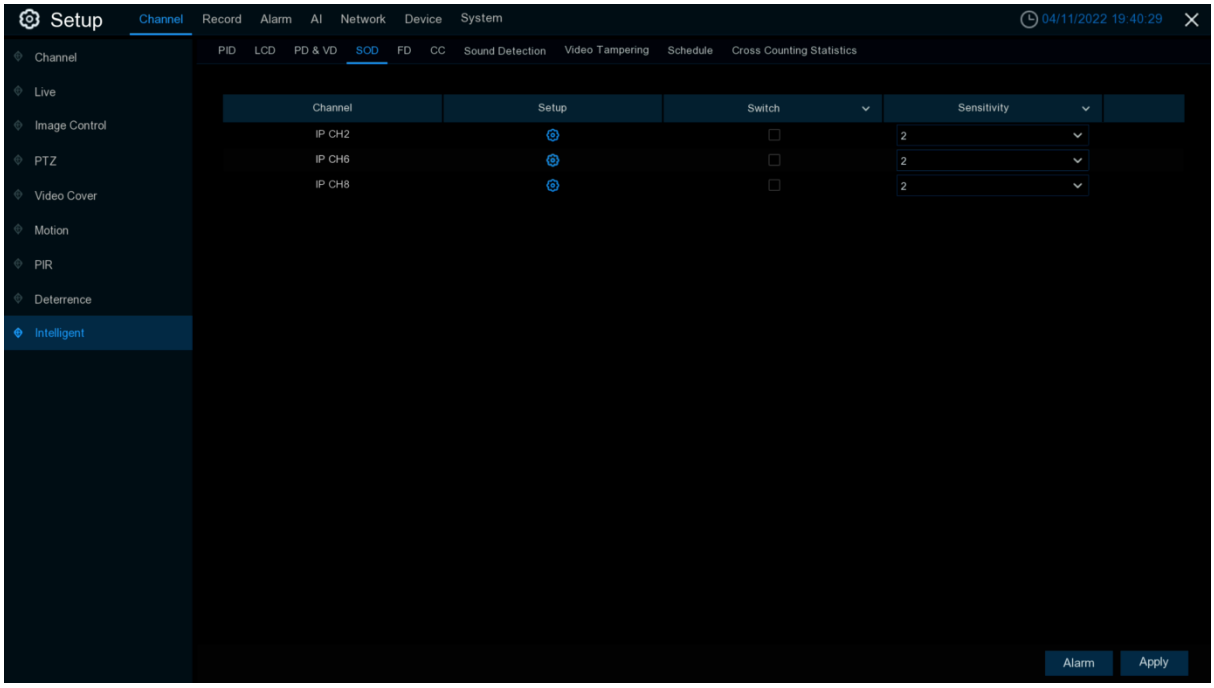
The optional intelligent functions include **SOD, Sound Detection** and **Video Tampering.** These functions are only supported by the AI-capable UA-IP cameras listed below:

- UA-B580F3
- UA-R560F2
- UA-R580F2
- UA-R800F2

Note: To configure AI functions, see *5.4 AI.*

5.1.9.1 SOD (Stationary Object Detection)

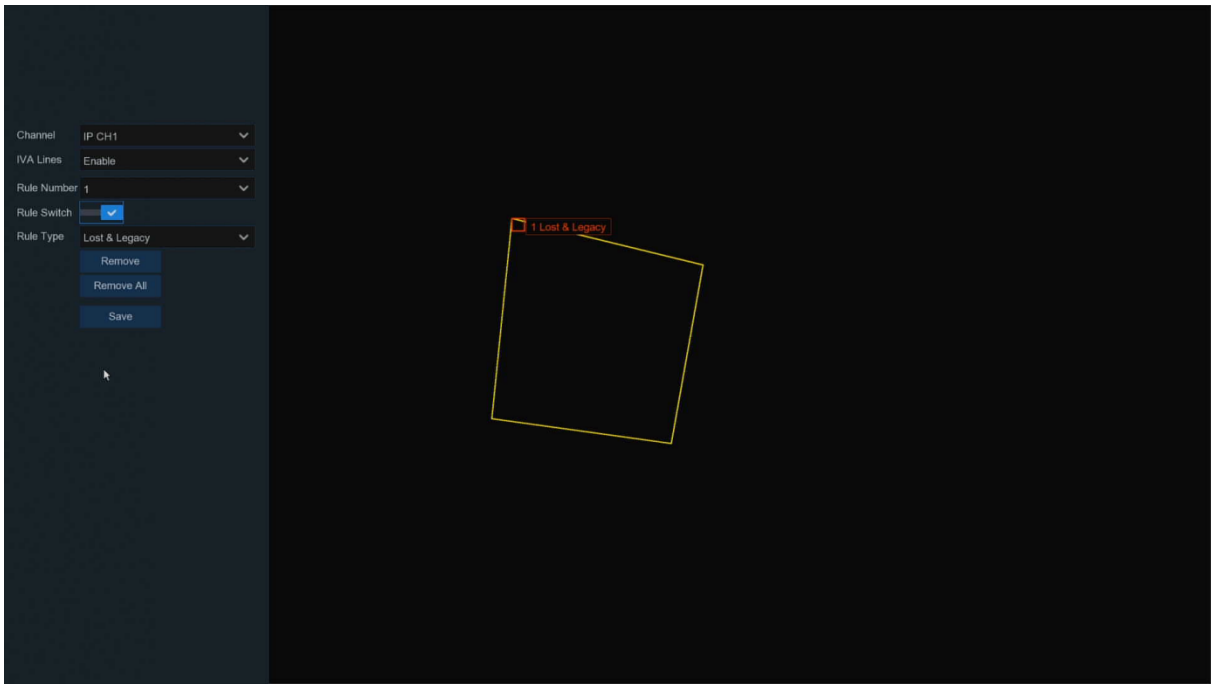
Stationary Object Detection function detects the objects left over or lost in the pre-defined region such as the baggage, purse, dangerous materials, etc., and a series of actions can be taken when the alarm is triggered.



Switch: To enable or disable the SOD function

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

Area: Click **Setup** to draw a virtual line in the camera picture.



1. **Channel:** To select the channel you want to configure
2. **Rule Number：** It is the number of LCD lines. Maximum 4 lines you can draw, choose one of the Rule Number. It is the number of LCD area. Maximum 4 areas you can set for LCD function. Each rule switch and rule type is separately, it needs to turn on/off separately.
3. **Rule Switch:** To enable the detection.
4. **Rule Type:** Choose a Rule Type.
   Legacy: DVR will only detect the left-over objects;
   Lost: DVR will only detect the lost objects;
   Lost & Legacy: 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.
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.

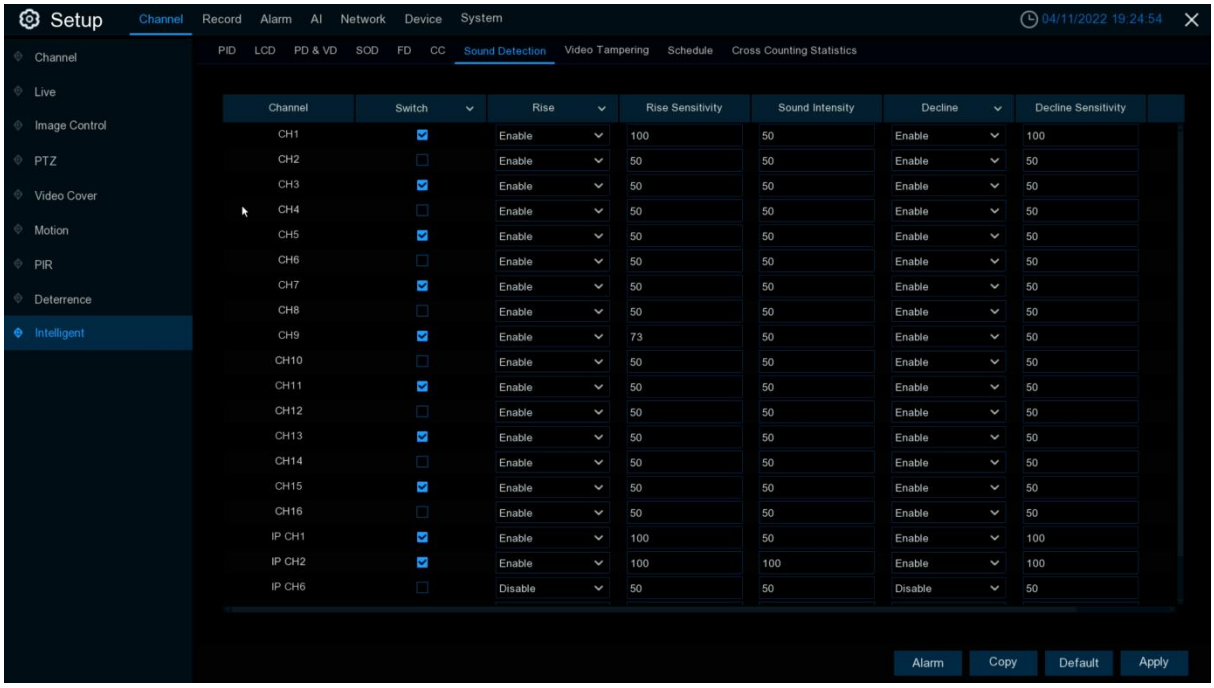
Notice:

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: Please view 5.3.4.1 SOD (Stationary Object Detection).

5.1.9.2 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.

Enable: Turn on/off the Sound Detection function.

Rise: Switch of volume raised; the alarm will be triggered only when volume rise sharply.

Rise Sensitive: The sensitivity of volume raised, 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. Set up value from 1—100.

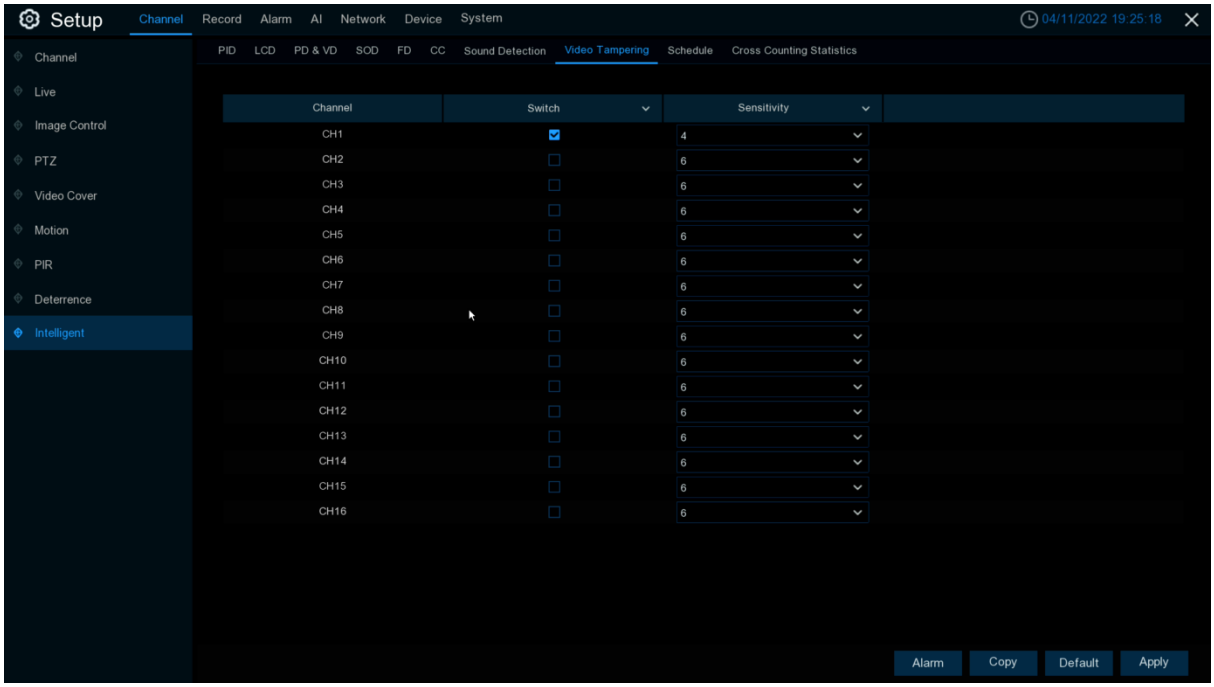
Decline: Switch of volume drop sharply; the alarm will be triggered only when volume rise sharply.

Decline Sensitive: The sensitivity of drop sharply, the larger the value, the easier to trigger the alarm. Set up value from 1—100.

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

Click "**Alarm**" button to configure **Sound Detection** function. Please view in 5.3.4.1 Sound Detection.

5.1.9.3 Video Tampering



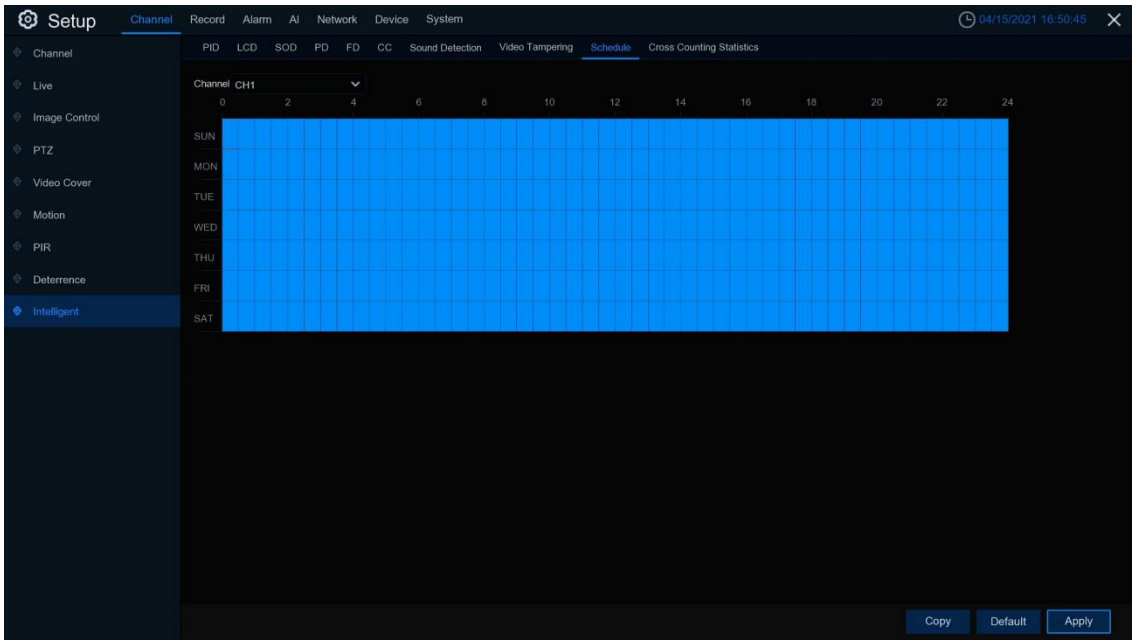
The alarm triggered when the camera be covered largely.

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

Sensitivity: Sensitivity has six options from 1 to 6. The default value is set to 4. The larger the value, the easier to trigger the alarm.

Click "**Alarm**" button to configure **Video Tampering** function. Please view in 5.3.4.2 Video Tampering.

5.1.9.4 Schedule

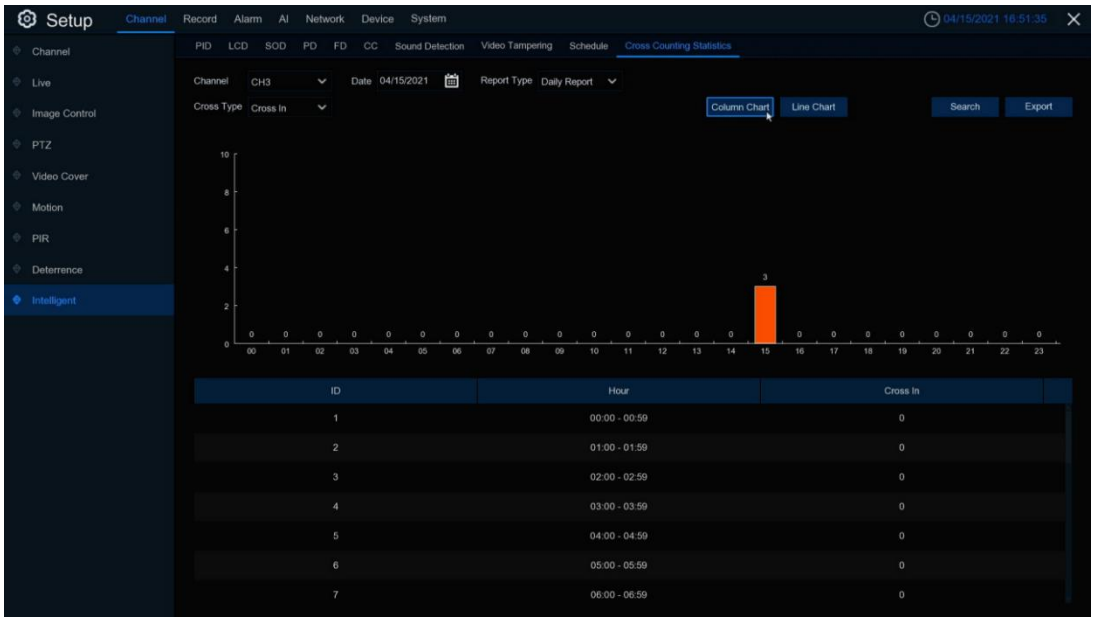


In order to activate the intelligent function, you need to configure the schedule. The schedule will be active in 24 hours x 7 days.

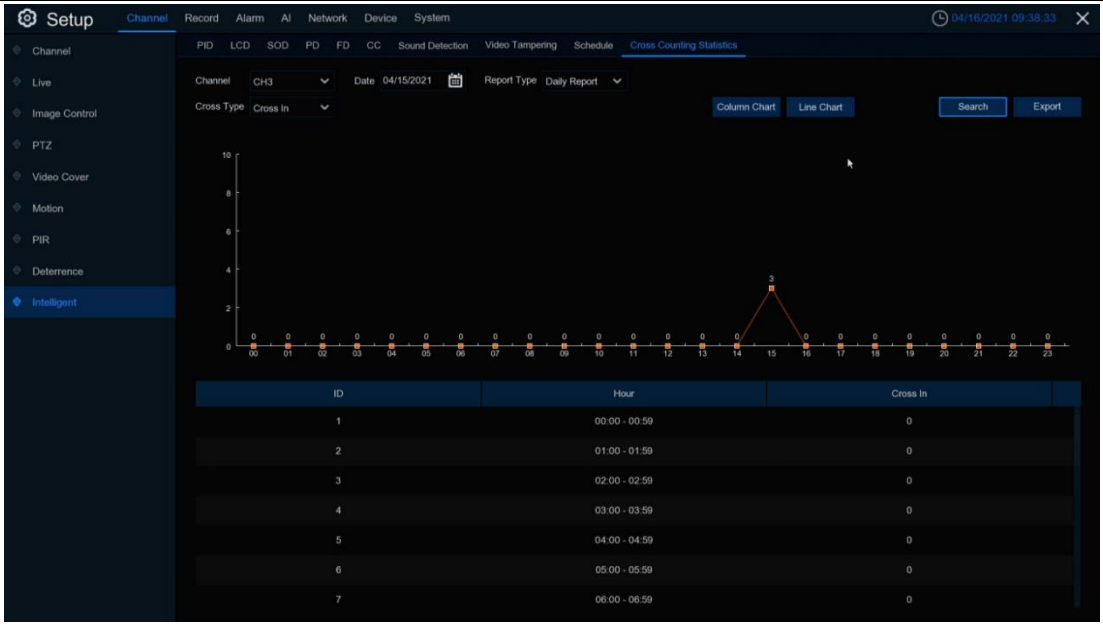
To set the schedule, choose one channel then drag the cursor to mark the slots. The sky-blue blocks in the time slots will be active for Intelligent detentions. The schedule is valid only for the selected channel each time when you set. If you want to use the same schedule for other channels, use **Copy**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

5.1.9.5 Cross Counting Statistics

This menu can make statistics for alarms caused by the cross counting and draw a linear or bar chart.



Channel: Select the channel wanted.
Date: Select the date wanted
Report Type: Select the report type, reports can be generated by Daily Report, Weekly Report, Monthly Report, Annual Report.
Cross Type: Select the cross type, cross in and cross out for option.
Click **Search** button to search CC statistics data
Export: Export the file to external USB drive.
Select **Column Chart** like upper picture shows the result.
Select **Line Chart** like below picture shows the result.


Setup
Channel
Record
Alarm
AI
Network
Device
System
04/16/2021 09:38:33
Channel
Live
Image Control
PTZ
Video Cover
Motion
PIR
Deterrence
Intelligent
PID
LCD
SOD
PD
FD
CC
Sound Detection
Video Tampering
Schedule
Cross Counting Statistics
Channel CH3
Date 04/15/2021
Report Type Daily Report
Cross Type Cross In
Column Chart
Line Chart
Search
Export
ID
Hour
Cross In
1 00:00 - 00:59 0
2 01:00 - 01:59 0
3 02:00 - 02:59 0
4 03:00 - 03:59 0
5 04:00 - 04:59 0
6 05:00 - 05:59 0
7 06:00 - 06:59 0

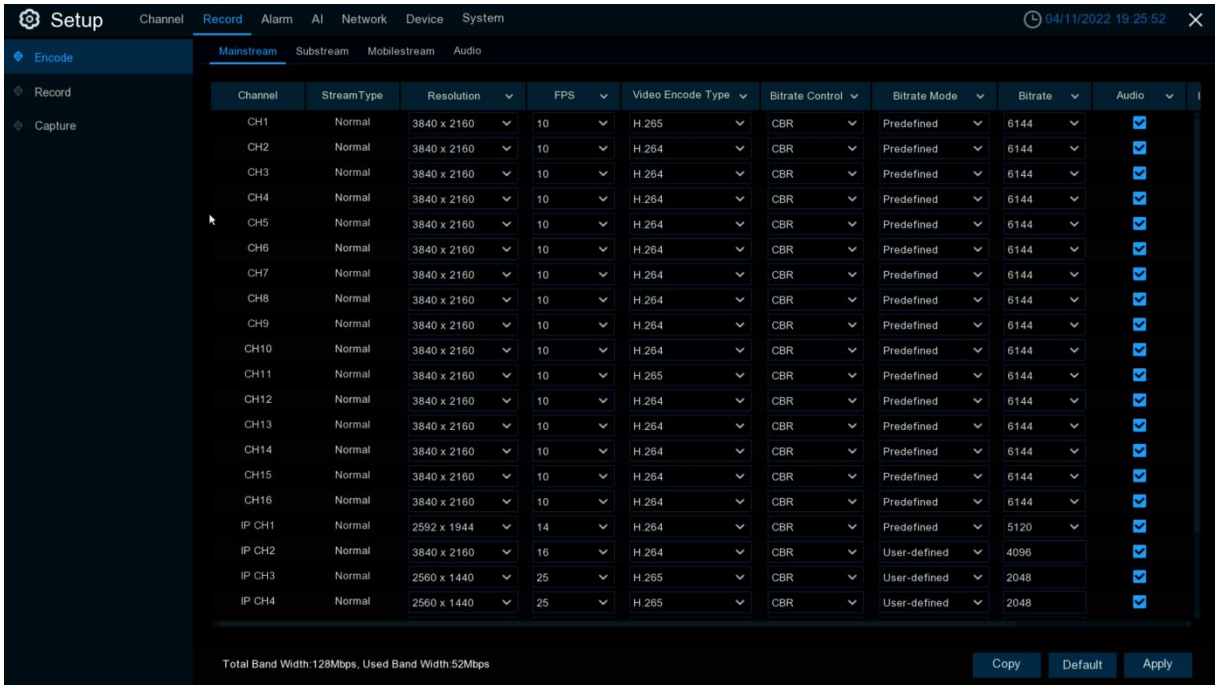
5.2 Record

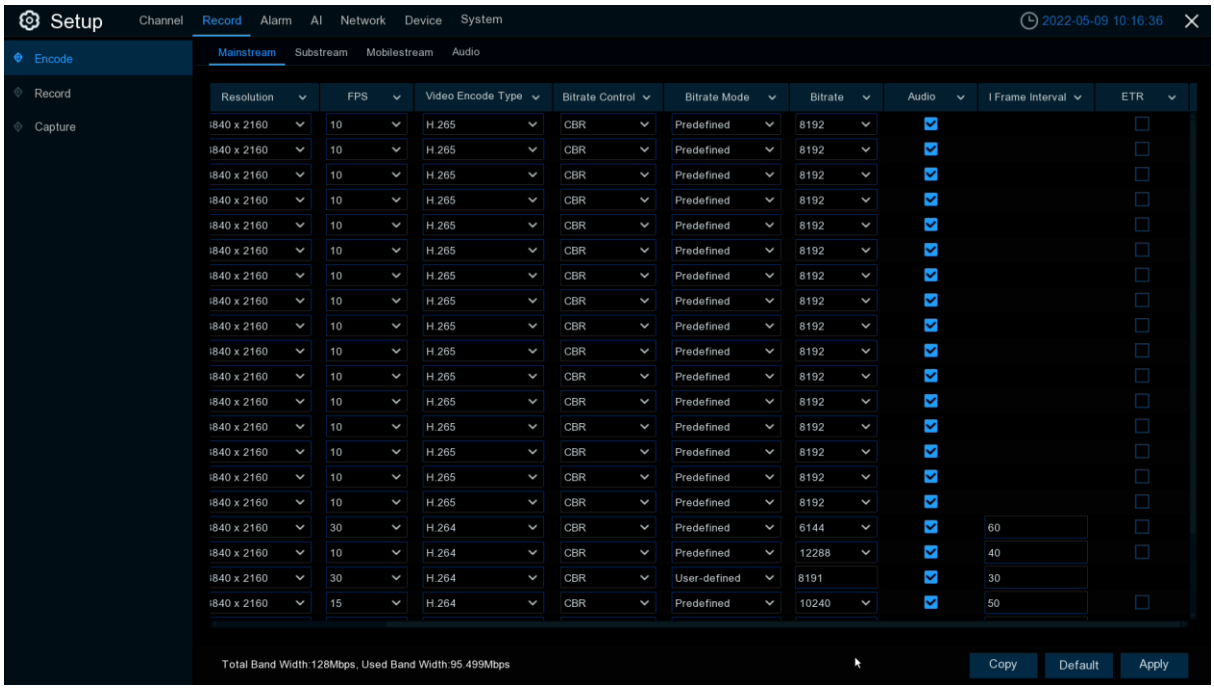
This menu allows you to configure the recording parameters.

5.2.1 Encode

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

5.2.1.1 Main Stream





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: Channel video encode type, there are four options like **H.264, H.265, H.264+, H.265+**.

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**).

Video Quality: Lowest, Lower, Low, Medium, Higher, Highest

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 bitrate, will be of better quality.

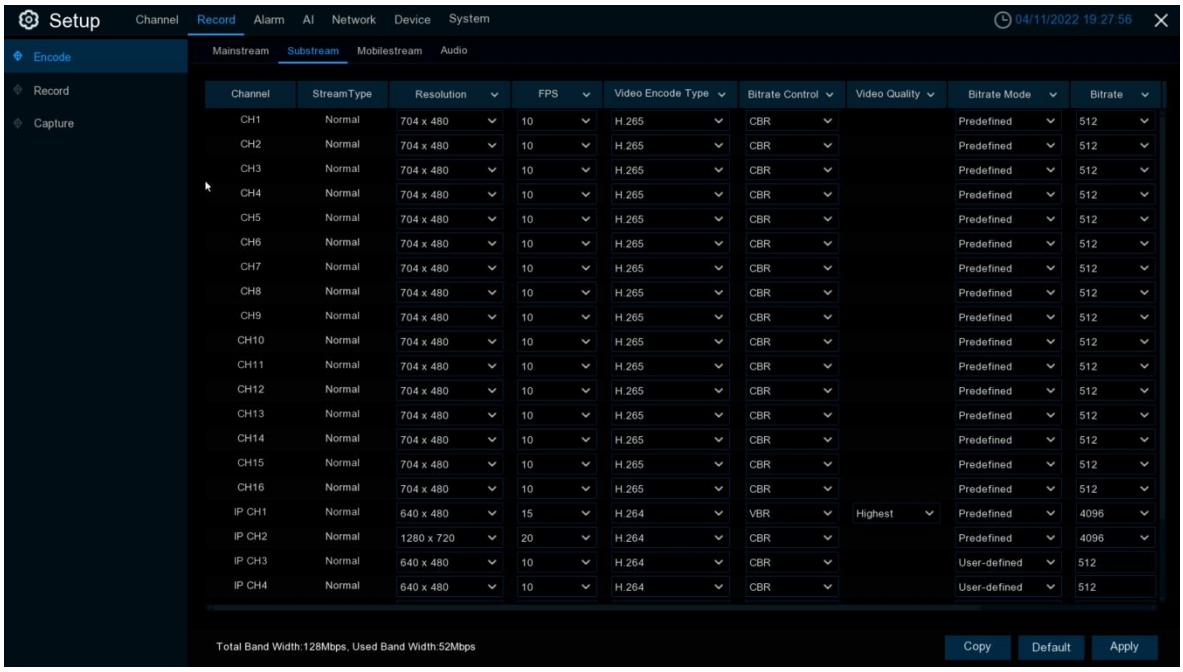
Audio: Select this option if you want to record audio along with video and have a microphone connected to the DVR or using a camera with audio capability.

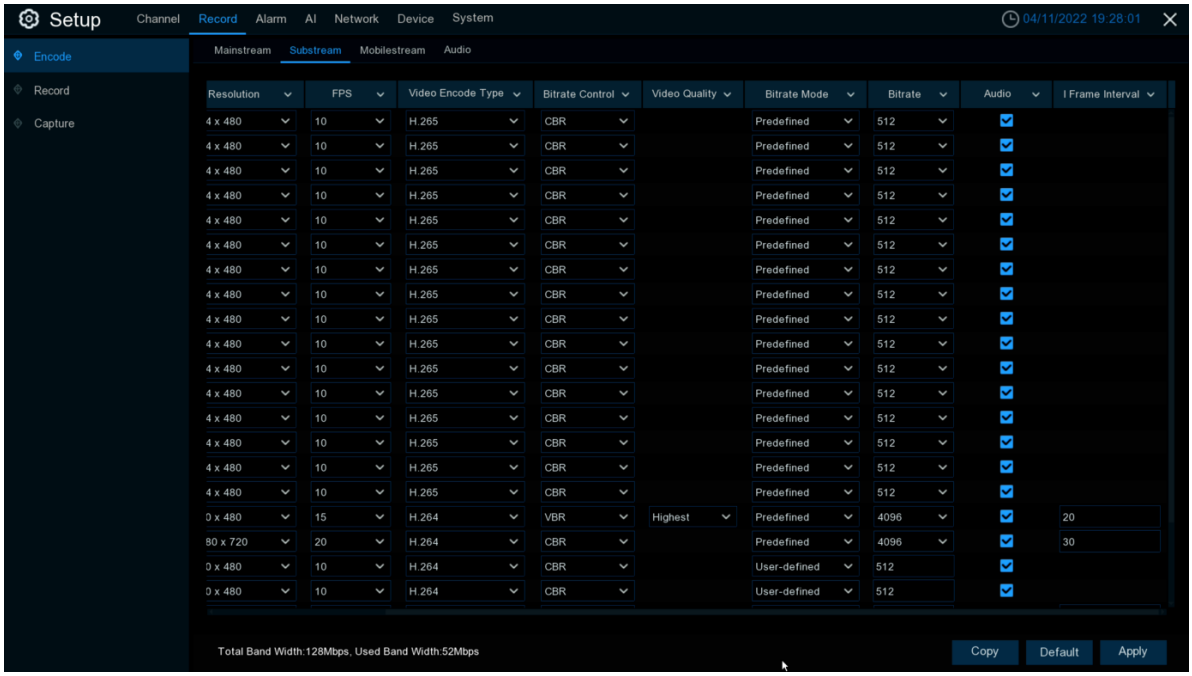
I Frame Interval: Set **I Frame Interval**, only available for IP channel.

ETR: Once enabled, there will be two different frames and resolutions when alarm triggered and not triggered.

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

5.2.1.2 Sub Stream





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: Channel video encode type, there are five options like **H.264, H.265, H.264+, H.265+,** and **MJPEG**.

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**).

Video Quality: Lowest, Lower, Low, Medium, Higher, Highest

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 bitrate, will be of better quality.

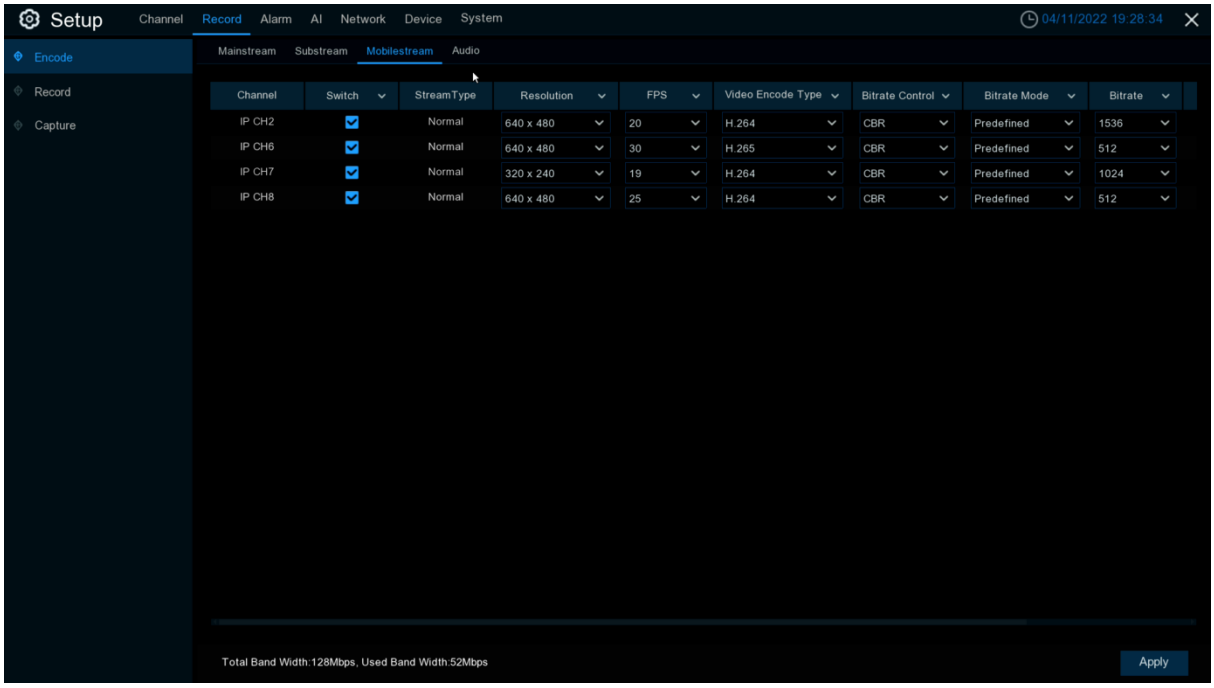
Audio: Select this option if you want to record audio along with video and have a microphone connected to the DVR or using a camera with audio capability.

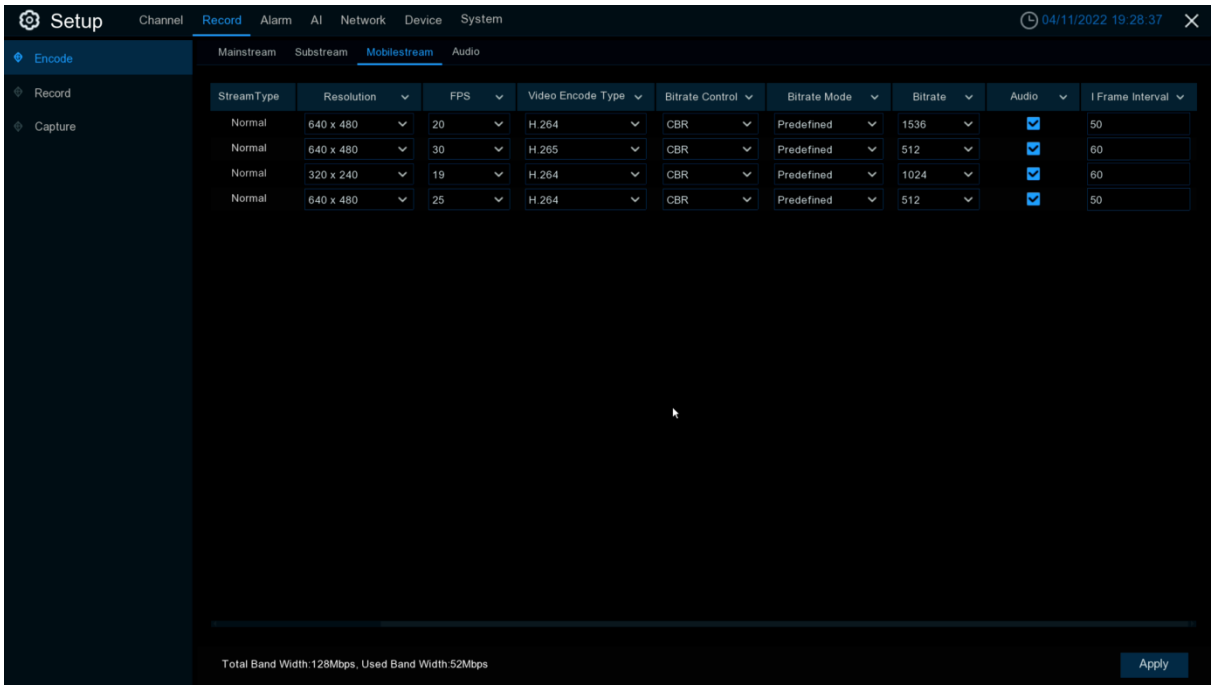
I Frame Interval: Set **I Frame Interval**, only available for IP channel.

ETR: Once enabled, there will be two different frames and resolutions when alarm triggered and not triggered.

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

5.2.1.3 Mobile Stream





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: Channel video encode type, there are four options like H.264, H.265, H.264+, H.265+.

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**).

Video Quality: Lowest, Lower, Low, Medium, Higher, Highest

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 bitrate, 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.

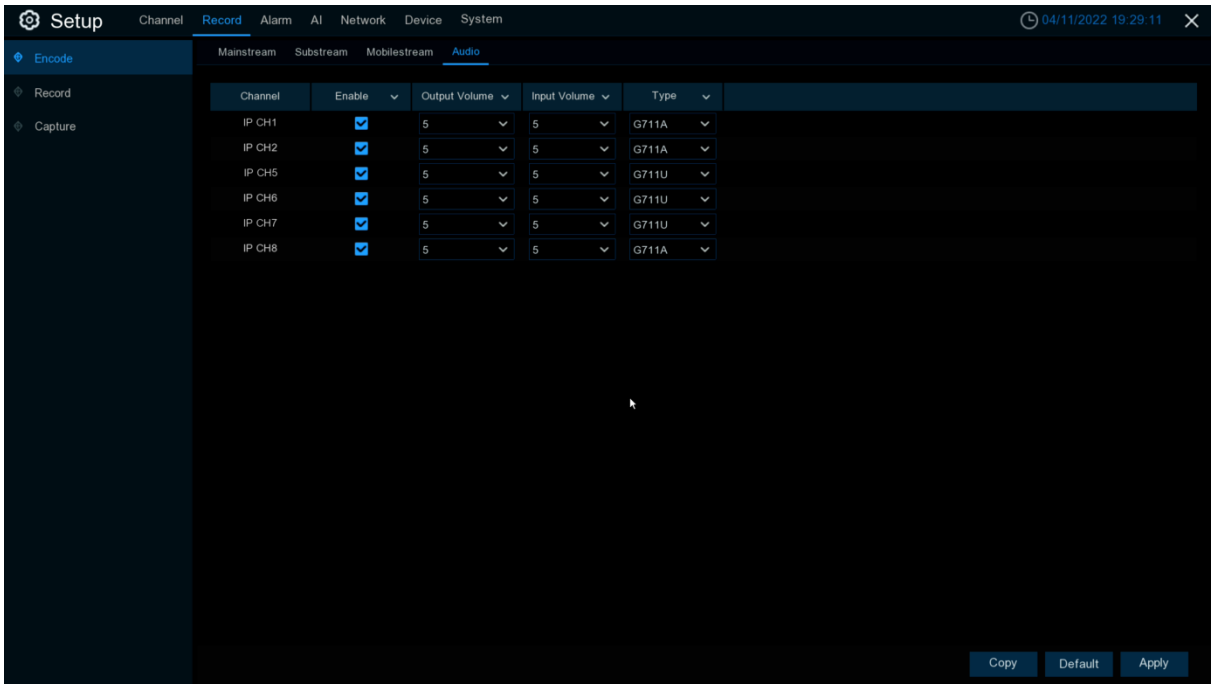
I Frame Interval: Set **I Frame Interval**, only available for IP channel.

ETR: Once enabled, there will be two different frames and resolutions when alarm triggered and not triggered.

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

5.2.1.4 Audio

Audio menu: Setup IP camera audio (support by camera).

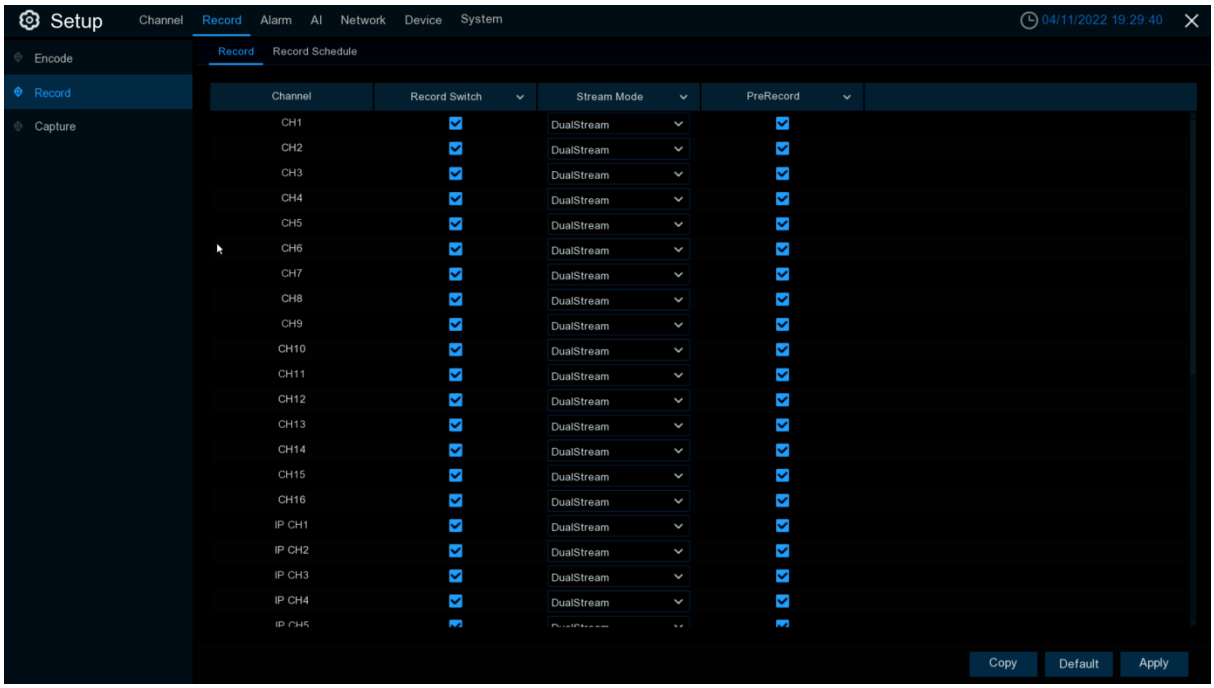


Enable: Enable camera audio.
Output Volume: Set camera output volume.
Input Volume: Set camera input volume.
Type: Set camera audio decode type.

5.2.2 Record

This menu allows you to configure the channel recording parameters.

5.2.2.1 Record



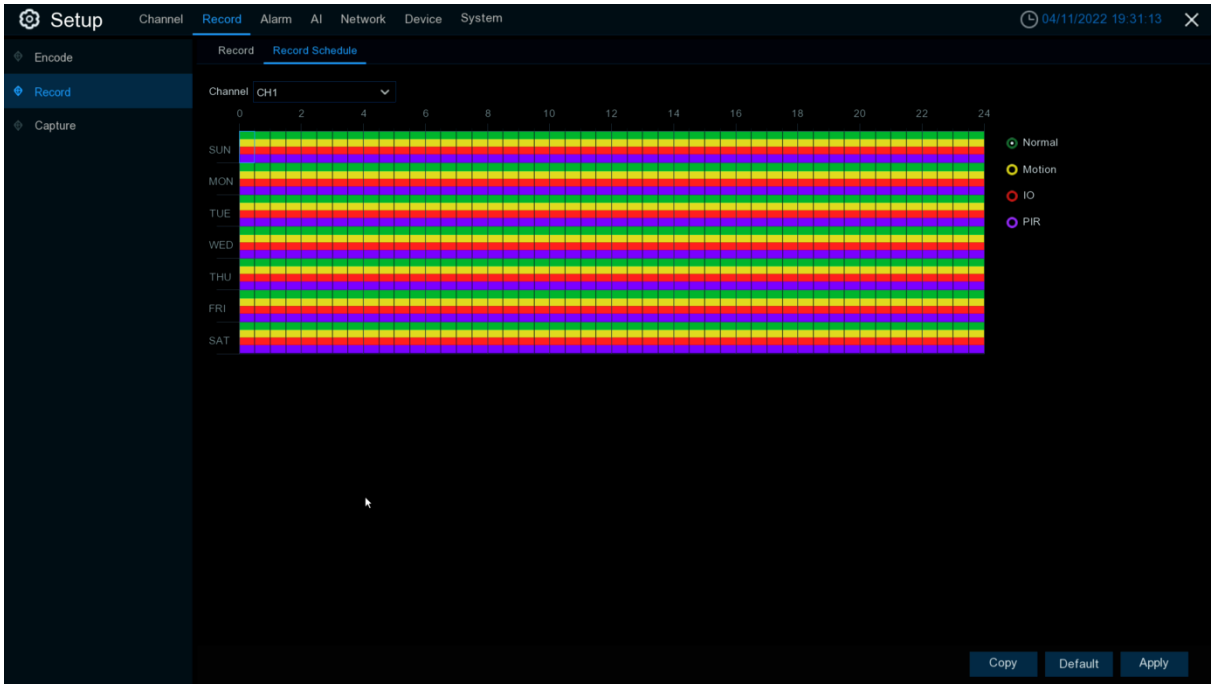
Record Switch: Check to enable the recording in this channel.

Stream Mode: Choose the recording quality. If you choose Dual-Stream, 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 channel. The recording schedule allows you to set up a schedule like, daily and hourly by normal (continuous) recording, motion recording, I/O alarm recording & PIR recording. To set the recording mode, click the mode radio button (Normal, Motion, IO, PIR), then drag the cursor to mark the slots. The recording schedule is valid only for one channel. If you want to use the same recording schedule for other channels, use **Copy** function. Click **Apply** to save your settings.



Channel: Select the channel to set its recording parameters.

Normal: When the time slot is marked **green**, this indicates the channel performs normal recording for that time slot.

Motion: When the time slot is highlighted with **yellow**, this indicates the channel records only when a motion is detected during that time slot.

IO: When the time slot is highlighted with **red**, this indicates the channel records only when the sensor is triggered during that time slot.

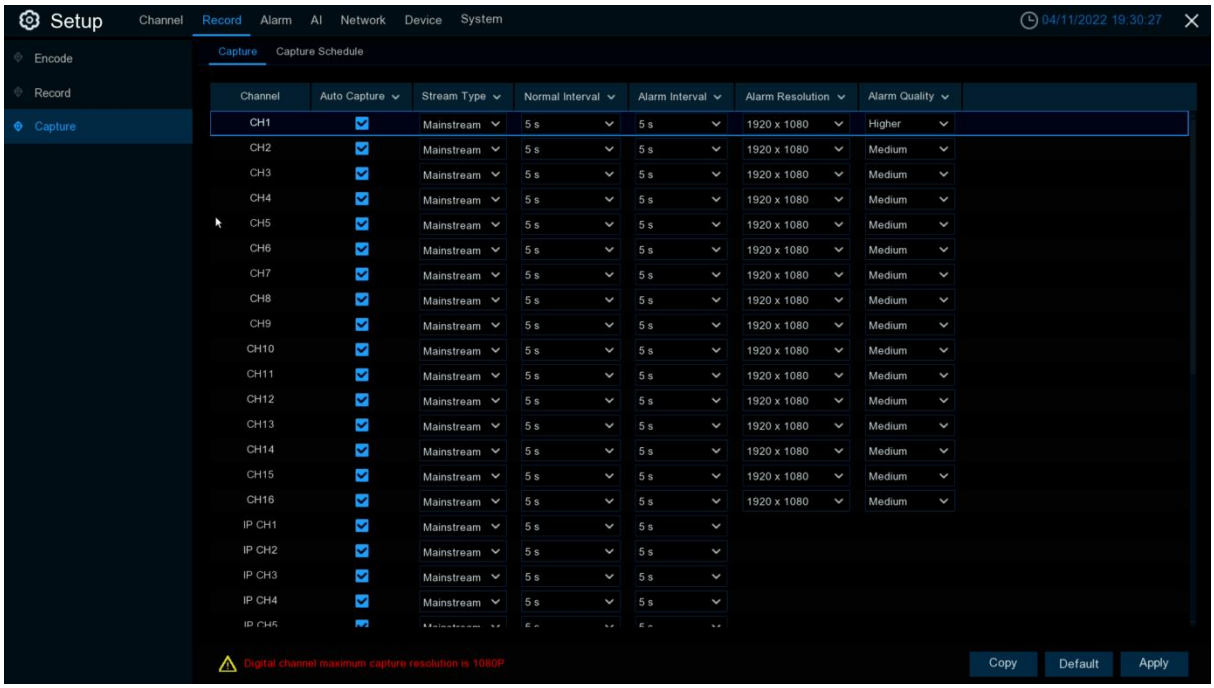
PIR: When the time slot is highlighted with **purple**, this indicates the channel records only when the PIR is triggered during that time slot.

No Record: A time slot marked black means that there is no recording scheduled for the time slot.

5.2.3 Capture

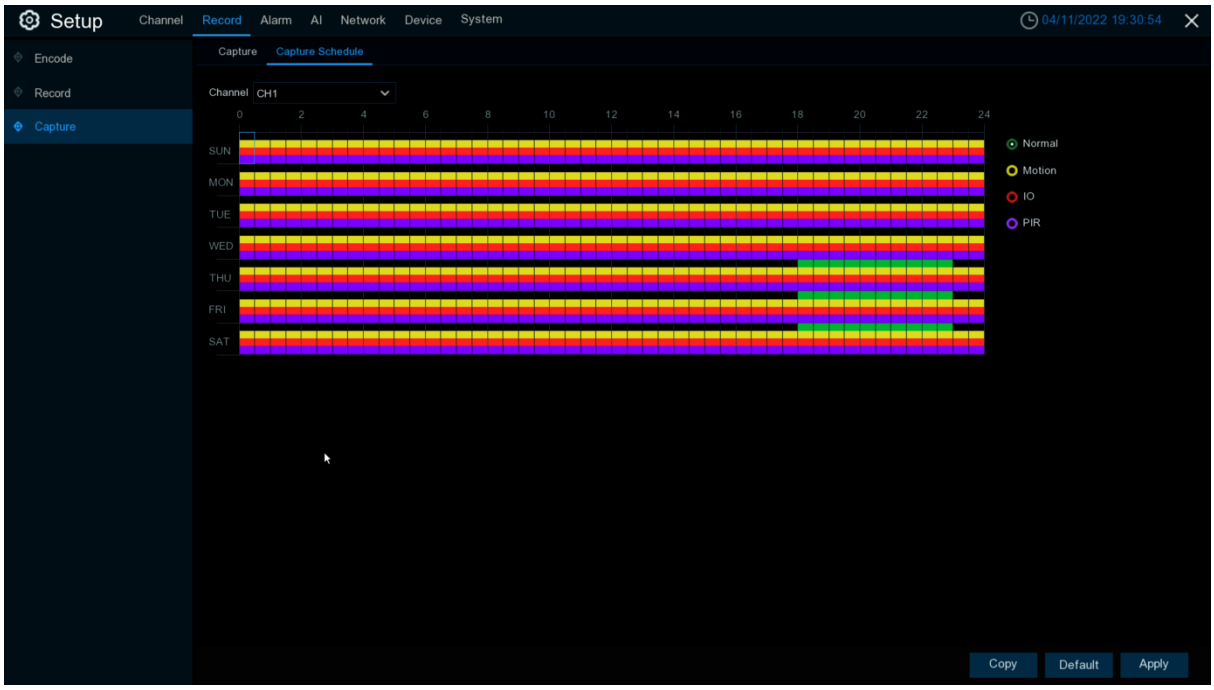
This menu allows to configure the image capture function.

5.2.3.1 Capture



Auto Capture: Enable or disable automatic capturing on the channel.
Stream Type: Select the image resolution by mainstream or sub stream.
Normal Interval: Time interval to capture an image in normal recording.
Alarm Interval: Time interval to capture an image when motion, IO alarm or PIR is triggered.
Alarm Quality: The capture quality when alarm triggered, the higher the quality, the clearer the image.

5.2.3.2 Capture Schedule



Normal: When the time slot is marked **green**, this indicates the channel performs normal capture for that time slot.

Motion: When the time slot is highlighted with **yellow**, this indicates the channel capture images only when a motion is detected during that time slot.

IO: When the time slot is highlighted with **red**, this indicates the channel capture images only when the sensor is triggered during that time slot.

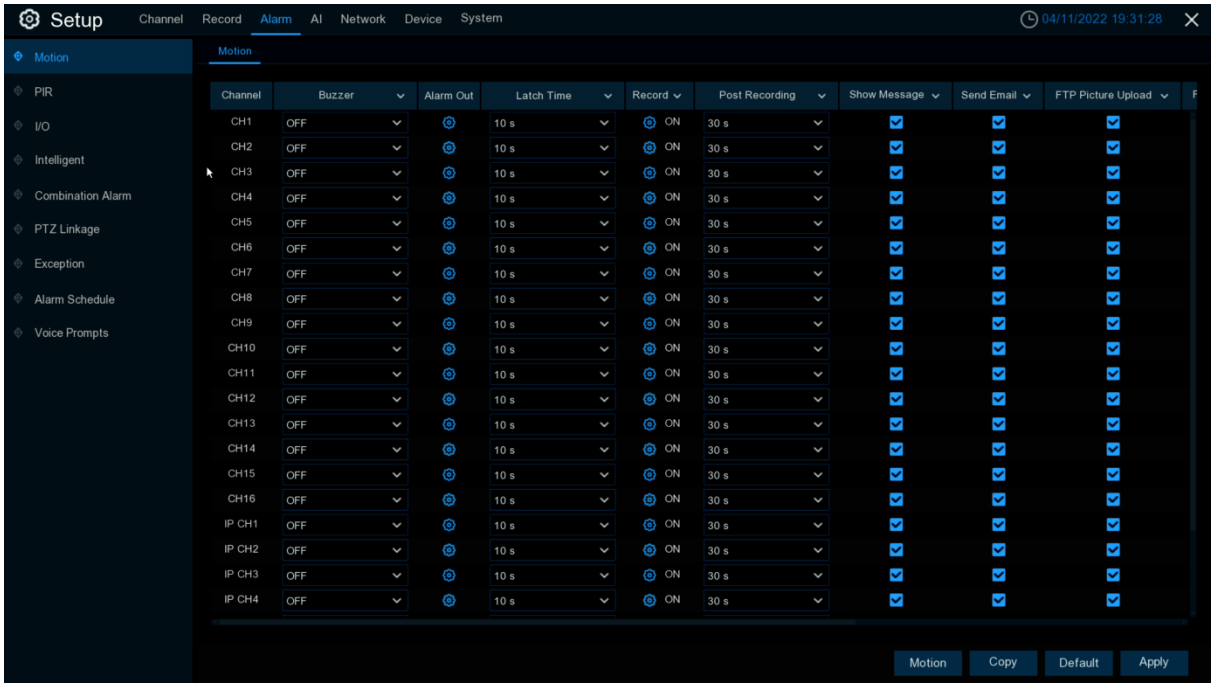
PIR: When the time slot is highlighted with **purple**, this indicates the channel capture images only when the PIR is triggered during that time slot.

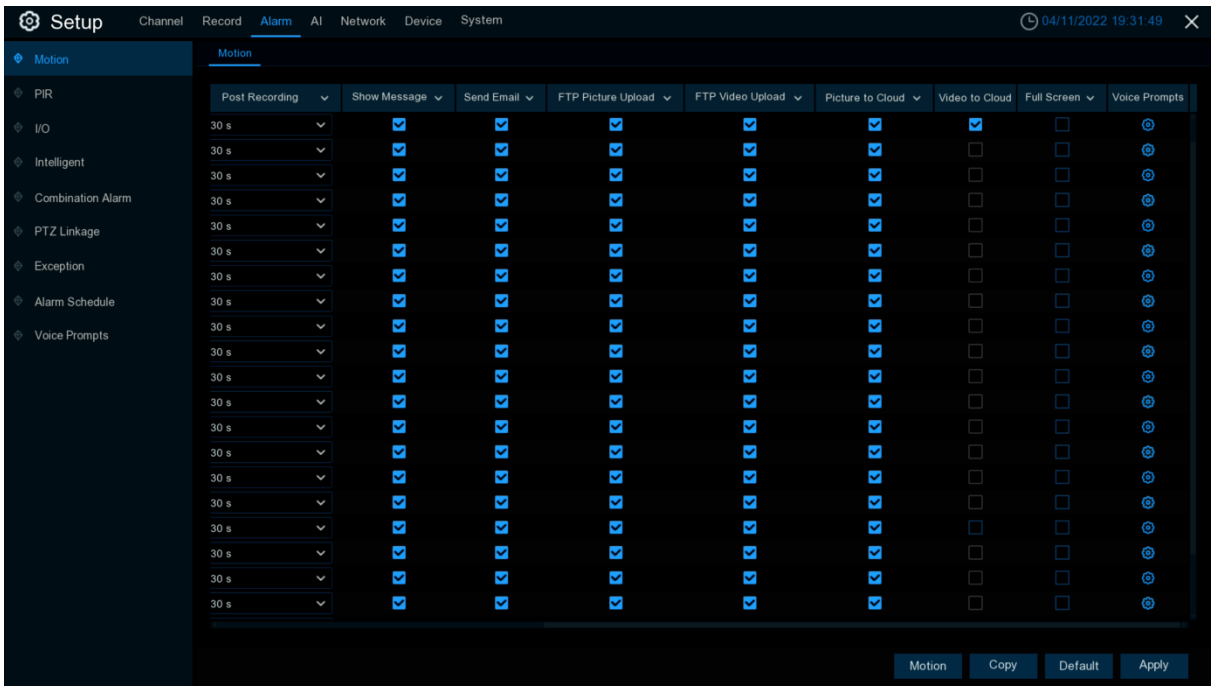
No Capture: A time slot marked black means that it won't capture any images for the time slot, but you can manually capture images if you enable the manual capture function in the channel.

5.3 Alarm Parameters

In this section, you can configure the alarm parameters.

5.3.1 Motion Detection



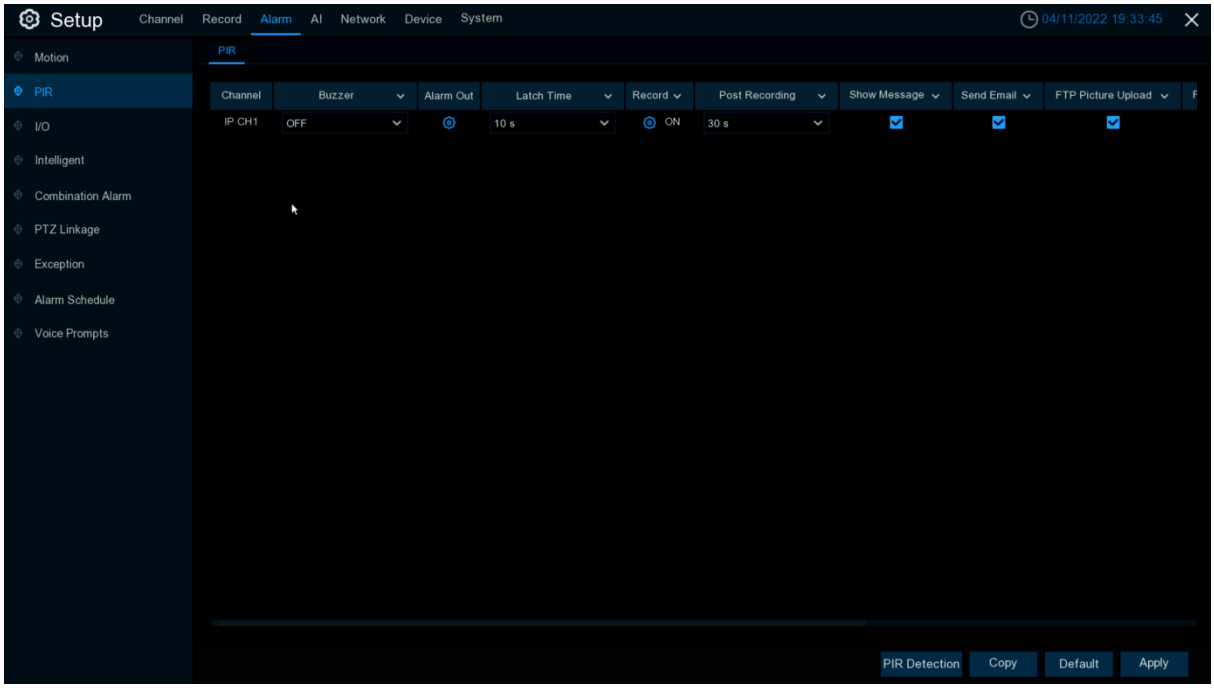


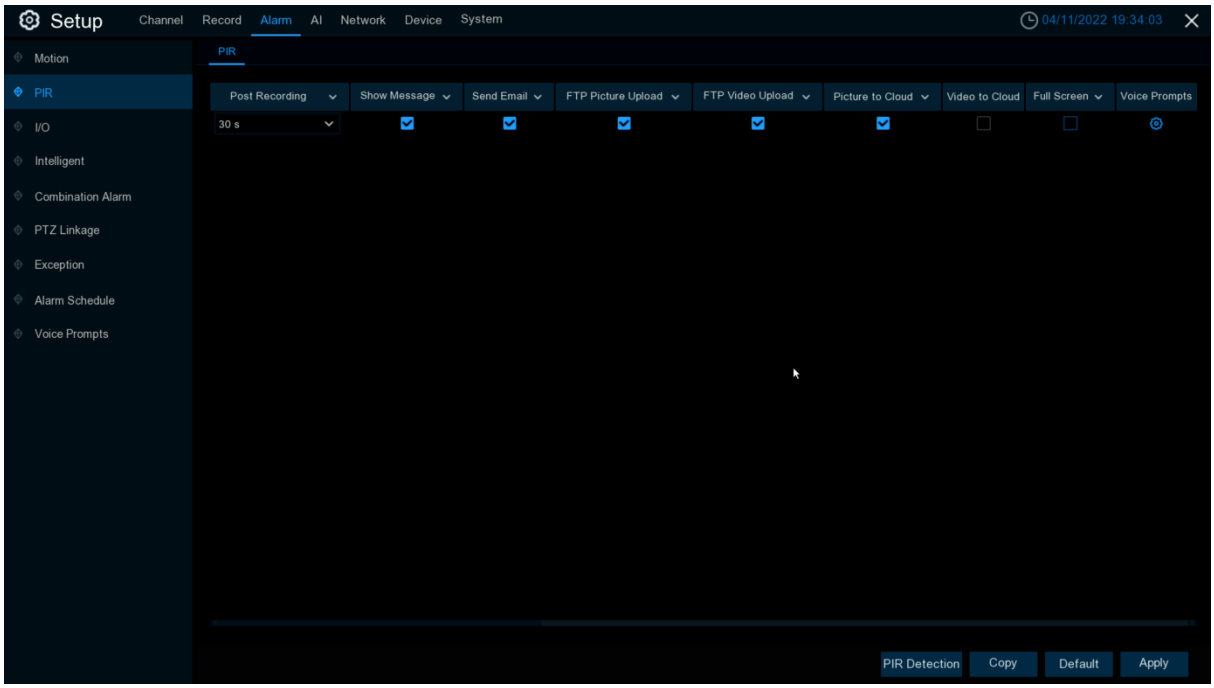
Channel: Channel name.

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 **Motion** is triggered.
Latch Time: You can set how long the buzzer will sound when **Motion** is triggered (10s, 20s, 40s, and 1 min).
Record: Click icon and choose which channel(s) you want to record when **motion** detection is triggered.

Post Recording: You can set how long motion record will last when alarm ends (30s, 1minutes, 2minutes, 5minutes.
Show Message: Display motion messages on the screen when sensor is triggered, show icon
Send Email: Set to send email to specified email when sensor is triggered.
FTP Picture Upload: To upload alarm images to FTP server when motion is triggered. To enable FTP, please view 5.6.3 FTP
FTP Video Upload: To upload alarm videos to FTP server when motion is triggered. To enable FTP, please view 5.6.3 FTP
Picture to Cloud: To upload alarm images to cloud storage when motion is triggered. Please view 5.6.2 Cloud
Video to Cloud: To upload alarm videos to cloud storage when motion is triggered. Please view 5.6.2 Cloud
Full Screen: When sensor is triggered, the corresponding channel will be switched to the full screen mode.
Voice Prompts: Voice prompts, when triggering the alarm, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.2 PIR





Channel: Channel name

Buzzer: The DVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when **PIR** is triggered.

Alarm Out: Tick to enable external alarm device to emit an alarm tone when a **PIR** is triggered.

Latch Time: you can set how long the buzzer will sound when **PIR** is triggered (10s, 20s, 40s, and 1 min).

Record: Click icon and choose which channel(s) you want to record when **PIR** is triggered.

Post Recording: You can set how long alarm record will last when **PIR** ends (30s, 1minutes, 2minutes, 5minutes.

Show Message: Display the alarm messages on the screen when **PIR** is triggered,

show PIR icon.

Send Email: Set to send email to specified email when sensor is triggered.

FTP Picture Upload: To upload alarm images to FTP server when PIR is triggered. To enable FTP, please view 5.6.3 FTP

FTP Video Upload: To upload alarm videos to FTP server when PIR alarm is triggered. To enable FTP, please view 5.6.3 FTP

Picture to Cloud: To upload alarm images to cloud storage when PIR alarm is triggered. Please view 5.6.2 Cloud

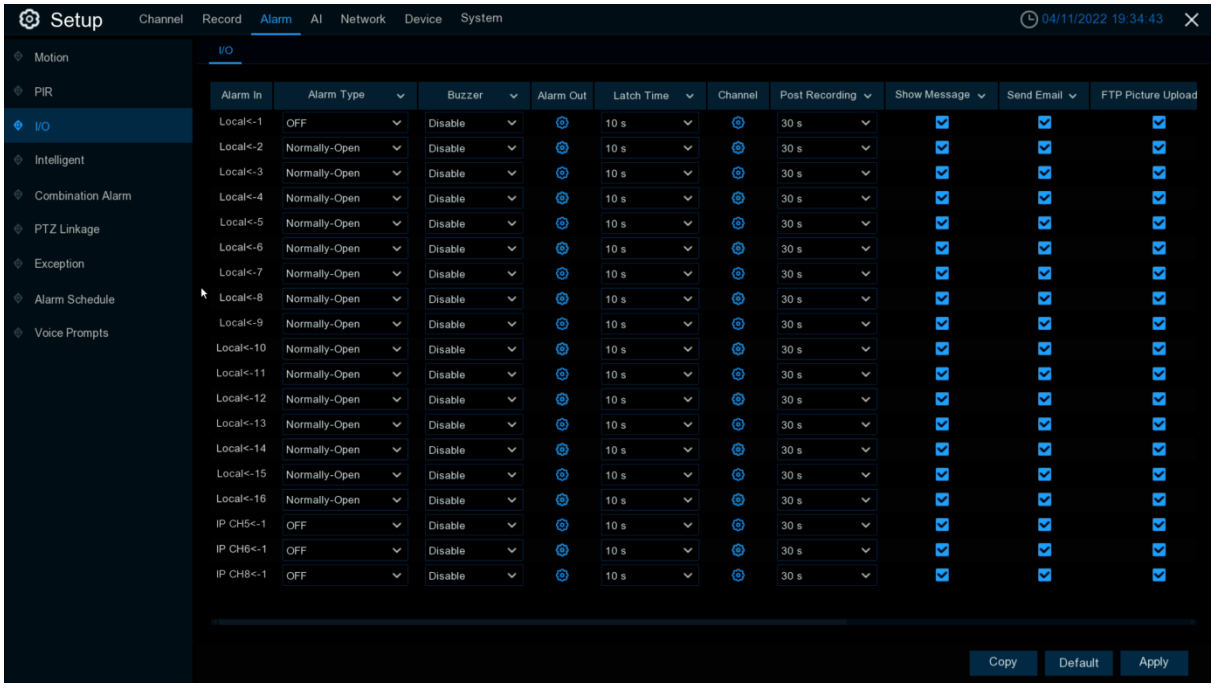
Video to Cloud: To upload alarm videos to cloud storage when PIR alarm is triggered. Please view 5.6.2 Cloud

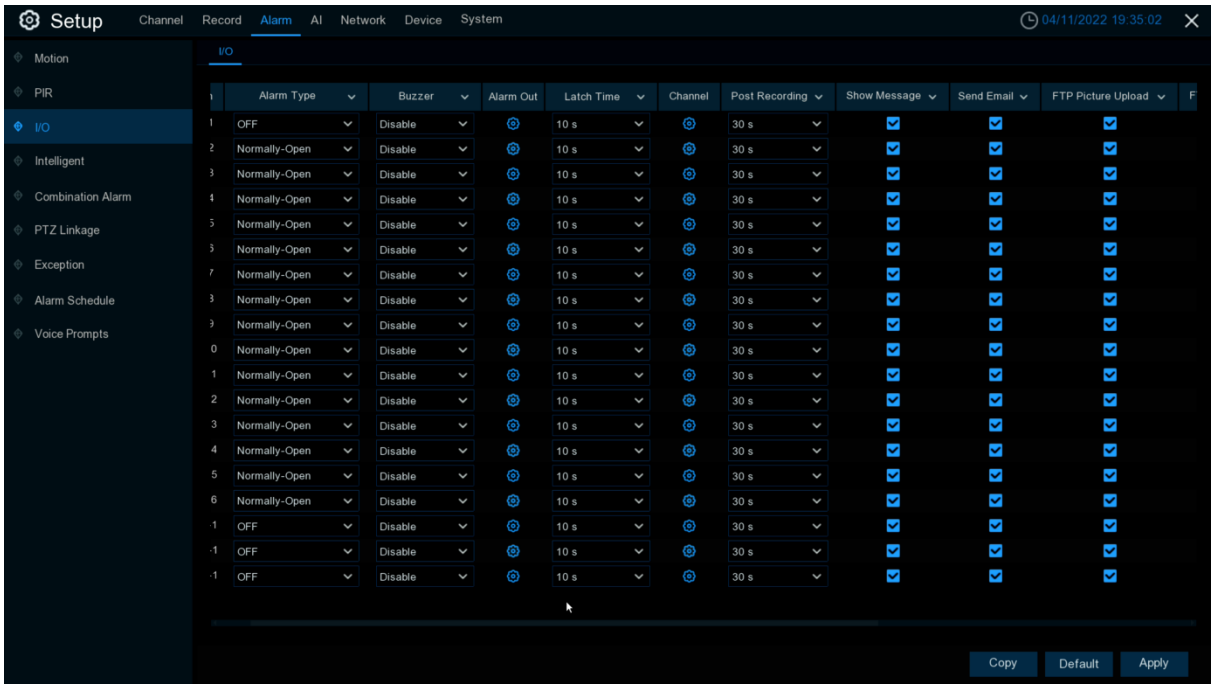
Full Screen: When **PIR** is triggered, the corresponding channel will be switched to the full screen mode.

Voice Prompts: Voice prompts, when triggering **PIR**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.3 I/O Alarm

Connect your DVR to the external sensor I/O alarm device and enable the alarm.





Alarm In: I/O channel.

Alarm Type: There are 3 types for your choice: Normally-Open, Normally-Close, and OFF.

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.

Latch Time: You can set how long the buzzer will sound when external sensor is triggered (10s, 20s, 40s, and 1min).

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

Post Recording: You can set how long alarm record will last when alarm ends (30s, 1minutes, 2minutes, 5minutes).

Show Message: Display the alarm messages on the screen when sensor is triggered. Show Icon.

Send Email: Set to send email to specified email when sensor is triggered.

FTP Picture Upload: FTP Picture Upload: To upload alarm images to FTP server when I/O alarm is triggered. To enable FTP, please view 5.6.3 FTP

FTP Video Upload: To upload alarm videos to FTP server when I/O alarm is triggered. To enable FTP, please view 5.6.3 FTP

Picture to Cloud: To upload alarm images to cloud storage when I/O alarm is triggered. Please view 5.6.2 Cloud

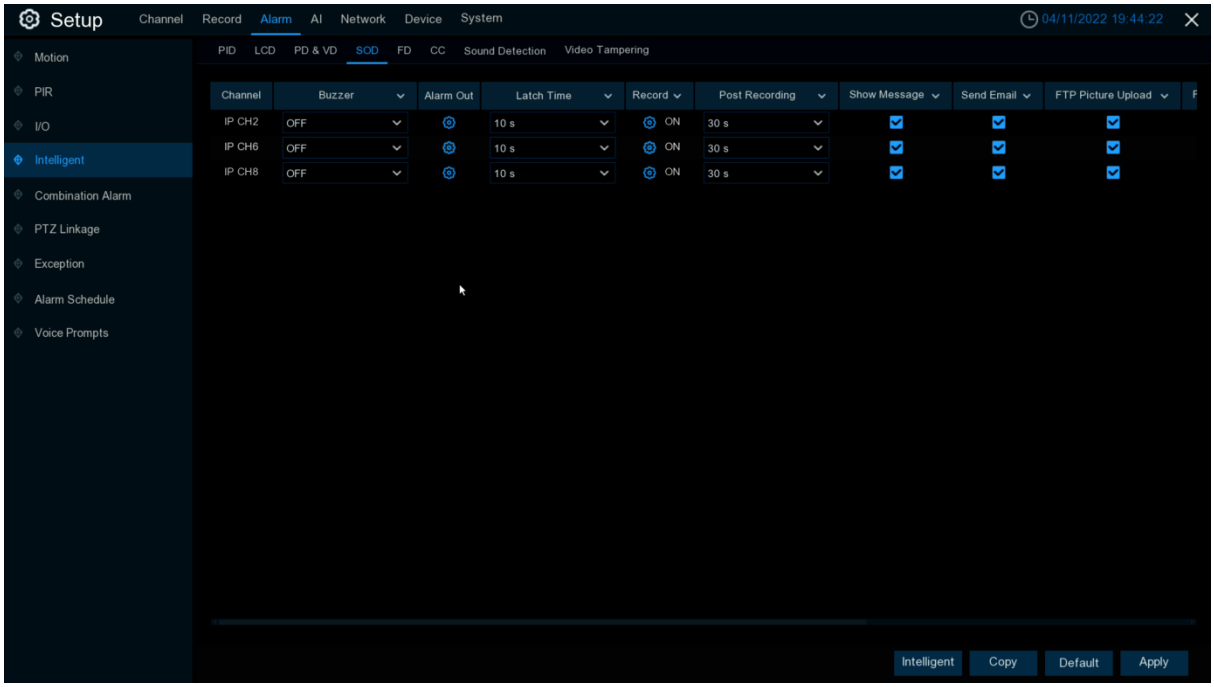
Video to Cloud: To upload alarm videos to cloud storage when I/O alarm is triggered. Please view 5.6.2 Cloud

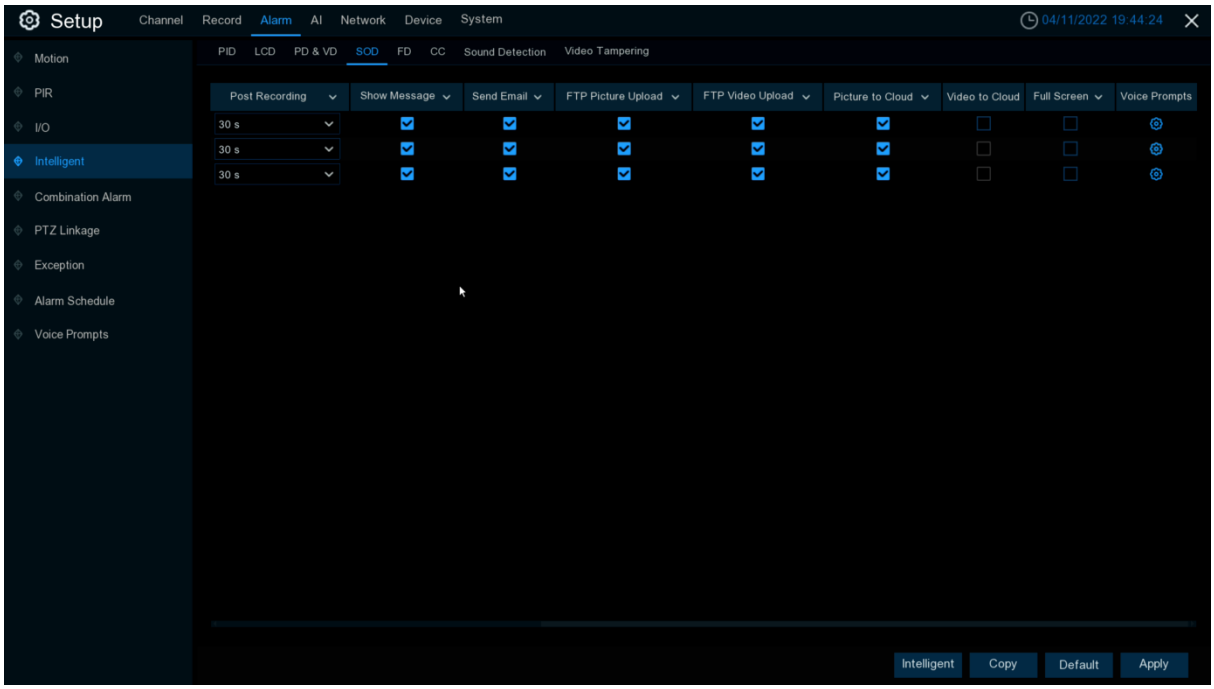
Full Screen: When sensor is triggered, the corresponding channel will be switched to the full screen mode.

Voice Prompts: Voice prompts, when triggering **PIR**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.4 Intelligent Analysis

5.3.4.1 SOD (Stationary Object Detection)





Configure SOD function in this page.

Channel: Channel name

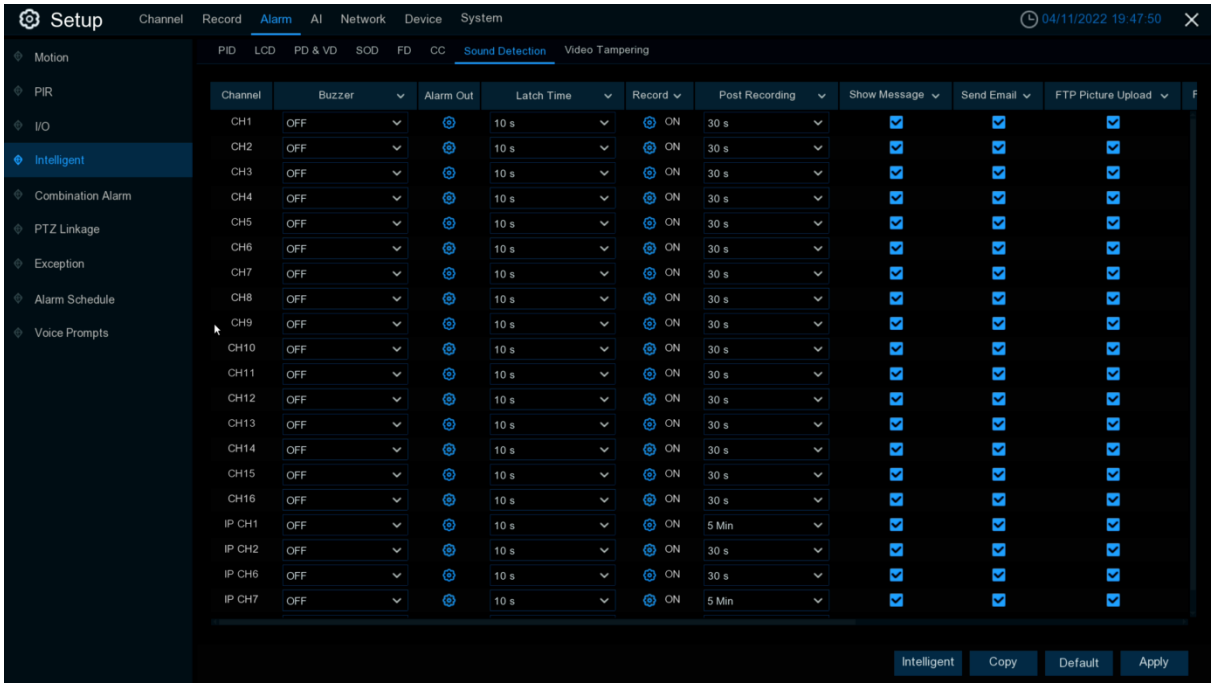
Buzzer: The DVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when a sensor is triggered.

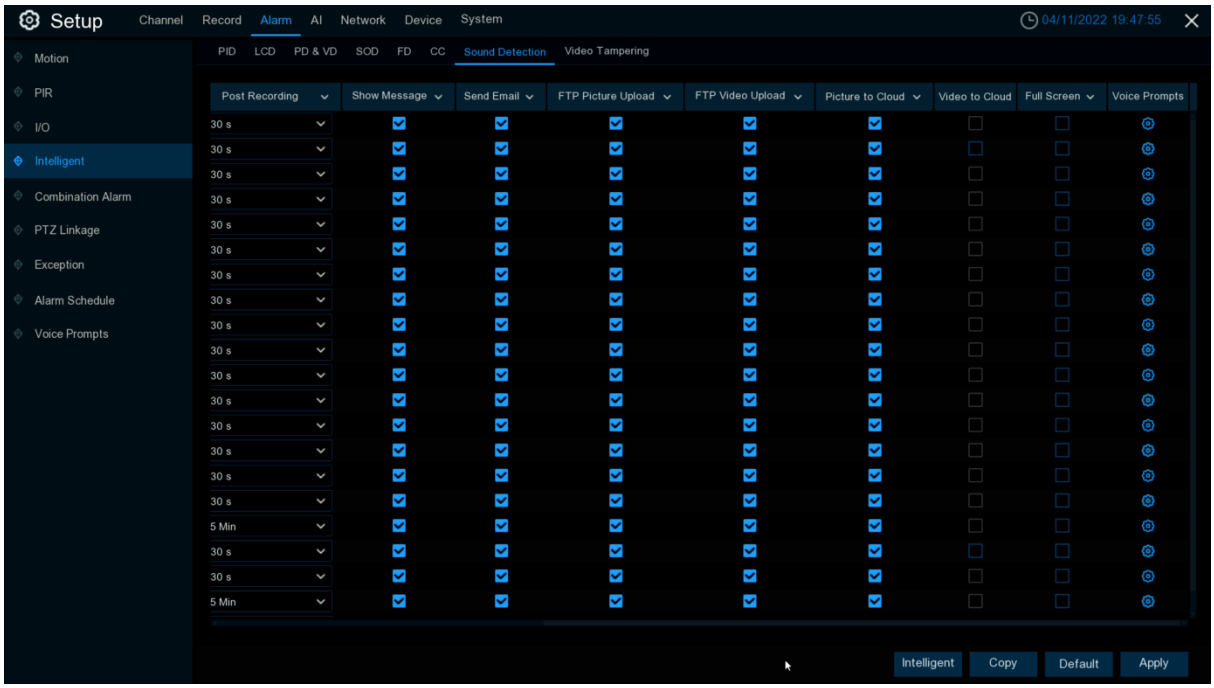
Alarm out: Tick to enable external alarm device to emit an alarm tone when a sensor is triggered.
Latch Time: You can set how long the buzzer will sound when **Intelligent** is triggered (10s, 20s, 40s, and 1min).
Record: Click icon and choose which channel(s) you want to record when the motion detection is triggered.

Post Recording: You can set how long alarm record will last when alarm ends (30s, 1minutes, 2minutes, 5minutes).
Show Message: Display the alarm messages on the screen when sensor is triggered. Show icon.

Send Email: Set to send email to specified email when sensor is triggered.
FTP Picture Upload: FTP Picture Upload: To upload alarm images to FTP server when I/O alarm is triggered. To enable FTP, please view 5.6.3 FTP
FTP Video Upload: To upload alarm videos to FTP server when **Intelligent** is triggered. To enable FTP, please view 5.6.3 FTP
Picture to Cloud: To upload alarm images to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud
Video to Cloud: To upload alarm videos to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud
Full Screen: When sensor is triggered, the corresponding channel will be switched to the full screen mode.
Voice Prompts: Voice prompts, when triggering **Intelligent**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.4.2 Sound Detection





Configure Sound Detection in this page.

Channel: Channel name

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.

Latch Time: you can set how long the buzzer will sound when **Intelligent** is triggered (10s, 20s, 40s, and 1min).

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

Post Recording: You can set how long alarm record will last when alarm ends (30s, 1minutes, 2minutes, 5minutes).

Show Message: Display the alarm messages on the screen when sensor is triggered. Show icon.

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 5.6.3 FTP

FTP Video Upload: To upload alarm videos to FTP server when **Intelligent** is triggered. To enable FTP, please view 5.6.3 FTP

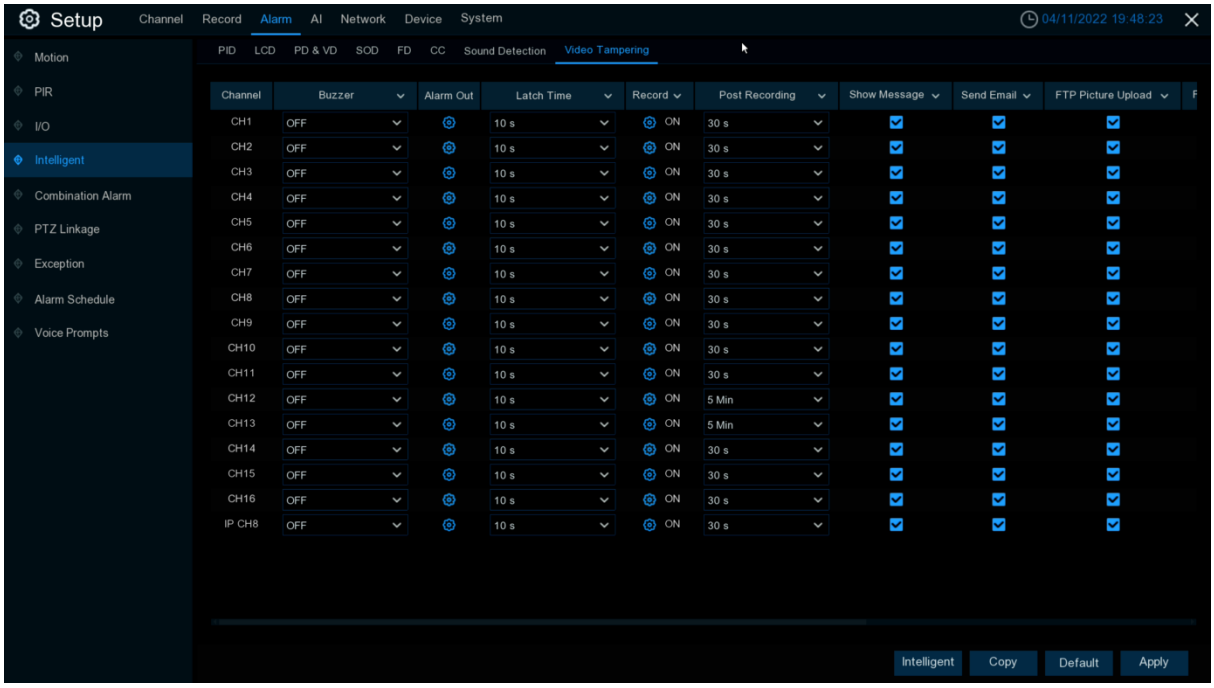
Picture to Cloud: To upload alarm images to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud

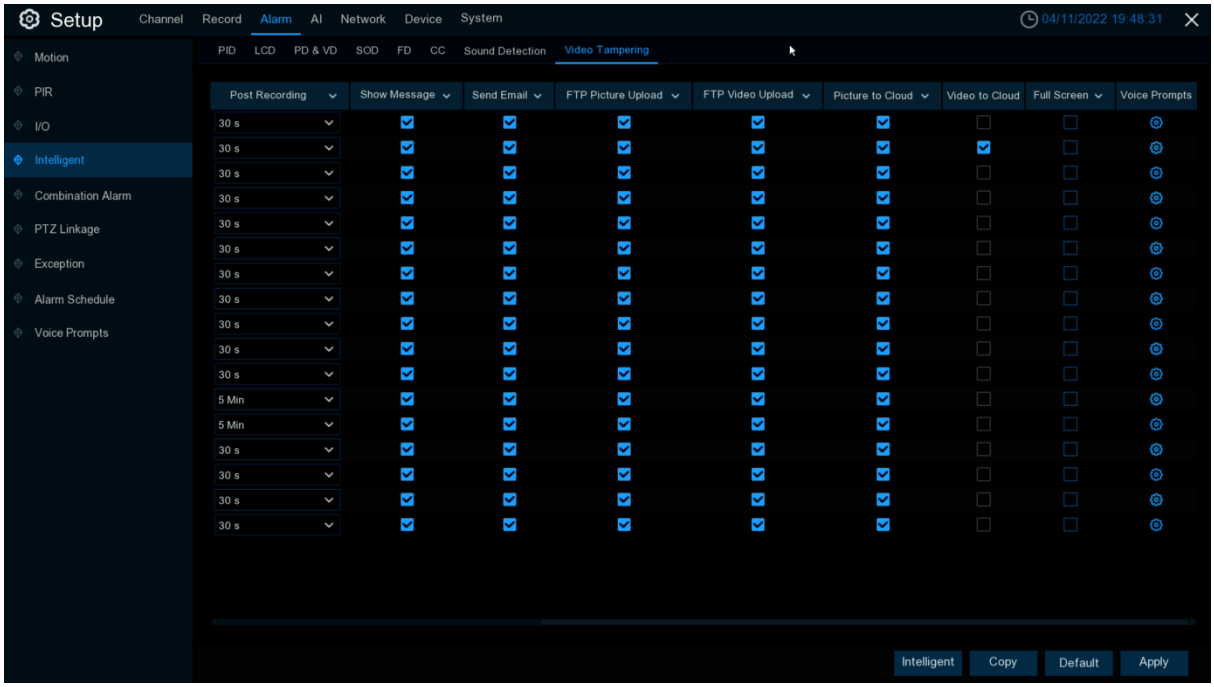
Video to Cloud: To upload alarm videos to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud

Full Screen: When sensor is triggered, the corresponding channel will be switched to the full screen mode.

Voice Prompts: Voice prompts, when triggering **Intelligent**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.4.3 Video Tampering





Configure PID function in this page.

Channel: Channel name

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.

Latch Time: you can set how long the buzzer will sound when **Intelligent** is triggered (10s, 20s, 40s, and 1min).

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

Post Recording: You can set how long alarm record will last when alarm ends (30s, 1minutes, 2minutes, 5minutes).

Show Message: Display the alarm messages on the screen when sensor is triggered. Show icon.

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 5.6.3 FTP

FTP Video Upload: To upload alarm videos to FTP server when **Intelligent** is triggered. To enable FTP, please view 5.6.3 FTP

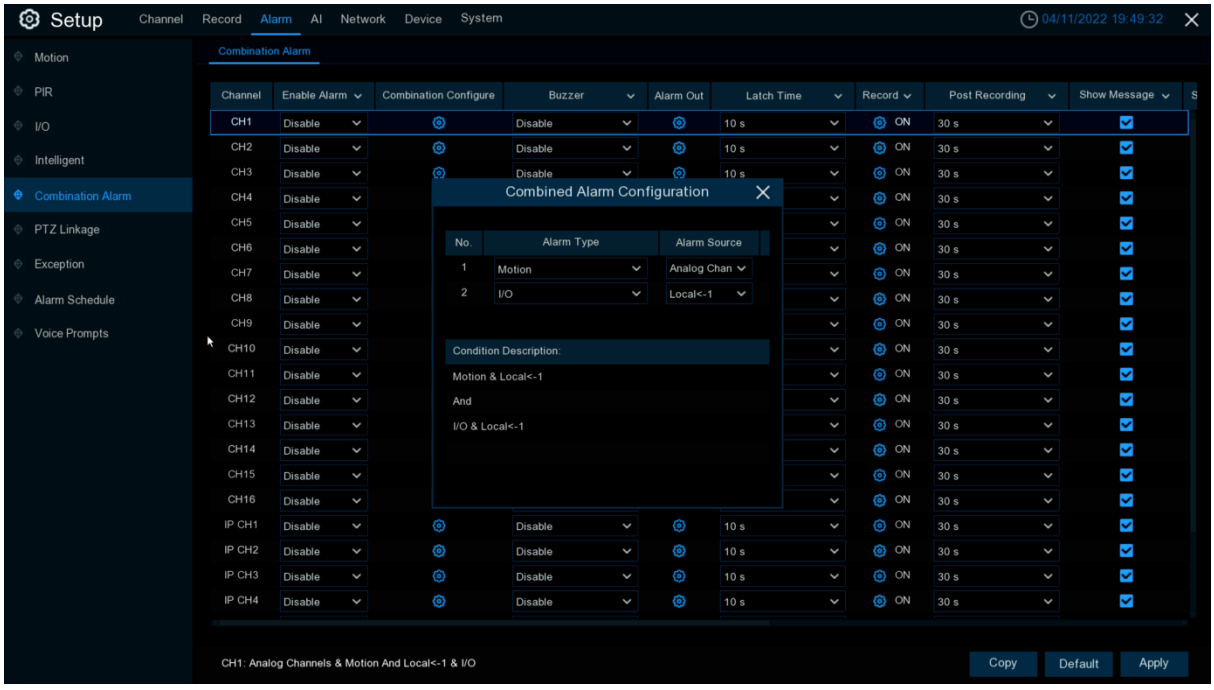
Picture to Cloud: To upload alarm images to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud

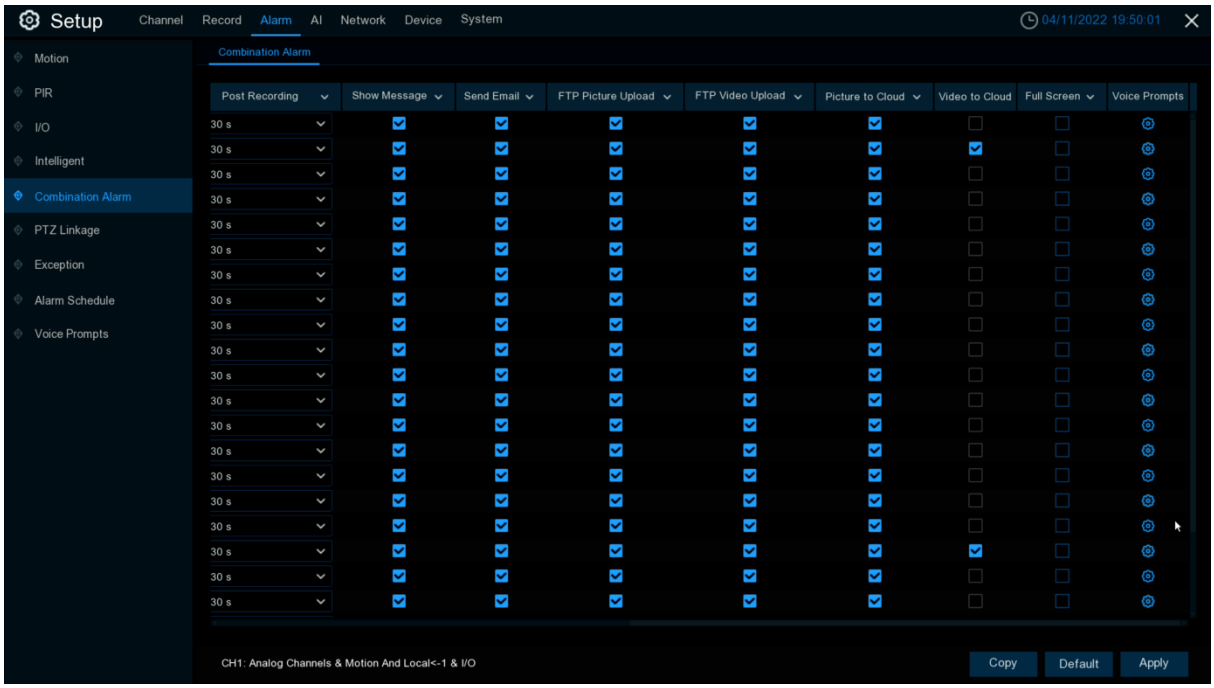
Video to Cloud: To upload alarm videos to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud

Full Screen: When sensor is triggered, the corresponding channel will be switched to the full screen mode.

Voice Prompts: Voice prompts, when triggering **Intelligent**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.5 Combination Alarm





Channel: Channel name

Enable Alarm: Whether channel combination alarm can be set, **Enable** enables combination alarm (combination alarm system parameter of the channel configuration takes effect, alarm parameter set separately by the channel is not effective). **Disable** does not enable combination alarm (combination alarm system parameter configured by the channel is not effective, and event alarm system parameter set separately by the channel does take effect).

Channel combination alarm is enabled. **Combination Configure** selects two alarm types. When both alarms are triggered within the same time period, the notification information such as buzzer, mail, push, upload is enabled. When only one of the alarms is triggered or when it is not triggered or when alarms other than the combination occurs, email, push and other notifications will not be sent. Two alarm types can be combined casually.

For example, the channel sets the "Alarm->Combination Alarm" as per **PID** + **MOTION**

1. Configure the CH 1 **Alarm**-> **Combination Alarm** alarm response system parameters. Configure the alarm combination type **Motion** + **PID**. Set up the **Buzzer Alarm Out, Latch time, Record, Post recording, Show Message, Send Email, Picture to Cloud, Video to Cloud, Full Screen, Voice Prompts**.
2. When the CH 1 combination alarm switch is enabled and **Motion + PID** is triggered at the same time, (the response combination parameters configured by the buzzer, mail, push, upload, etc. are not the system alarm parameters configured separately for the response event). For mail: The client is named by event. When the combined alarm is turned on, if the CH4 triggers an alarm other than the **Motion + PID** alarm, the other alarm will not respond to the alarm system parameters (such as LCD, SOD, etc.) corresponding to the CH4 alarm setting. Turn off the CH4 combination alarm switch, and each set event alarm of CH4 separately responds to the respective configured system alarm parameters.

Buzzer: The DVR can use its internal buzzer to sound an alarm. You can set the buzzer duration (in seconds) when triggering a combined alarm.

Alarm out: Check whether the external alarm device is triggered when the combination alarm is triggered.

Latch Time: You can set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

Record: Click icon and select the channel to record when triggering the combination alarm.

Post Recording: You can set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to display the corresponding alert icon on the real-time display screen when a combined alarm is detected: Trigger **Motion** + **PID** alarm, show **and** icon.

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 5.6.3 FTP.

FTP Video Upload: To upload alarm videos to FTP server when **Combination alarm** is triggered. To enable FTP, please view 5.6.3 FTP.

Picture to Cloud: To upload alarm images to cloud storage when **Combination alarm** is triggered. Please view 5.6.2 Cloud.

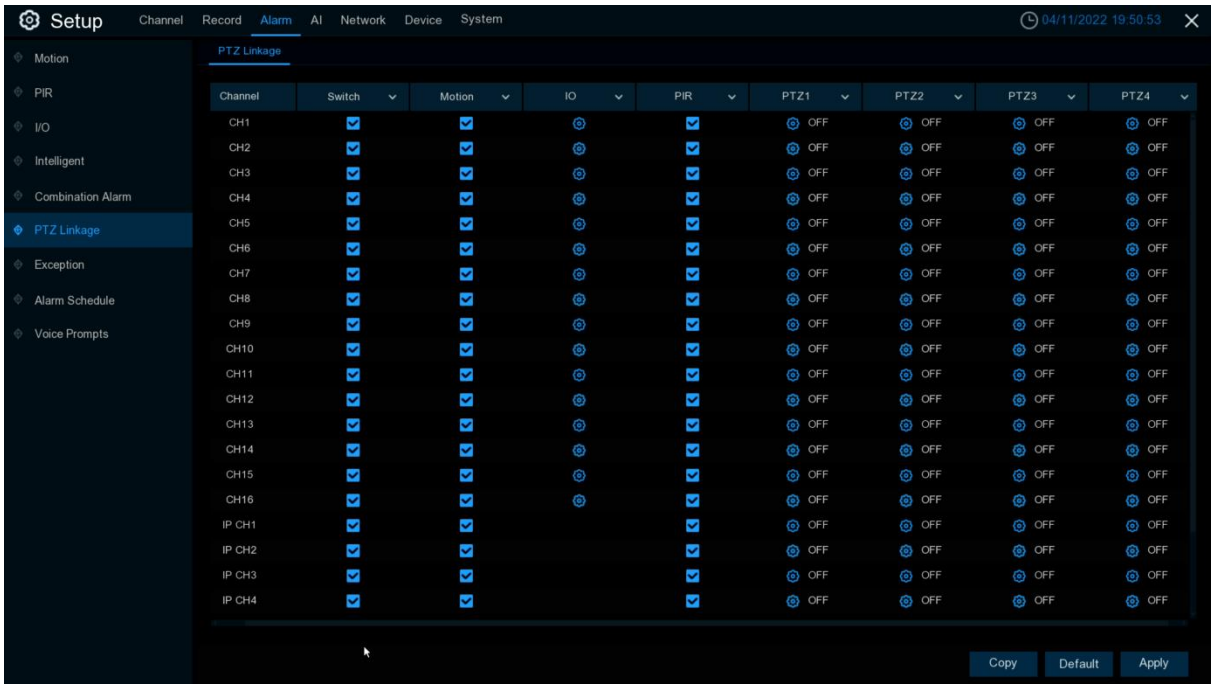
Video to Cloud: To upload alarm videos to cloud storage when **Combination alarm** is triggered. Please view 5.6.2 Cloud.

Full Screen: When **Combination alarm** is triggered, the corresponding channel will be switched to the full screen mode.

Voice Prompts: Voice prompts, when triggering **Combination alarm**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts.

5.3.6 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.



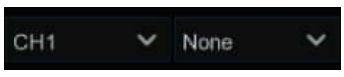
Switch: Enable or disable the PTZ linkage function.

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.

PIR: PIR Alarm will trigger the selected PTZ linkage function.

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 

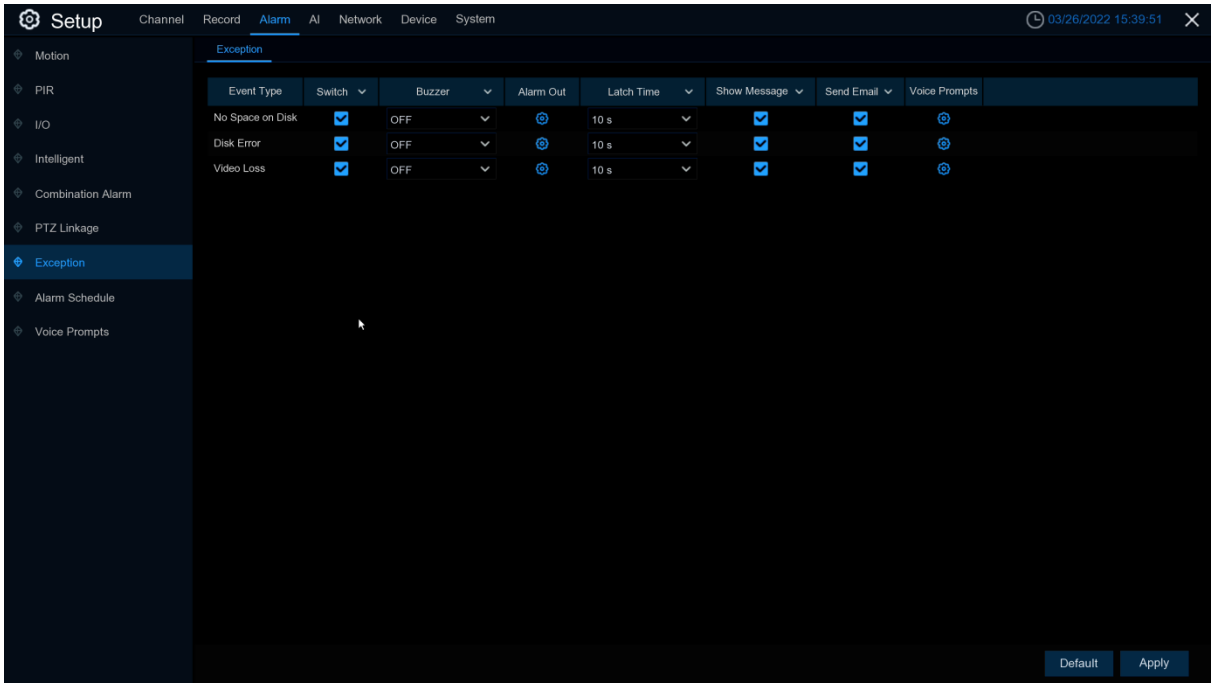
to choose the camera and present points that need to link.

Select it

to enable the linkage.

5.3.7 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.**

Latch Time: 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.

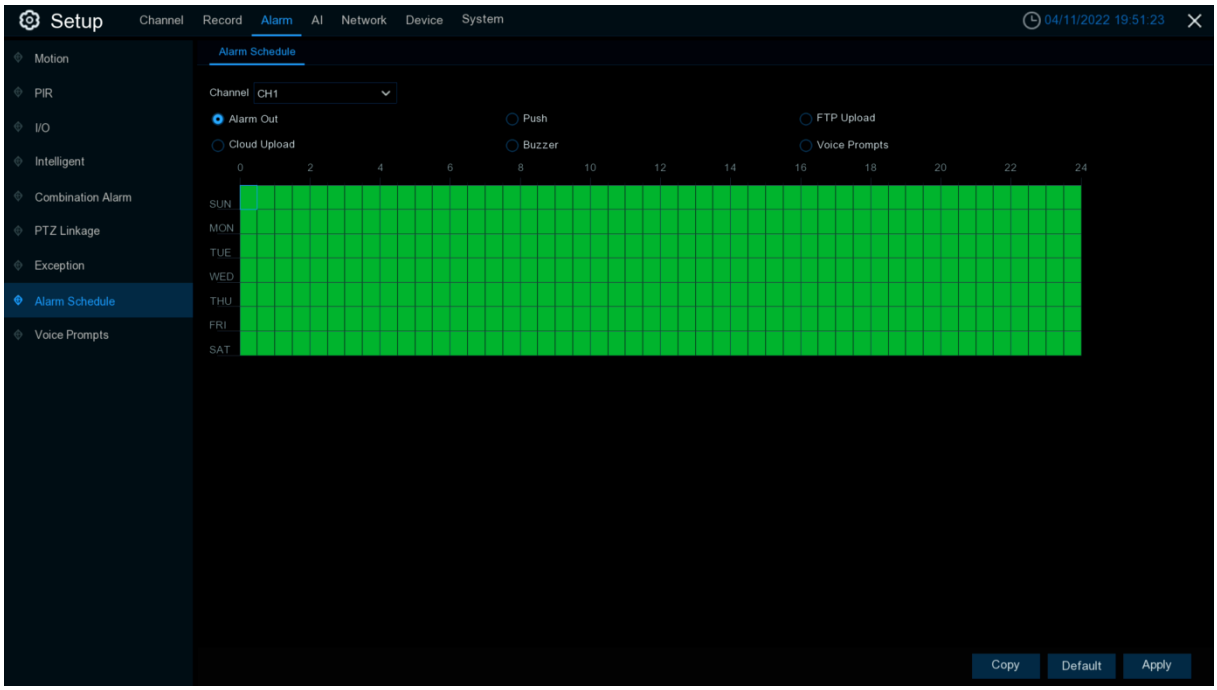
Show Message: Check the box to display a message on the screen when No Space on Disk, Disk Error, or Video Loss event happens.

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

Voice Prompts: Voice prompts, when triggering **Alarm** the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details 5.3.9 Voice Prompts

5.3.8 Alarm Schedule

This menu can set the schedule of various alarms.

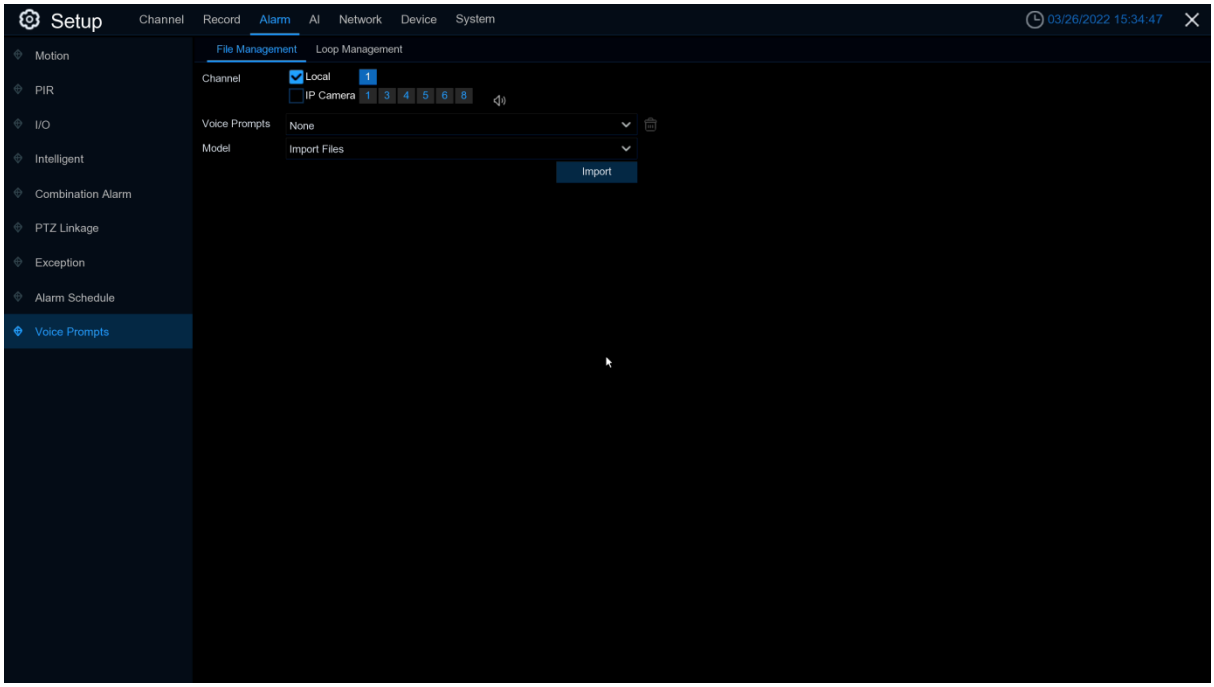


Channel: Select the channel.
Alarm Out: Set the schedule for alarm out.
Push: Set the schedule for push.
FTP Upload: Set the schedule for FTP uploading.
Cloud Upload: Set the schedule for cloud upload.
Buzzer: Set the schedule for buzzer.

5.3.9 Voice Prompts

This function is to realize the alarm linkage when the alarm occurs, the system collects the alarm signal and the voice broadcast equipment, and automatically or manually plays the associated audio to the "intrusion" object on the scene. (Each alarm setting item and the editing page of the face database face image has a voice broadcast option)

5.3.9.1 File Management



Click **Import** to import costumed audio. It supports three import modes: Import File, Local Conversion, and Internet Server Conversion.

Import File: Local import (support the import of audio files in MP3, WMA, WAV format)

Local Conversion: Local translation (input of text content to be translated, translated to audio file, and automatically saved to hard disk storage)

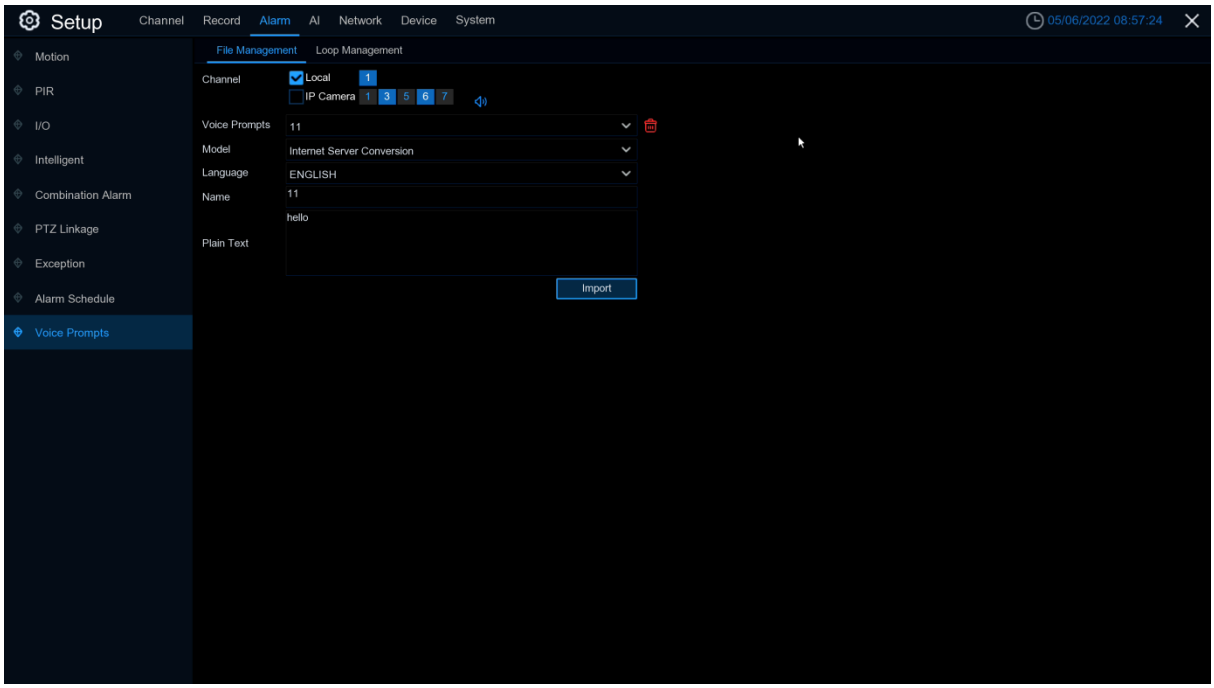
Internet Server Conversion: Web server translation (by locally entering the translated text content, sent to the network server for translation into audio files, and automatically saved to the local hard disk storage)

Local Conversion and **Internet Server Conversion** have more language box and text box than **Import File. Local Conversion** language selection is to English by default, and it doesn't choose any other language for the user.

The input box has a maximum allowed input length of 1,024 bytes. **Import File** import audio files, face database and license plate database allow file size of 1~500K, non-face database and license plate database allows file size of 1~5M.

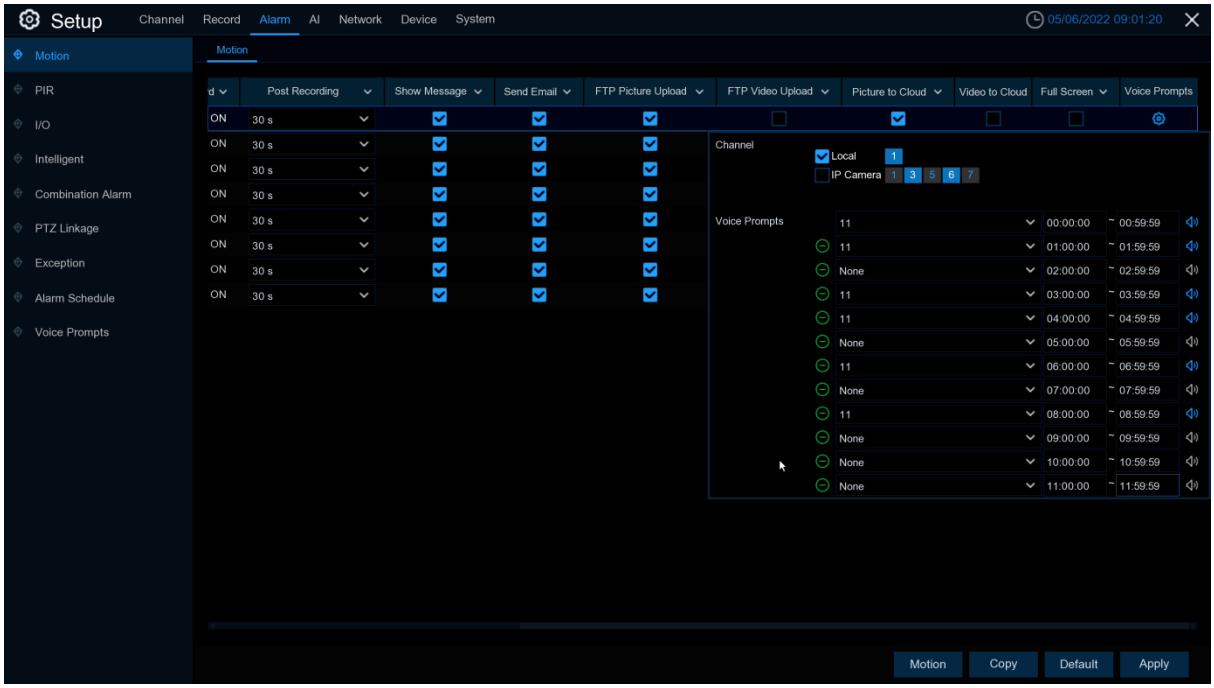
After importing audio file, you can select which file to play in **Voice Prompt.**

Only Local is supported for the broadcast mode.



Local: Local broadcast (when choosing this broadcast mode, the audio output shall is connected to the device side)

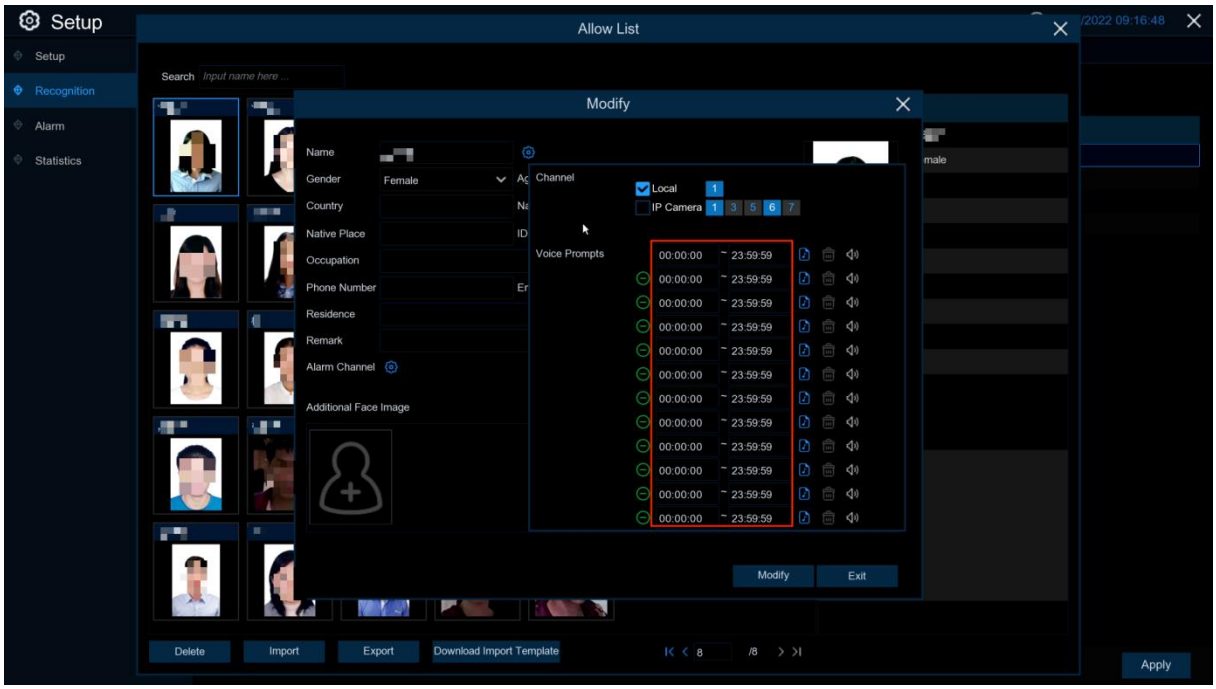
Voice Prompts setting by time period: An alarm type can support setting the voice broadcast of up to 12 time periods. There is no conflict between the start and end time of any time period



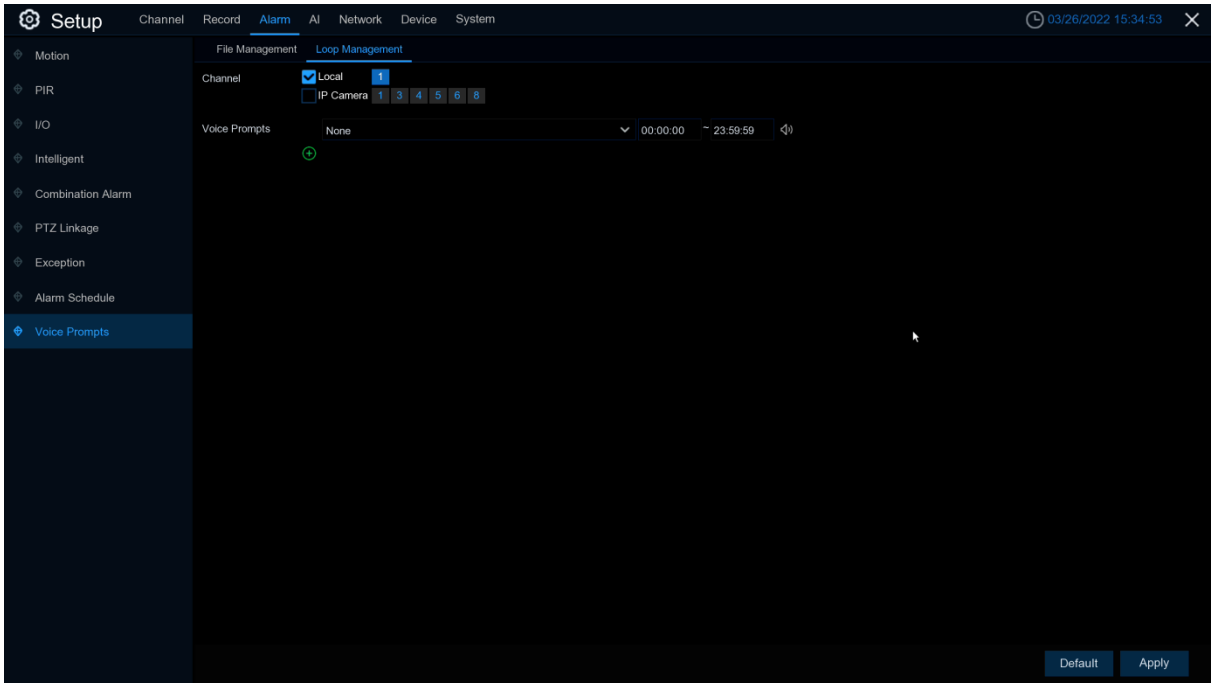
Voice broadcast setting based on face recognition: This function is to realize that when face recognition occurs, the system collects the alarm signal and the voice broadcast equipment for linkage, and automatically plays the associated audio to the scene "intrusion" object.

Note: Imported audio based on black and white list face images can only be used for the associated images.

When the face detection triggers the face detection, there will be a voice prompt.



5.3.9.2 Loop Management



Voice Prompts selects the audio file, and after setting the time period, the selected audio file will be played repeatedly without alarm or hearing the audio file, supporting the voice broadcast for up to 12 time periods.

Local: Local broadcast (when choosing this broadcast mode, the audio output shall be connected to the device side)

5.4 AI

5.4.1 Setup

Note:

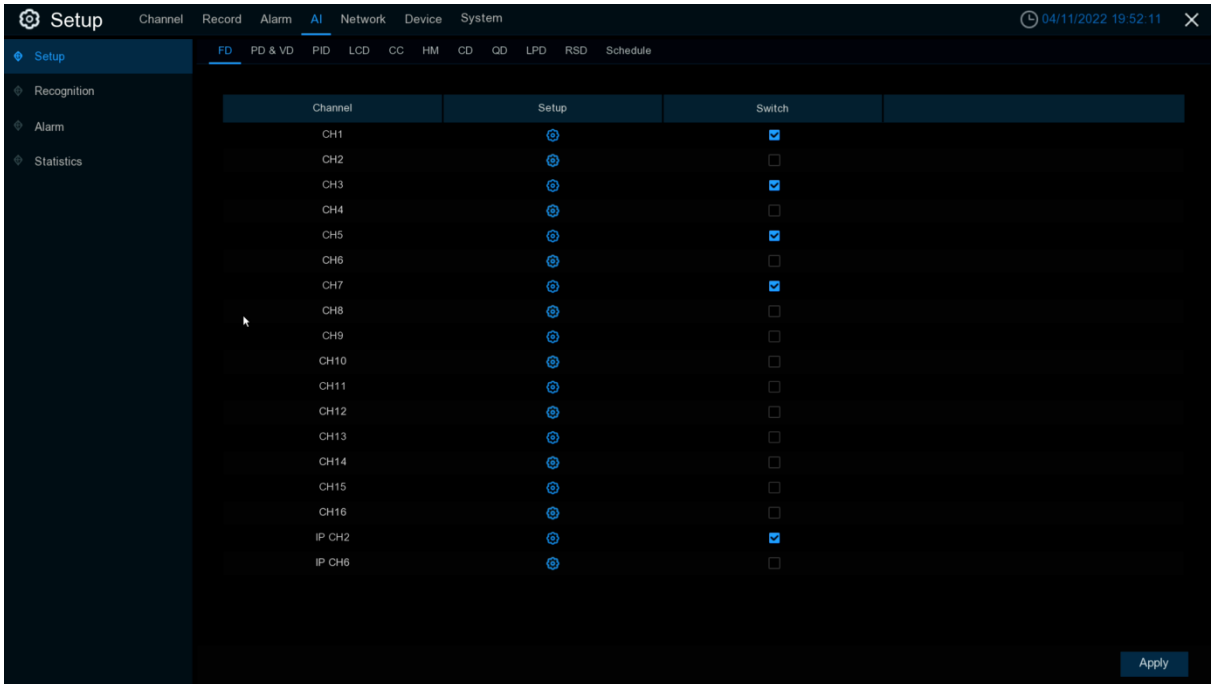
1. The AI functions are only supported when the DVR is connected to the following AI-capable UA-IP cameras or analog cameras.

Camera Model/Type	AI Functions
UA-B580F3 (V1.01 or later) UA-R560F2 (V1.01 or later) UA-R580F2 (V1.01 or later) UA-R800F2 (V1.01 or later)	PD&VD (Human & Vehicles Detection) PID (Perimeter Intrusion Detection) LCD (Line Crossing Detection) SOD (Stationary Object Detection) CC (Cross Counting) FD (Face Detection) HM (Heat Map) CD (Crowd Density Detection) QD (Queue Length Detection) LPD (License Plate Detection) RSD (Rare Sound Detection)
Analog Cameras	FD (Face Detection) PD&VD (Human & Vehicles Detection) PID (Perimeter Intrusion Detection) LCD (Line Crossing Detection)

2. When connected to analog cameras, it is only allowed to enable **one** AI function on the same camera channel at a time; FD (Face Detection) and PD&VD (Human & Vehicles Detection) can be enabled on a maximum of 8 channels at a time.

5.4.1.1 Face Detection

This menu sets the relevant parameters for face detection.



Setup: Click to enter the setting page.

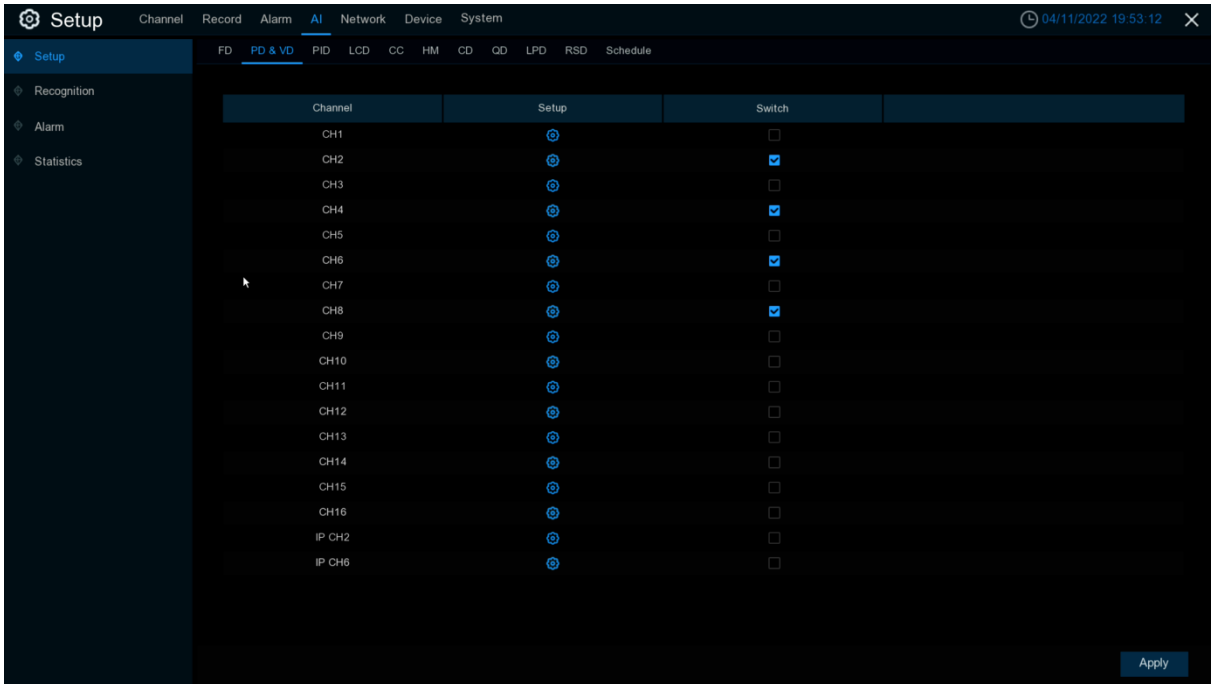
Switch: Enable or disable face detection.

Channel: Channel selection.

Snap Mode: There are **Real Time** (push once when the face appears, push once again when disappearing), **Interval Mode** (custom time and interval of push), and **Optimal Mode** (automatically select and push the best image from all face images of the same person whose face images were captured during his/her duration of stay).
Snap Num: In **Interval Mode**, set the number of pictures pushed.
Snap Frequency: Set the frequency of face push in **Interval Mode**.
Apply Mode: Set the detection angle, with options of **Frontal View/Multi Angle/Customize.**
Roll Range: Set the range of face rotation at a custom angle.
Pitch Range: From a custom angle, set the range of face pitch.
Yaw Range: Set the range of face level flipping at a custom angle.
Picture Quality: Set the image quality, 1 is lowest, 100 is highest.
Frontal View/Muti Angle Default: Restore angle settings by default to frontal and multiple angle settings.
Min/Max Pixel: Set the minimum/maximum recognition pixel box. The face should be bigger than the set min pixel to be recognized and smaller than the set max pixel to be recognized.
Face Enhance: Face enhancement, open after catching the moving target face effect is enhanced, but will reduce the overall quality of the picture.
Detection Mode: The detection mode has both Static and Motion modes.
Motion Mode: Select the **Motion Mode** only if the target in the picture is the motor state. **Static Mode**: Both still targets and dynamic targets are checked. The exercise check mode mainly prevents false positives, such as face-like targets (such as posters and statues), which are still in the picture and do not trigger alarms.
Rule Kind: Full screen (Rect) and line rule.
Detection Range: Under rectangle rule, set up detect area is customize and default setting s Full Screen.
Rule Type: Under **Line Rule**, setting crossing rule. It needs to be lined in the right preview. The face is detected when from rule A→B or rule B→A.
Dynamic Marking: Tracking box.

5.4.1.2 PD&VD (Pedestrian Detection &Vehicle Detection)

This menu sets the relevant parameters for PD & VD detection.



Setup: Click to enter the setting page.

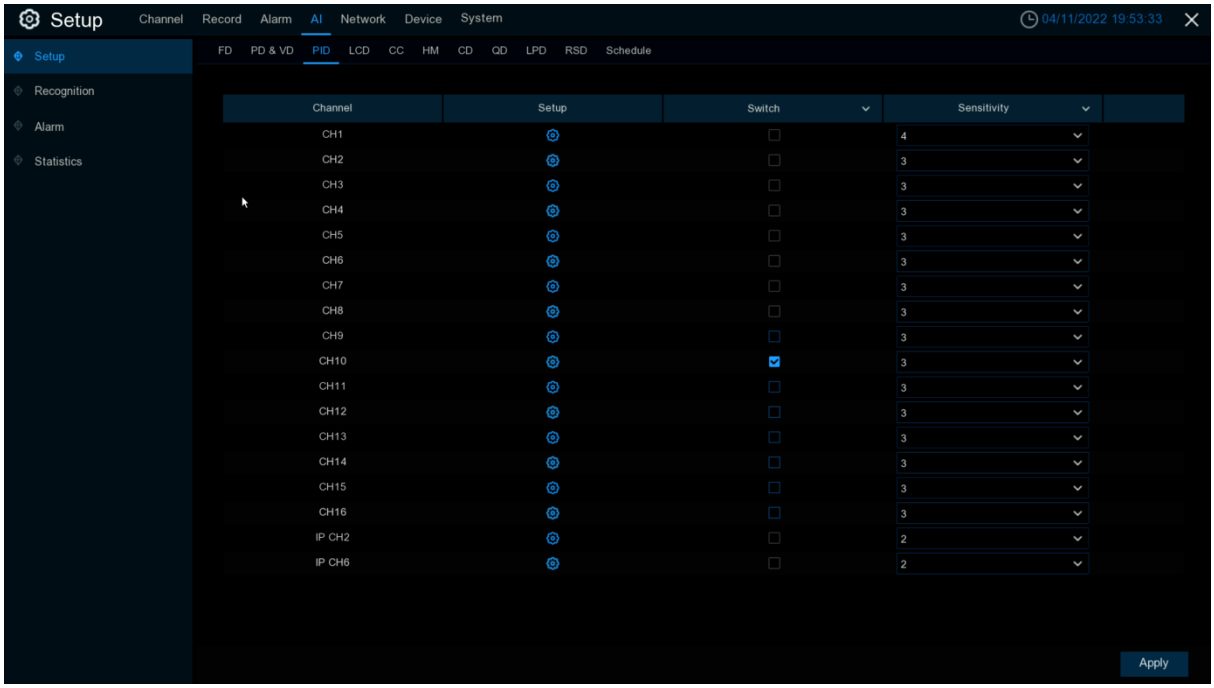
Switch: Enable or disable PD & VD.

Channel: Channel selection.

Snap Mode: Snap picture mode, there are **Default Mode** (select the best quality picture push during the period from person & car to disappear). **Realtime Mode** (push once when appearing, push once again when disappearing), and **Interval Mode** (custom time and interval of push).
Snap Num: In **Interval Mode**, set the number of pictures pushed.
Snap Frequency: Set the frequency of PD&VD push in **Interval Mode**.
Min pixel: Set the minimum identification pixel box, and people and vehicle should be greater than the set pixels to be identified.
Max pixel: Set the maximum recognition pixel box, the person and car should be less than the set pixels to be identified.
Sensitivity: Set sensitivity, 1 is minimum, 100 is maximum.
Detection Type: Pedestrian and Vehicle are available.
Detection Mode: Set up **Motion Mode / Static Mode**.
Detection Range: Set up detection area, customized or default full screen.
Dynamic Marking: Tracking box.

5.4.1.3 PID (Perimeter Intrusion Detection)

The Perimeter intrusion detection function can detect people, vehicles, or other objects moving in and out of a predetermined virtual area, and take certain specific measures when an alarm is triggered.



Switch: Enable or disable PID

Sensitive: The sensitivity level is 1 to 4. Higher sensitivity would be easier to trigger detection.

Area: Click **Setup** to draw the virtual area in the image.

1. **Channel**：Select the channel that you want to configure.

2. **Detection Type:** detection type

Person: Pedestrian alarm during perimeter intrusion detection.

Motor Vehicle: Alarm when the motor vehicle triggers the perimeter intrusion.

Non-motorized Vehicle: Alarm when non-motor vehicles trigger a perimeter intrusion.

3. **Rule Number:** Select one of the rule numbers. The PID functionality can set up to 4 areas.

4. **Rule Switch:** Enable or disable the rules

5. **Rule Type:** Select the 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；

6. **Dynamic Marking:** Tracking box

7. Mouse-Click 4 points in the camera image to draw a virtual rectangle.

8. Click **Save** to save the setting

9. If you want to change the position or size of the rectangle, Click on the red box in the rectangle, and the color of the rectangular border becomes red.

Press the left mouse button long to move the line, or drag the end of the segment to modify the length or position of the line.

10. If you want to delete a line from the camera picture, Click the red box in the line, and then Click the "**Remove**" button. Click "**Remove All**" will remove all of the rectangles.

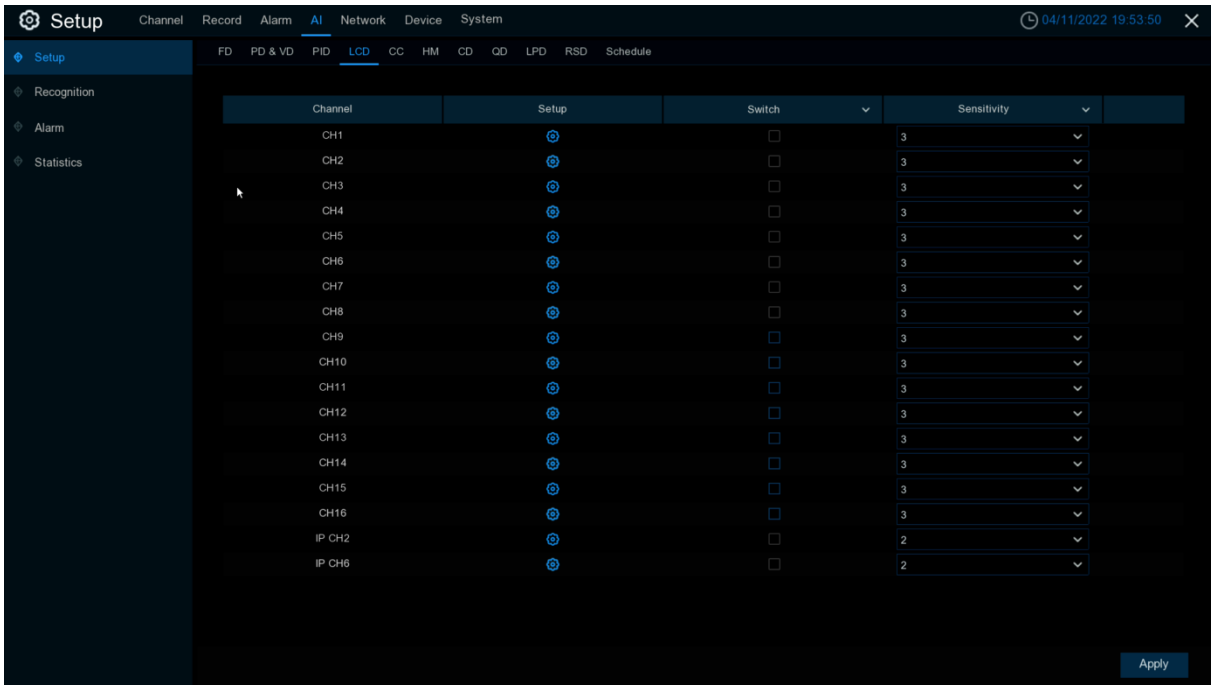
Notice:

1) The periphery should not be too close to the edges / corners of the camera image, because it may not trigger detection when the target passes through the edges / corners.

2) The shape of the region cannot be too narrow / too small because detection may not be triggered when large targets cross the perimeter.

5.4.1.5 LCD (Line Crossing Detection)

The LCD function detects people, vehicles or other objects crossing a predetermined virtual line and takes certain measures when an alarm is triggered.



Switch: Enable or disable LCD.

Sensitive: The sensitivity level is 1 to 4. Higher sensitivity would be easier to trigger detection.

Area: Click **Setup** to draw the virtual area in the image.

1. **Channel:** Select the channel that you want to configure.
2. **Detection Type:** Detection type

Person: Trigger alarm when pedestrians cross the line.

Motor Vehicle: Trigger alarm when motor vehicle crosses the line.

Non-motorized Vehicle: Trigger alarm when non-motor vehicle crosses the line.

3. **Rule Number:** Select one of the rule numbers. The LCD function can set up to 4 areas.
4. **Rule Switch:** Enable or disable the rule switch.
5. **Rule Type:** Select the 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;

6. **Dynamic Marking:** Tracking box

7. Mouse-Click 4 points in the camera image to draw a virtual rectangle.

8. Click **Save** to save the setting

9. If you want to change the position or size of the rectangle, click on the red box in the rectangle, and the color of the rectangular border becomes red.

Press the left mouse button long to move the line, or drag the end of the segment to modify the length or position of the line.

10. If you want to delete a line from the camera picture, Click the red box in the line, and then Click the "**Remove**" button. Click "**Remove All**" will remove all the rectangles.

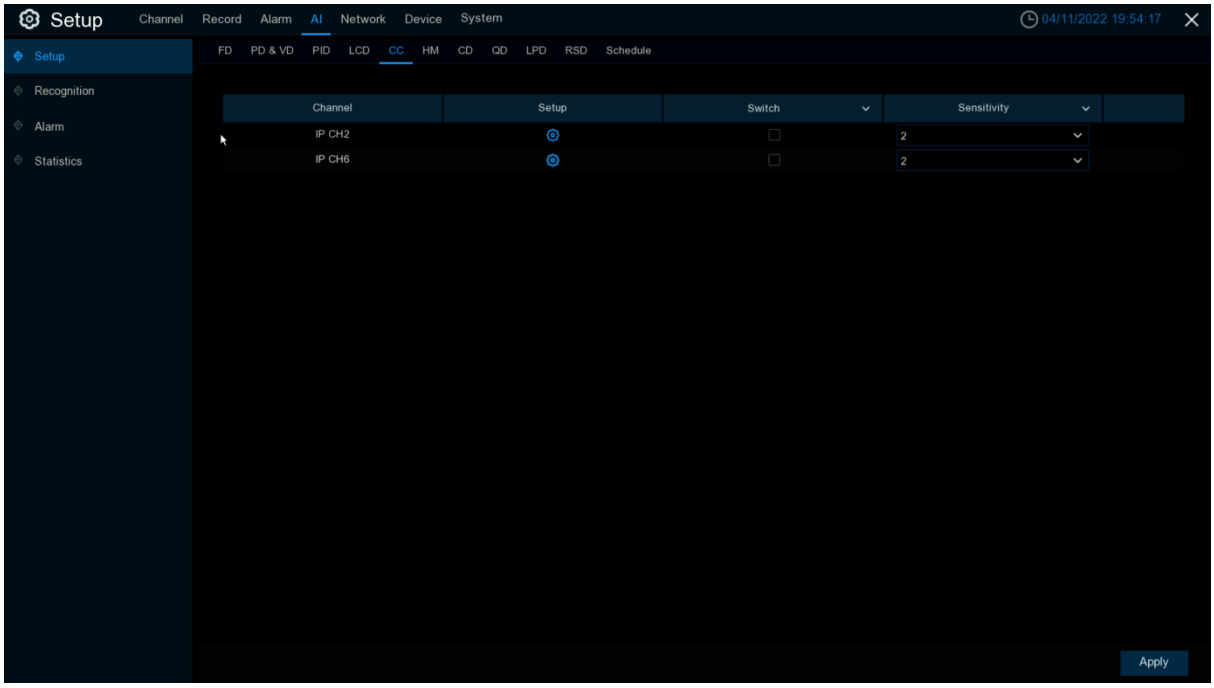
Notice:

1) The periphery should not be too close to the edges / corners of the camera image, because it may not trigger detection when the target passes through the edges / corners.

2) The shape of the region cannot be too narrow / too small because detection may not be triggered when large targets cross the perimeter.

5.4.1.5 CC (Cross-Counting)

The Cross-Counting function statistics people or moving objects.



Sensitive: Sensitivity levels are 1 to 4, and the default value is 2. Higher sensitivity would trigger detection more easily.

Switch: Enable or disable CC function.

Area: Click **Setup** to set the virtual lines and rectangular boxes within the camera image.

Channel: Select the channel that you want to configure.

Type: Select rule type.

Person: Only count pedestrians.

Motion: Count any moving object that crossed the line.

Motor Vehicle: Only count motor vehicles that crossed the line.

Non-motorized Vehicle: Only count non-motor vehicles that crossed the line.

1. **Alarm Num：** Set alarm number. Alarm Num= (cross in number) – (cross out number), which is in Number of internal support exists.
2. **Start Time:** Set the counting start time.
3. **End Time:** Set the counting end time.
4. **Reset Count:** Let the count default to zero and recount.
5. **Rule Number：**Select the rule number. It is the number of virtual lines that you can draw the CC. Up to 1 line.
6. **Rule Switch:** Enable or disable rule types.
7. **Rule Type:** Rule type
    a) A-> B, the DVR will count people or items from side A to side B.
    b) B-> A, DVR will count people or items from side B to side A.
8. **Dynamic Marking:** Tracking box.

1) The periphery should not be too close to the edges / corners of the camera image, because it may not trigger detection when the target passes through the edges / corners.

2) The shape of the region cannot be too narrow / too small because detection may not be triggered when large targets cross the perimeter.

Notice:

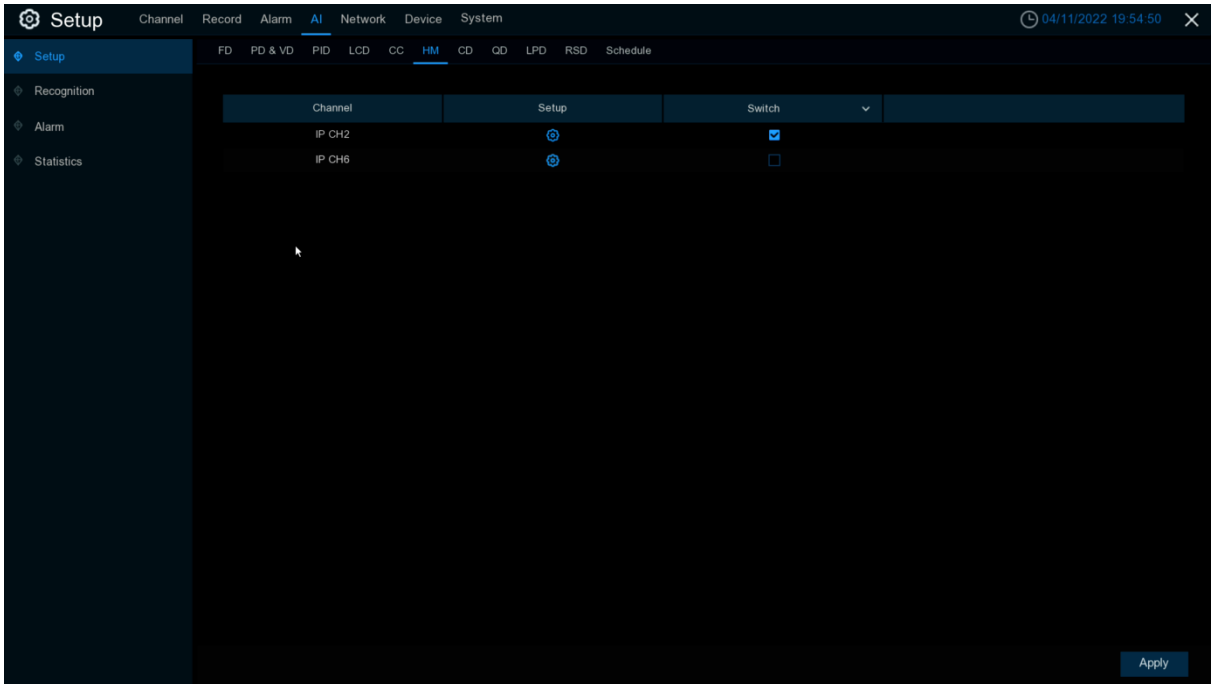
1) The lines should not be too close to the edge of the camera image to avoid alarm when the target passes through the camera.

2) The line should not be set too short to fail to trigger the alarm when the target crosses the alarm.

Please view 5.4.4.3 CC Statistics to search and check statistics result.

5.4.1.6 Heat Map

Show the diagram of the popular page area and the geographical area where visitors are in a special highlight form, and the heat map also tells you which areas of the picture attract most visitors.



Switch: Enable or disable heat map function.

Area: Click **Setup** to draw the virtual area in the image.

Channel: Select the channel that you want to configure.

Rule Number: Select the rule number. It is the number of heat map detection regions. The heat map function can only set up 1 area.

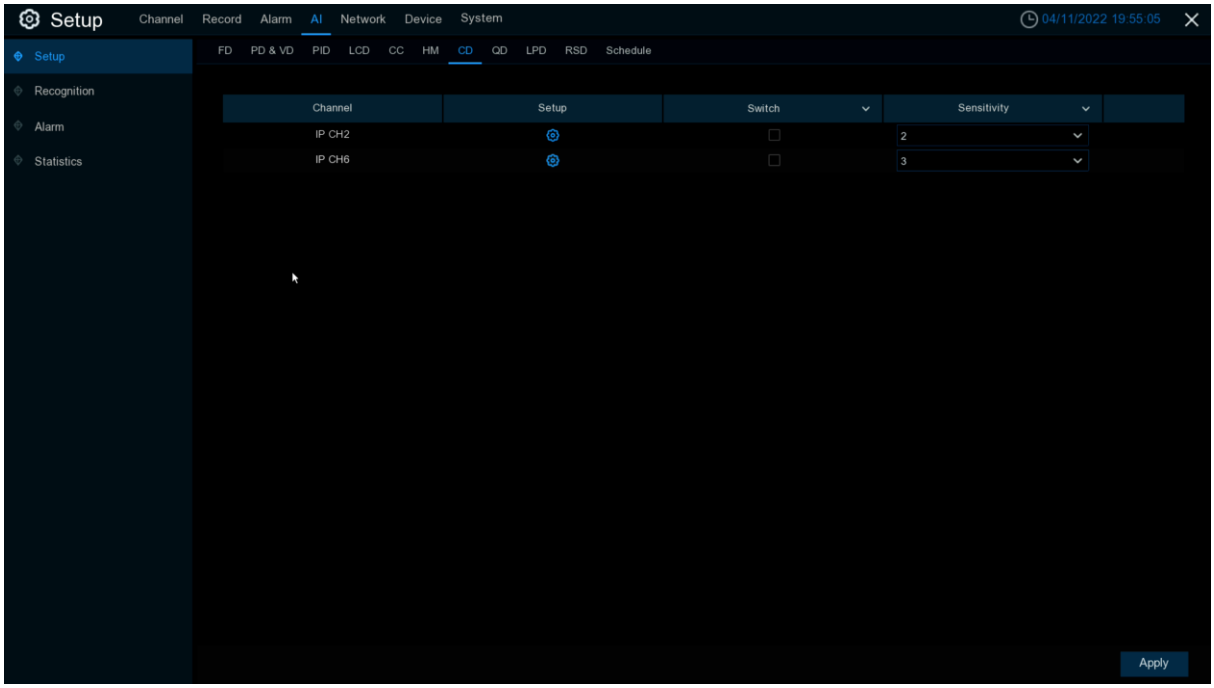
Rule Switch: Enable or disable rule switch.

Remove: Click detection area box and Click **Remove** to remove the detection box.

Remove All: Click **Remove All** to remove the detection box directly.

5.4.1.7 CD (Crowd Density Detection)

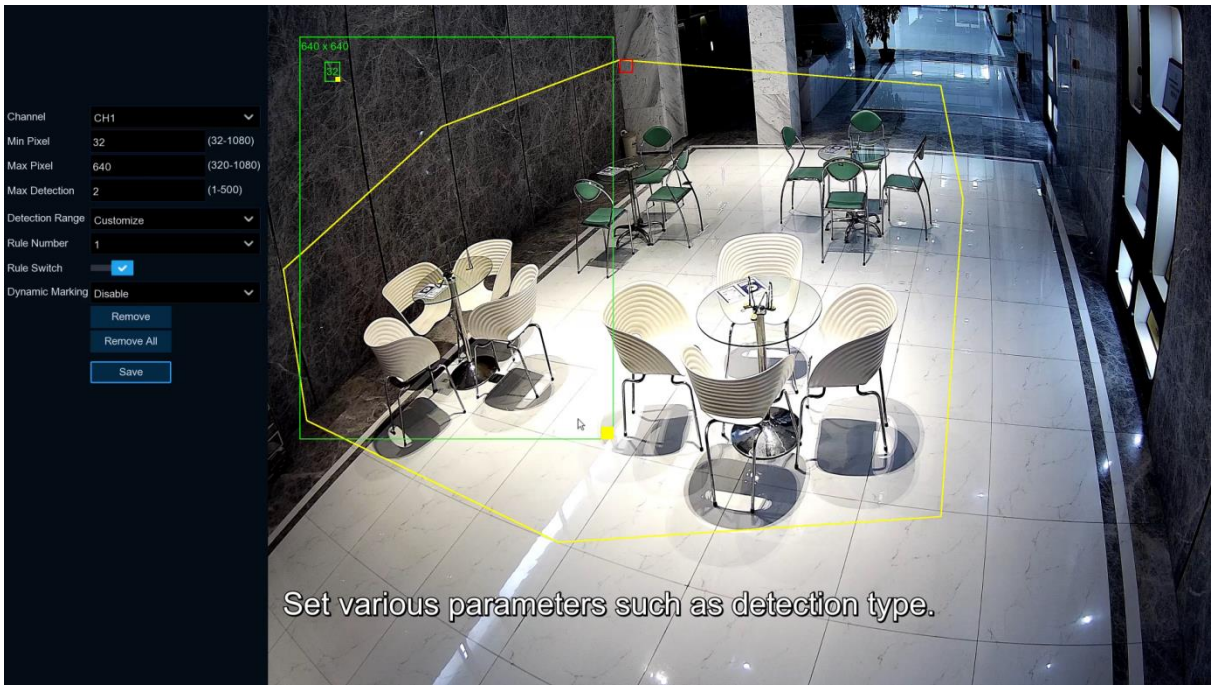
CD is used to detect population aggregation to maintain controlled order in specific areas.



Switch: Enable or disable CD function.

Sensitive: The sensitivity level is 1 to 4. Higher sensitivity would be easier to trigger detection.

Area: Click **Setup** to draw the virtual area in the image.



Min pixel: Set the minimum recognition pixel box, the person should be greater than the set pixel to be identified.

MAX pixel: Set the maximum recognition pixel box, people need less than the set pixels to be identified.

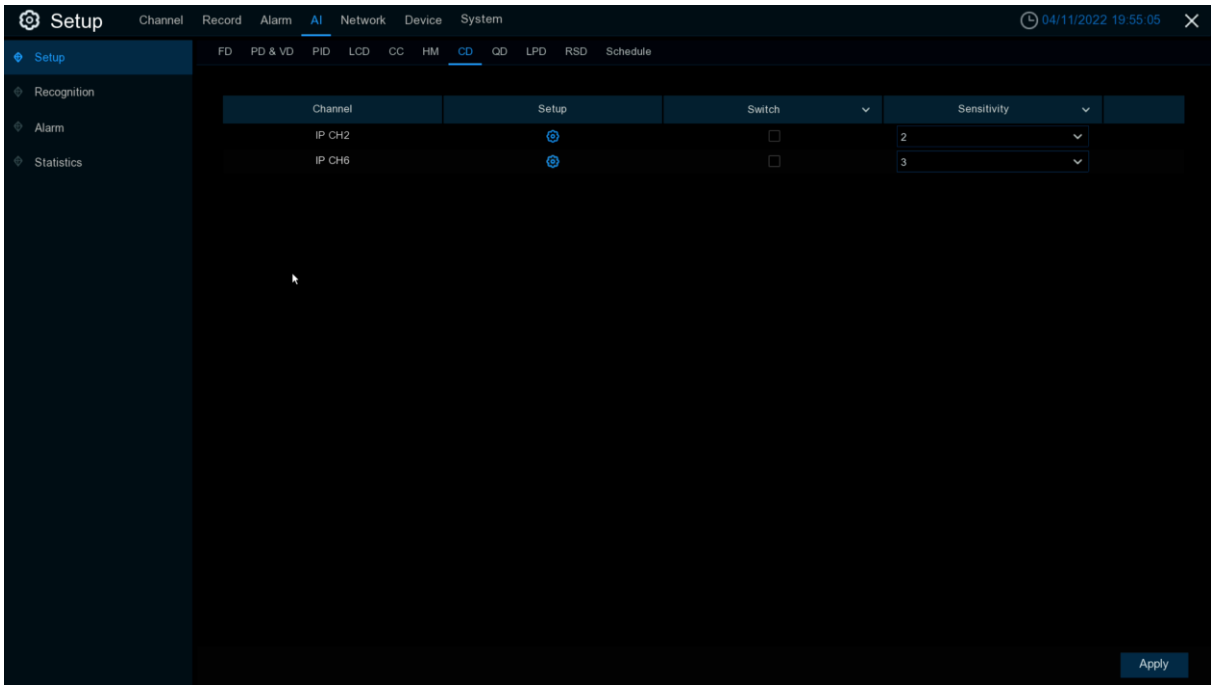
Max Detection: The DVR alarms if the number of people in the detection area exceeds the maximum number of people tested.

Dynamic Marking: Tracking box.

1. Set **Min pixel** and **Max pixel**
2. Set **Max Detection**
3. Enable **Rule switch**
4. Set **Detection Range** default to Full screen or costumed.
5. If you select a custom detection range, you need to click the eight points in the camera picture to draw the virtual area.
6. Click "**Save**" to save the settings
7. If you want to change the location or sharpness of the area, click the red box in the area, and the area boundaries will change to red. Click and hold down the left mouse button to move the area, or drag the corner point to resize the area.
8. If you want to remove one of the areas from the camera picture, click the red box in the area, and then Click **Remove** button. Click "**Remove All**" to remove all areas.

5.4.1.8 QD (Queue Length Detection)

Queue Length Detection is used to detect the status of the cohort, including its length and stall time.



Switch: Enable or disable the QD.

Sensitive: The sensitivity level is 1 to 4. Higher sensitivity would be easier to trigger detection.

Area: Click **Setup** to draw the virtual area in the image.

Min Pixel: Set the minimum recognition pixel box, the person should be greater than the set pixel to be identified.

Max Pixel: Set the maximum recognition pixel box, people need less than the set pixels to be identified.

Max Detection: The DVR alarms if the number of people queuing in the detection area exceeds the maximum number of people tested.

Max Pro Time: If the queue stagnation exceeds the given processing time, DVR sends alarm.

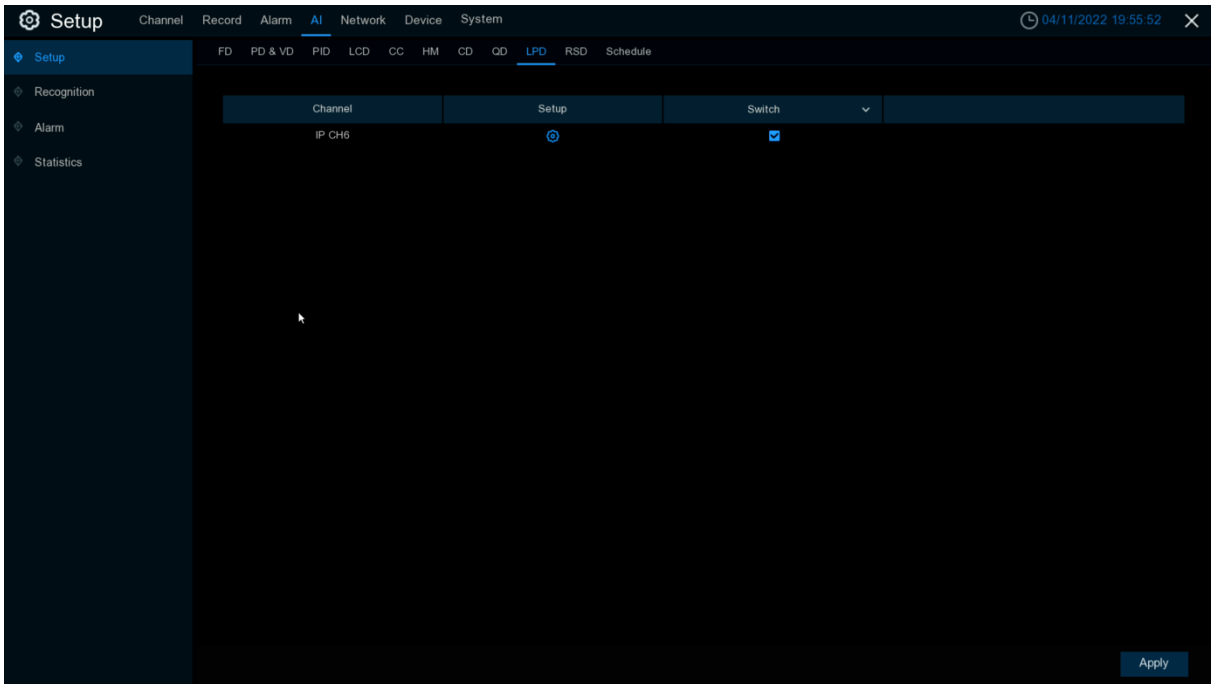
Dynamic Marking: Tracking box

1. Set **Min pixel** and **Max pixel**
2. Set **Max Detection**
3. Enable **Rule switch**
4. Set **Detection Range** default to Full screen or costumed.
5. If you select a custom detection range, you need to Click the eight points in the camera picture to draw the virtual area.
6. Set Max Pro time
7. Click "**Save**" to save the settings
8. If you want to change the location or sharpness of the area, click the red box in the area, and the area boundaries will change to red. Click and hold down the left mouse button to move the area, or drag the corner point to resize the area.
9. If you want to remove one of the areas from the camera picture, click the red box in the area, and then Click **Remove** button. Click "**Remove All**" to remove all areas.

5.4.1.9 LPD (License Plate Detection)

License Plate Detection, detect the pass vehicles which is unfamiliar vehicle or the vehicle that has been entered into the database. It can be also back up the unfamiliar vehicle license plate information to the database, or retrieve the license plate detection and alarm information on playback. **License plate detection currently only supports two regions license-Europe and America.**

In this menu, you can set the relevant parameters of the license plate detection.



Setup: Click to enter setup page.

Switch: Enable or disable LPD function.

Channel: Channel selection

Snap Mode: There are "**Default Mode**" (push only one captured image with the best quality), "**Realtime Mode**" (push the first captured image and push again the last captured image from the same vehicle) and "**Interval Mode**" (customized the capture time and interval).

Min pixel: Minimum recognition pixel box, the license plate must be greater than the set minimum pixel to be recognized.

Max pixel: Maximum recognition pixel box, the license plate should be less than the set maximum pixel to be recognized.

Sensitivity: Sensitivity, the larger the value, the easier to detect the target.

Detection Type: Detect type, there are two kinds of license plate：

European license plate: European license plate

American license plate: American license plate.

Detection Mode: License plate detection mode, there are two modes.

Static Mode: Check the static license plate in the picture

Motion Mode: Filter out the stationary vehicles and their license plates to detect only the license plates in the dynamic process.

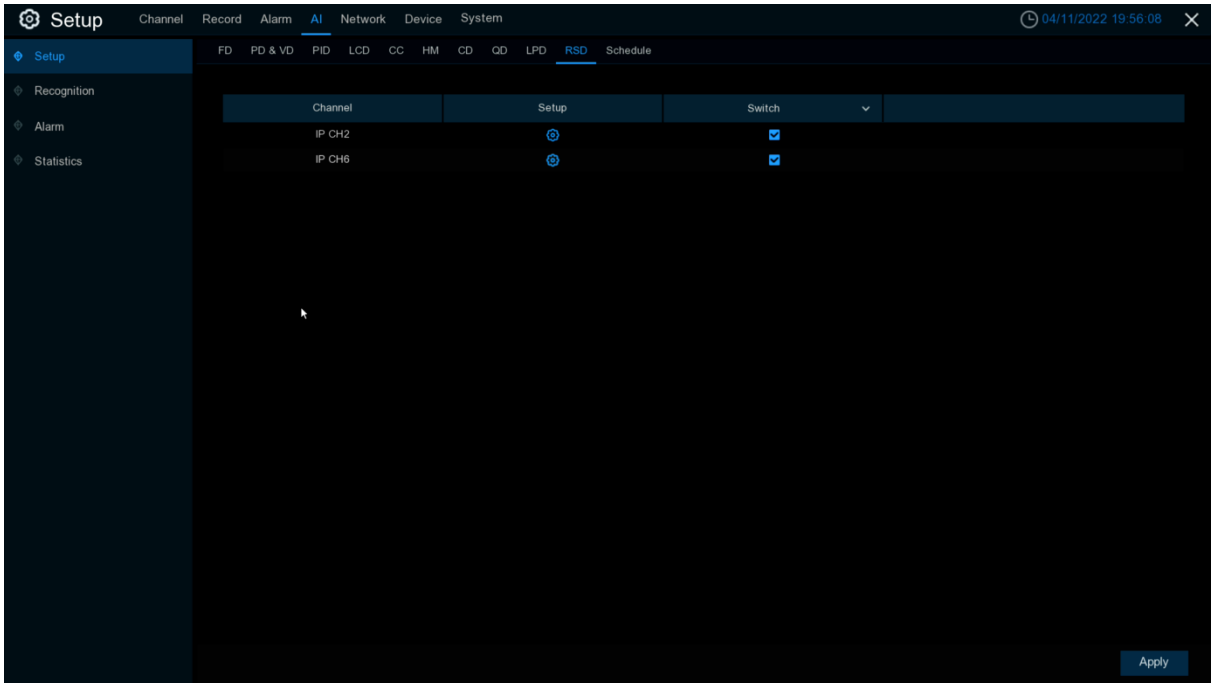
Detection Range: There are two areas for license plate detection as follows：

Full Screen: Full-screen detection,

Customize: Custom detection area.

Dynamic Marking: Tracking box.

5.4.1.10 RSD (Rare Sound Detection)



Setup: Click to enter setup page.

Switch: Enable or disable RSD function.

Channel: Channel selection

Sensitivity: Sensitivity, 1 is the minimum,100 in the maximum.

Detection Type: Choose the detection type by clicking ☑ to enable detection for **Baby Crying Sound, Dog Barking,** or **Gunshot**.

5.4.1.6 AI Schedule

When IPC connects to DVR with media ports, the schedule is as below:

Set the schedule for each AI feature recording.

When the IPC connects to the DVR with the WEB port, the schedule is as below:

Set the schedule for each AI function switch. The gray area is unavailable.

Enable: Enable schedule.

Functions are mutually exclusive: Function mutually exclusive to the selected function.

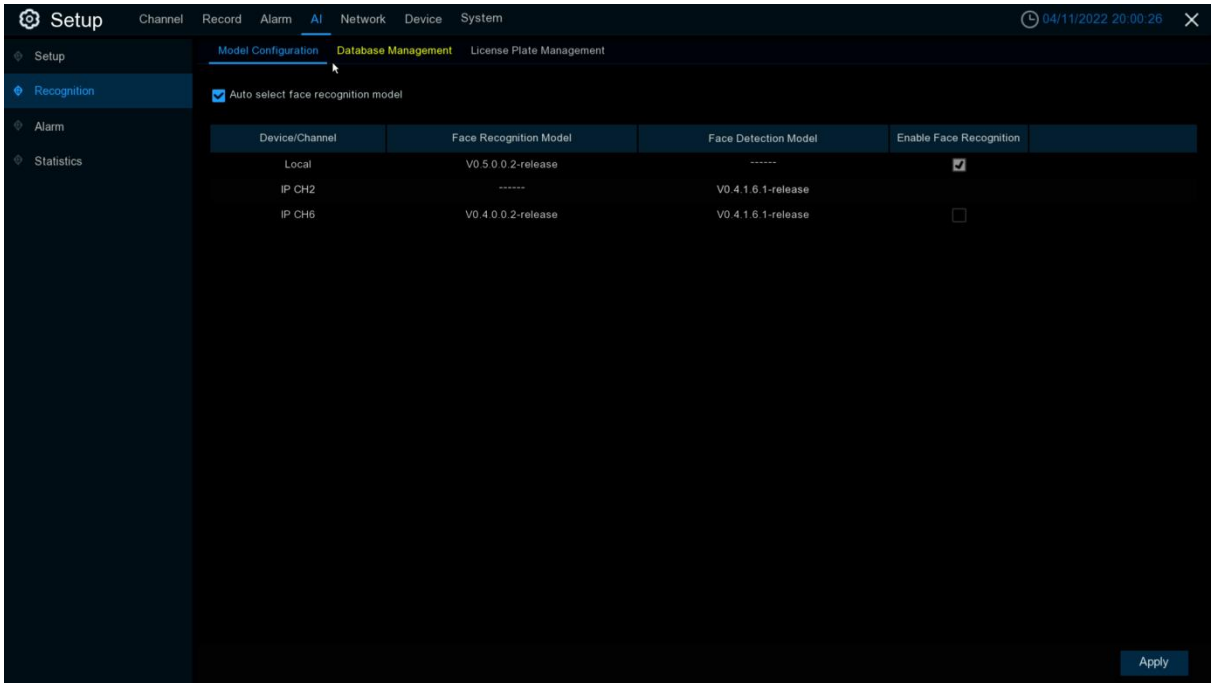
5.4.2 Recognition

Note:

1. This function is only applicable when the DVR is connected to the following UA-IP cameras with specified firmware versions or any analog cameras:
   - UA-B580F3 (V1.01 or later)
   - UA-R560F2 (V1.01 or later)
   - UA-R580F2 (V1.01 or later)
   - UA-R800F2 (V1.01 or later)
2. To see AI applications for different scenarios using Face Recognition results, see *Chapter 6 AI Scenario.*
3. To search for face recognition results, see *7.1.9 AI.*

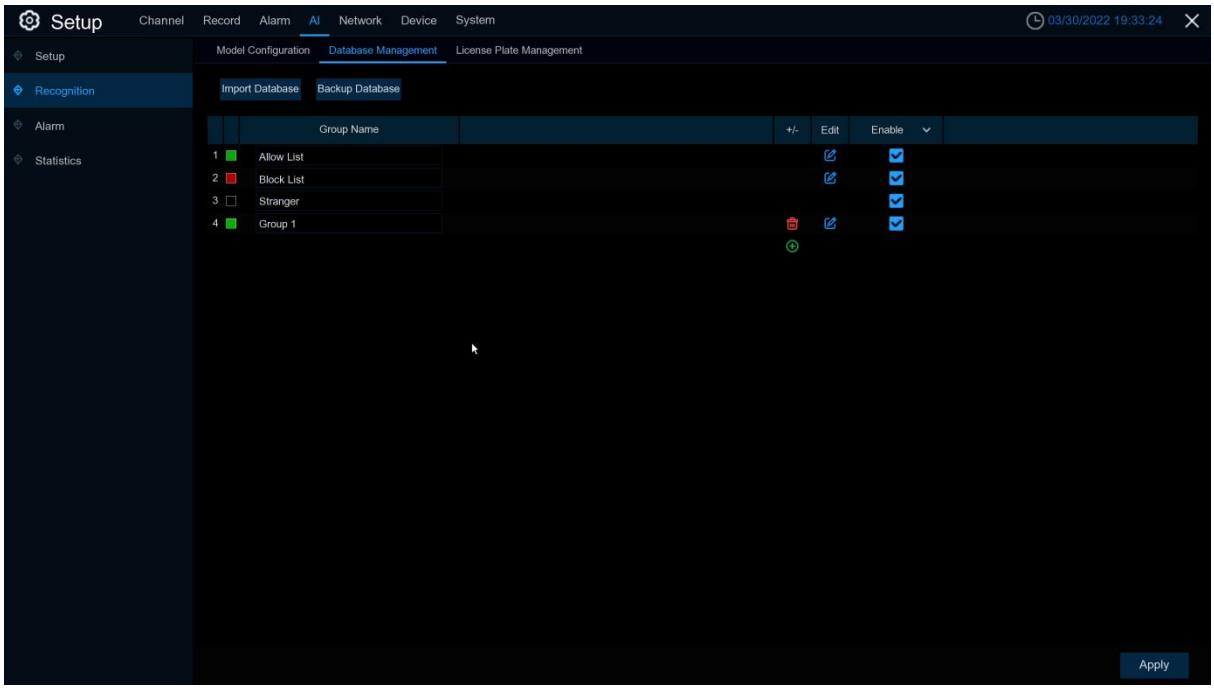
5.4.2.1 Model Configuration

Select the algorithm model in this menu. There are local and IPC algorithm models.



5.4.2.2 Database Management

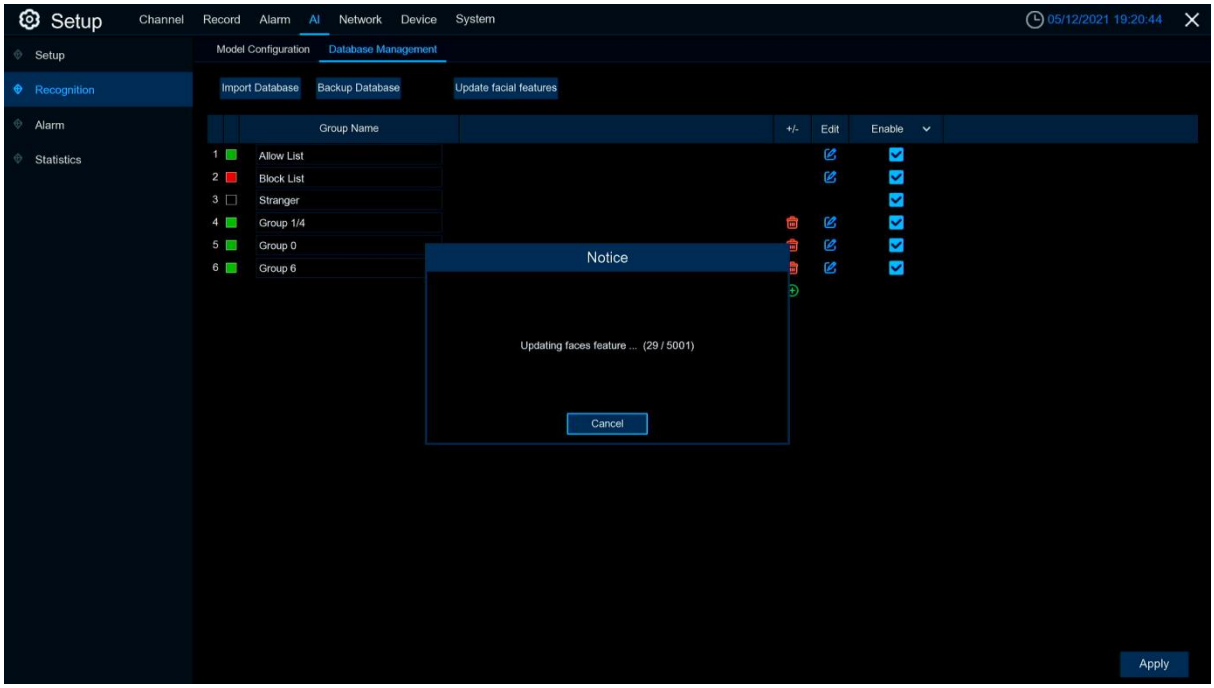
This menu sets up a database for face recognition.



Import Database: Import the exported file to the device.

Backup Database: Export all the groups into the U disk.

Update facial features: Update face features, switching the face features model or imported from external files face images or face database, after AI IPC recognition detected the face database face features and the current check face features model is inconsistent, will pop up update face features. Click **Update facial features** and the box will be shown as the following figure below.

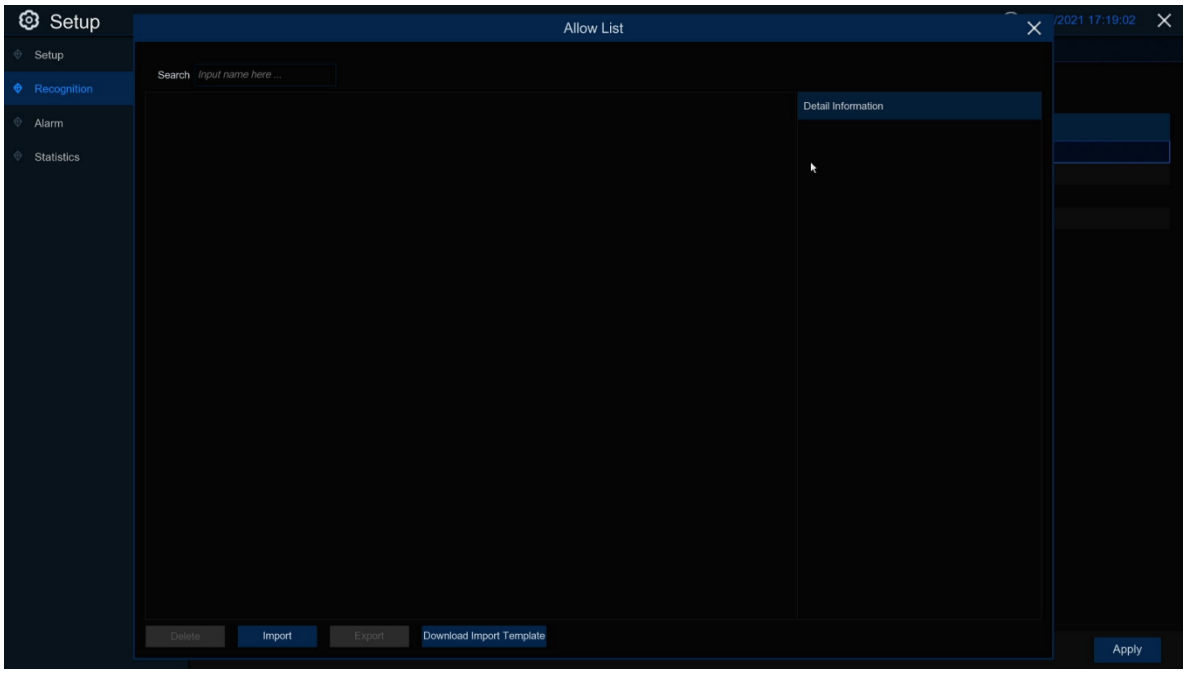


Click **Cancel** and a prompt will pop up to continue or suspend the update, the remaining not updated next Click to update.

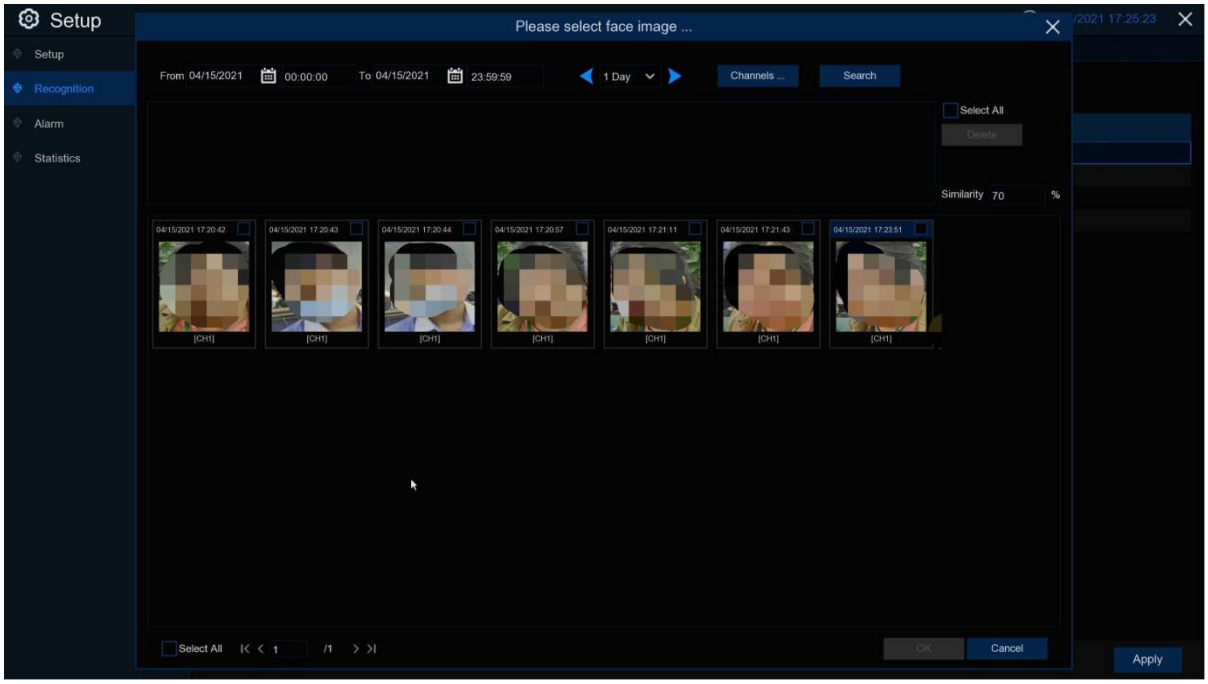
Click / **:** Add a new face group or delete an existing face group. (The default first three face groups cannot be deleted)

Enable: Enable or disable face recognition group.

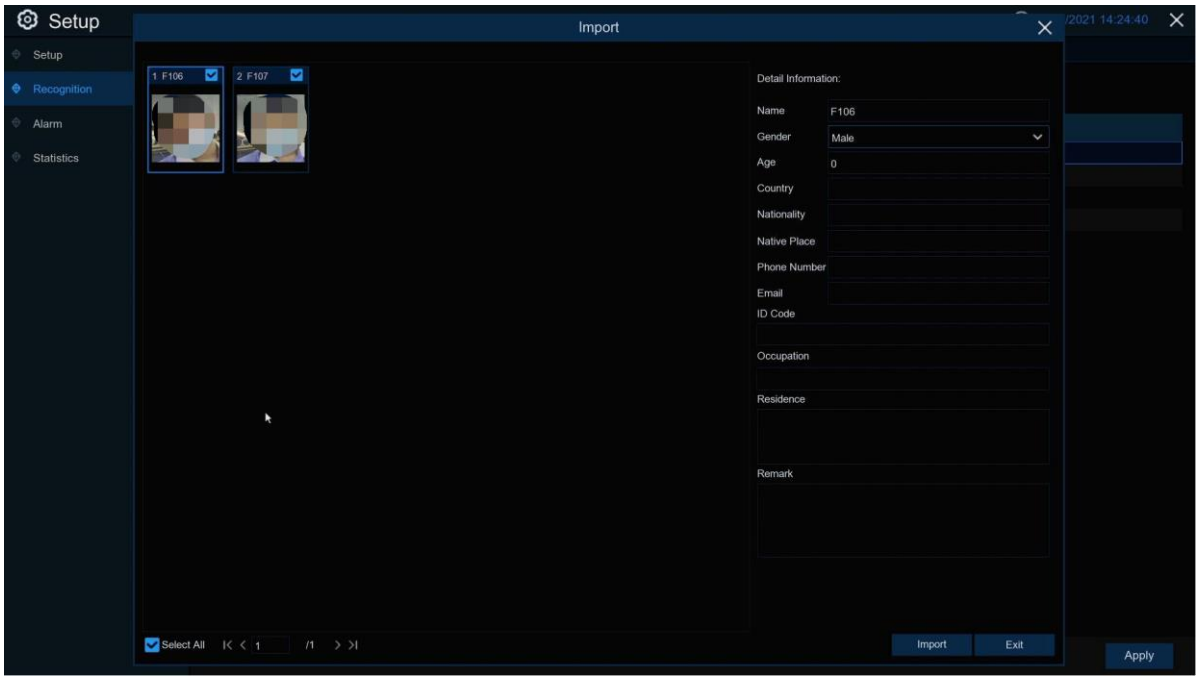
Edit: Click Edit to enter the editing face group interface.



Import: Click **Local Storage Device** to enter local face interface.

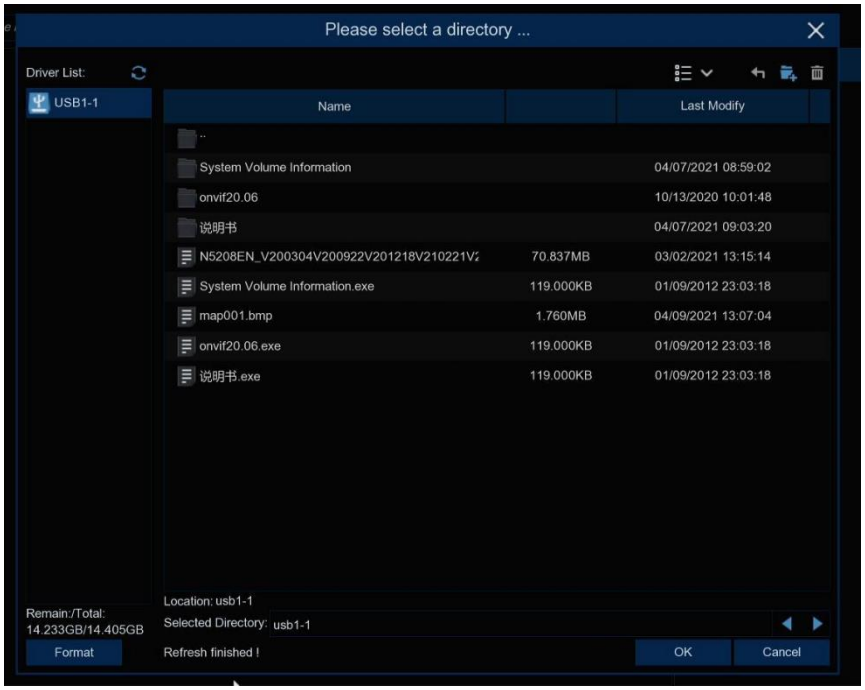


Select date, duration, and channels. Click **Search** to search all of faces saved to the devices during that time. If you select face similarity and then click **Search**, it will be searched out faces based on the similarity percentage. Check the face result images and click **Delete** to remove the images from database. Select face and click **OK** to enter the import face page.



Edit face information in the right box. After editing, click **Import** to finish. Click **Exit** to exit the interface.

Click **External Storage Device** to enter external memory storage, and select the face image you want to import. Follow the same steps as importing to local storage device.

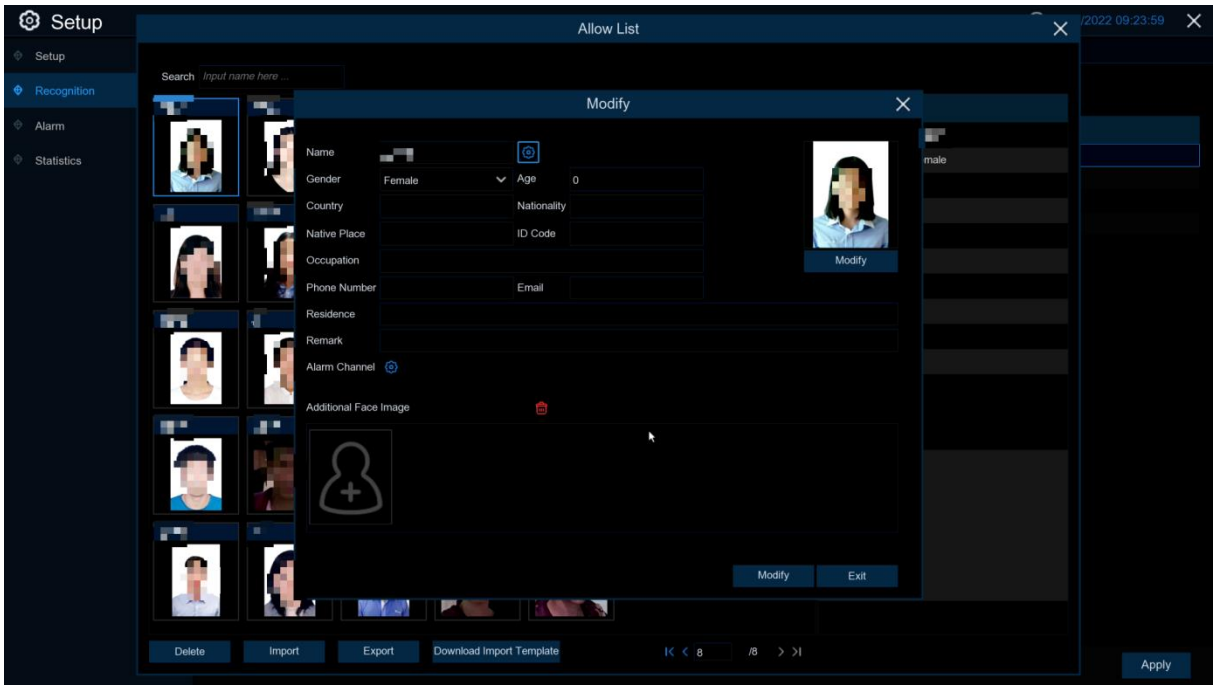


Export: Export the face picture to the external memory storage. Click to the face group picture to Export all the face pictures of the face group; if you click to the face group face picture to click **Export** to export the selected face picture.

Download import Template: Download and import the template, you can export a template to an external memory, this template can contain a form and use instructions, you can fill in the

information of the face picture information in this form, import this form can modify the information of multiple name face pictures, convenient to modify the face picture information.

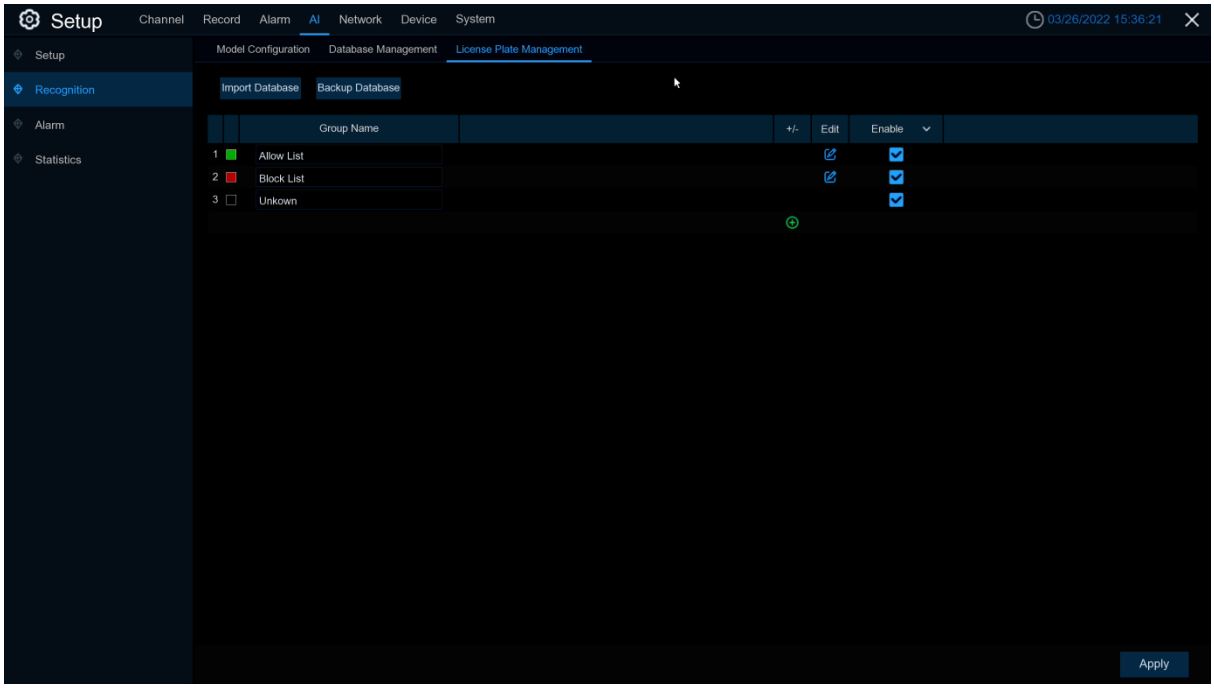
Right-Click to select the face picture, select **Edit** to enter the face picture editing interface, and Click **Additional Face image** to import the face picture under different circumstances of the face.



5.4.2.3 License Plate Management

License Plate Detection, detect the passing vehicles which is unfamiliar vehicle or the vehicle that has been entered into the database. It can be also back up the unfamiliar vehicle license plate information to the database, or retrieve the license plate detection and alarm information on playback. **License plate detection currently only supports two regions license-Europe and America.**

This menu provides a license plate information database for comparing the detected license plate information.



Import Database: Import the exported packet data into the device.

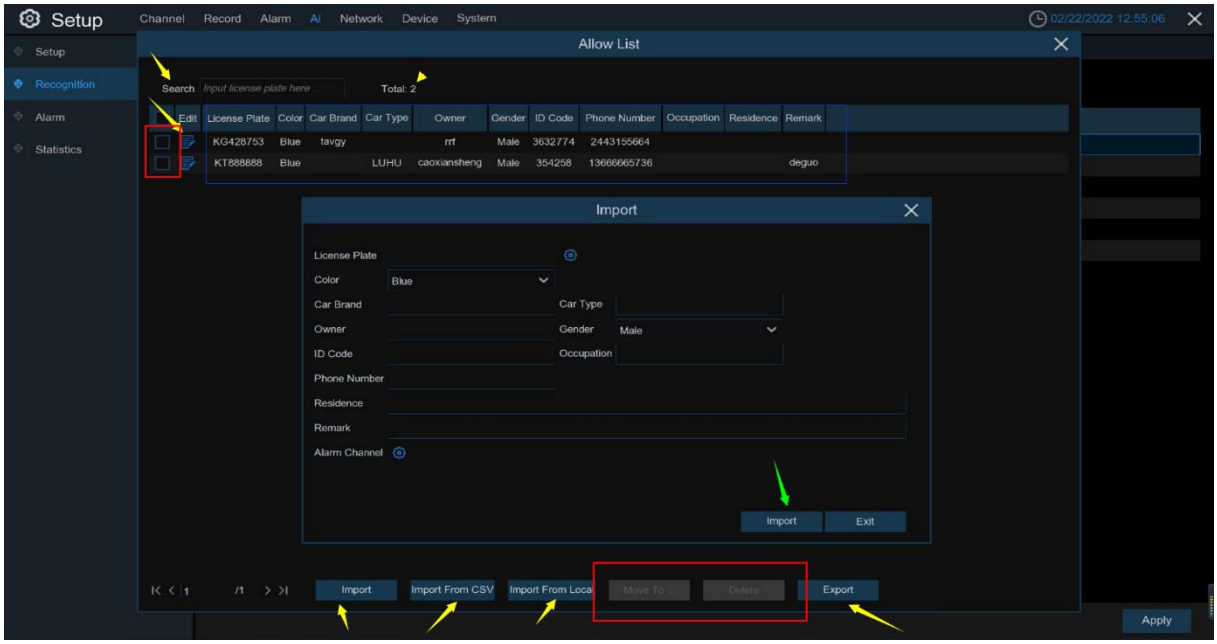
Backup Database: Export all the groups to a U disk.

Group Name: The name of the database group, allow list, black list, stranger group, you can add up to 61 custom groups, a total of 64 groups, one group can accommodate up to 5000 license plate information, the whole database can accommodate 10000 license plate information.

Click / : To add a new license plate group or delete an existing license plate group. (The default first three license plate groups can't be deleted)

Edit: Click Edit to enter the edit license plate group interface.

Enable: Enable or disable LPD.



Search: Filtering license according to keywords.

Total: Total number of license plate data in this group.

Click to modify the corresponding license plate data information. There are three ways to add license plate information: **Import** (manually added), **Import From CSV** (CVS table import), and **Import From Local** (local import).

Click **Import** button to manually add a single license plate information.

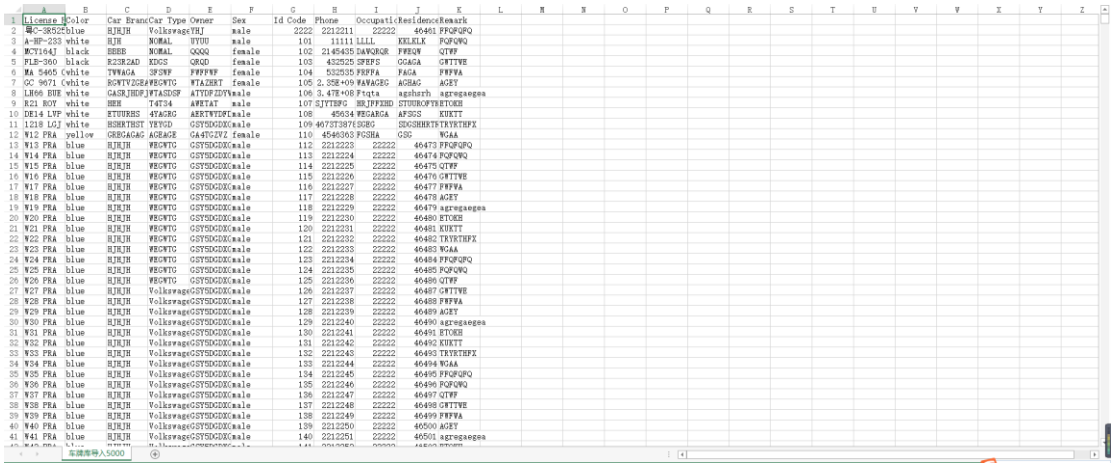
Click **Export** to export the entire group information to the external U disk.

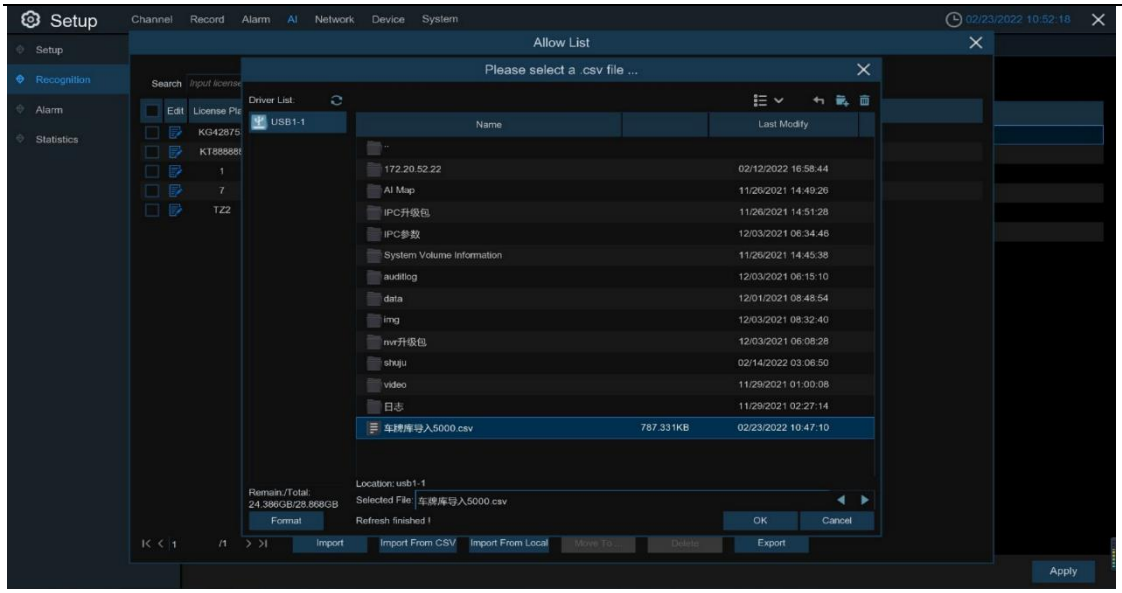
Alarm Channel: Set the channel to alarm after the license plate is detected and successfully aligned.

Move to…: Check the re-check box of the license plate information and click it again to transfer the license plate information to another group.

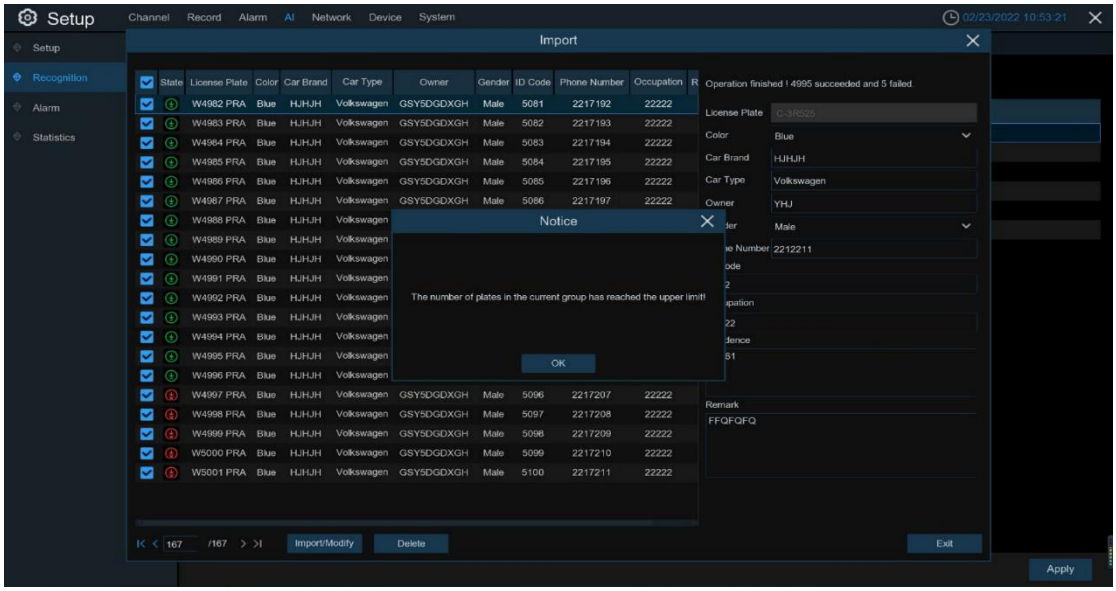
Delete: Check the re-check box of the license plate information and then Click this button to delete the license plate information.

Click **Import From CSV** button to import one or more CVS pieces of data. The format of the CVS table is shown below:



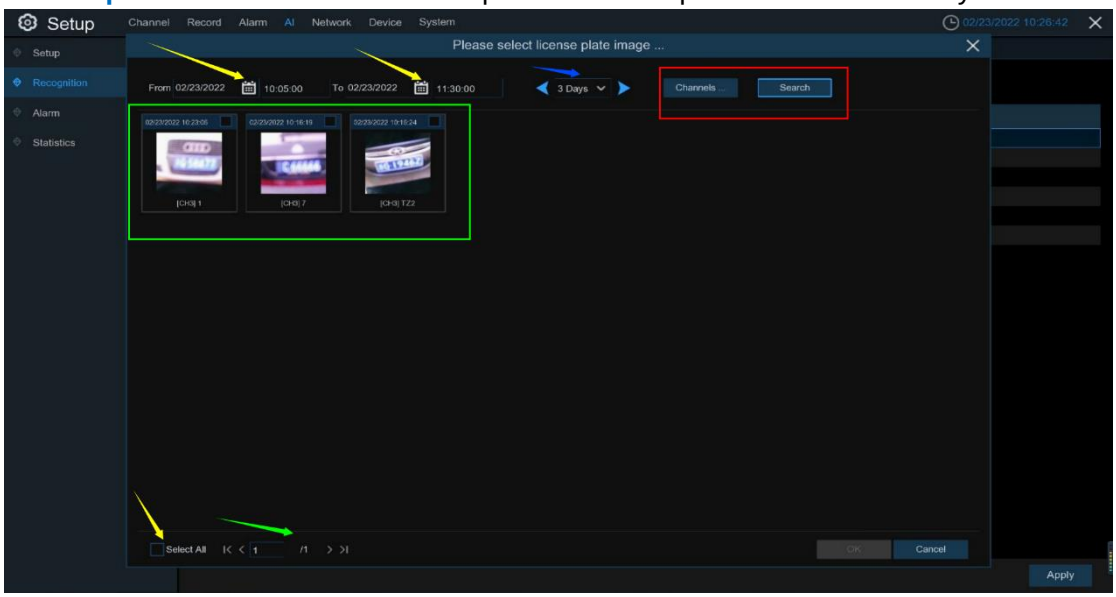


Click **Import From CSV** button to pop up the above interface, select the CSV license plate file to be imported, and Click the OK button. Popup the following below:



Click **Import/Modify** button to add a batch, and you can also modify one license plate information. When more than 5000 data are added, the message box with the content of "Add data has reached the upper limit of the group" will pop up.

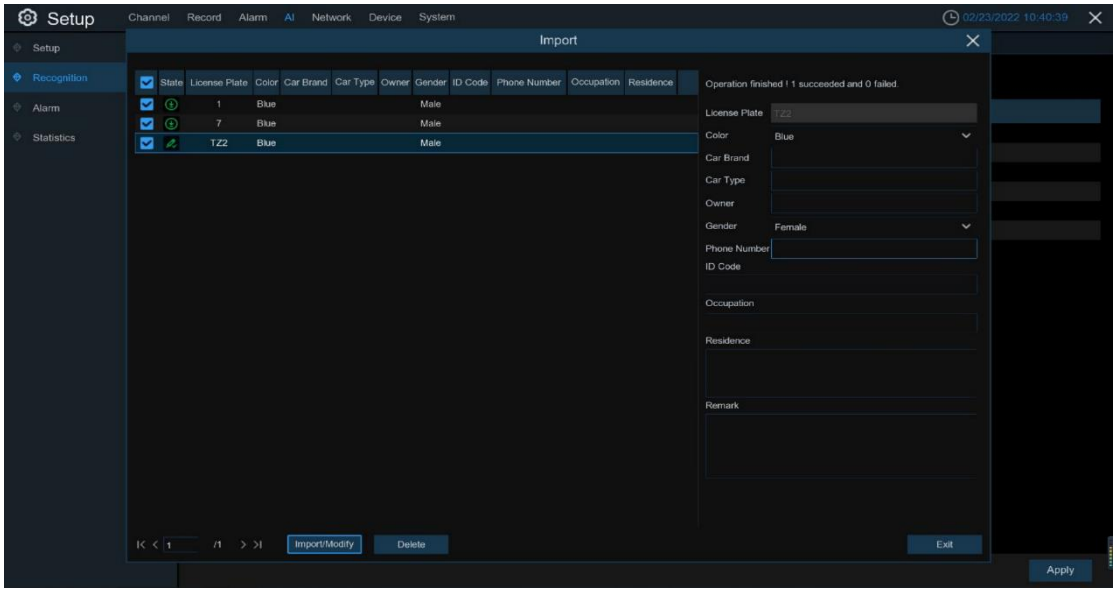
Click **Import From Local button** to import the license plate information locally to the database.



Select date, duration, and channels then click **Search** to search license plates saved by all devices during this time.

Channels: License plate detection events triggered by each channel.

Select All: Select all the license plate information.

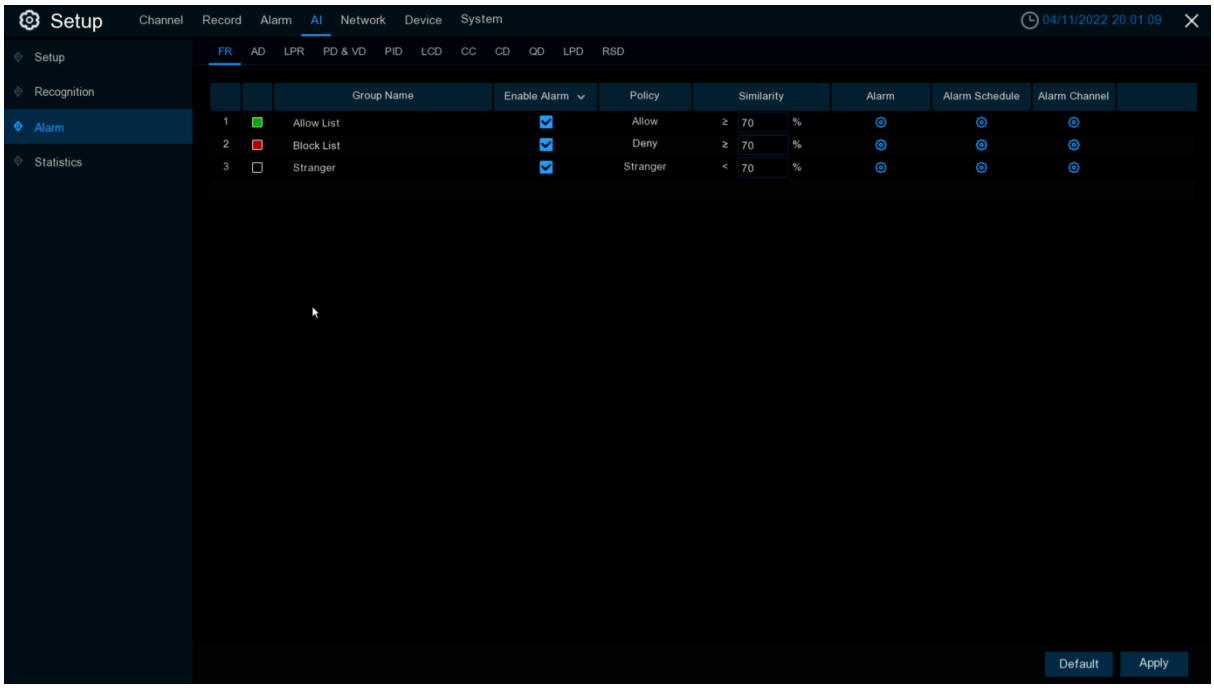


Click one of data to edit the license plate information and Click **Import/Modify** button to modify, if the modification is successful. will become .

5.4.3 AI Alarm

5.4.3.1 Face Recognition

When faces added in the group were detected, it'll be a series of alarm settings.

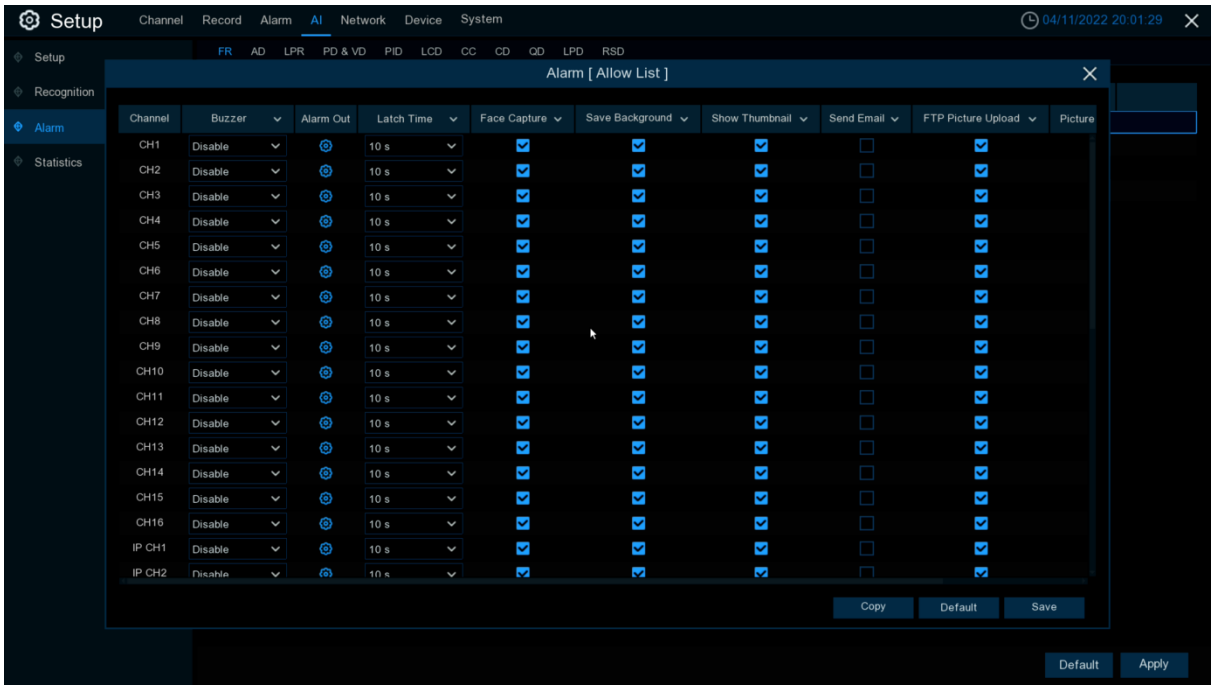


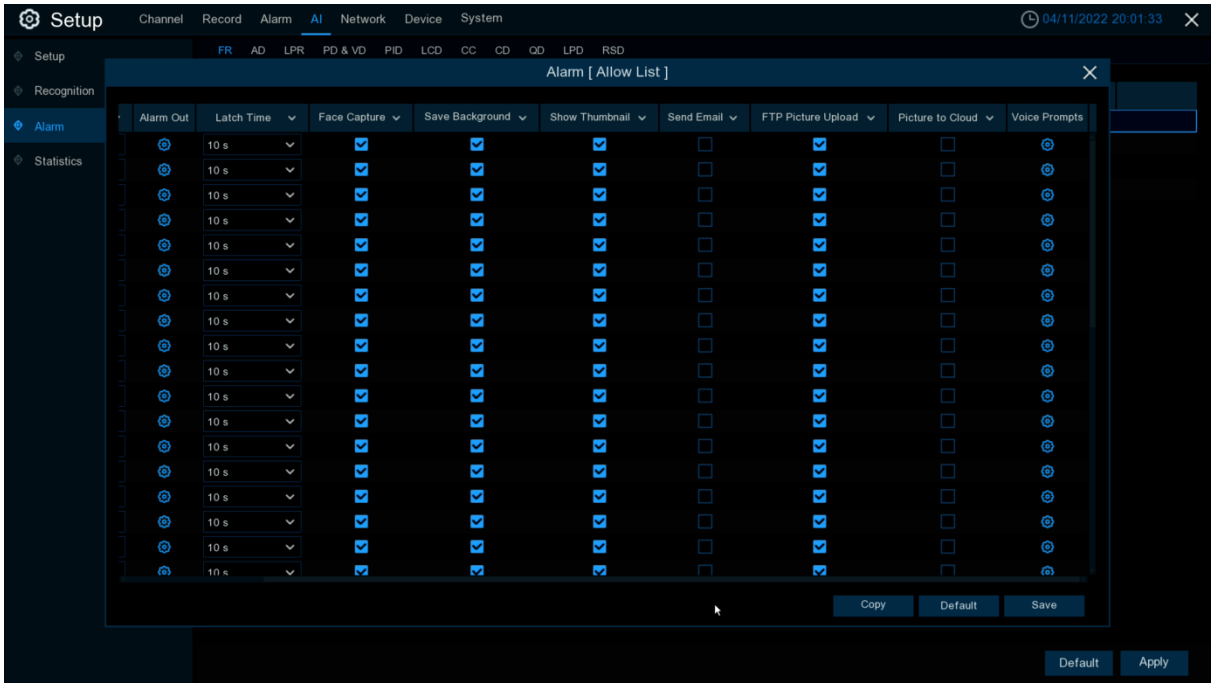
Enable alarm: Enable or disable face detection

Policy: Set up face group alarm countermeasures

Similarity: Similarity settings

Alarm: Click to enter alarm setting interface.





Alarm Out: Optional function. If your DVR supports connecting to an external alert device, you can set up an external alert device.

Latch Time: Set up the external alarm time when the face is detected.

Save Face: The face is saved when the face is detected.

Save Background: When FD is detected, the entire preview image is saved.

Show Thumbnail: When FD is detected, a thumbnail prompt pops up on the preview.

Send Email: When FD is detected, the picture is sent to the set mailbox.

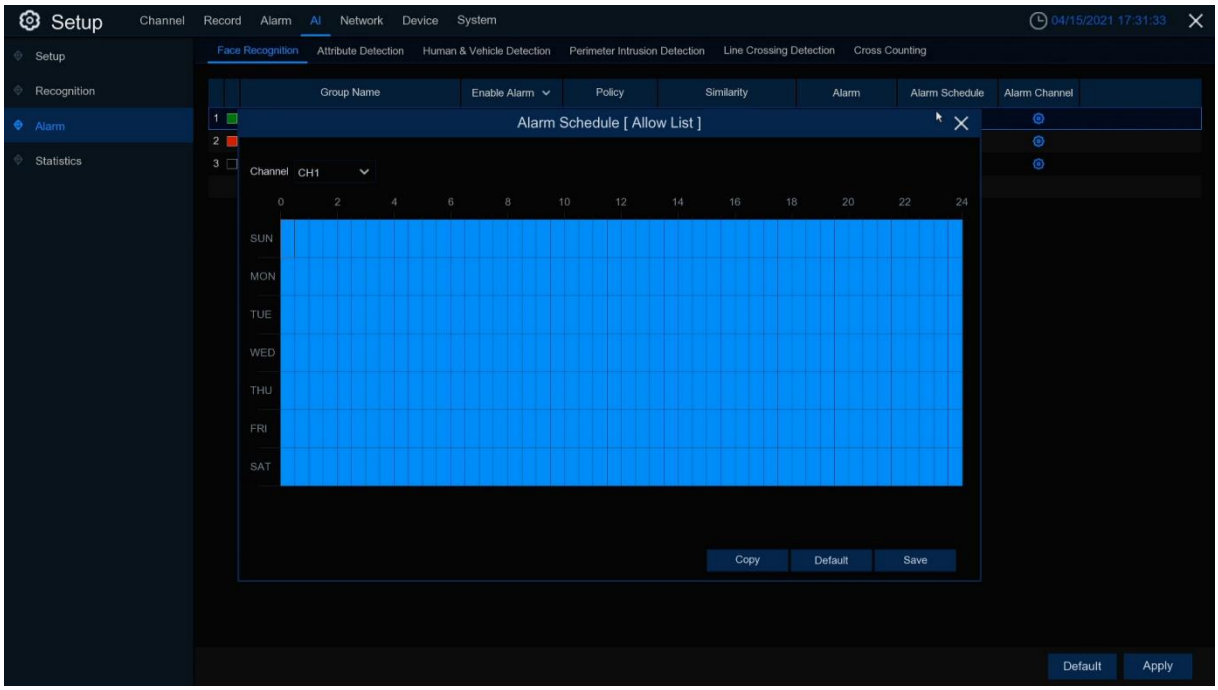
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.

Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.

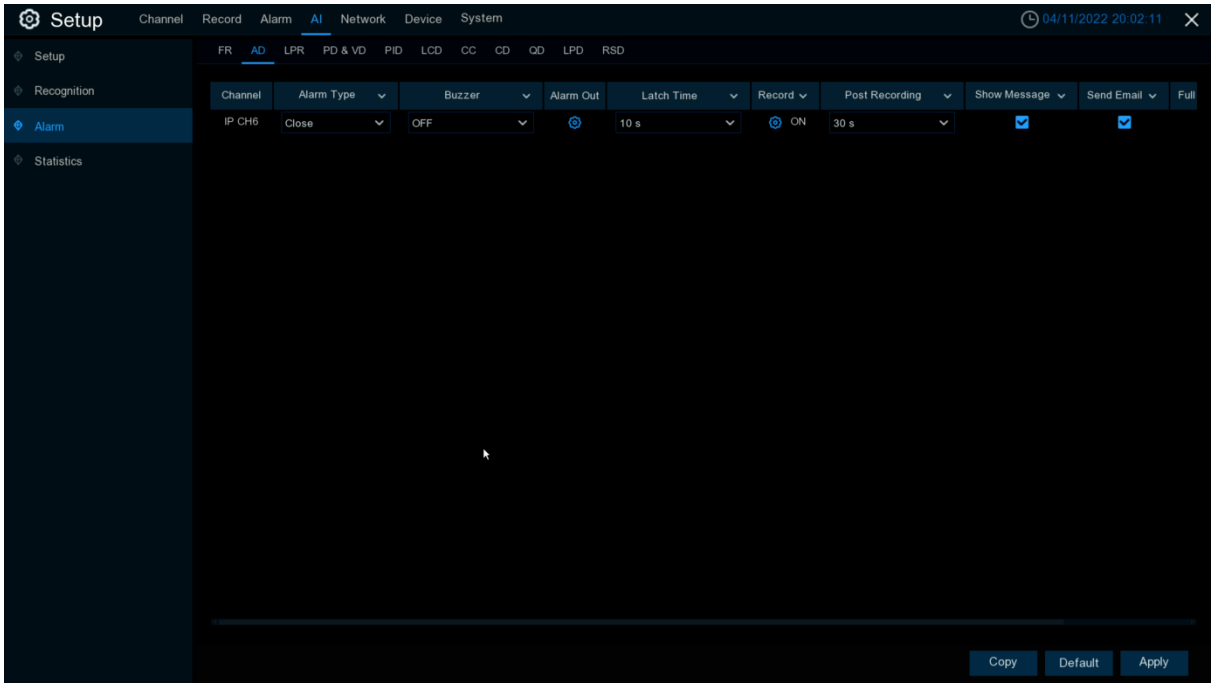
Alarm Schedule: Click to enter schedule setting interface.

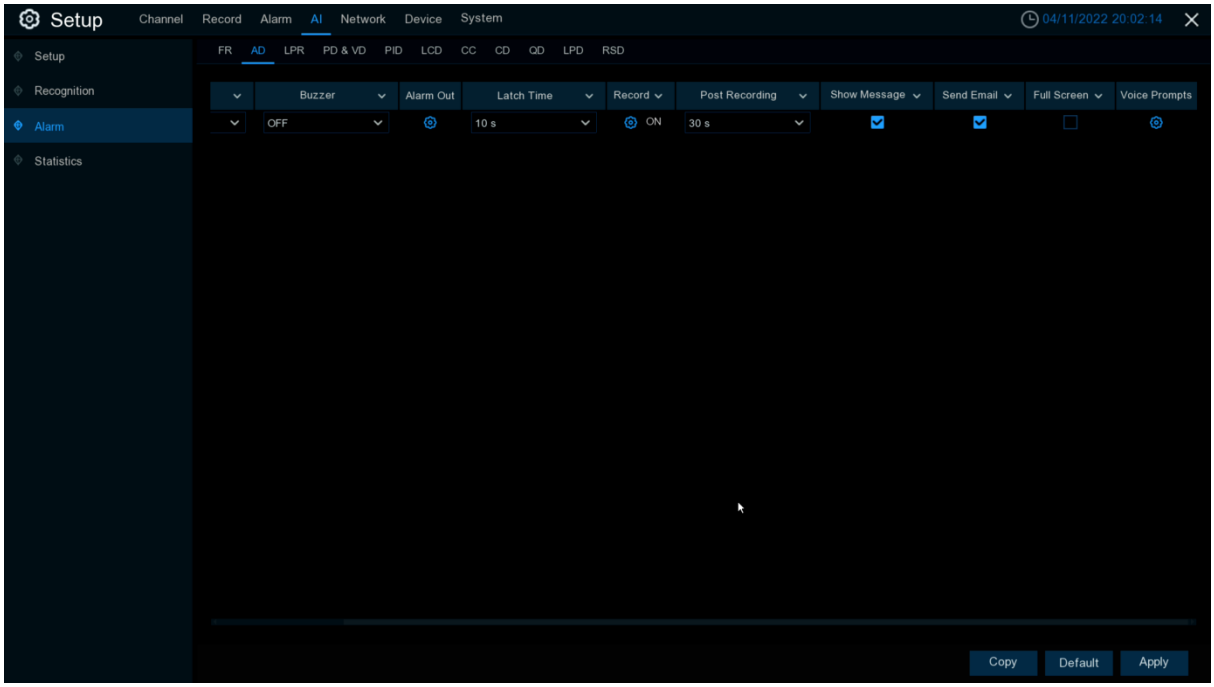


Check the time period. Click **Copy to** copy the current setting to other channels.

Voice Prompts: When the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function). Please view 5.3.9 Voice Prompts.

5.4.3.2 AD (Attribute Detection)





Configure the face attribute alarm function here.

Channel: Channel name

Alarm Detection: Set up face attribute detection type, there are three kinds of detection type, including Close, No Mask, and Wear Mask.

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a face attributes alarm.

Alarm out: Check the external alarm device when the pedestrian and vehicle alarm is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 60s).
Record: Click icon, select the channel to record when triggering pedestrian and vehicle alarms.

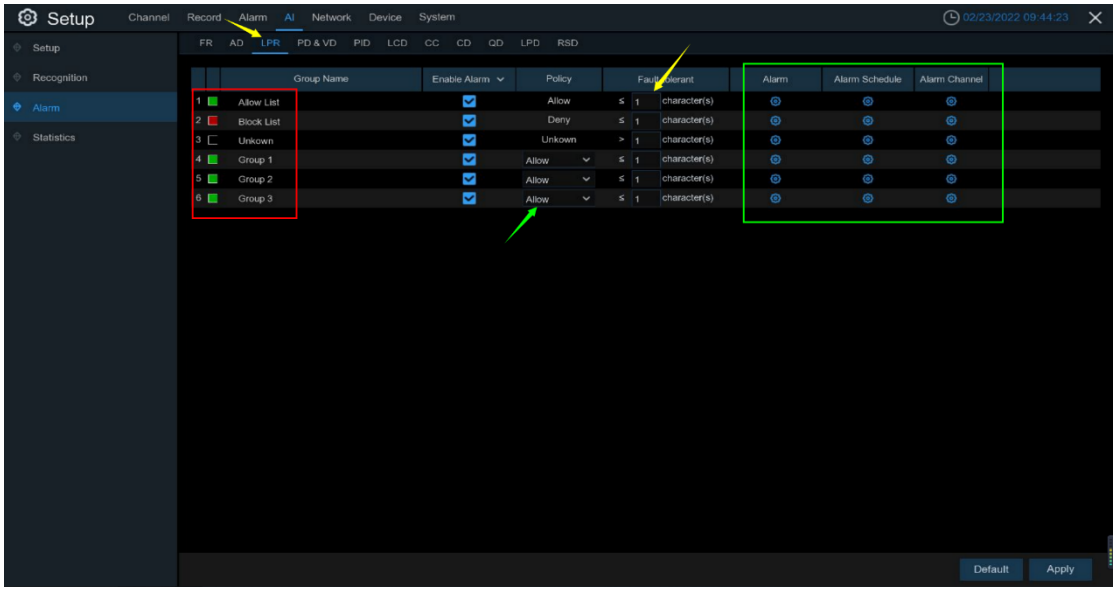
Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when face attendance alarms are detected.

Send Email: DVR send an automatic email when face attendance alarms are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen： If this feature is enabled and face attendance are detected in the channel, you will see the channel in full-screen mode.
Voice Prompts： Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.3 LPR (License Plate Recognition)

When license plate added in the group were detected, it'll be a series of alarm settings.



Group Name: Group name.

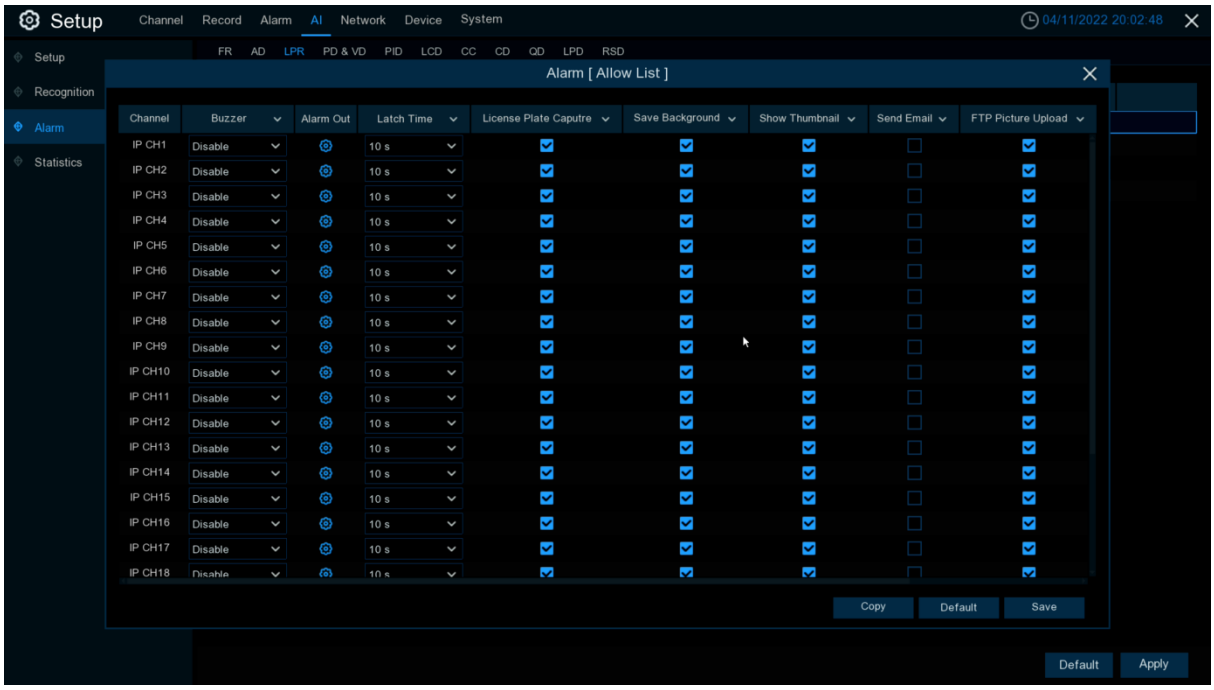
Enable alarm: Enable or disable license plate detection.

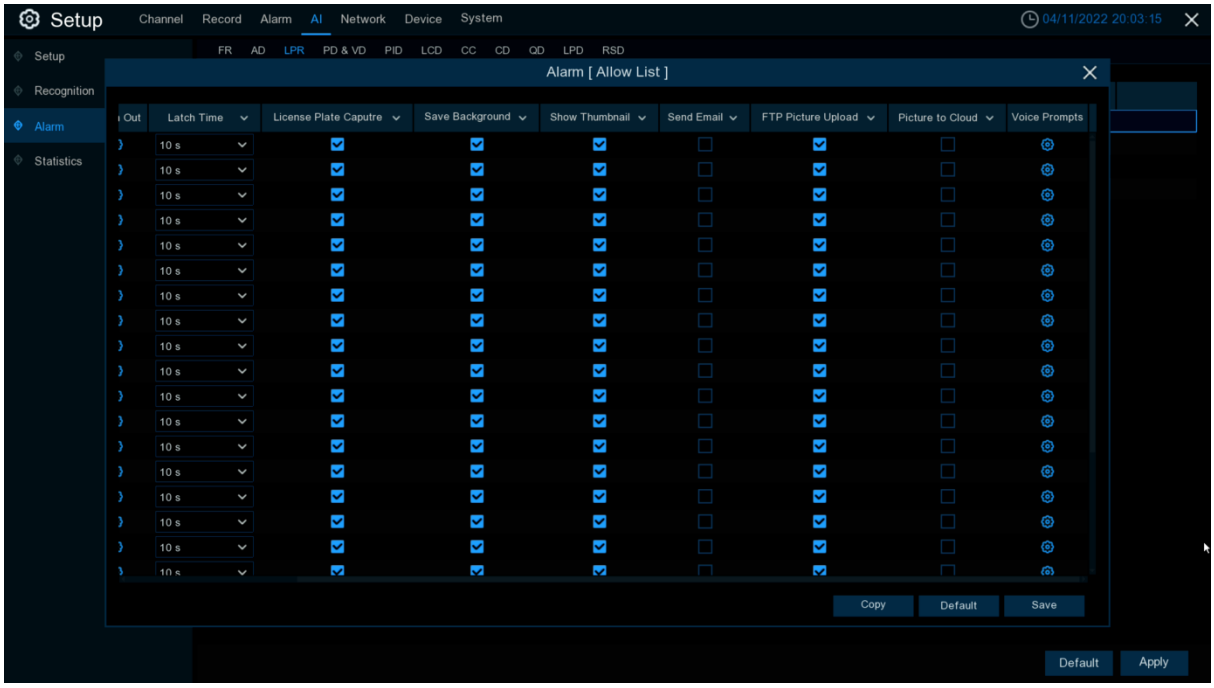
Policy: Set up license plate group alarm countermeasures.

Fault-tolerant: Fault tolerance rate, for example, when set to three characters, the white list in the group is B594SB, and triggers alarms when a license B734KB enters the monitoring area. That is, the detection license plate number has 0~3 characters and the database license plate number is different will alarm.

Alarm Channel: Set the alarm channel after the license plate is detected and successfully aligned.

Alarm: Click to enter the settings interface.





Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a license plate alarm.

License Plate Capture: License plate number picture capture.

Save Background: Save the background.

Show Thumbnail: Show the little thumbnails.

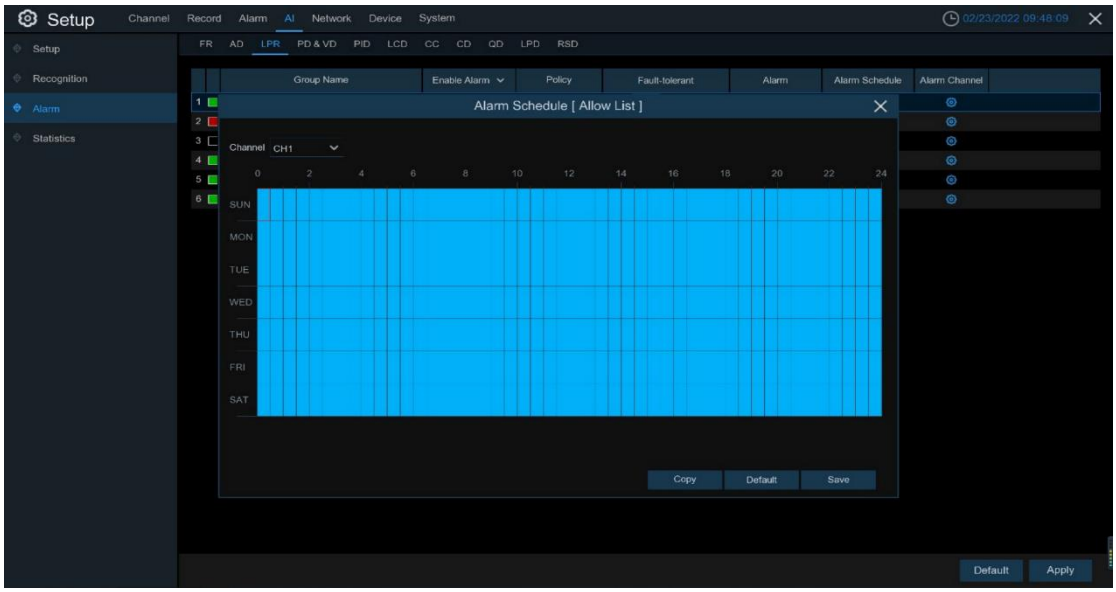
Send Email: When the license plate is detected, the picture is sent to the mailbox.

FTP Picture Upload: When the license plate is detected, the picture is sent to the FTP.

Picture to Cloud: When the license plate is detected, the picture is sent to the Cloud.

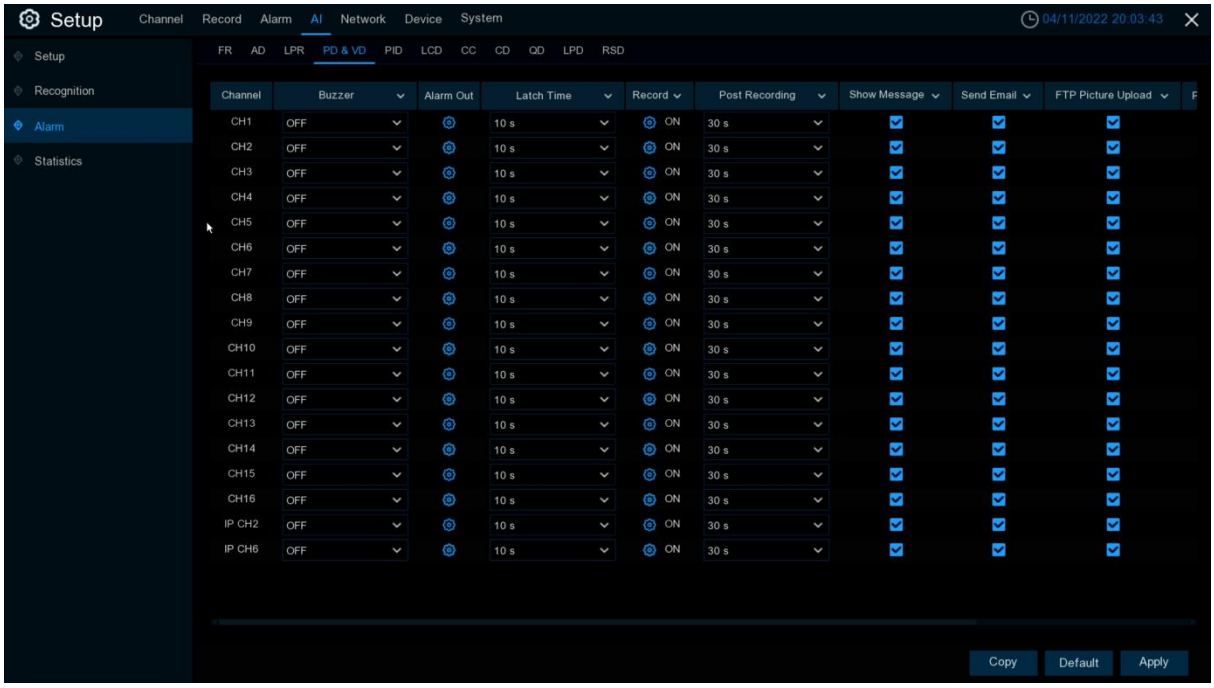
Voice Prompts: When the alarm is triggered, good audio files will be imported through voice prompts.

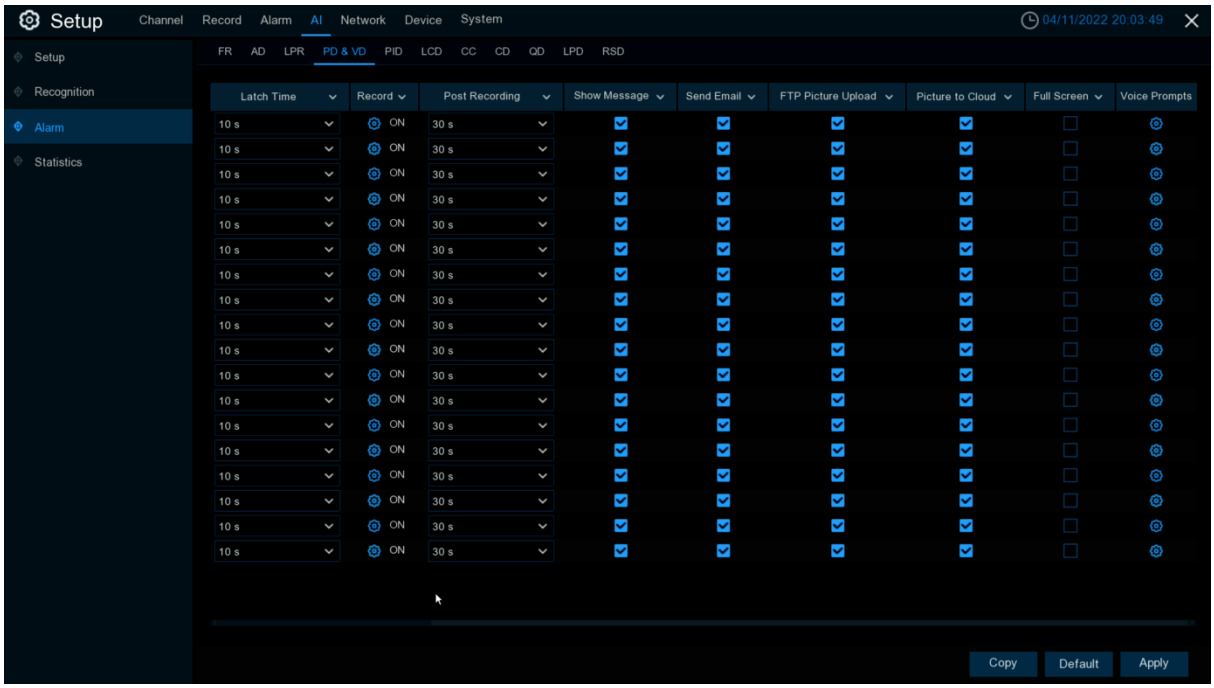
Alarm Schedule: Click to enter schedule interface.



Check the time period that you want to trigger the alarm. Click **Apply** to save. Click **Copy** to copy the current channel parameters to other channels.

5.4.3.4 PD & VD (Human & Vehicle Detection)





Configure the pedestrian and vehicle alarm function

Channel: Channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a pedestrian and vehicle alarm.

Alarm out: Check the external alarm device when the pedestrian and vehicle alarm is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

Record: Click icon to set channels that pedestrian and vehicle alarms.

Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when pedestrian and vehicle alarms are detected.

Send Email： DVR send an automatic email when pedestrian and vehicle alarms are detected.

FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

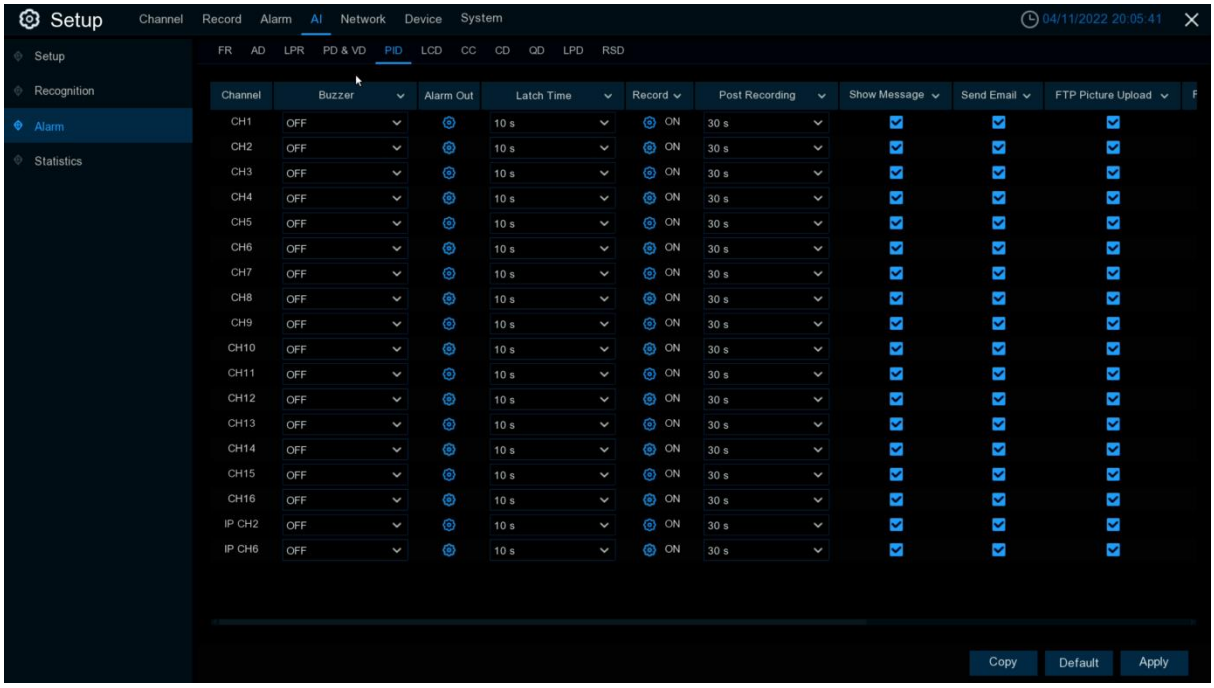
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.

Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.

Full Screen: If this feature is enabled and the pedestrian and vehicle alarms are detected in the channel, you will see the channel in full-screen mode.

Voice Prompts: Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.5 PID (Perimeter Intrusion Detection)



Configure the **Perimeter Intrusion Detection function**

Channel: Channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a **Perimeter Intrusion Detection**.

Alarm out: Check the external alarm device when **Perimeter Intrusion Detection** is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

Record: Click icon to set channels that pedestrian and vehicle alarms.

Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show S icon when **Perimeter Intrusion Detection** are detected.

Send Email: DVR send an automatic email when **Perimeter Intrusion Detection** are detected.

FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

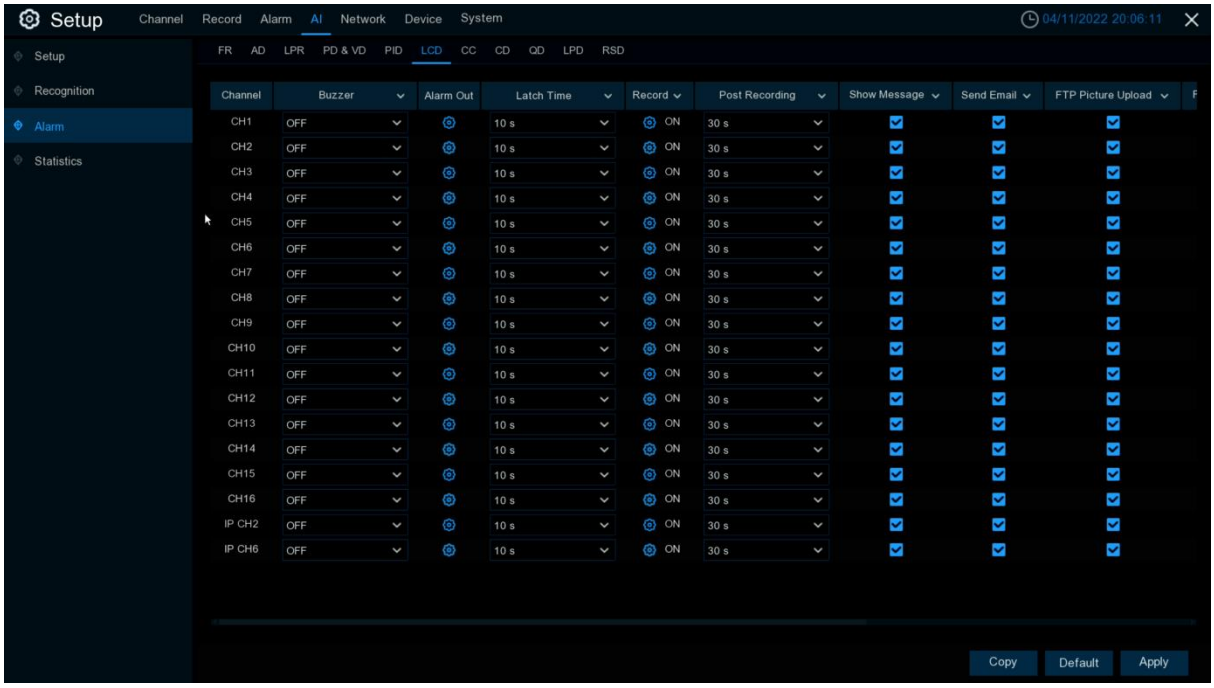
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.

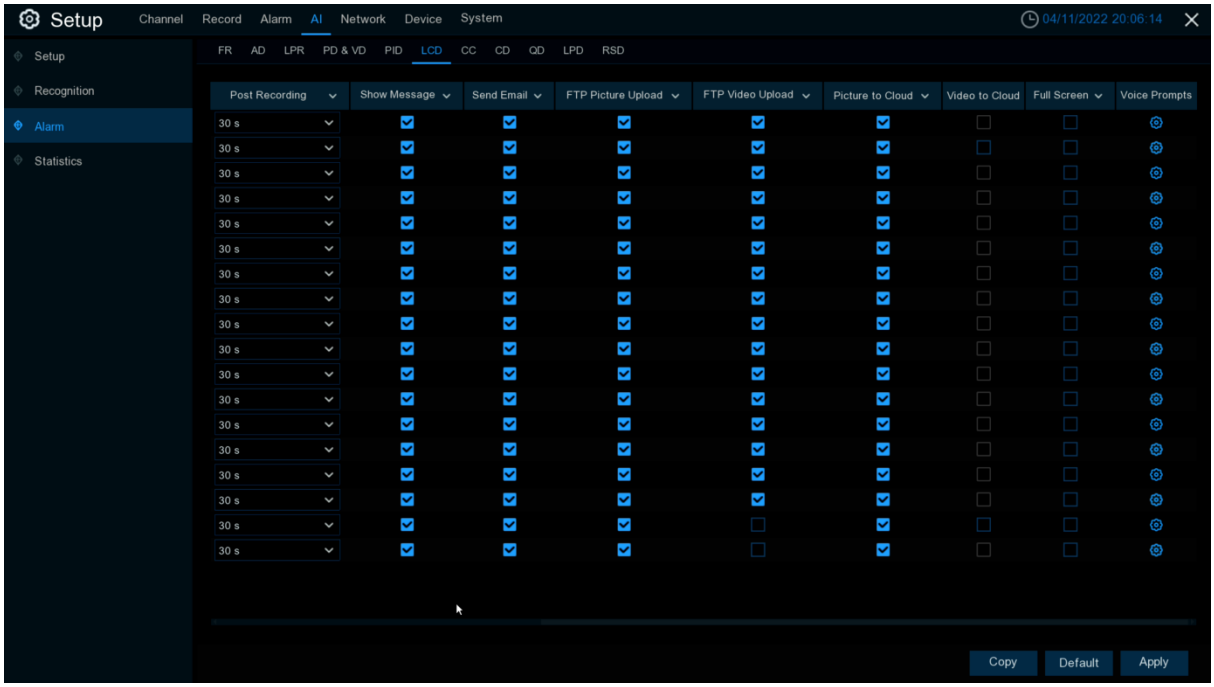
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.

Full Screen: If this feature is enabled and the **Perimeter Intrusion Detection** are detected in the channel, you will see the channel in full-screen mode.

Voice Prompts: Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.6 LCD (Line Crossing Detection)





Configure the Line Cross Detection function.

Channel: Channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a Line Cross Detection.

Alarm out: Check the external alarm device when Line Cross Detection is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

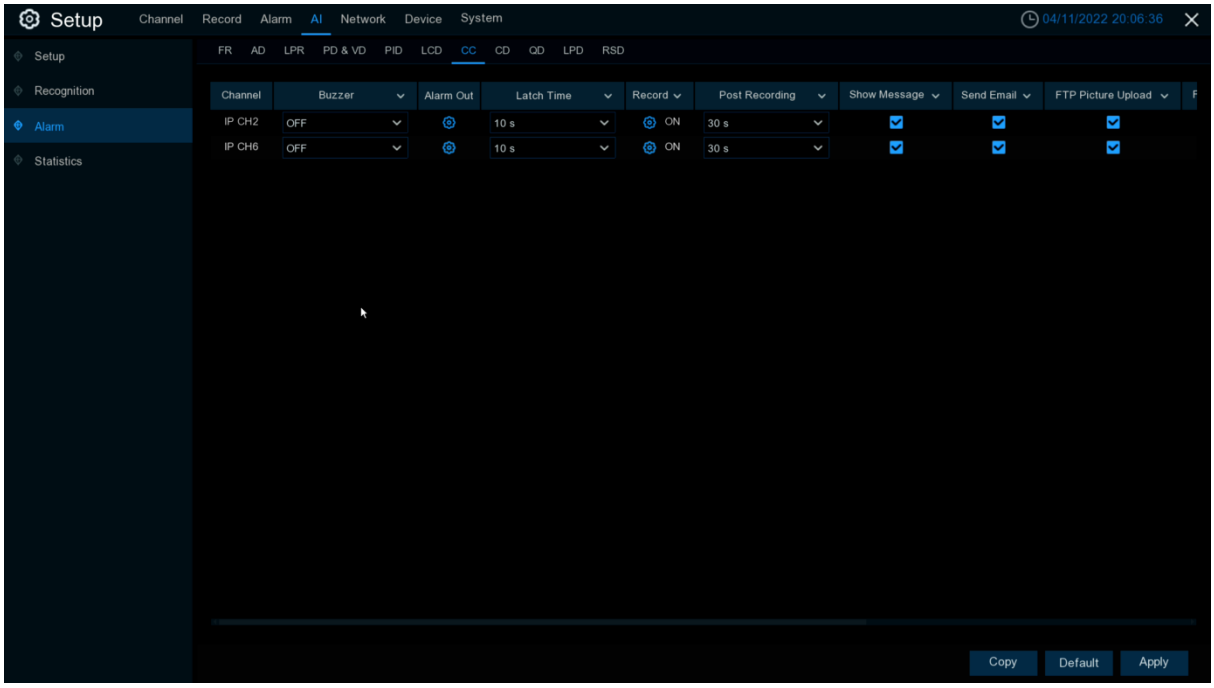
Record: Click icon to set channels that pedestrian and vehicle alarms.

Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show S icon when LCD alarm are detected.

Send Email: DVR send an automatic email when LCD alarm are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen: If this feature is enabled and the LCD alarm are detected in the channel, you will see the channel in full-screen mode.
Voice Prompts: Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.7 CC (Cross Counting)



Configure Cross Counting function in this interface.

Channel: Channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a Cross-Counting alarm.

Alarm out: Check the external alarm device when Cross Counting is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

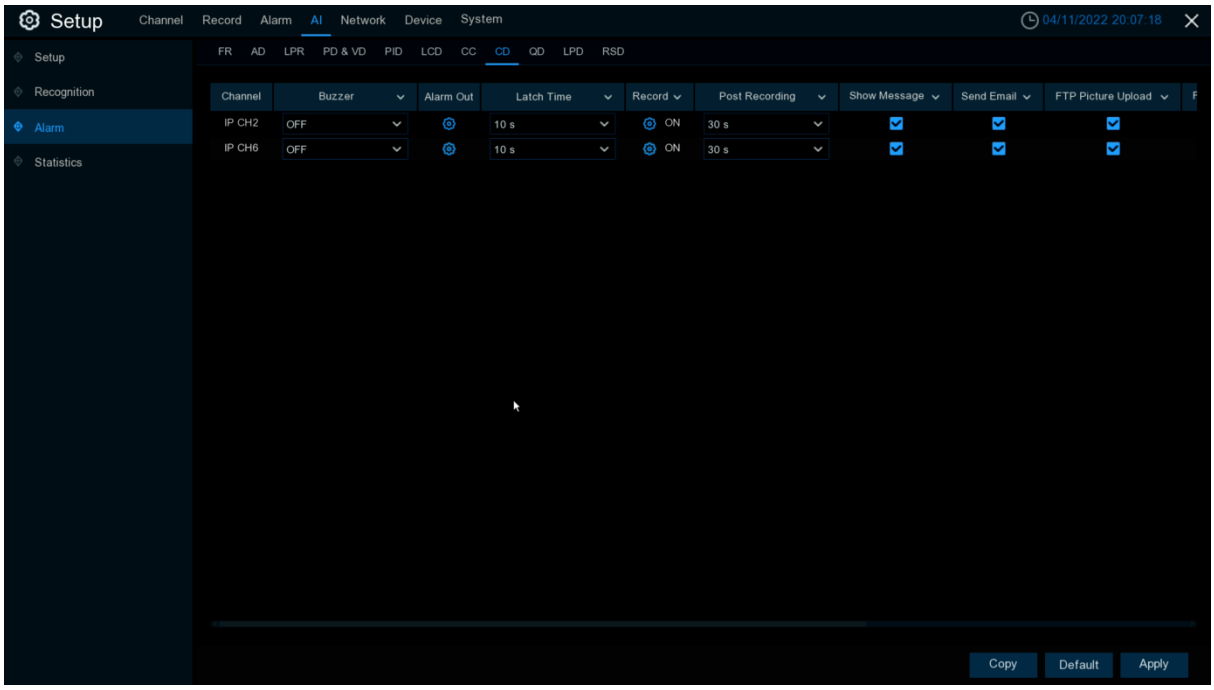
Record: Click icon to set channels that pedestrian and vehicle alarms.

Post Recording: set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when CC alarm are detected.

Send Email: DVR send an automatic email when CC alarm are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen: If this feature is enabled and the CC alarm are detected in the channel, you will see the channel in full-screen mode.
Voice Prompts: Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.8 CD (Crowd Density Detection)



Configure Crowd Density Detection in this interface.

Channel: Channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a Crowd Density Detection.

Alarm out: Check the external alarm device when Crowd Density Detection is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

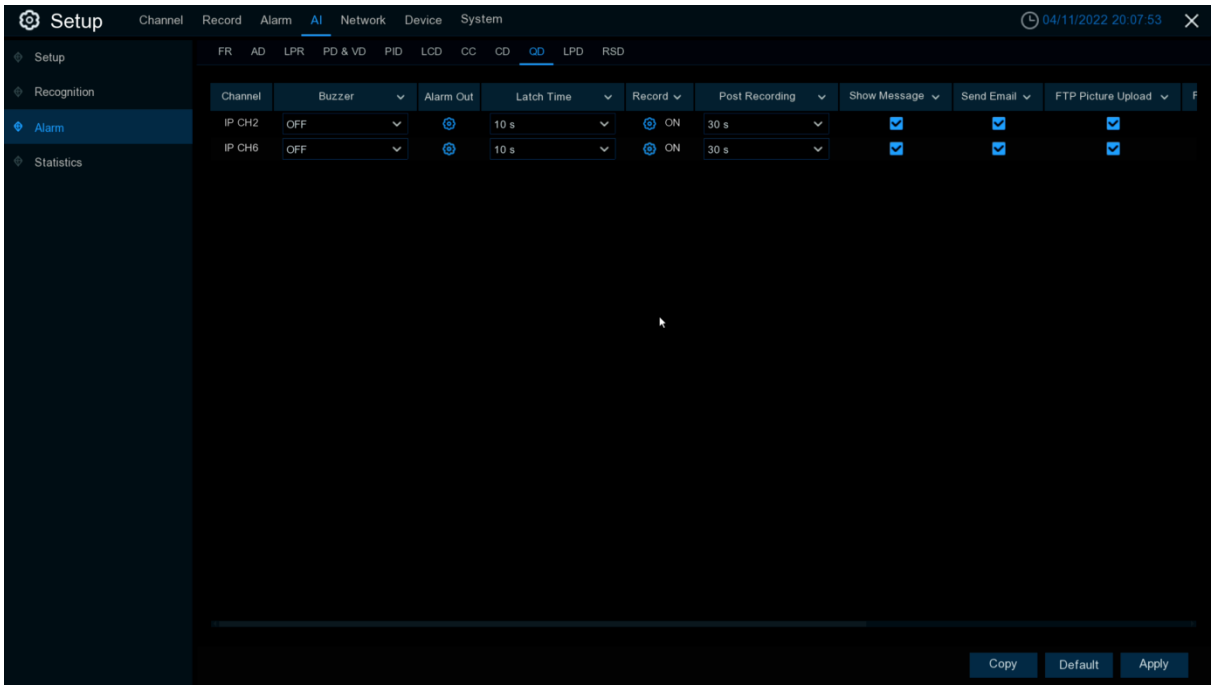
Record: Click icon to set channels that pedestrian and vehicle alarms.

Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when CD alarm are detected.

Send Email: DVR send an automatic email when CD alarm are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen： If this feature is enabled and the CD alarm are detected in the channel, you will see the channel in full-screen mode.
Voice Prompts： Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.9 QD (Queue Length Detection)



Configure Queue Length Detection in this interface.

Channel: channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a Queue Length Detection.

Alarm out: Check the external alarm device when Queue Length Detection is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

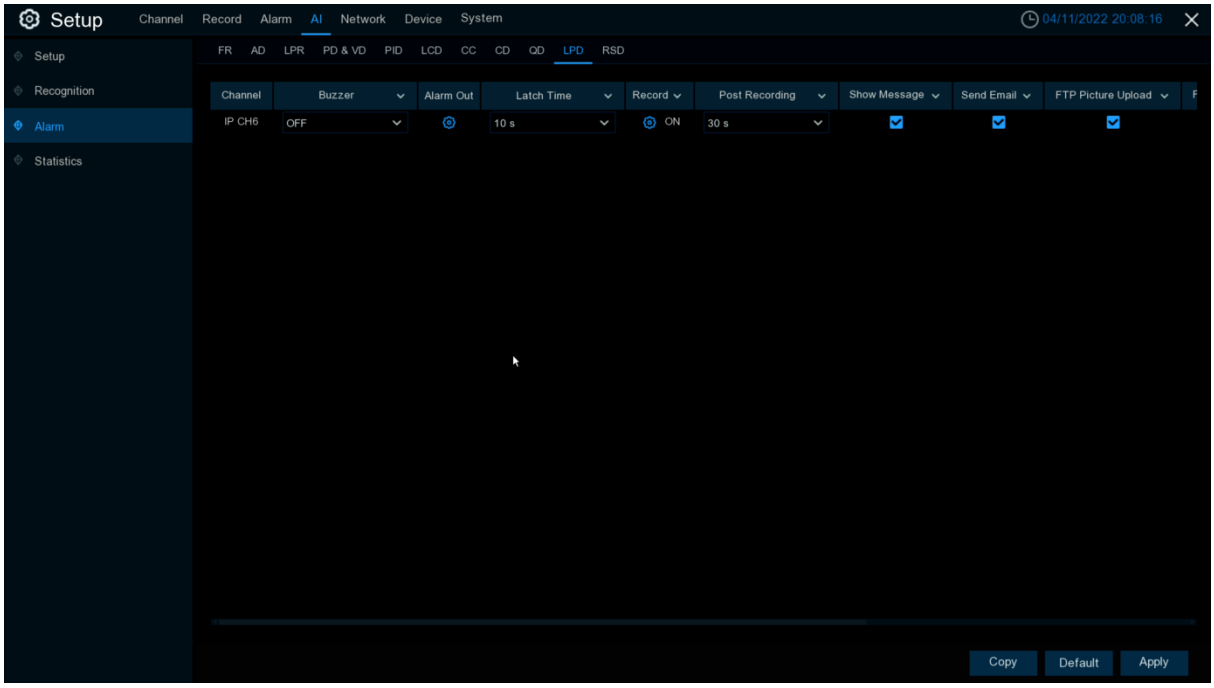
Record: Click icon to set channels that pedestrian and vehicle alarms.

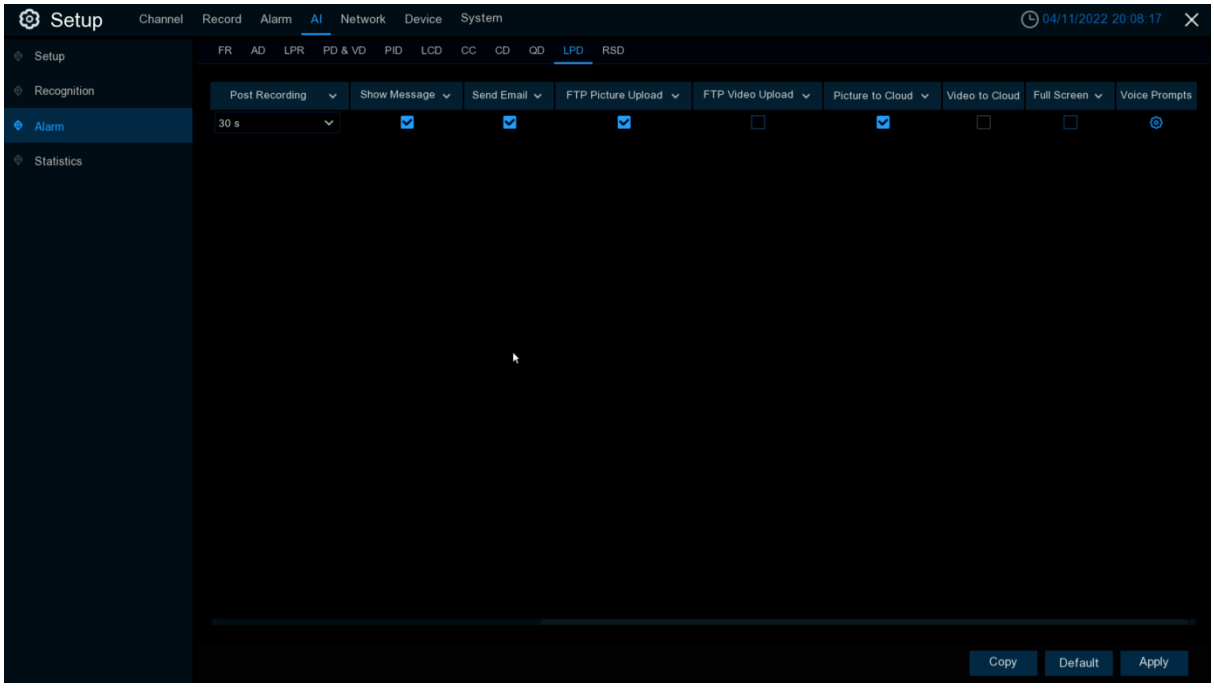
Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when QD alarm are detected.

Send Email: DVR send an automatic email when QD alarm are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen： If this feature is enabled and the QD alarm are detected in the channel, you will see the channel in full-screen mode.
Voice Prompts： Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.3.10 LPD (License Plate Detection)





Channel: channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a License plate detection.

Alarm out: Check the external alarm device when License plate detection is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

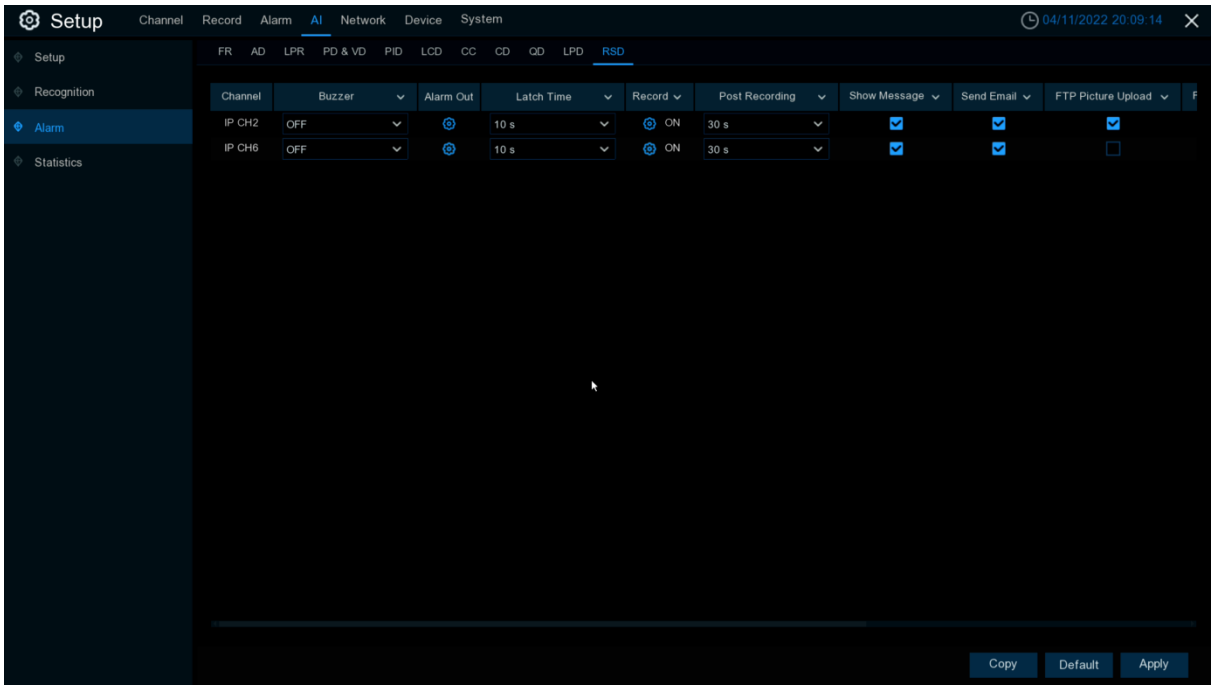
Record: Click icon to set channels that License plate detection alarms.

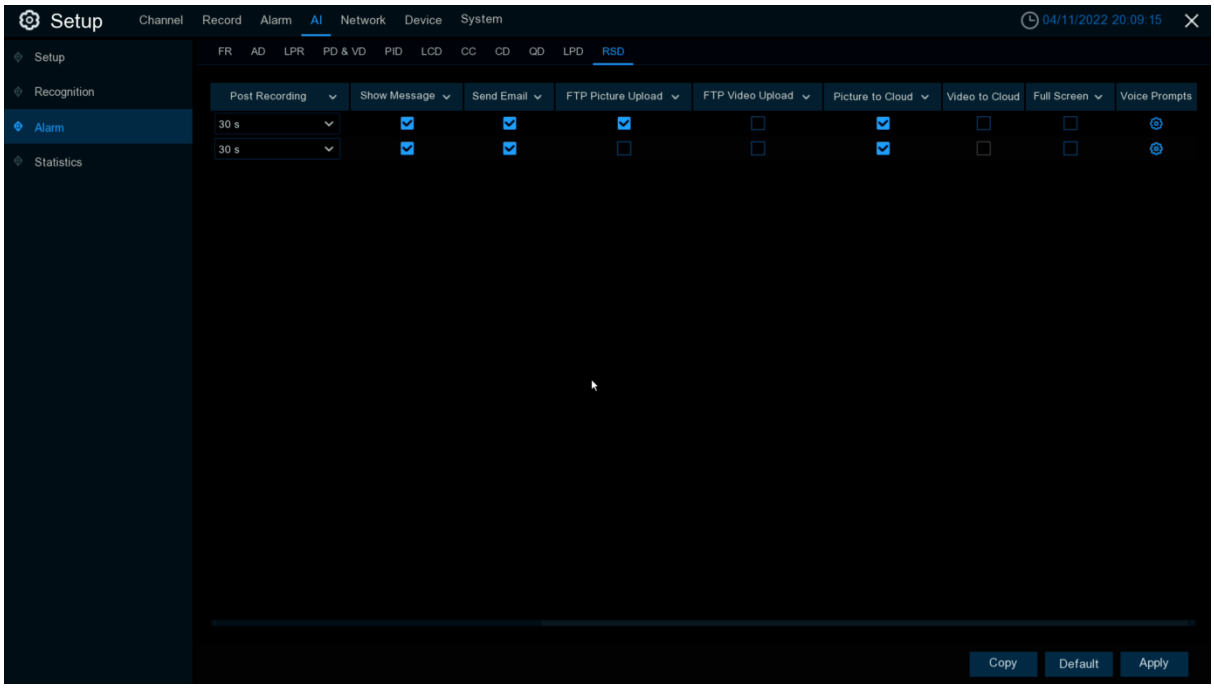
Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when LPD alarm are detected.

Send Email: DVR send an automatic email when LPD alarm are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen: If this feature is enabled and the LPD alarm are detected in the channel, you will see the channel in full-screen mode.
Voice Prompts: Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts.

5.4.3.11 RSD (Rare Sound Detection)





Configure the Rare Sound Detection in this interface.

Channel: Channel name

Buzzer: DVR internal buzzer. You can set the buzzer duration time (in seconds) for triggering a Rare Sound Detection.

Alarm out: Check the external alarm device when Rare Sound Detection is triggered.

Latch Time: Set the duration of triggering the external alert devices (10s, 20s, 40s, and 1Min).

Record: Click icon to set channels that Rare Sound Detection alarms.

Post Recording: Set the duration of continuous DVR recording after the event occurs. The suggested recording time is 30 seconds, but can be set to up to 5 minutes.

Show Message: Select this box to show icon when RSD alarm are detected.

Send Email: DVR send an automatic email when RSD alarm are detected.
FTP Picture Upload: To upload alarm images to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.
Picture to Cloud: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Video to Cloud: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view 5.6.2 Cloud.
Full Screen: If this function is enabled and an alarm is triggered in a channel, you will see that channel in full screen.
Voice Prompts: Voice prompt, when the alarm is triggered, the audio file is imported by the voice prompt (the IPC needs to support the voice prompt function), Please view in 5.3.9 Voice Prompts

5.4.4 Statistics

5.4.4.1 FR Statistics

In the face statistics, the faces can be all detected in a period of time, and reflected in the form of a statistical chart.

Select **Groups**, **Channels,** date and statistical time to search results. Click **Export** to export the data to U disk.

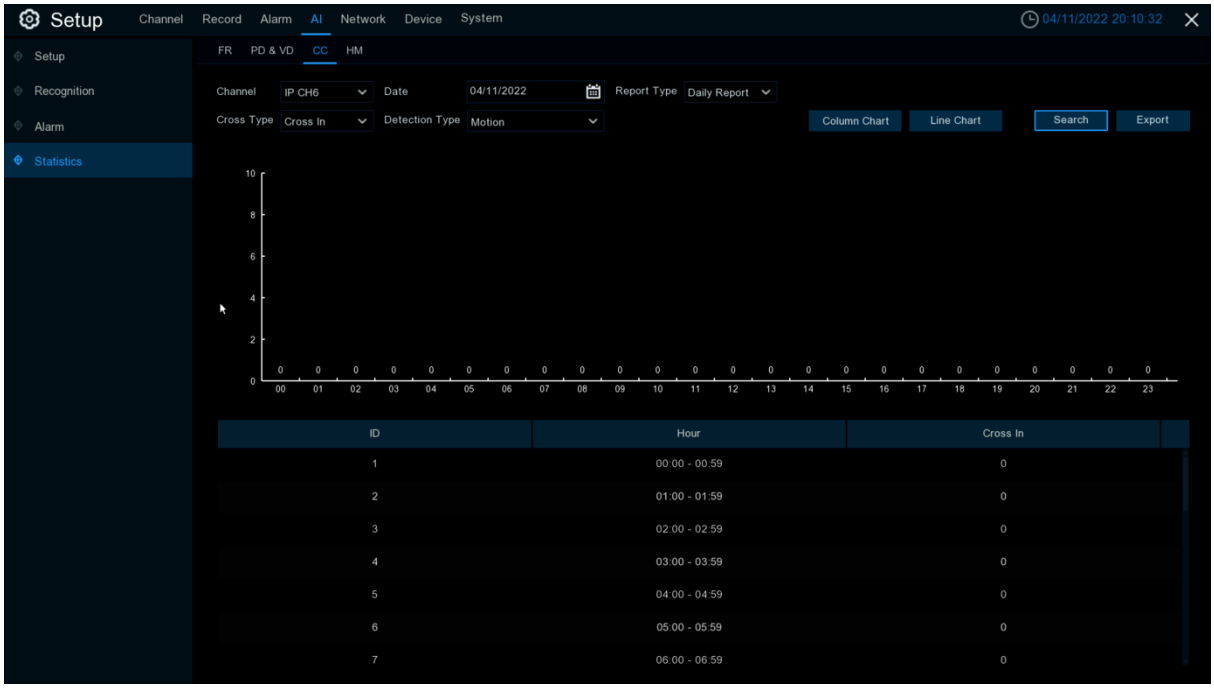
5.4.4.2 PD&VD Statistics

In the statistics of people and cars, all the detected people and cars in a period of time can be counted and reflected in the form of statistical diagram.

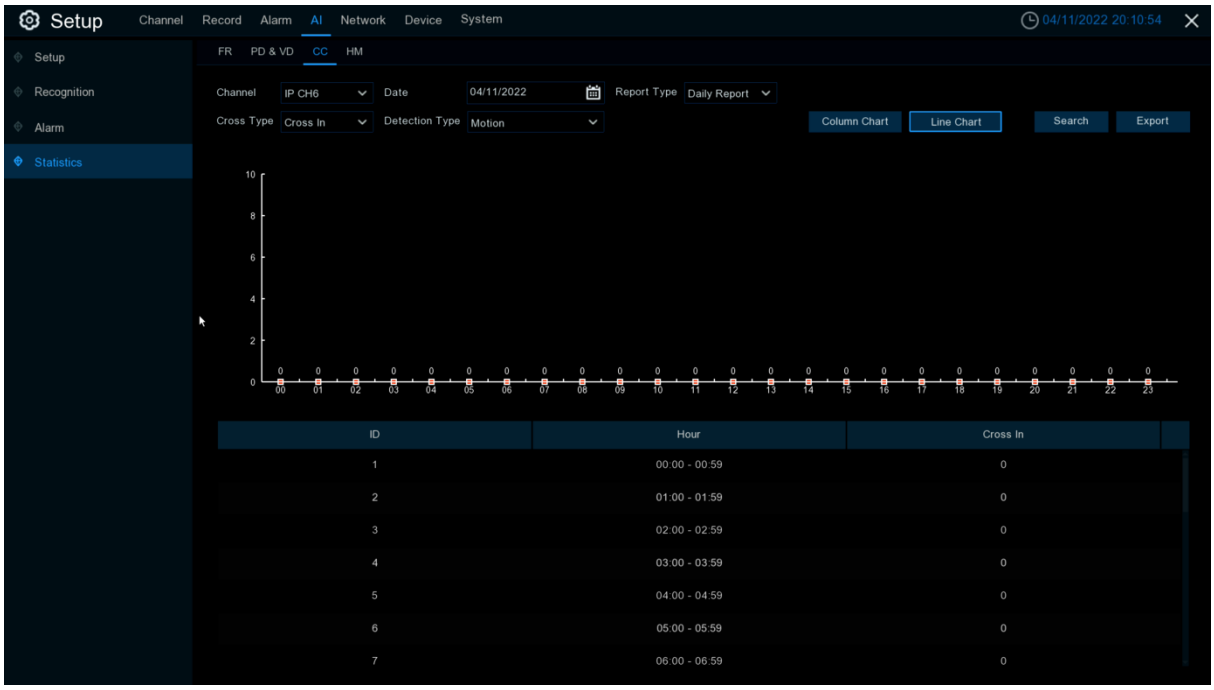
Select **Intelligent** Groups, Channels, date, and statistical time to search result.

5.4.4.3 CC Statistics

In the statistics of people and cars, all the detected people and cars in a period of time can be counted and reflected in the form of statistical diagram.



Channel: Select channels
Date: Select the date
Report Type: Select report type, there are Daily Report、Weekly Report、Monthly Report、Annual Report.
Cross Type: Crossing type. There are Cross and Cross Out.
Detection Type: Select the detection type that triggers CC, there are Motion, Person, Vehicle.
Click **Search** to search the result.
Export: The result export to external USB drive.
Select **Column Chart** to show as below picture.
Select **Line Chart** to show as below picture.



5.4.4.4 Heat Map Statistics

In the heat chart statistics, the frequent activity of some areas can be counted over a period of time and reflected in the form of statistical chart.

Channel: Select channel

Date: Select date

Start Hour: Select the start time

End Hour: Select the end time

Report Type: Report type, there are Daily Report, Weekly Report, Monthly Report, and Annual Report.

Click **Search** to search the result.

Export: Export the result to USB

Select **Space Heat Map** as upper picture shows

Select **Time Heat Map** as below picture shows

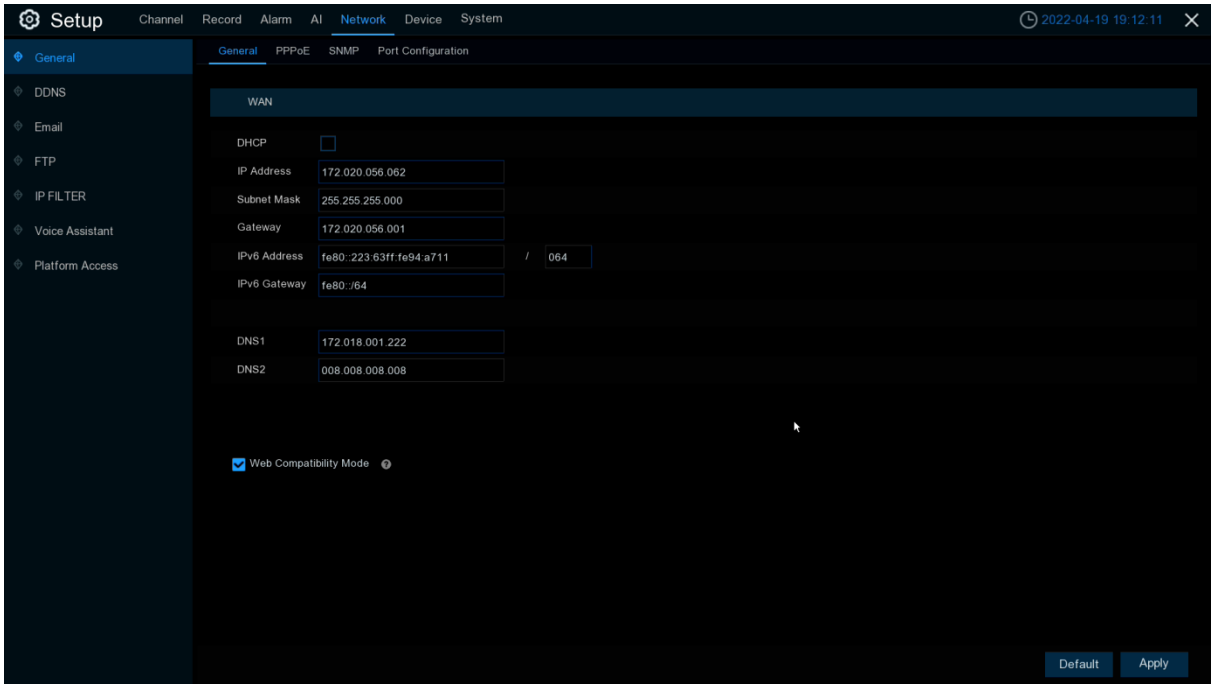
Select time heat map type has **Start Hour** and **End Hour**.

5.5 Network

This menu allows you to configure network parameters, such as PPPoE, DHCP, and so on. 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.

5.5.1 General

5.5.1.1 General



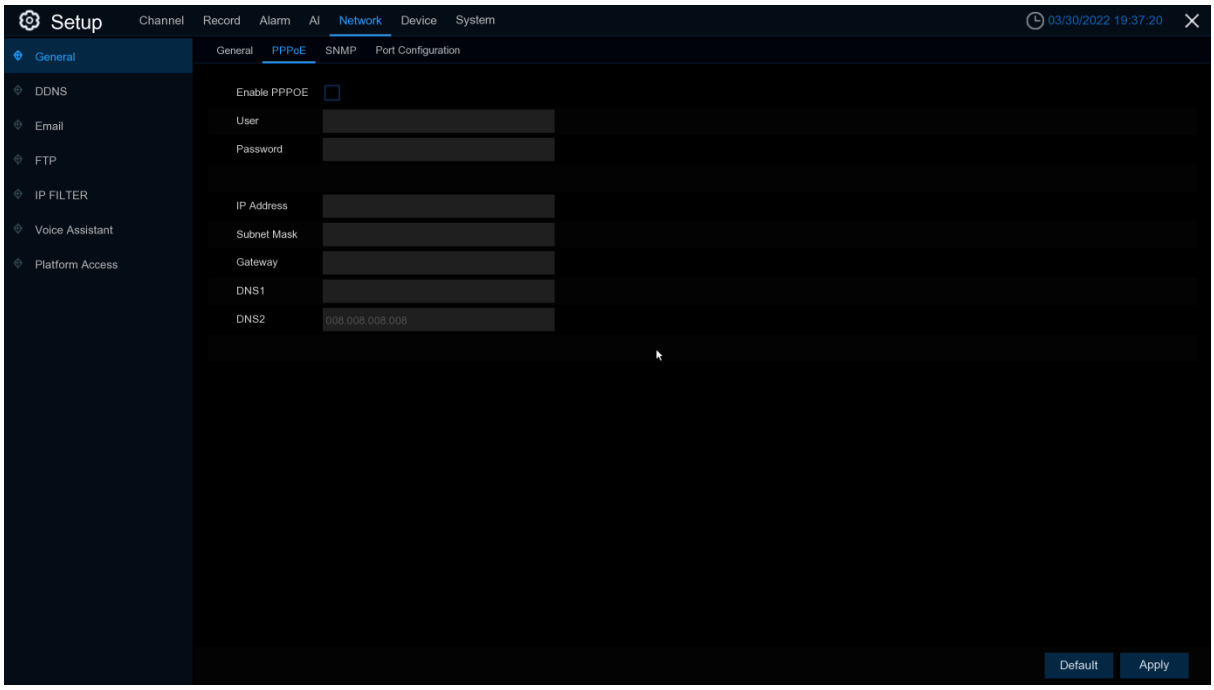
If you connect to a router allows to use DHCP, please check the **DHCP** box. The router will assign automatically all the network parameters for your DVR. Unless the network is manually addressed below parameters:

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. Format like “ABCD:EF01:2345:6789:ABCD:EF01:2345:6789”.
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 Compatibility Mode: If you login of the Win7 system PC after turning on the **HTTPS**, you need to check this item to switch to the **HTTPS** page.

5.5.1.2 PPPoE

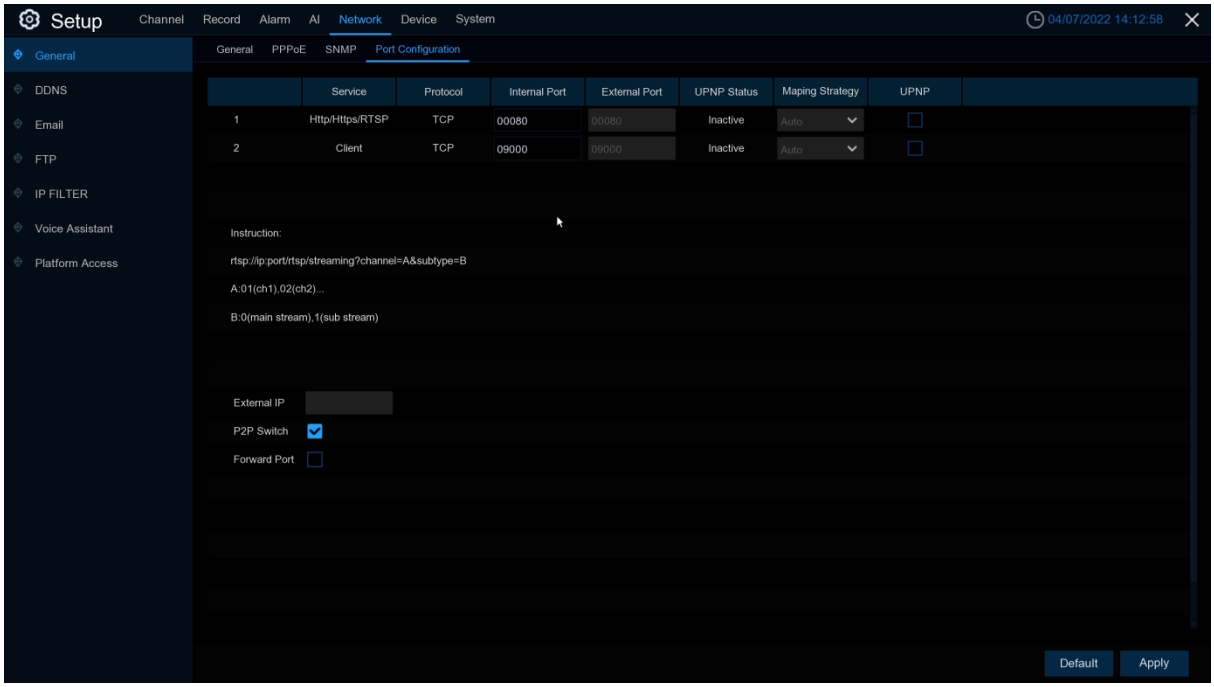


This is an advanced protocol that allows the DVR to connect to the network more directly via DSL modem.

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.

5.5.1.3 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: DVR is allowed to transport real time streams to other device via RTSP port. (e.g. VLC player)
Https Port: Https port ---Web browsing ports are mainly used for HTTPS services. It is another HTTP that provides encryption and transmission through the security port.

Note: Common port, HTTP port, RTSP port, and HTTPS port share one port, and the default is 80.

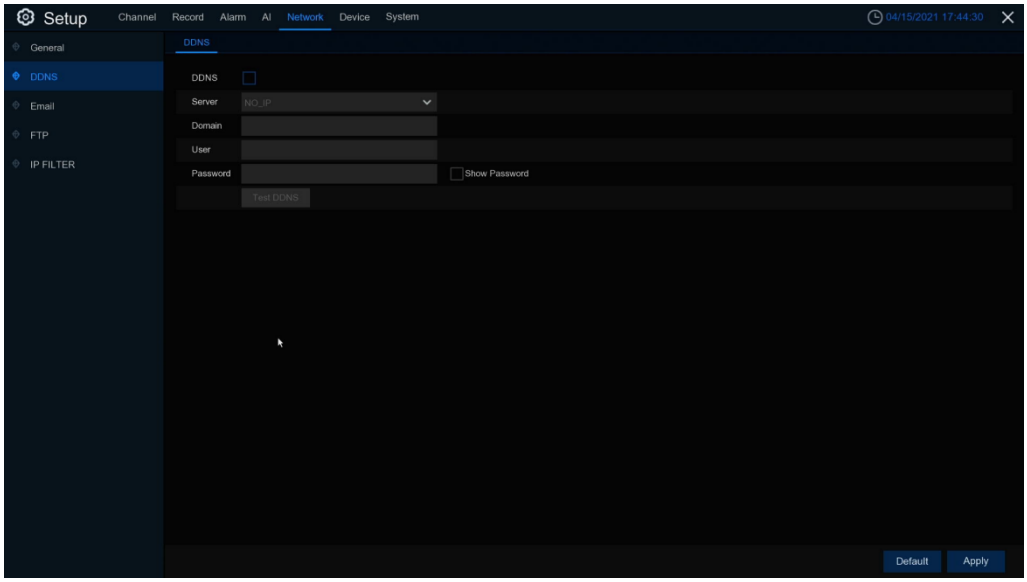
UPNP: If you want to log in remotely to the DVR using Web Client, you need to complete the port forwarding. Enable this option if your router supports the UPNP. You need to enable UPNP both, on DVR and router. In this case, you do not need to configure manually port forwarding on your router. If your router does not support UPNP, make sure the port forwarding is completed manually.
Mapping Strategy: Switch to Manual mode, you can set up **External Port** manually.
P2P Switch: P2P connection can't work once switch disable..
Forward Port: The IPC hyperlink switch can access the IPC web page through the hyperlink on the web of the DVR. At present, only the web port is launched or listed through search, and the IPC that supports API can use the hyperlink to access.

Note:

1. The RTSP commands of the DVR are shown as below:
   For main stream display: rtsp://IP address:port/rtsp/streaming?channel=xx&subtype=0
   For sub stream display: rtsp://IP address:port/rtsp/streaming?channel=xx&subtype=1
2. For how to connect GV-IP Decoder Box Ultra to the DVR through RTSP, see the technical notice.

5.5.2 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.



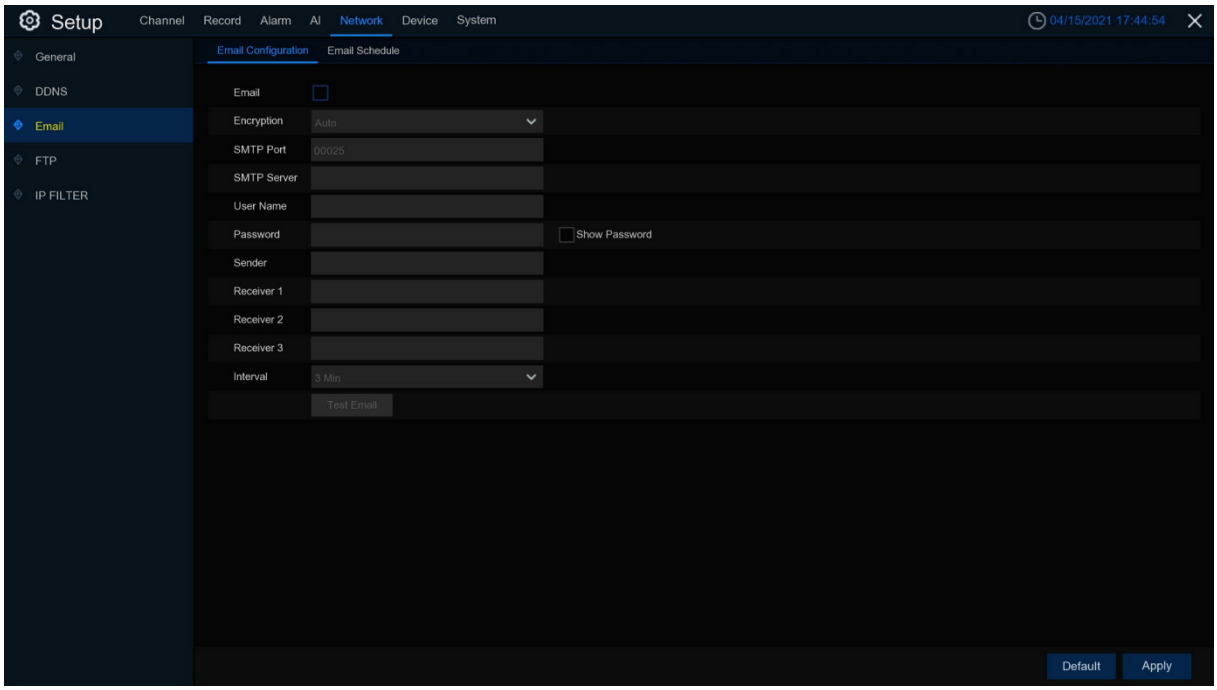
DDNS: Check to enable DDNS.
Server: Select the preferred DDNS server (DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT, GeoDDNS).
Domain: Enter the domain name you created on the DDNS service provider's web page. This will be the address you type in the URL box when you want to connect remotely to the DVR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

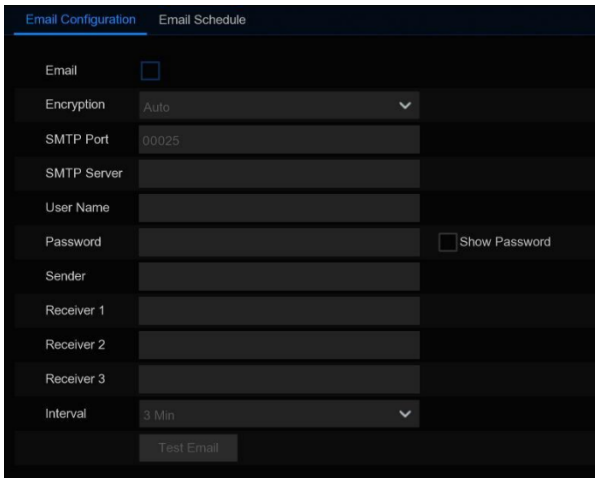
After user applies for a dynamic domain name service, you can use browser to remotely access DVR through the domain name, forming the domain name of http://DDNS: the web port of the mapping/. When the DDNS domain name is used to access the DVR, you need to confirm the port, and the current IP can be connected normally on the public network. The server address/host name/user name/password/setting is consistent with the DVR local settings.

5.5.3 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.



5.5.3.1 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.

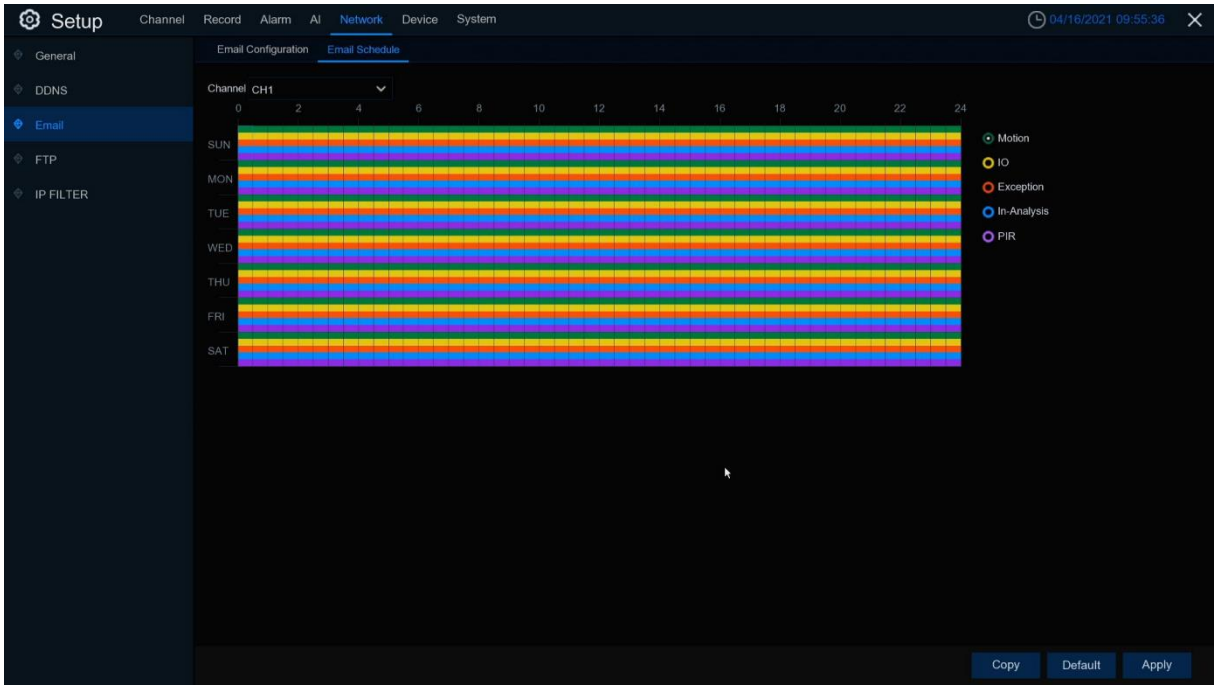
Receiver 1~3: Enter the email address where you want to receive the event notifications from the DVR.

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.

5.5.3.2 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

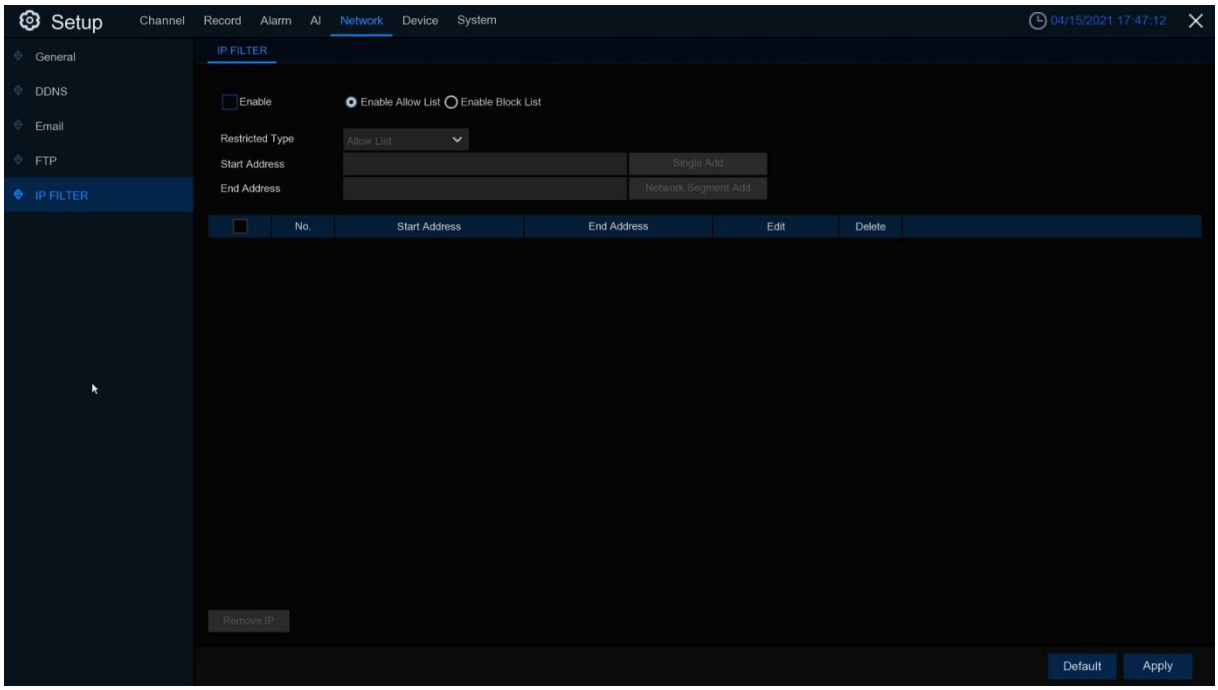
Exception: Red area

In-Analysis: Blue Area

PIR: Purple area

5.5.4 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.



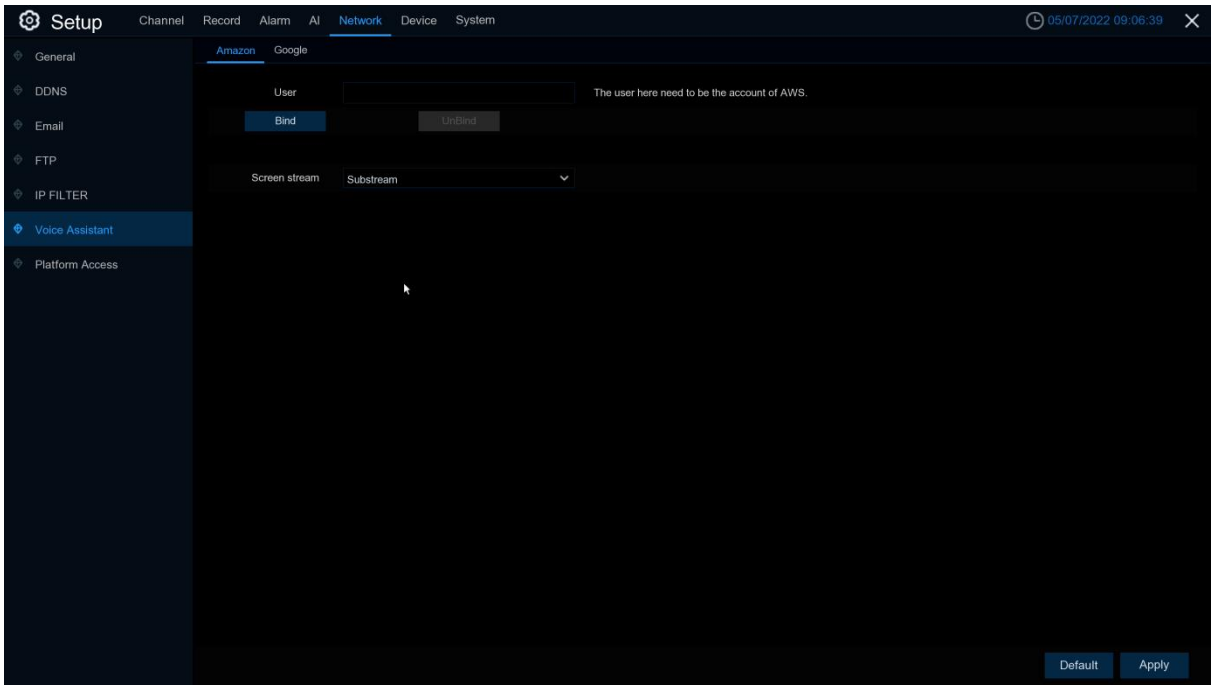
Enable: Enable or disable the IP filter function. Can use the blacklist or whitelist once enabled.
Restricted Type: Select the list (blacklist or whitelist) to set.
Start Address: Input the **Start Address.**
End Address: Input the **End Address.**

5.5.5 Voice Assistant

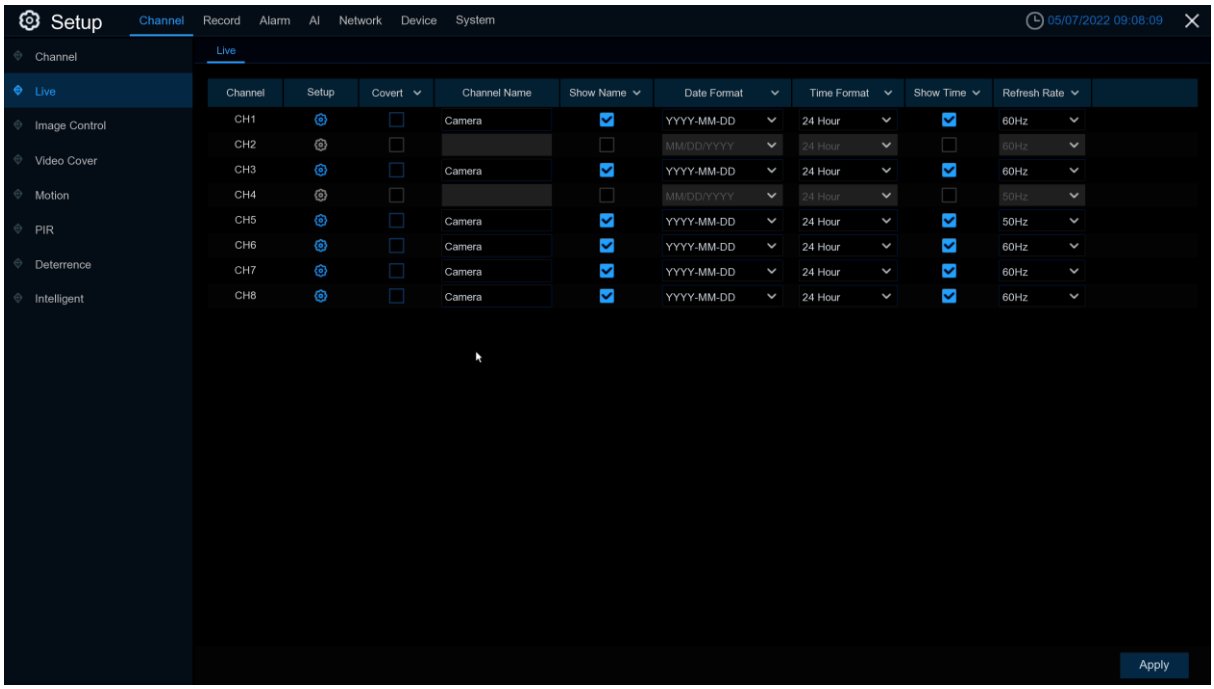
The voice assistant function allows DVR to connect Google Cast or Amazon Fire TV Stick, and project real -time monitoring images through voice control.

5.5.5.1 Amazon

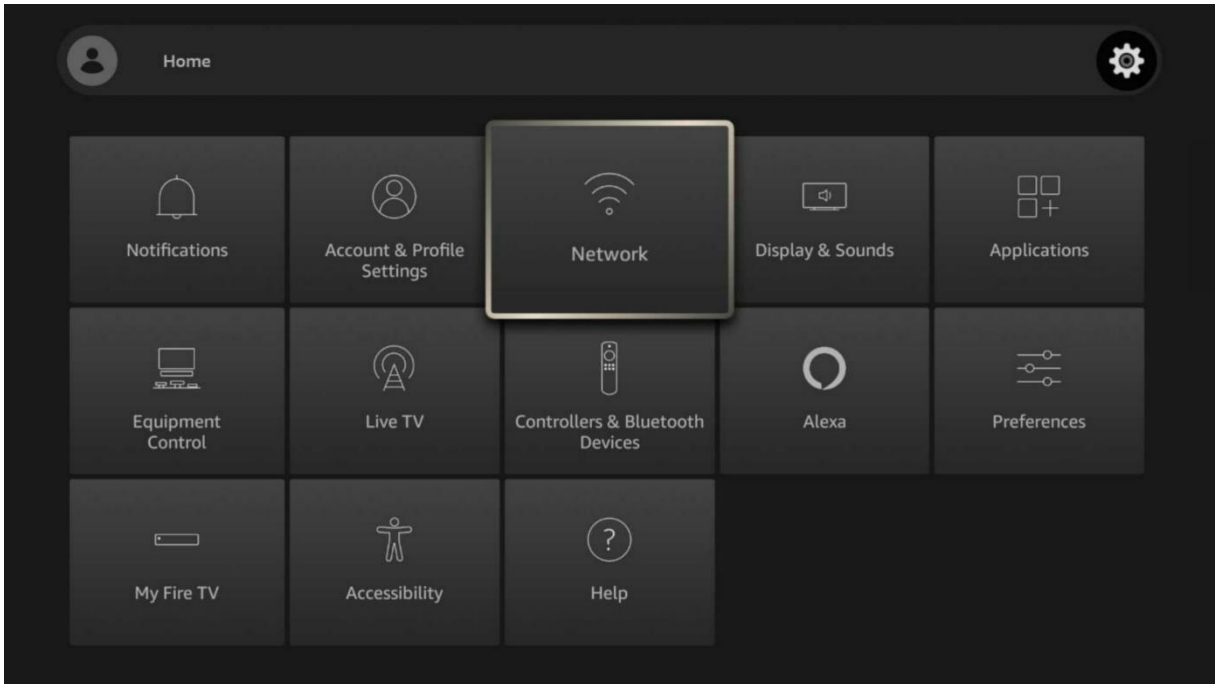
1. Enter your Amazon account and click the **Bind** button to connect and bind your Amazon account. Choose the video code flow to play to the TV display.



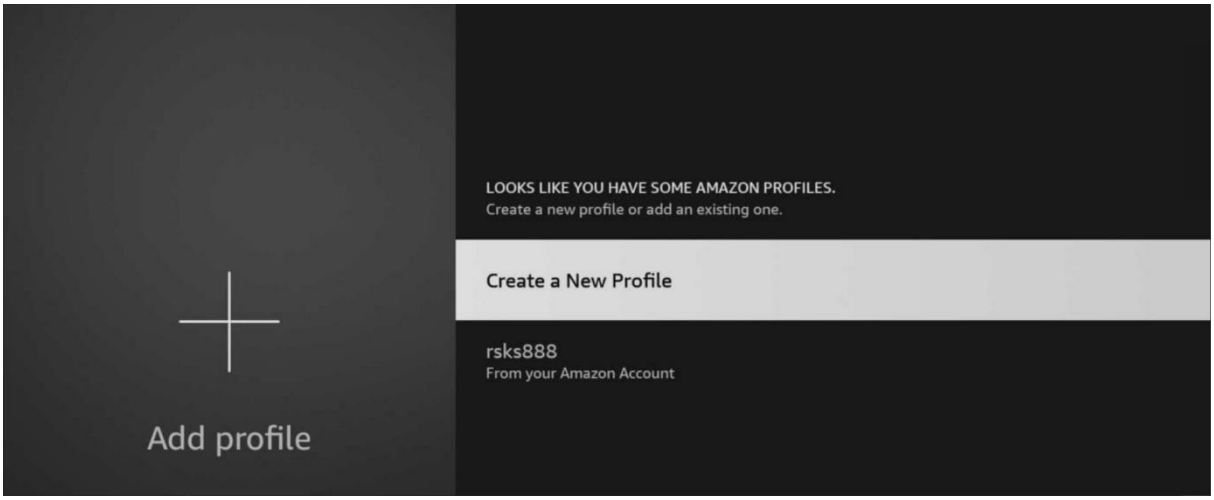
2. Enter "**Channel–Live**" page, set a channel name so that easy to show this channel video on TV or monitoring.

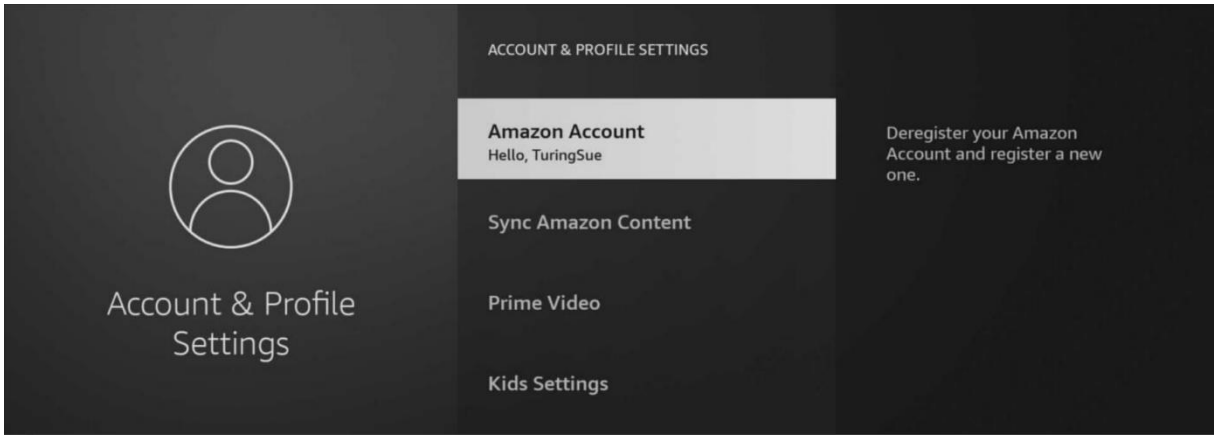


3. Connect Fire TV Stick to the TV monitor and turn on the power. Connect Fire TV Stick to Wi-Fi, which is in the same local area network as DVR.

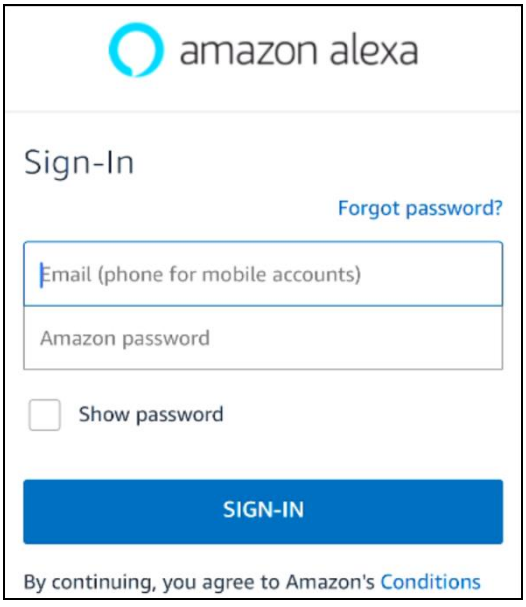


4. Use the existing configuration file or add a new configuration file, and log in to the Amazon account with the same DVR as DVR.

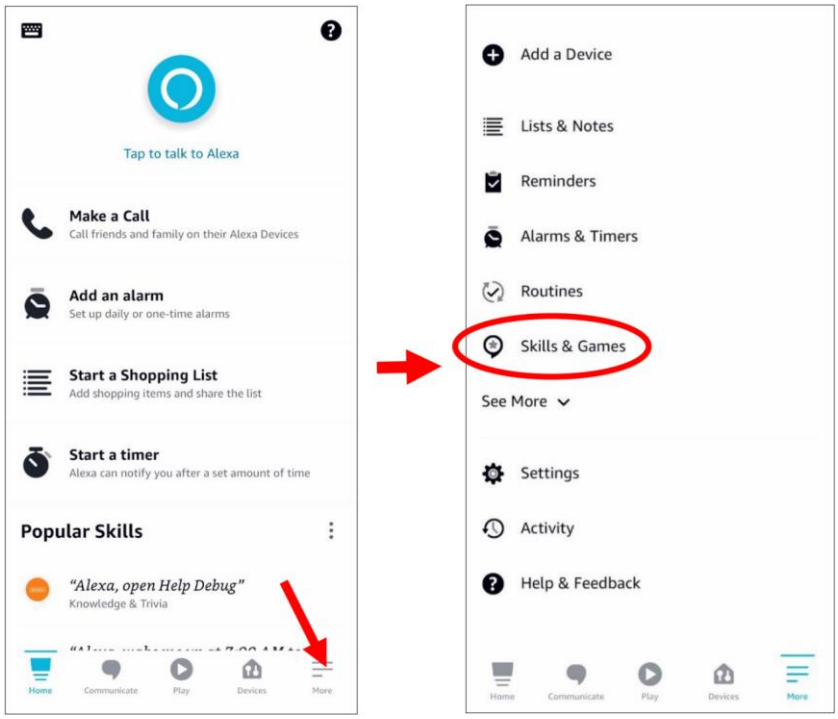




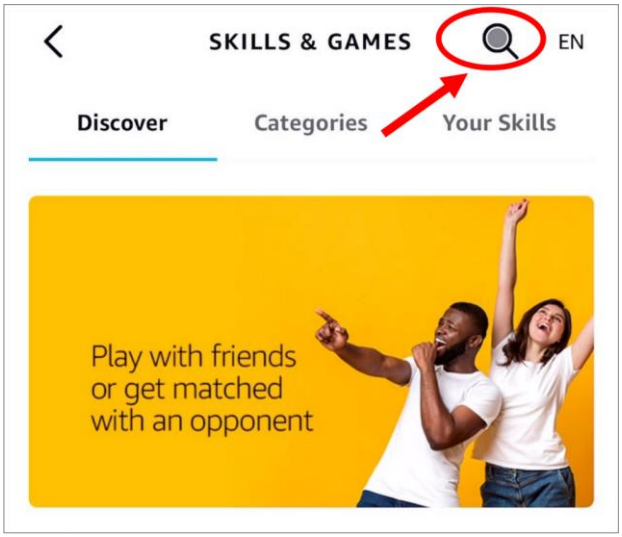
5. Search from the App Store and install Amazon Alexa to your mobile phone, and then log in with the same Amazon account that is bound to the DVR account.



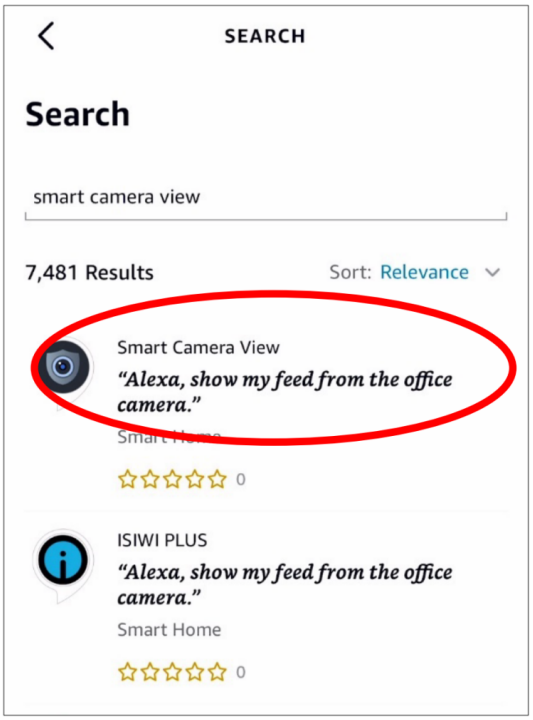
6. Click "**More**", and then click "**Skills and Games**".



7. Click the search icon in the upper right corner.

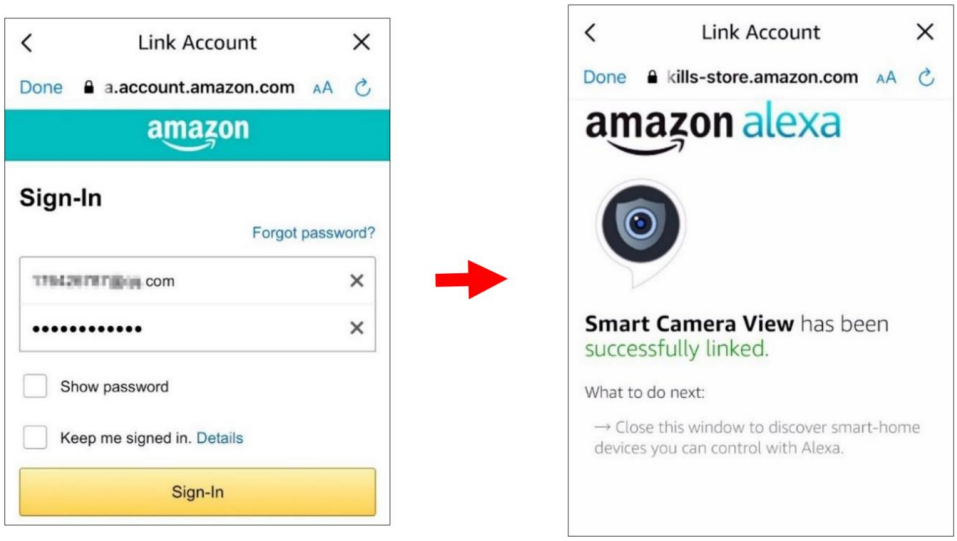


8. Enter keywords: **Smart Camera View**, and search.

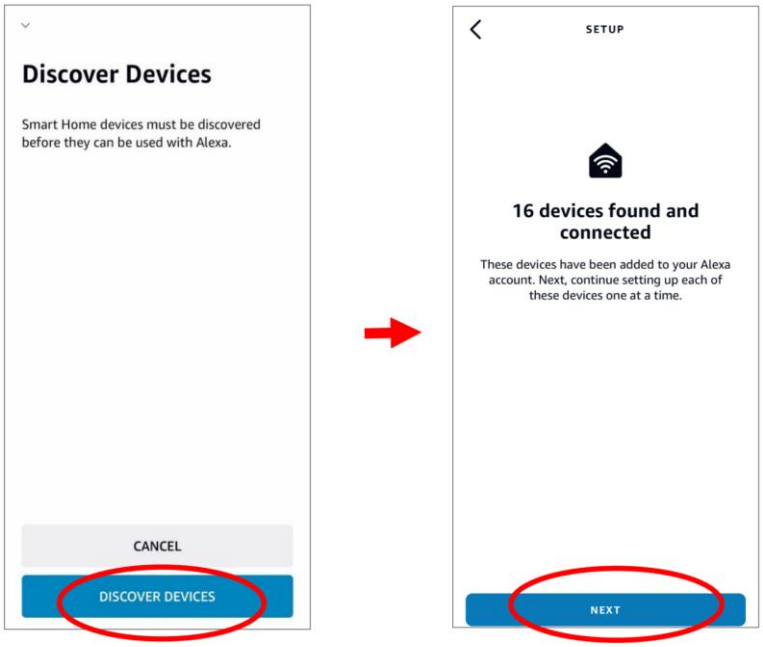


9. Click "**ENABLE TO USE**".

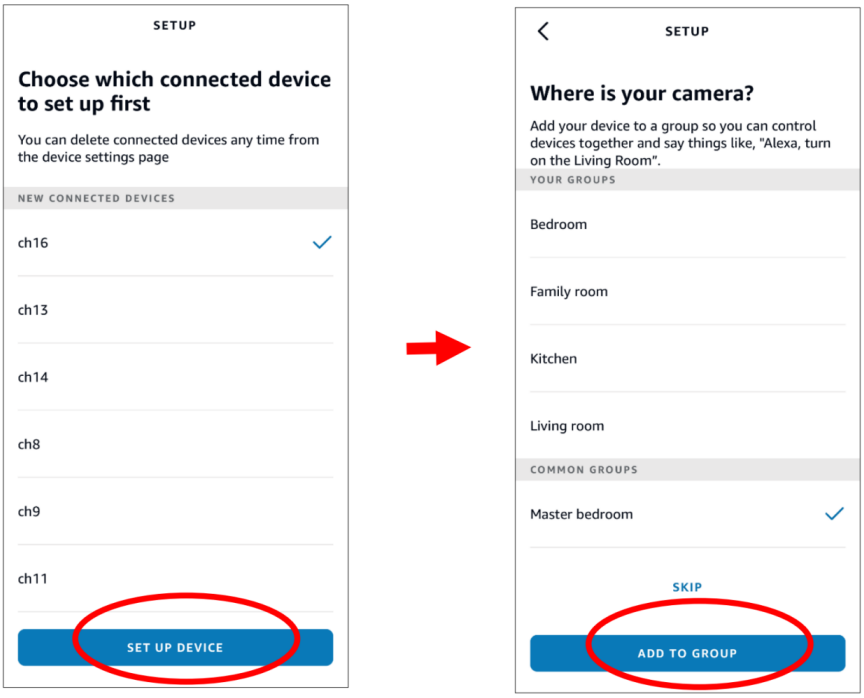
10. You need to link your Amazon account. Log in to the Amazon account with the same account you have bound with the DVR. After the function is successful, click "**Completed**".



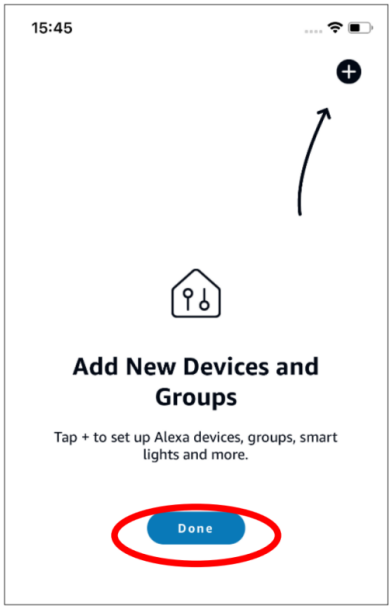
11. Click "**Discover Devices**" waiting for the application to search the camera. After finding and connecting the device, click **Next**.



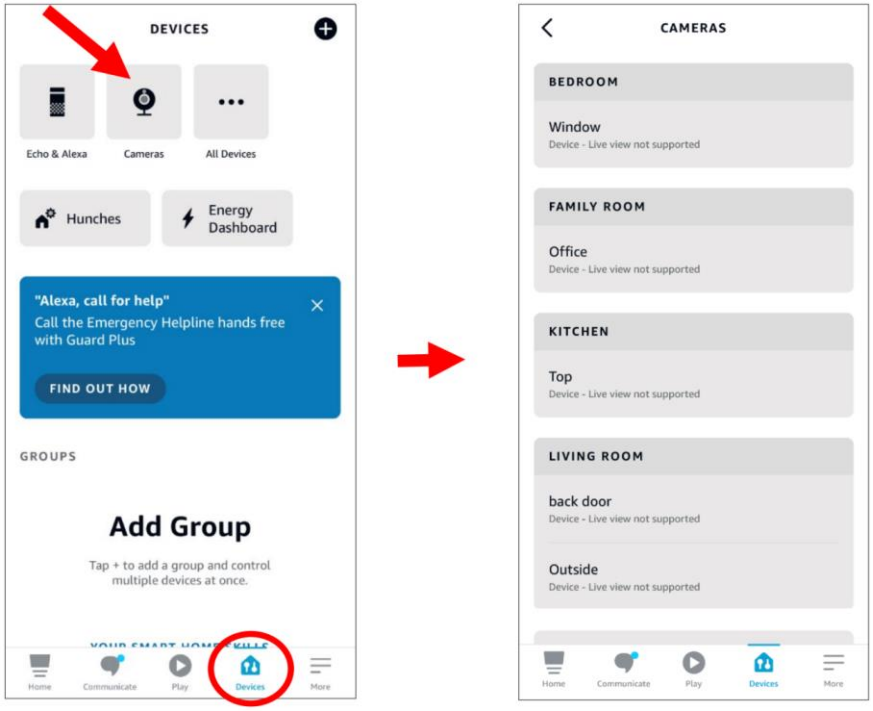
12. Select one of device, then click **SET UP DVICE**, you can add IP camera to group or pass this step.



13. Repeat step 11 to add all cameras, then click **Done.**



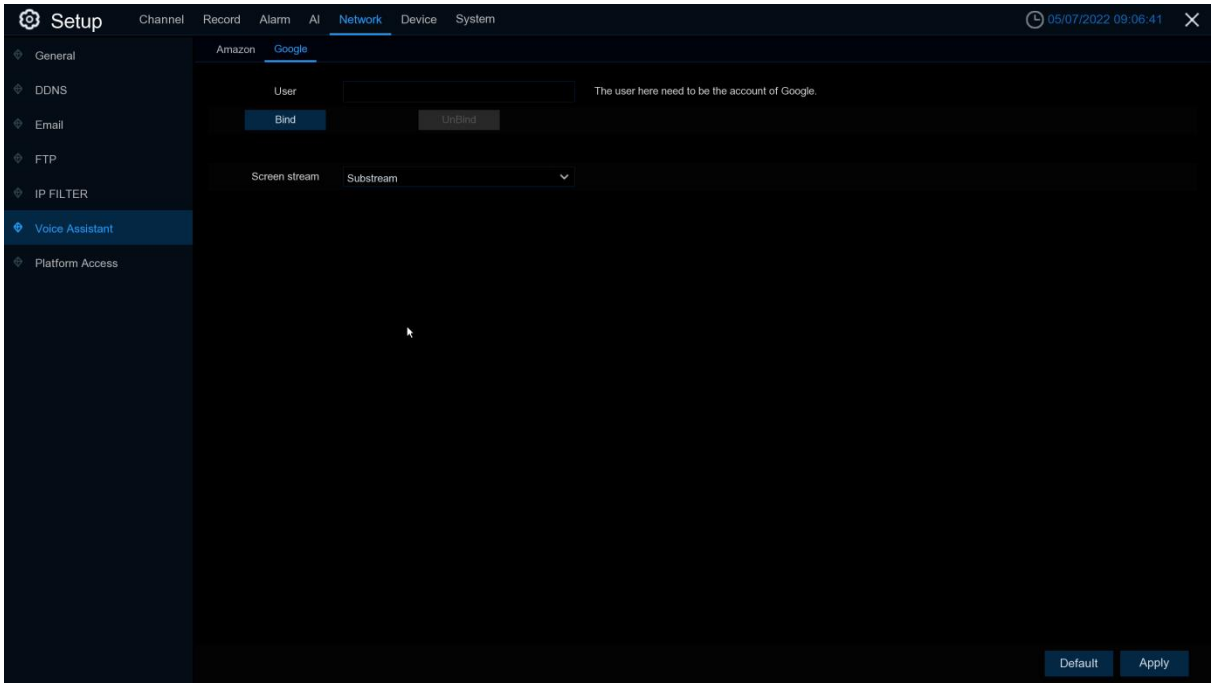
14. All added cameras will be displayed on **Devices** page. Click the camera icon to check all cameras.



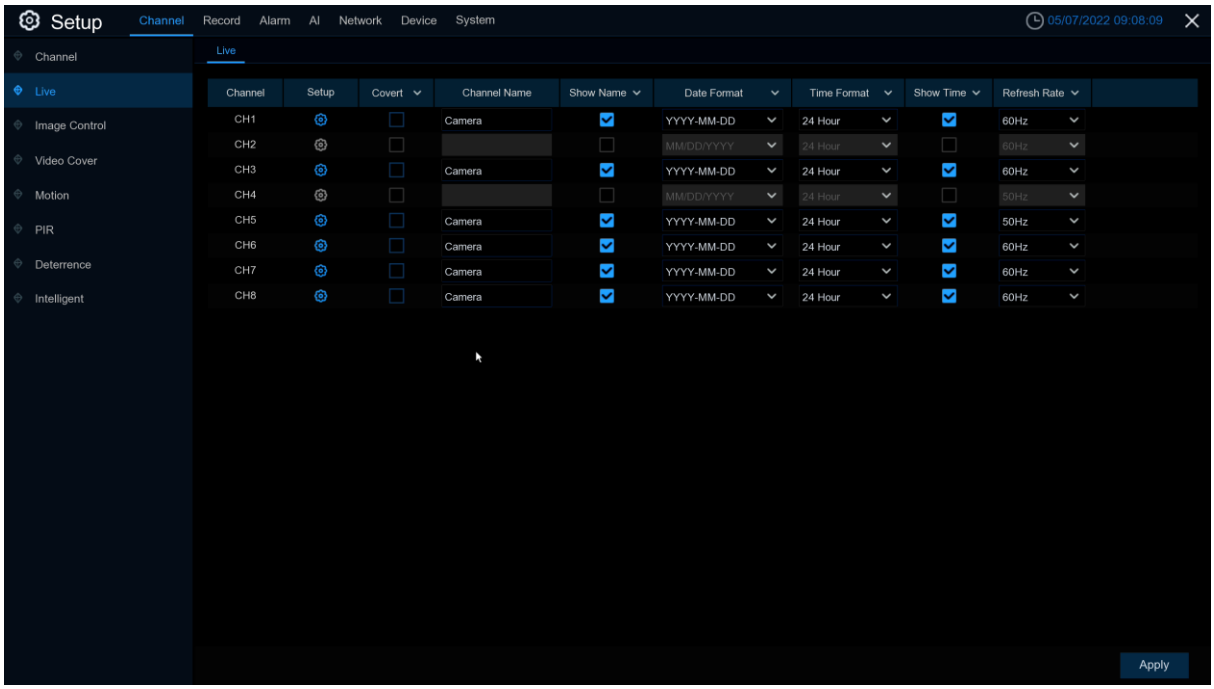
15. Hold on Fire TV stick controller audio button, and speak out command clearly. Speak the command like this: Show the XXX camera/Show XXX (the camera's name) For example, if the channel name is "Office", you can say "Show the Office camera".
16. Wait for a while, and the real time streaming will be displayed on TV monitoring for the office camera.
17. When you want to leave live image, please say "Stop".
18. If channels are changing, it needs to search again and add the camera.

5.5.5.2 Google

1. Enter your google account, click **Bind** button to connect and bind your Google account so that you can play the streams on TV monitor.

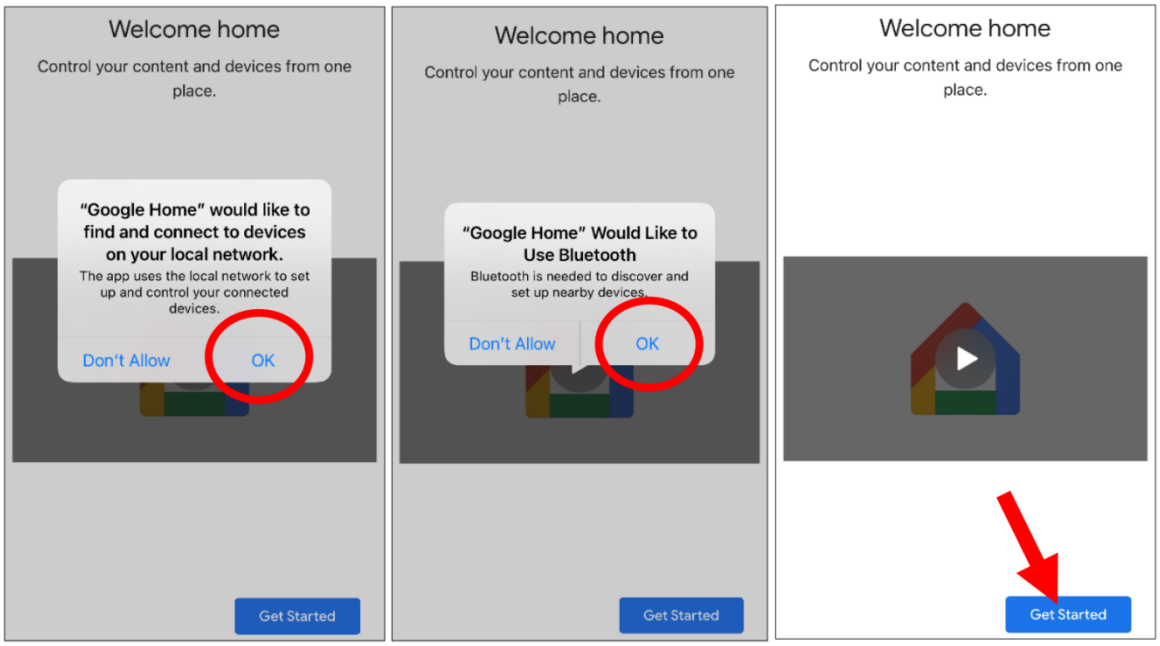


2. Enter "**Channel–Live**" page, set a channel name so that easy to show this channel video on TV or monitoring.

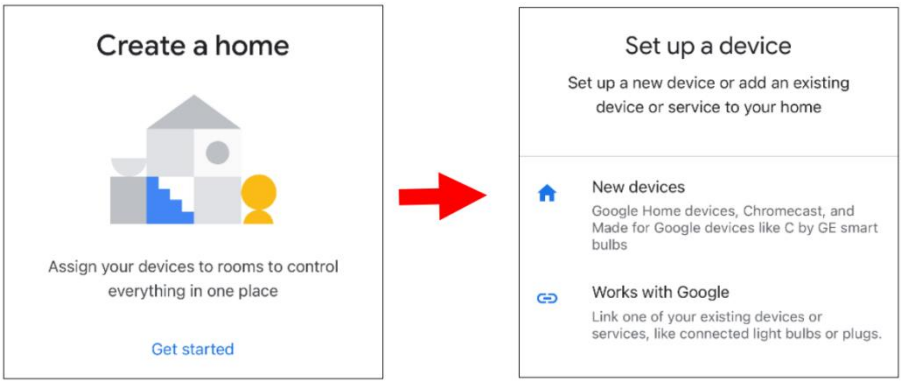


3. Connect ChormeCast to your TV monitor and power on.

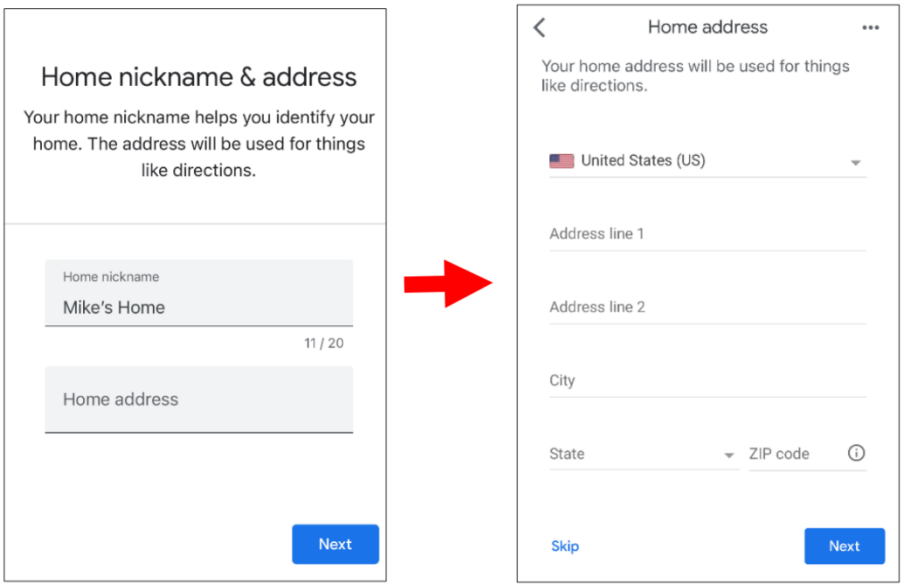
4. Search from app store and install Google Home app to mobile phone. Click “OK” to allow application using your local network and Bluetooth, and click “ **OK**”.



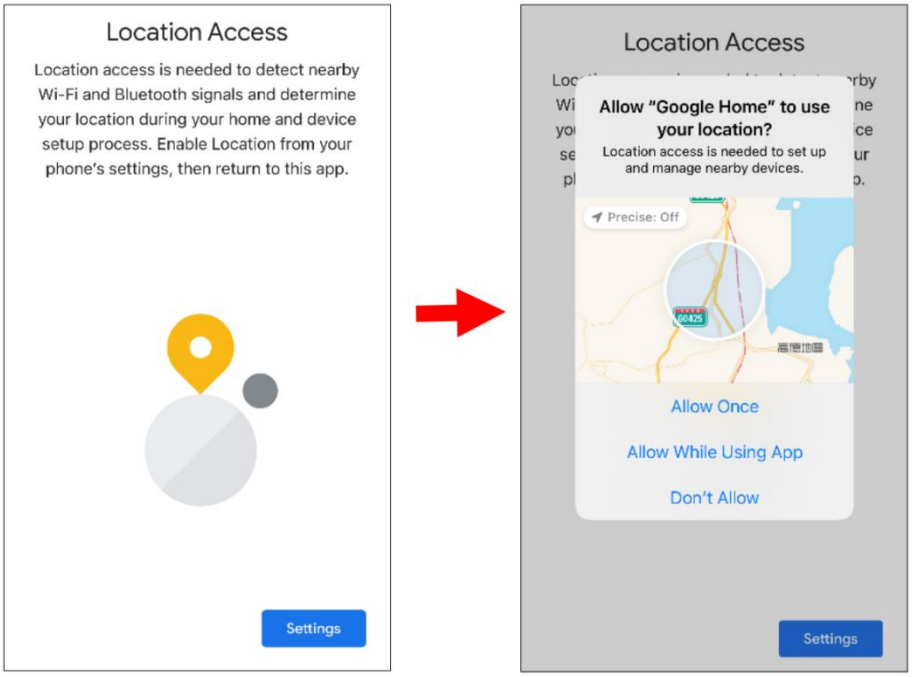
5. Login in your bonded google account.
6. Click “**Get Started**” to create home, and then Click “**New devices**”.



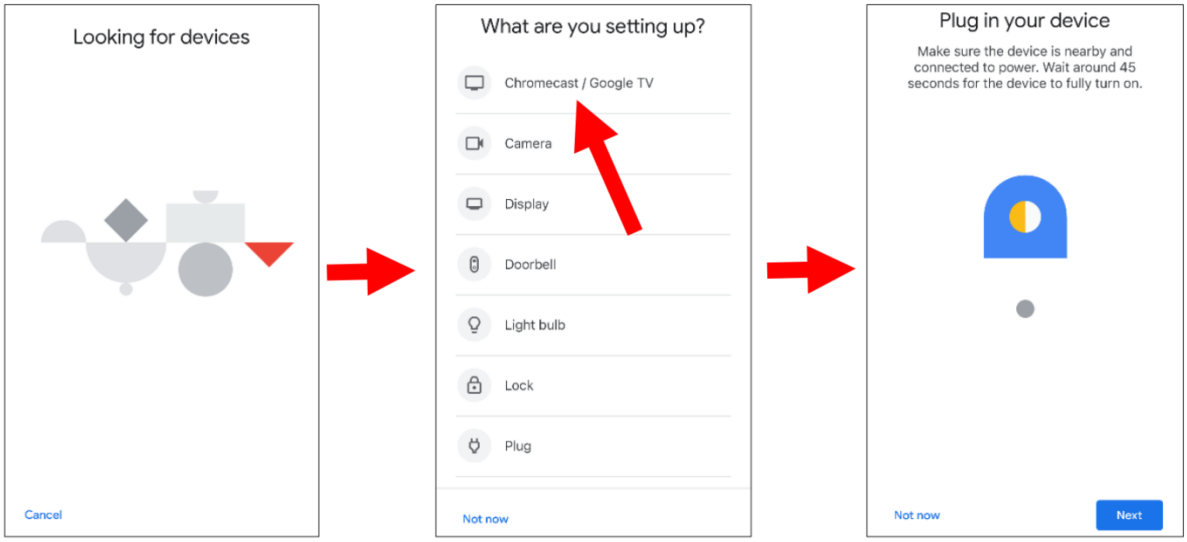
7. Enter home name and address, and then click “**Next**” .



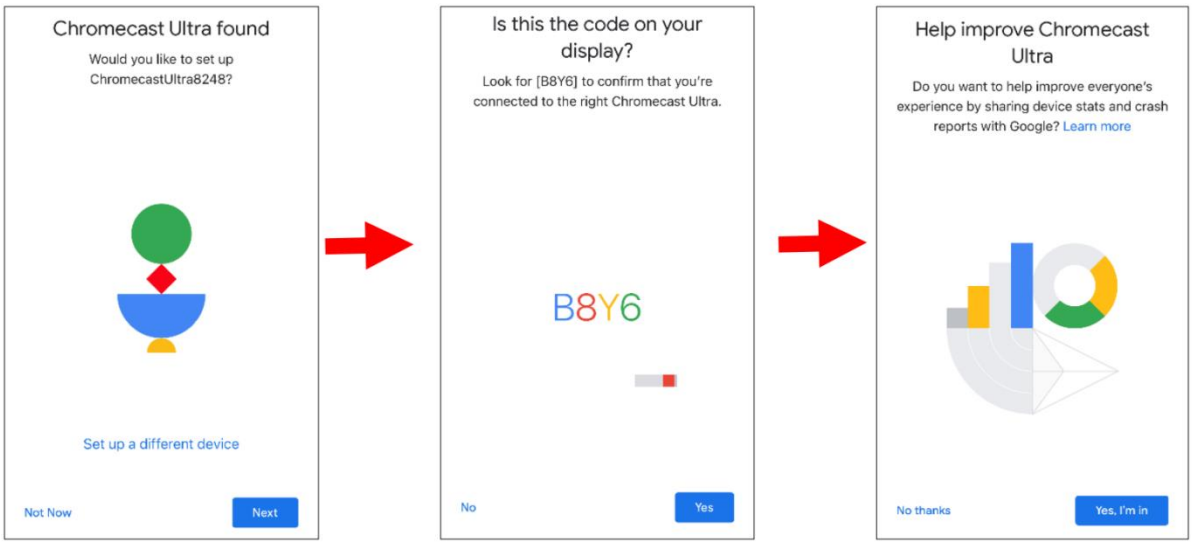
8. Allow application location access.



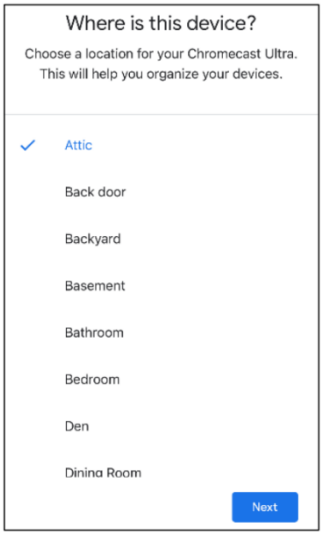
9. The application will try to search your local network devices automatically. Choose Chromecast. Make sure Chromecast is turned on, and then continue with the next step.



10. Your Chromecast was founded, Click **Next** to connect. Click **Yes** to confirm the codes.

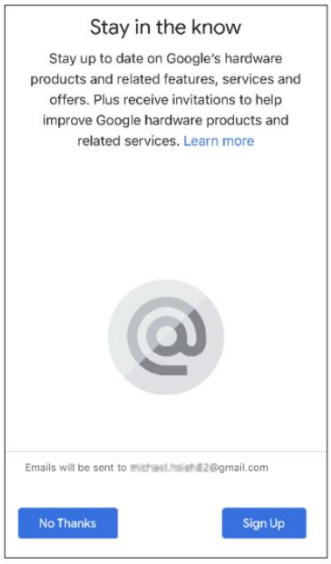


10. Select Chromecast position, and then Click **Next**.

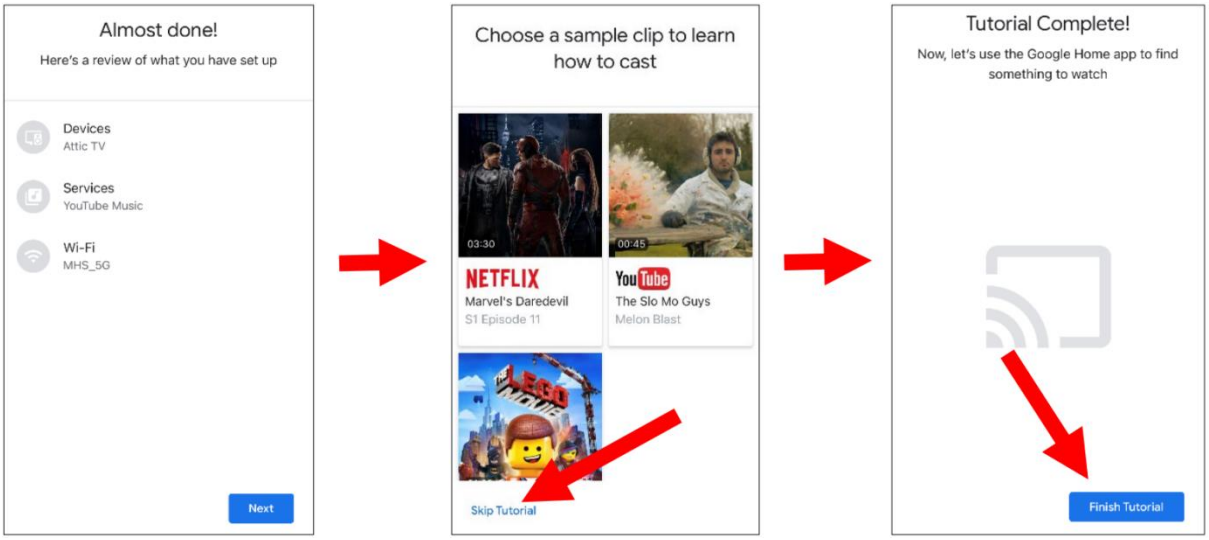


11. Select the Wi-Fi network for Chromecast and enter the Wi-Fi password for connection. Make sure your Wi-Fi is the same as the mobile phone, and is in the same local network as DVR. Click **Continue** to the next step.

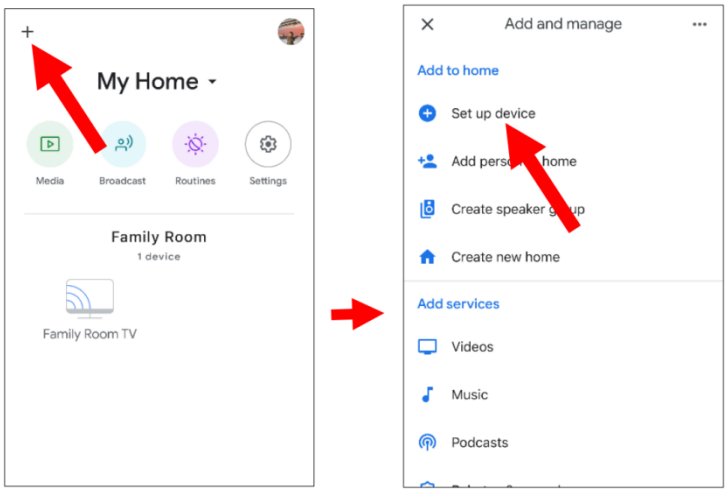
12. Click **No Thanks** or **Sign Up** to log in to your Google account.



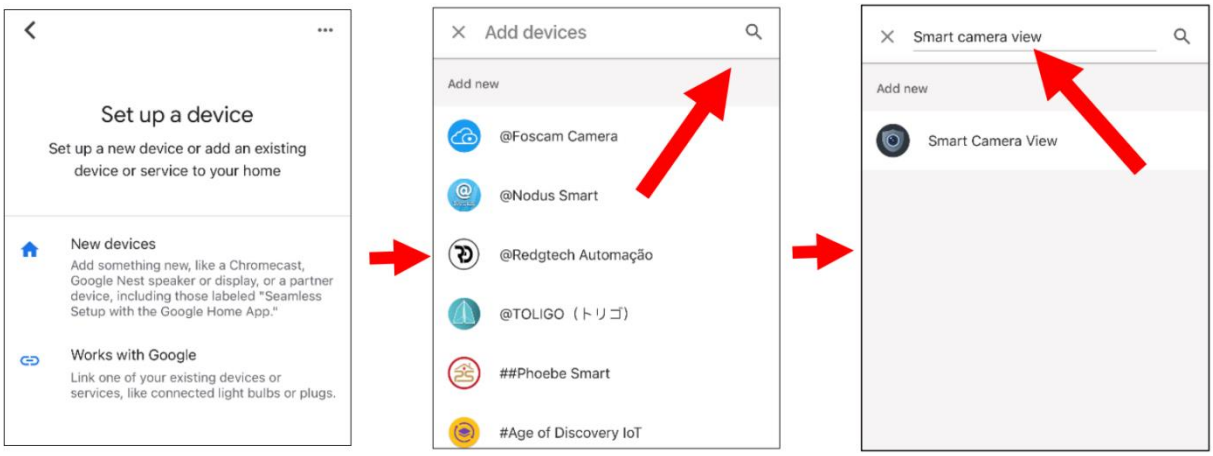
13. Click **Next->Skip->Finish Tutorial**.



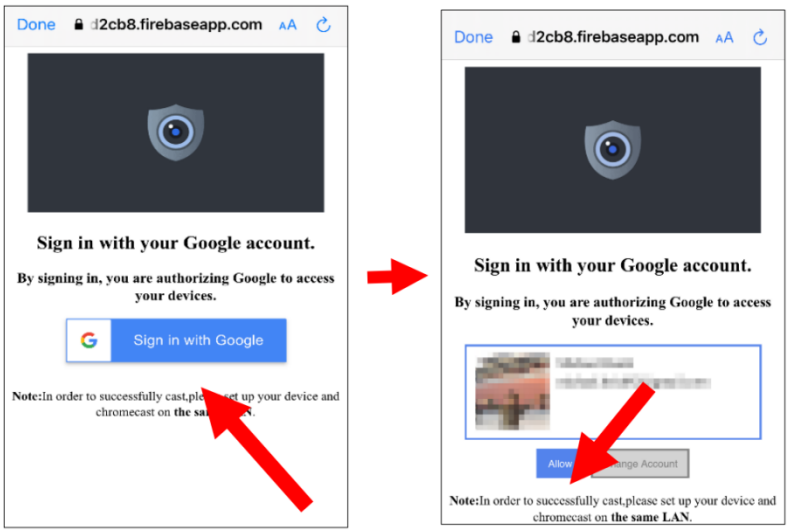
11. Now Chromecast is added to your google home page. Click the + icon in the upper left corner to set up device.



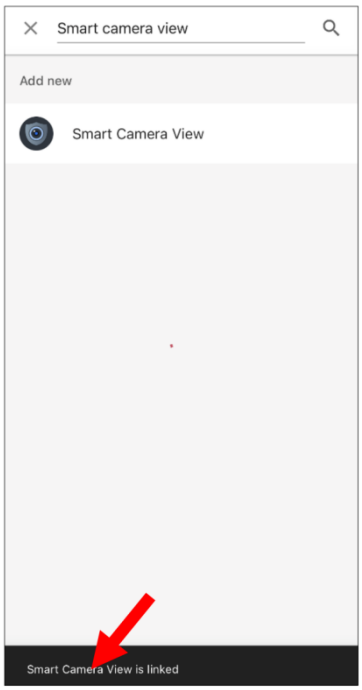
12. Select "**Works with Google**". Click the search icon in the upper right corner and then enter "**smart camera view**".



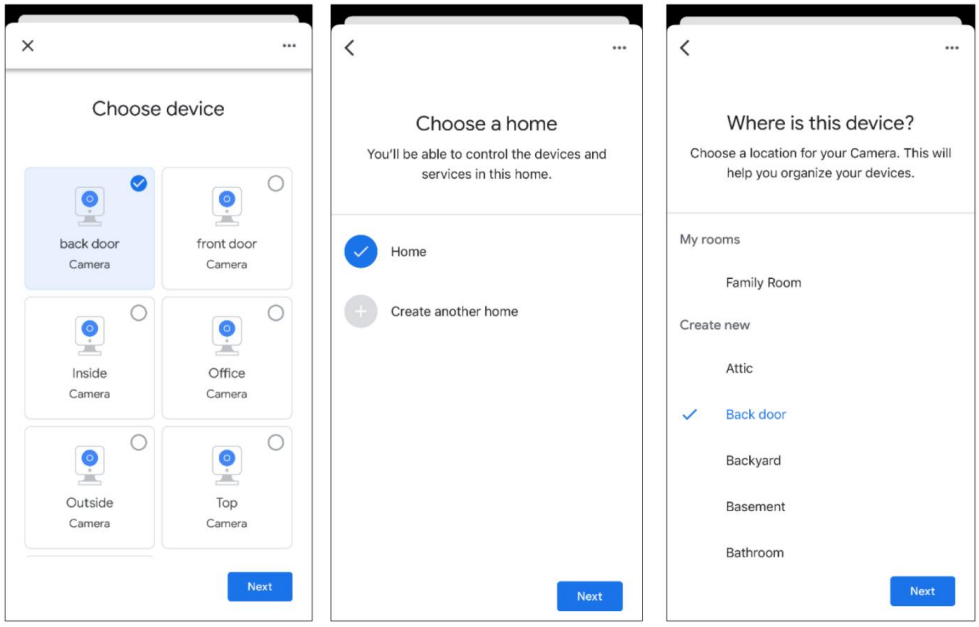
13. On search result Click “**smart camera view**”. Need to log in your google account and allow google visit your devices.



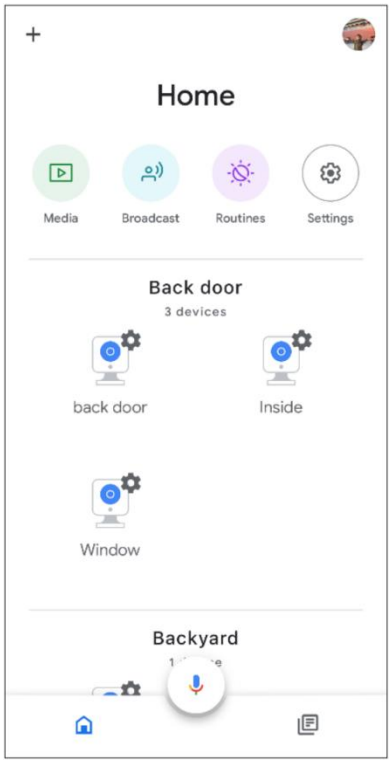
14. Wait for a minute, and the application will connect to Google home.



14. The camera available in DVR will now be displayed. Select one of the cameras and touch the next button. Select a home and location for the camera step by step.

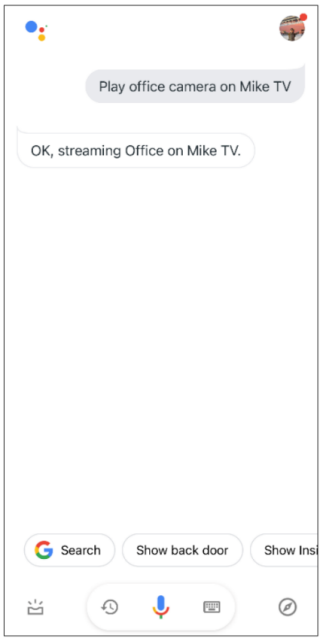


15. Repeat the operation of the 13th, add all the camera.



16. Search from the App Store and install the Google Assistant application to the mobile phone.
17. Run Google Assistant, log in to your Google account, this account is bound to the same account that is bound to DVR.

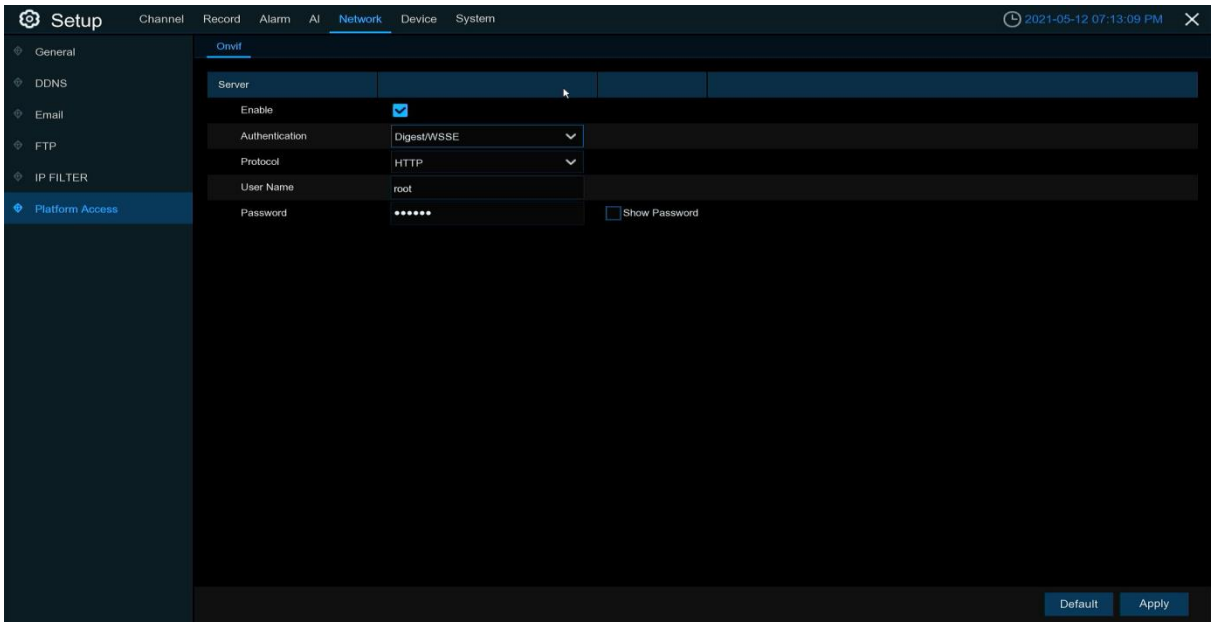
18. Now, you can use the text or voice command to transmit the camera to TV monitor, such as "show/play the *** camera on XXX TV". Among them, *** is the name of the camera, xxx is your TV name.



5.5.6 Platform Access

5.5.6.1 Onvif

Enable this function to allow devices to be searched and added by other third-party platforms through the ONVIF protocol.

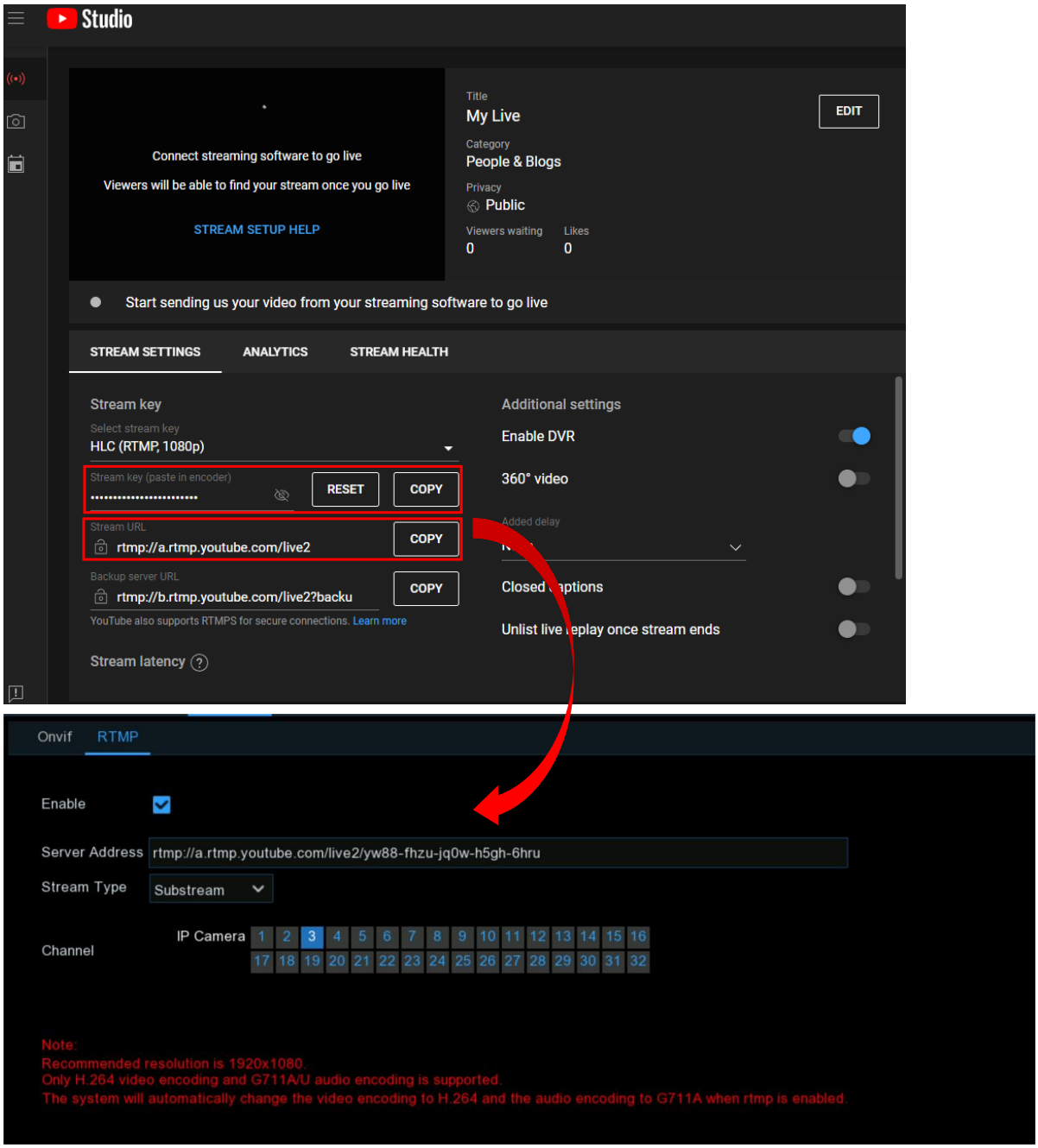


Enable: Enable switch. If turn off this menu, the service will be failed.
Authentication: Login authentication mode, authentication methods including Digest_sha256, Digest, Digest/WSSE, and WSSE.
Protocol: Connection protocol
Username: Login user name
Password: Login user password

Note: The stream connected by the back end through the ONVIF protocol are all the pictures of the first channel.

5.5.6.2 RTMP

The audio and video streams of the NVR channels can be pushed to the YouTube website by RTMP for live broadcasting. To use this function, you need to do the following: Register a YouTube account, create a live streaming studio, set the URL and live code of the live streaming studio, set the live server address bar for the device, and enable and configure the code stream type and live broadcasting channels. After saving the configuration, you can go to the YouTube live room to refresh the page to watch live broadcasting.



Enable: Used to set whether to enable the RTMP live broadcasting function.

Server Address: Enter the live broadcasting address and live code of the YouTube server. (Note: "/" is used between the live broadcasting address and live code of the YouTube server.)
Stream Type: Select the stream type of the live broadcasting channel. Both main stream and substream are supported.
Channel: Select the channel for live broadcasting. Only one channel can be selected.

Note:

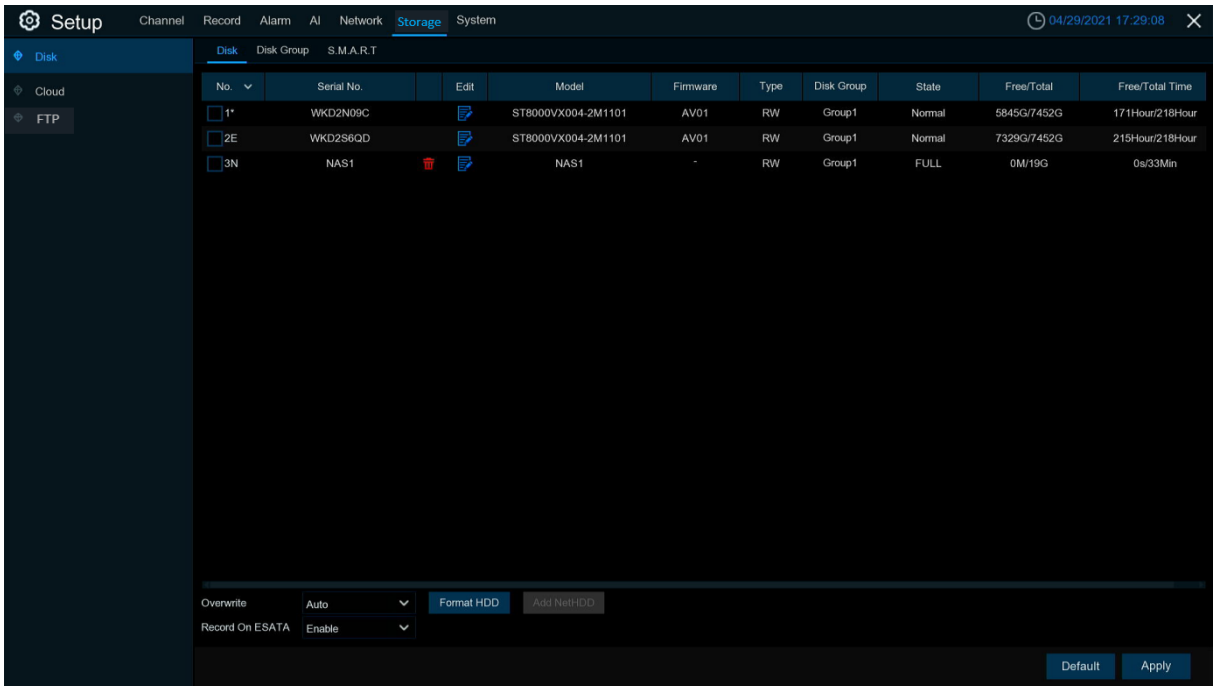
1. To ensure the live broadcasting effect, it is recommended that the resolution of the stream not exceed 1920 × 1080.
2. Live broadcasting can be conducted for only the data streams of H.264 video encoding format and G711A/U audio encoding format.
3. A YouTube live code can be set for only one device and cannot be reused.

5.6 Storage

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

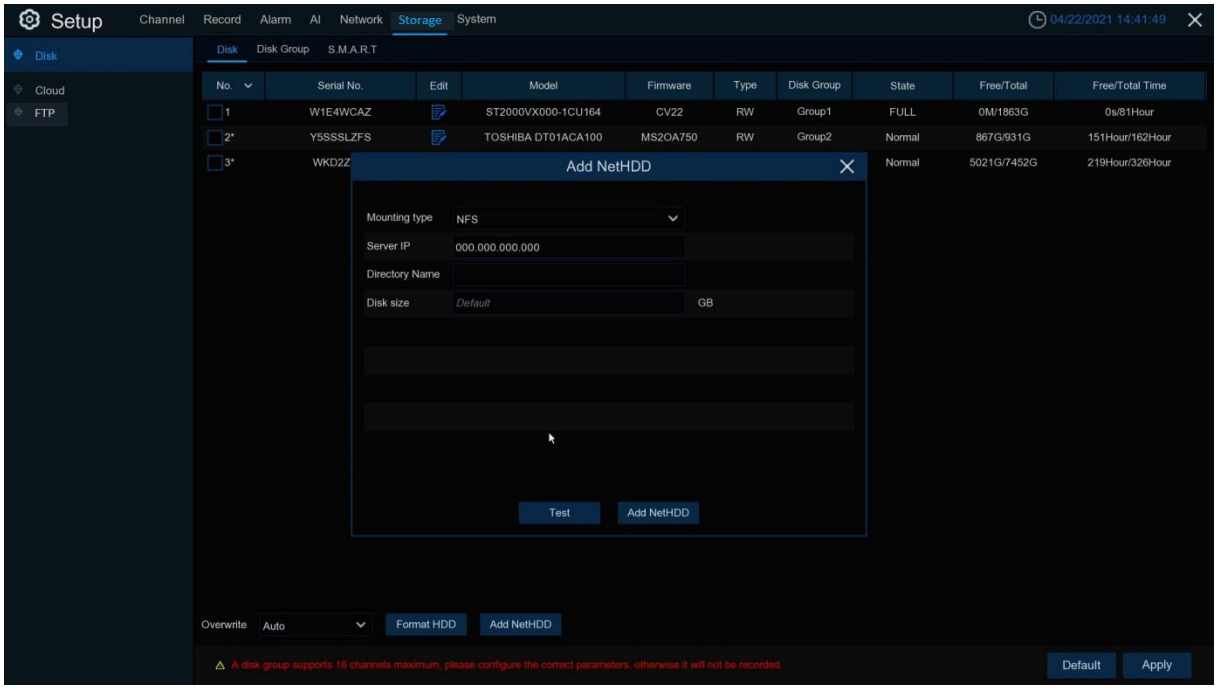
5.6.1 Disk

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.



Format HDD: Select the HDD you want to format and then Click **Format HDD**. To start formatting, you need to enter your username and password and then click **OK** to confirm to continue formatting.

ADD NetHDD: This function to add a network hard disk. After configured the network hard disk (NAS), you can connect NAS to record channel video or grab maps through the network connection. But AI Face Database can only be stored in the hard disk.



Mounting type: NFS and CIFS types, NFS needn't to enter NAS account and password, CIFS need to enter NAS account and password.

User Name: NAS account (NFS this option is invisible).

Password: NAS password (NFS this option is invisible).

Server IP: NAS IP address.

Directory Name: Enter the folder that wants to store data in NAS

Disk Size: Set up network disk size

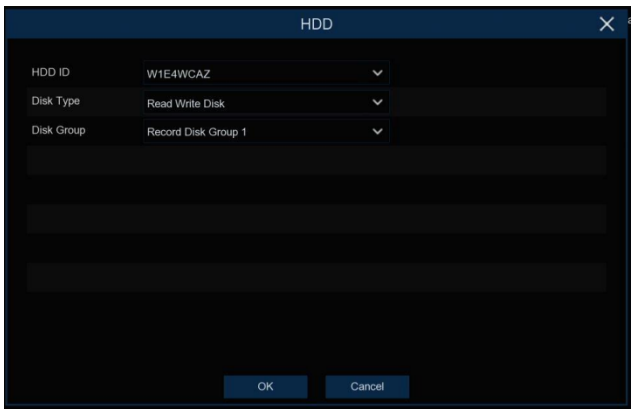
Test: Test whether NAS connected.

Add NetHDD: Click to add NAS.

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 an HDD to save recording or search recording to play.

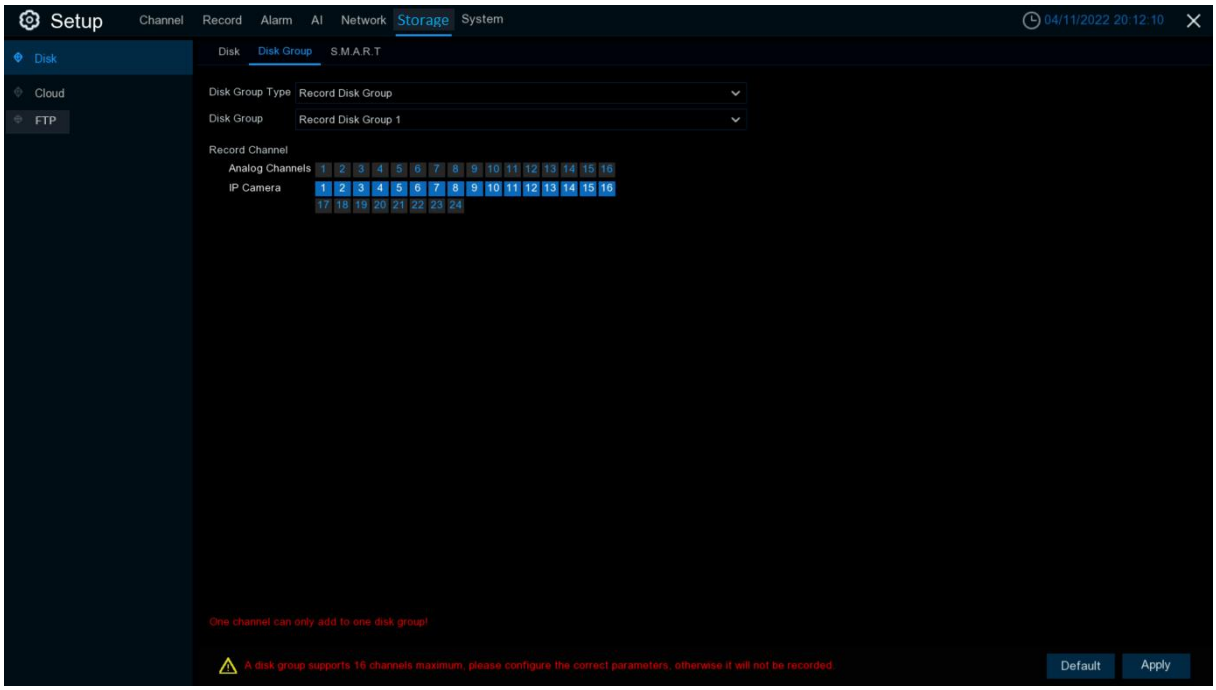
To prevent important video data from being overwritten during cyclic recording, the HDD can be set as **Read-only** mode. New recording will be not able to save into this read-only HDD. You can still search recording from this read-only HDD to play.

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.

5.6.1.1 Disk Group

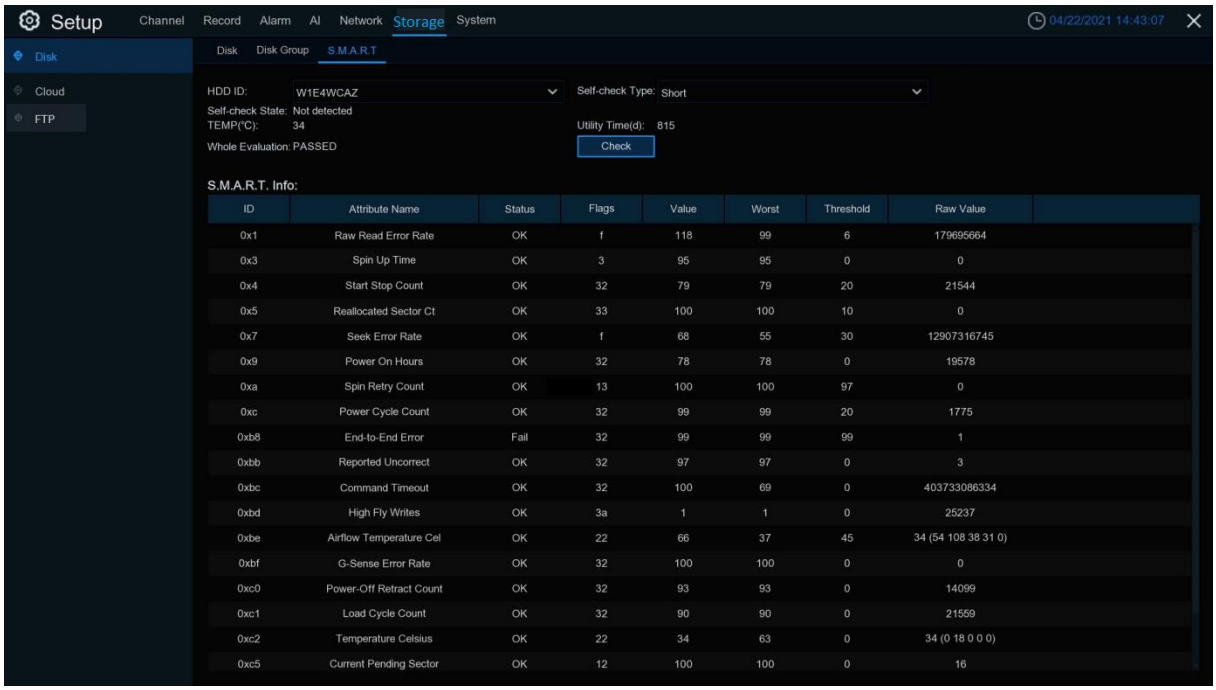
If your DVR supports to install multiple HDDs, you can configure the HDD to be different groups. HDD groups allow you to balance recordings across multiple hard drives. For example, you can record channels 1~4 to one hard drive and 5~8 to a second hard drive. This can reduce the amount of wear on the hard drives and may extend the life of the hard drives.



1. Use **Disk Group Type** to select the type of group to configure.
2. Use **Disk Group** to select the specific group within the selected group type.
3. Click the numbered boxes representing channels to record channels to HDDs in the selected group.
4. Click **Apply** to save.

5.6.1.2 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	f	118	99	6	179695664
0x3	Spin Up Time	OK	3	95	95	0	0
0x4	Start Stop Count	OK	32	79	79	20	21544
0x5	Reallocated Sector Ct	OK	33	100	100	10	0
0x7	Seek Error Rate	OK	f	68	55	30	12907316745
0x9	Power On Hours	OK	32	78	78	0	19578
0xa	Spin Retry Count	OK	13	100	100	97	0
0xc	Power Cycle Count	OK	32	99	99	20	1775
0xb8	End-to-End Error	Fail	32	99	99	99	1
0xbb	Reported Uncorrect	OK	32	97	97	0	3
0xbc	Command Timeout	OK	32	100	69	0	403733086334
0xbd	High Fly Writes	OK	3a	1	1	0	25237
0xbe	Airflow Temperature Cel	OK	22	66	37	45	34 (54 108 38 31 0)
0xbf	G-Sense Error Rate	OK	32	100	100	0	0
0xc0	Power-Off Retract Count	OK	32	93	93	0	14099
0xc1	Load Cycle Count	OK	32	90	90	0	21559
0xc2	Temperature Celsius	OK	22	34	63	0	34 (0 18 0 0 0)
0xc5	Current Pending Sector	OK	12	100	100	0	16

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.

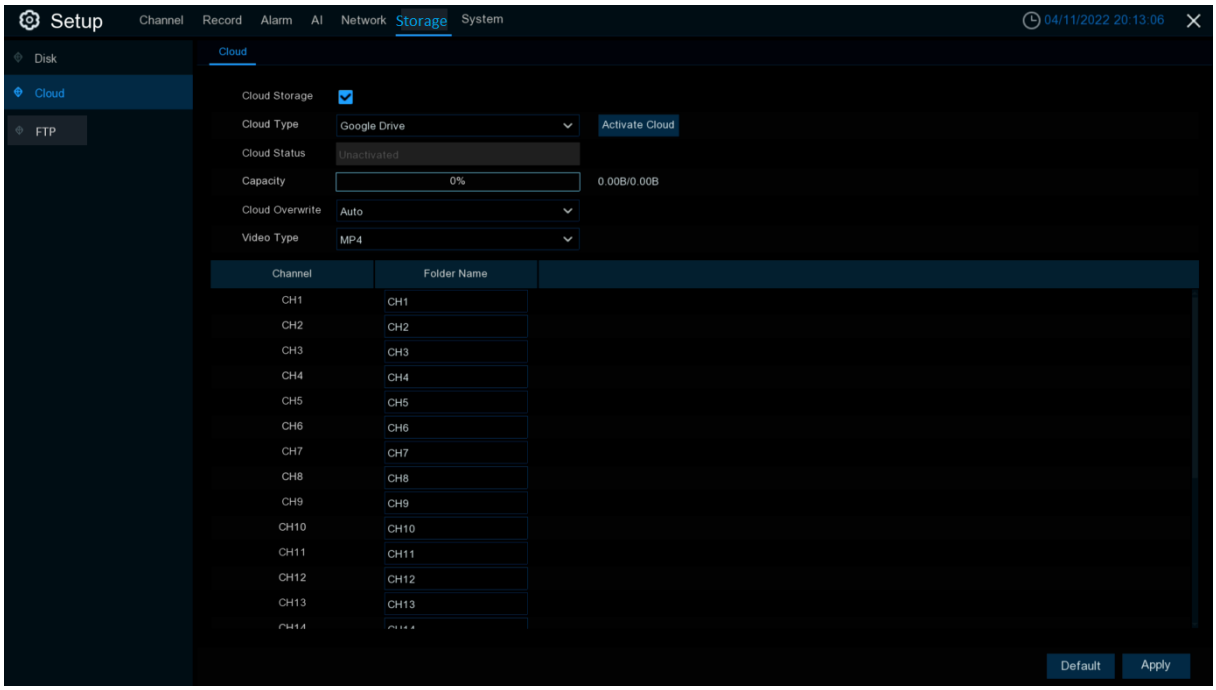
Long: This is a longer test that verifies the above as well as performing a surface scan to reveal problematic areas (if any) and forces bad sector relocation

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.

5.6.2 Cloud

Your DVR can 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

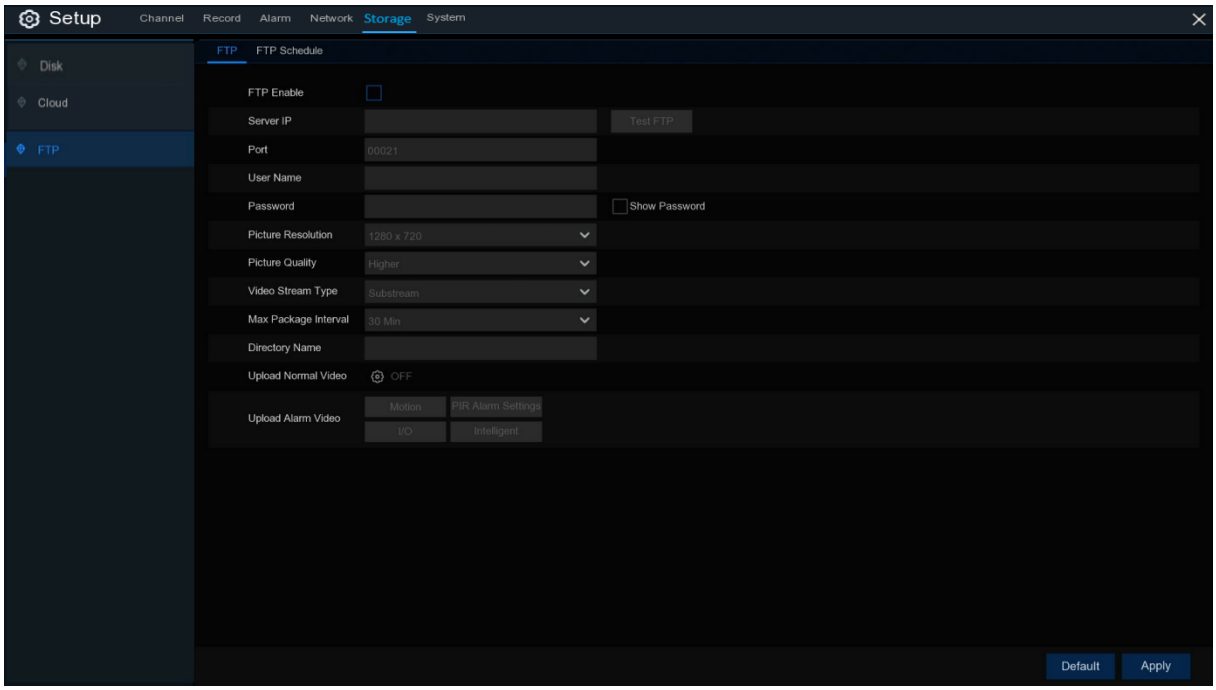
Capacity: To show the remaining space of cloud storage.

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 5.5.3.1 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.

5.6.3 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 video stream type uploaded to FTP, mainstream and sub stream 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:

Normal: Green area (Default it not selected)

Motion: Yellow area

IO: Red area

PIR: Purple area

In-Analysis: Blue area

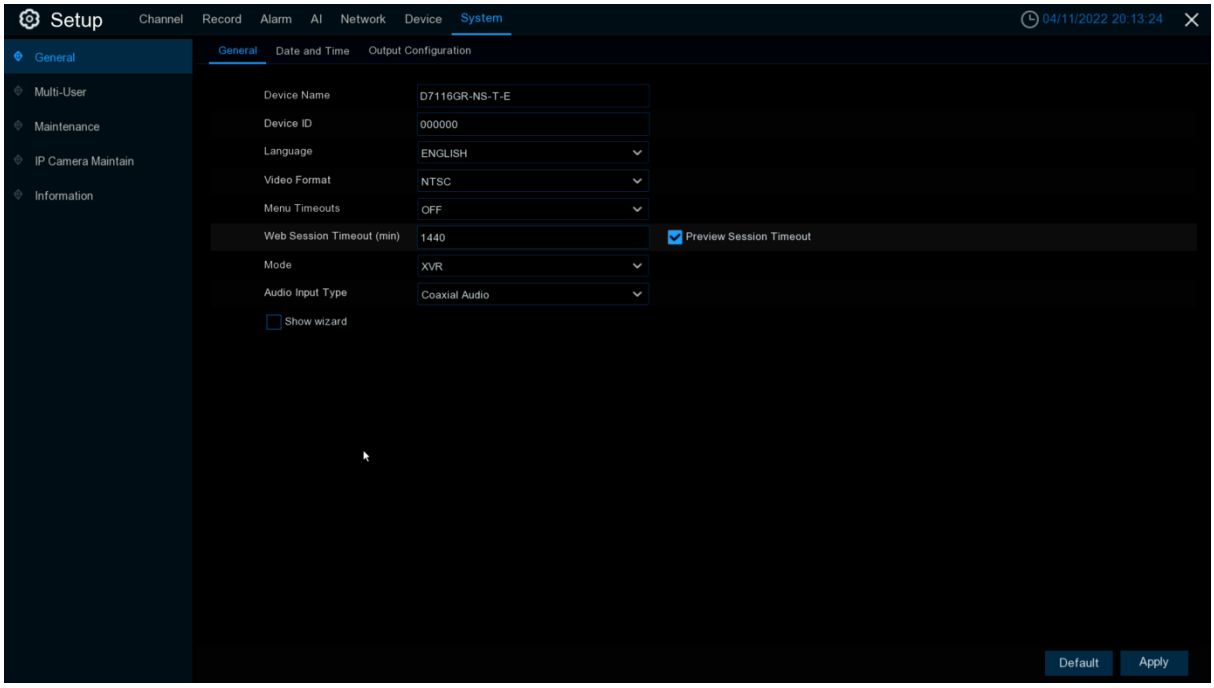
Note: To view images or play videos uploaded to FTP server, make sure you use USAVision Player.

5.7 System

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

5.7.1 General

5.7.1.1 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. The system disables this function by default (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. The system default is 5 minutes, adjustable from 5-1440minutes.

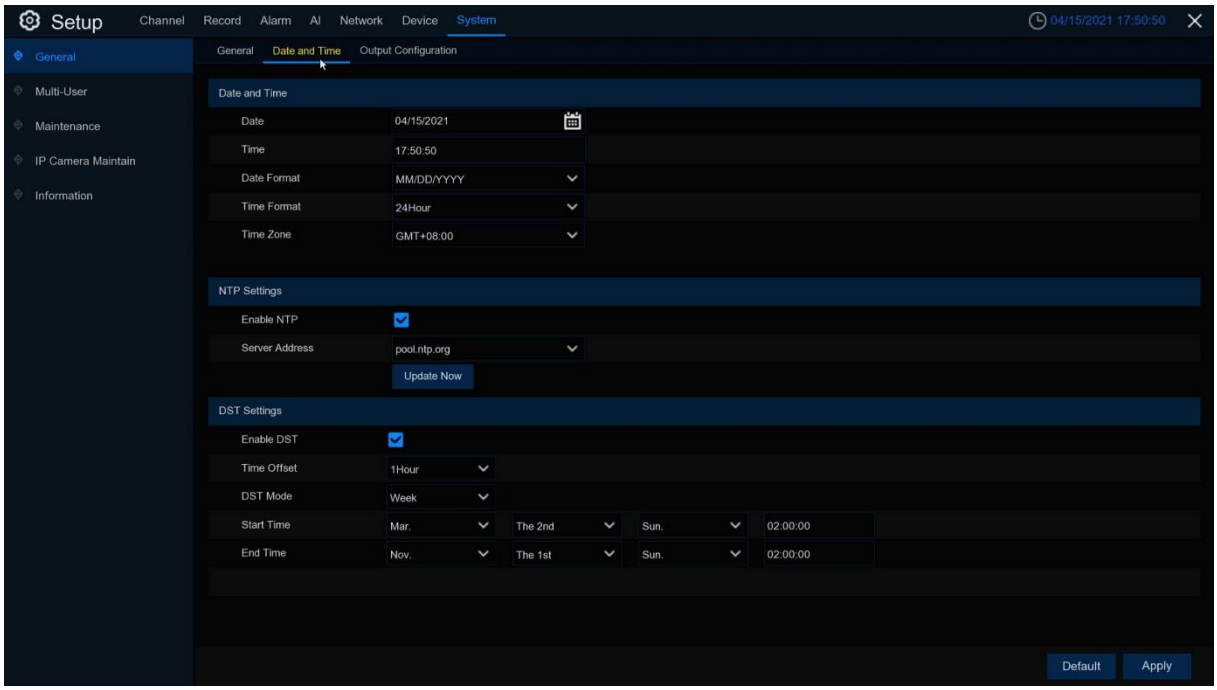
Preview/Playback Session Timeout: After enable, in the preview or playback, to avoid automatic logout of the web side.

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.

Audio Input Type: Select analog channels input audio type, select **Base-band Audio,** it's DVR hardware audio input interface. Select **Coaxial Audio**, which is analog camera audio input via BNS interface.

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

5.7.1.2 Date and Time



5.7.1.2.1Date & Time

Date: Click to change the date.

Time: Click the time box to change the time.

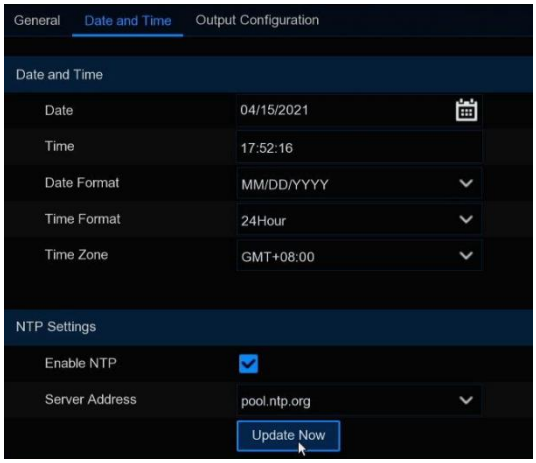
Date Format: Select the preferred date format.

Time Format: Select the preferred time format.

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

5.7.1.2.2NTP

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).



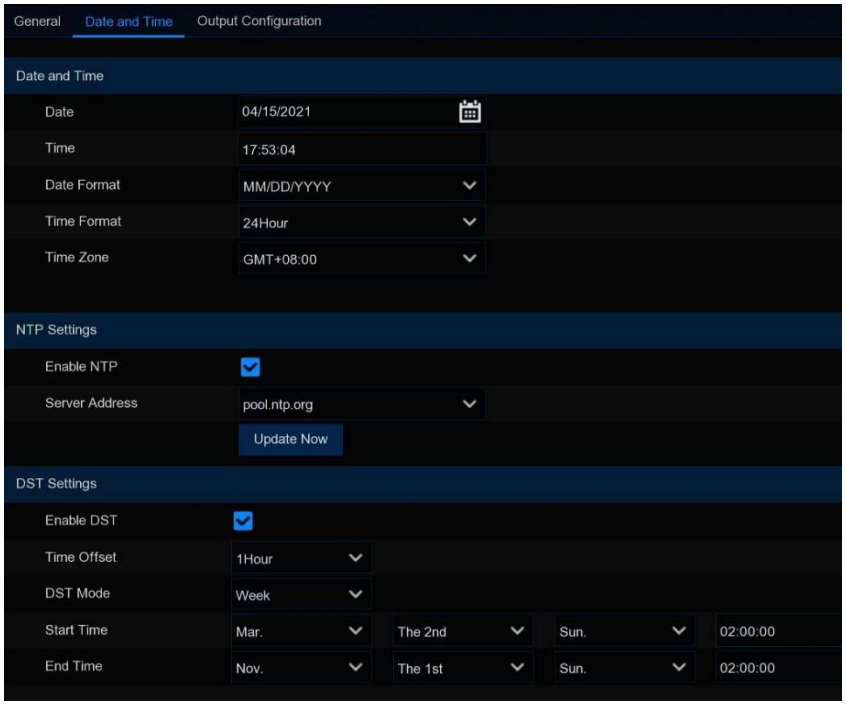
Check to enable the **NTP**, and select a **Server Address**, Click Update Now to manually sync the date & time.

Click **Apply** to save your settings.

When NTP function is enabled, system will update the system time at 00:07:50 per day, or

5.7.1.2.3DST

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

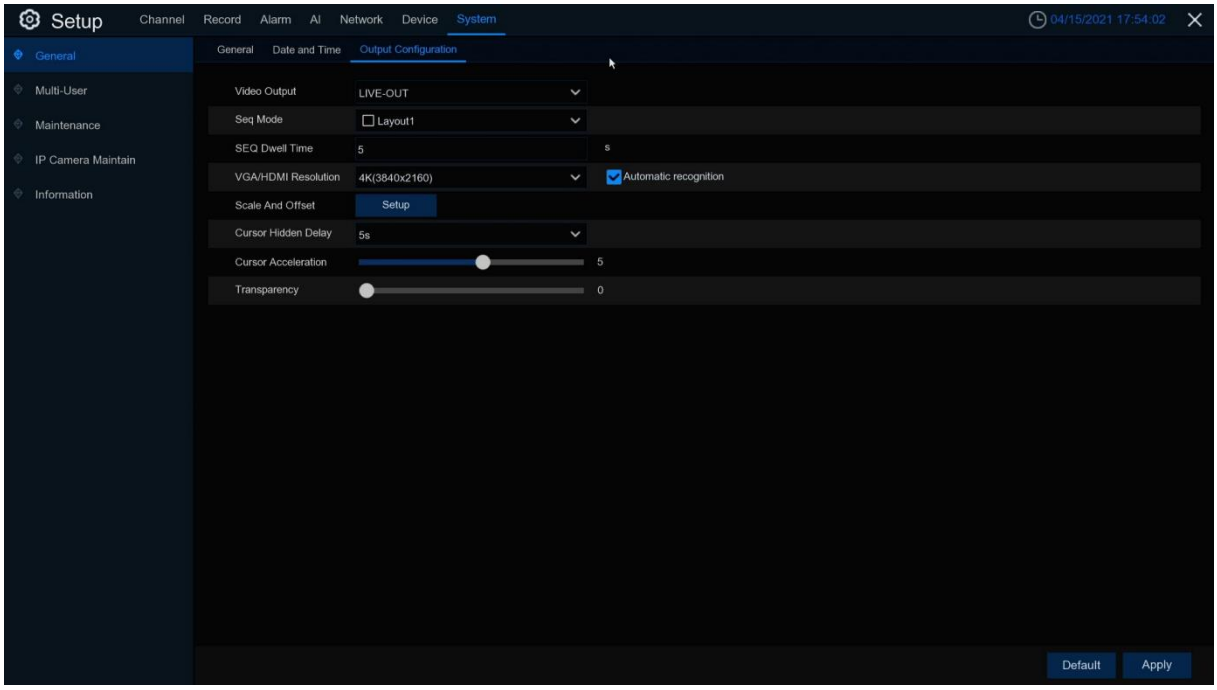
5.7.1.3 Output Configuration

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 configure the VGA spot output parameters.



Video Output drop-down select **LIVE-OUT** mode.

SEQ Mode: Choose the number of video channels to be displayed when the DVR is in the wheel patrol mode.

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

VGA/HDMI 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.

Automatic recognition: Automatically recognize the resolution, the resolution of the display of the display when it is checked after checking, prompting the appropriate resolution.

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.

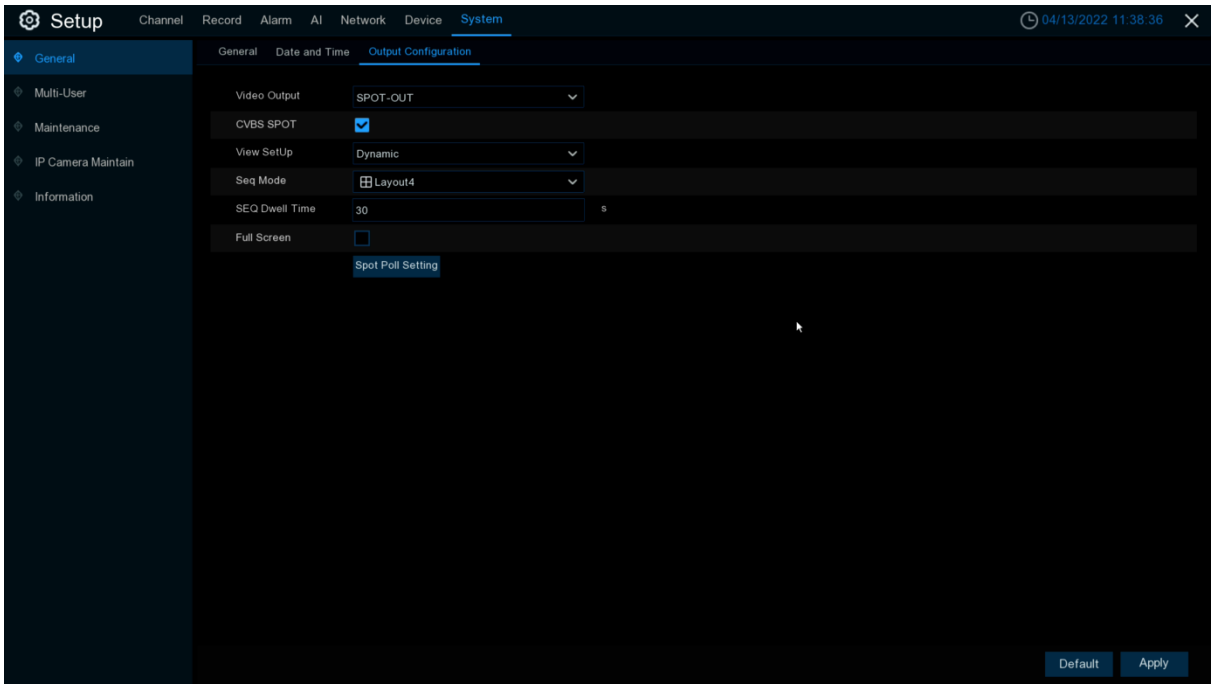
Y Offset: To move the displayed screen to up or down.

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.



Video Output drop-down menu to select **SPOT-OUT** mode.

CVBS SPOT: Click to enable **CVBS** interface to output video.

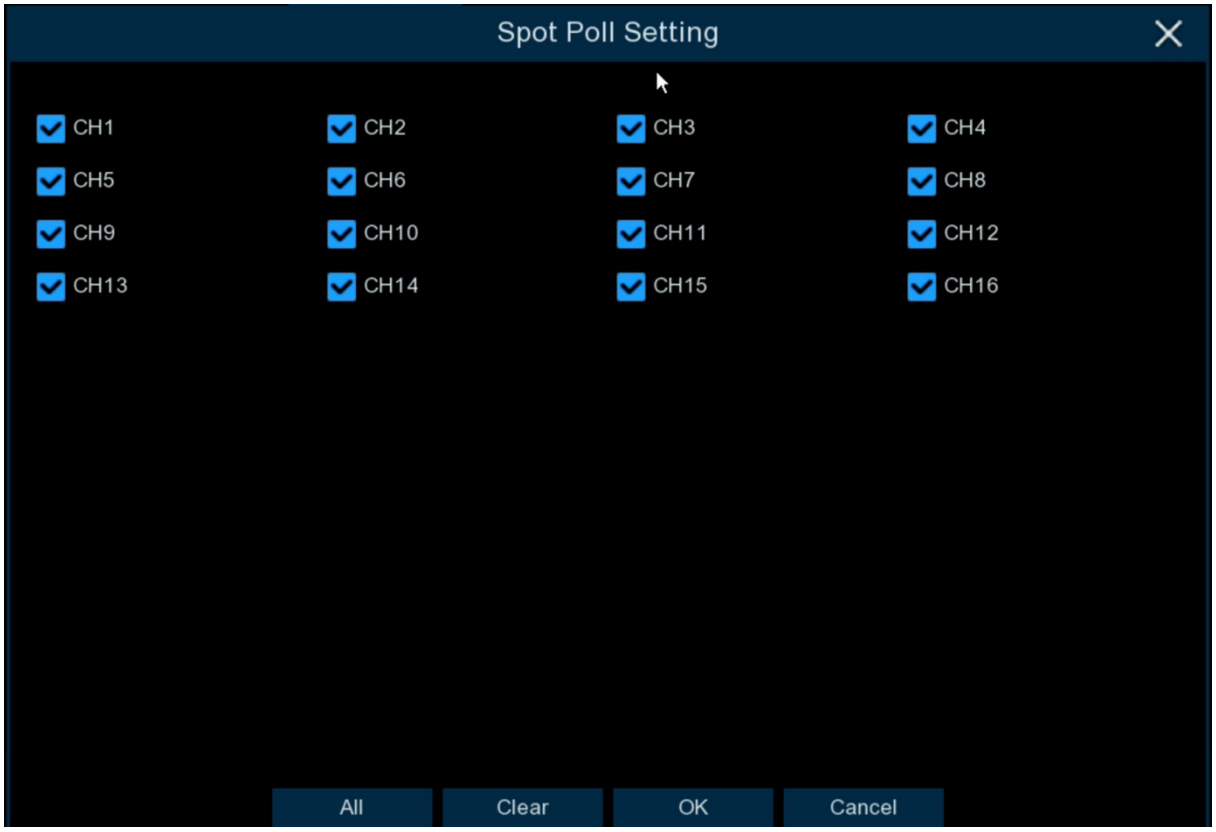
View Setup: Select **CVBS** interface to set up display output modes, **Dynamic** and **Static.**

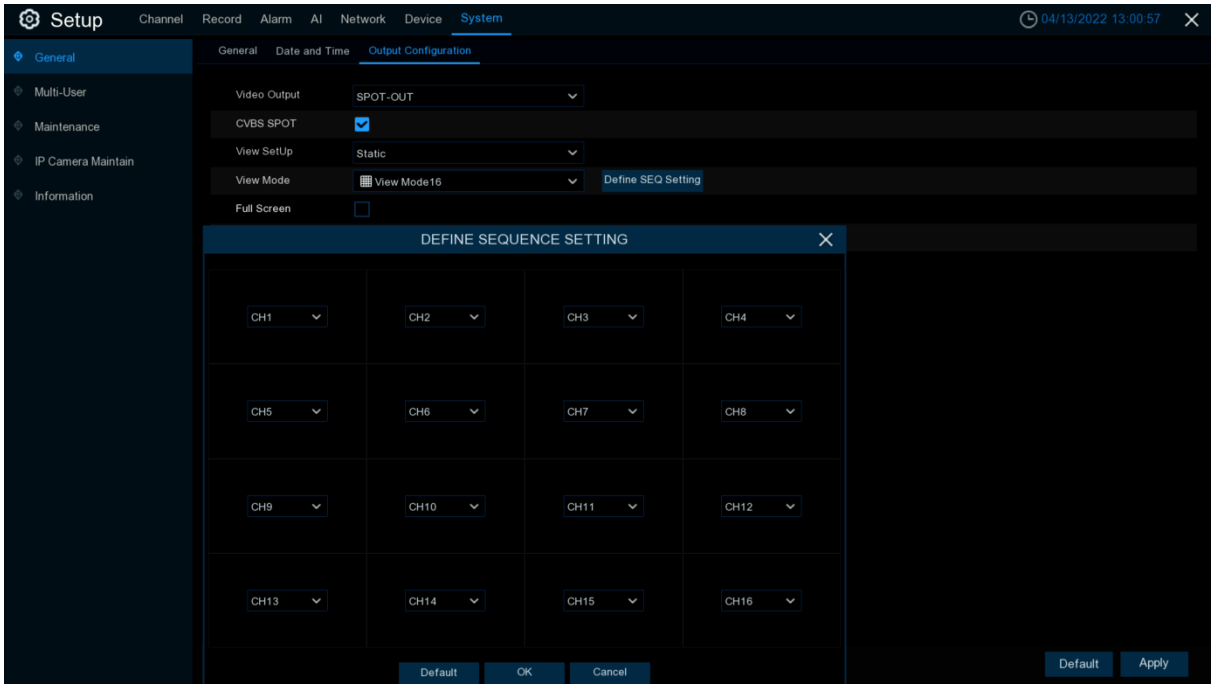
SEQ Mode: Select **Dynamic** mode to show the video channels on SEQ.

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

Full Screen: While trigger alarm to show this channel to full screen.

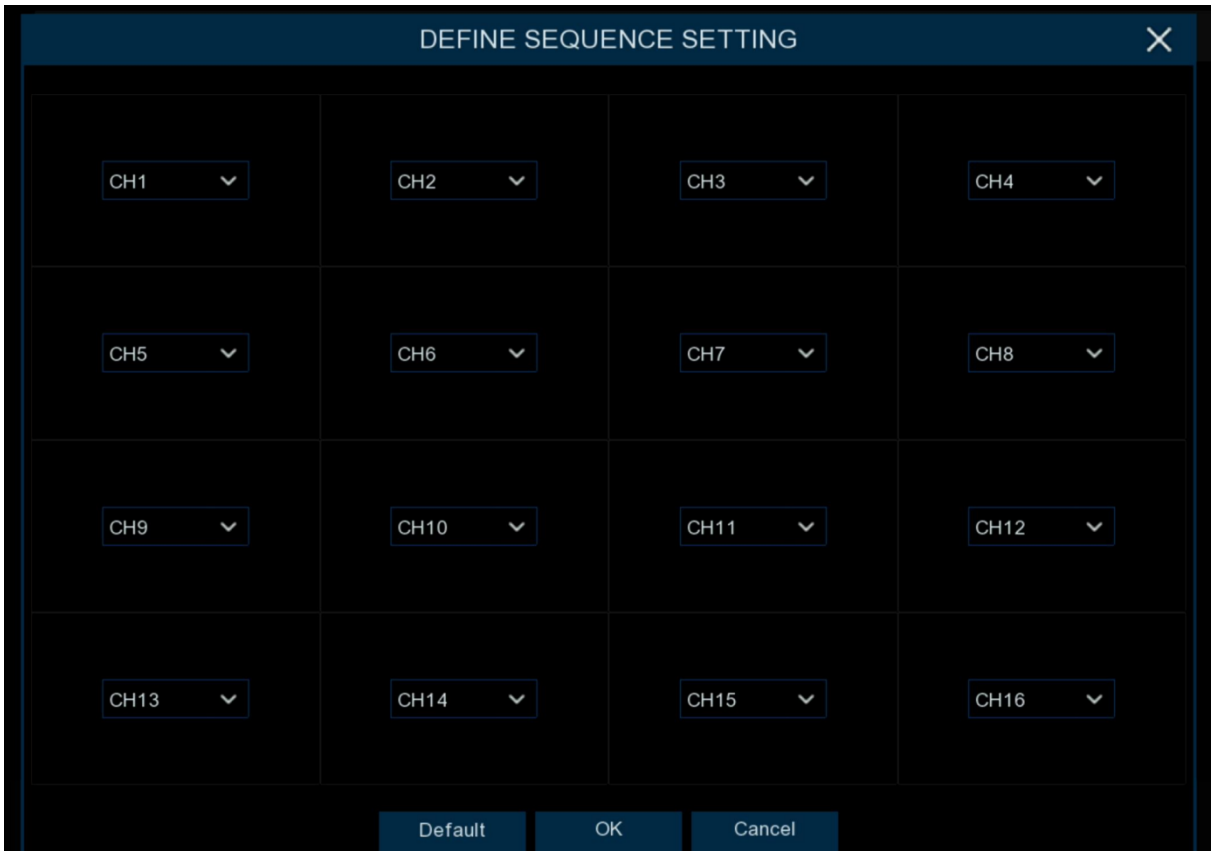
Spot Poll Setting: Select **Dynamic** mode to SEQ channels.





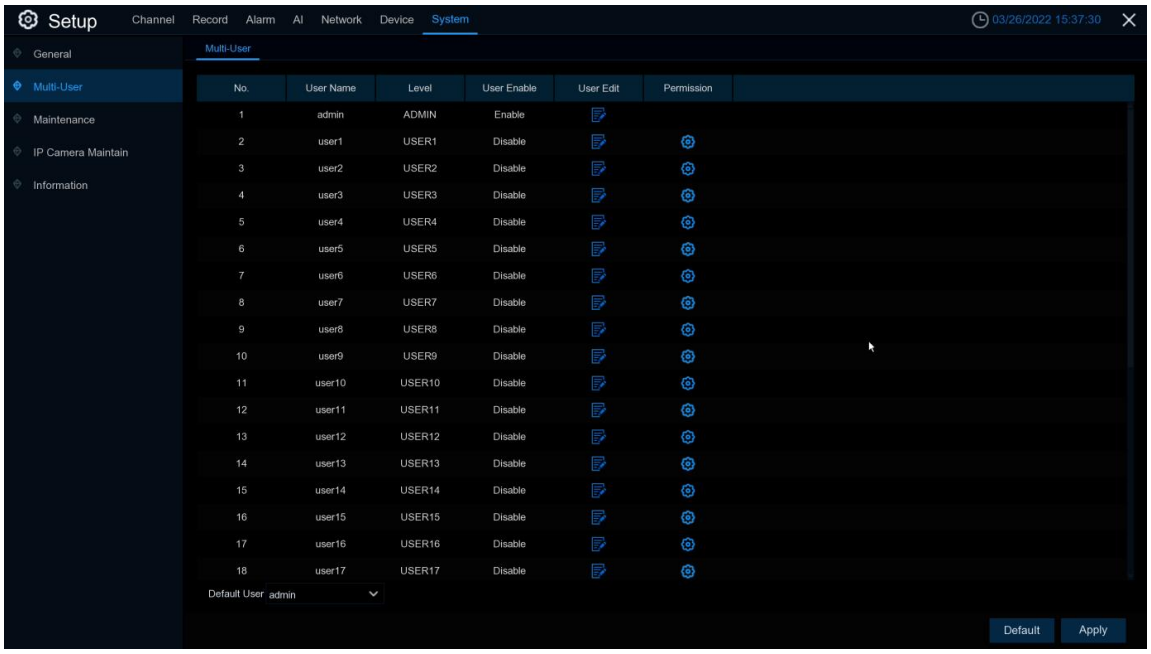
View Mode: Select **Static** mode multi-window number.

Define SEQ Setting: Select **Static** mode each window display.


DEFINE SEQUENCE SETTING
CH1
CH2
CH3
CH4
CH5
CH6
CH7
CH8
CH9
CH10
CH11
CH12
CH13
CH14
CH15
CH16
Default
OK
Cancel

5.7.2 Multi-User

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

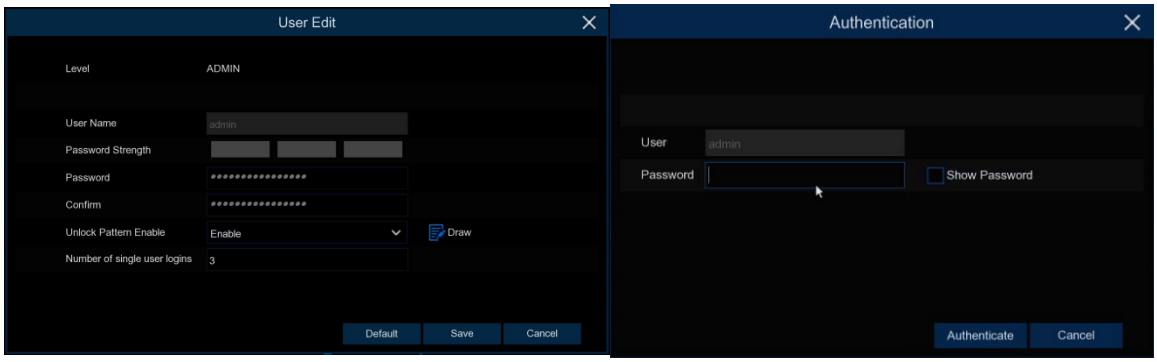


The system supports the following account types:

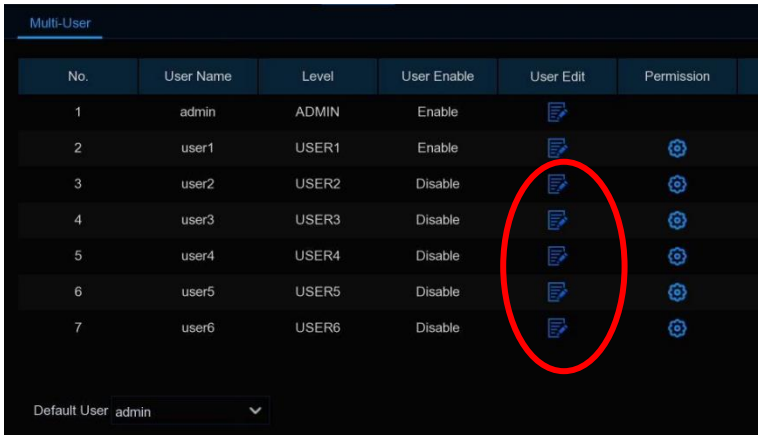
- **ADMIN — System Administrator**: The administrator has full control of the system, and can change both administrator and user passwords and enable/disable password protection. (It won't be allowed to change administrator name.)
- **USER — Normal User**: Users only have access to live viewing, search, playback, and other functions. You may set up multiple user accounts with varying levels of access to the system. (8.2.2 version and above support maximum31 normal user account.
- **Default User**: Default account, the user which default to login when DVR start up.

5.7.2.1 Changing Password and Single User Number

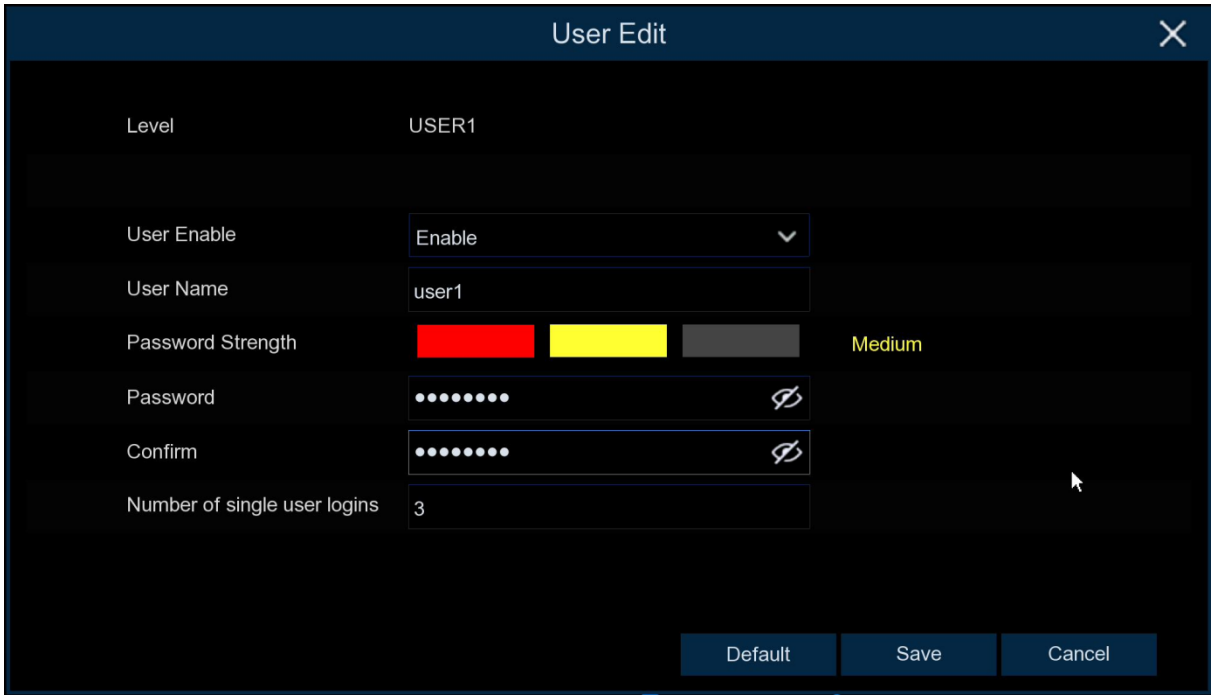
To change the password for the administrator or user accounts, click the User Edit icon . The password must be a minimum of 8 characters and can contain a mixture of numbers and letters. Enter your new password again to confirm, and then click **Save** to save your new password. You will be required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



5.7.2.2 Add New Users



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

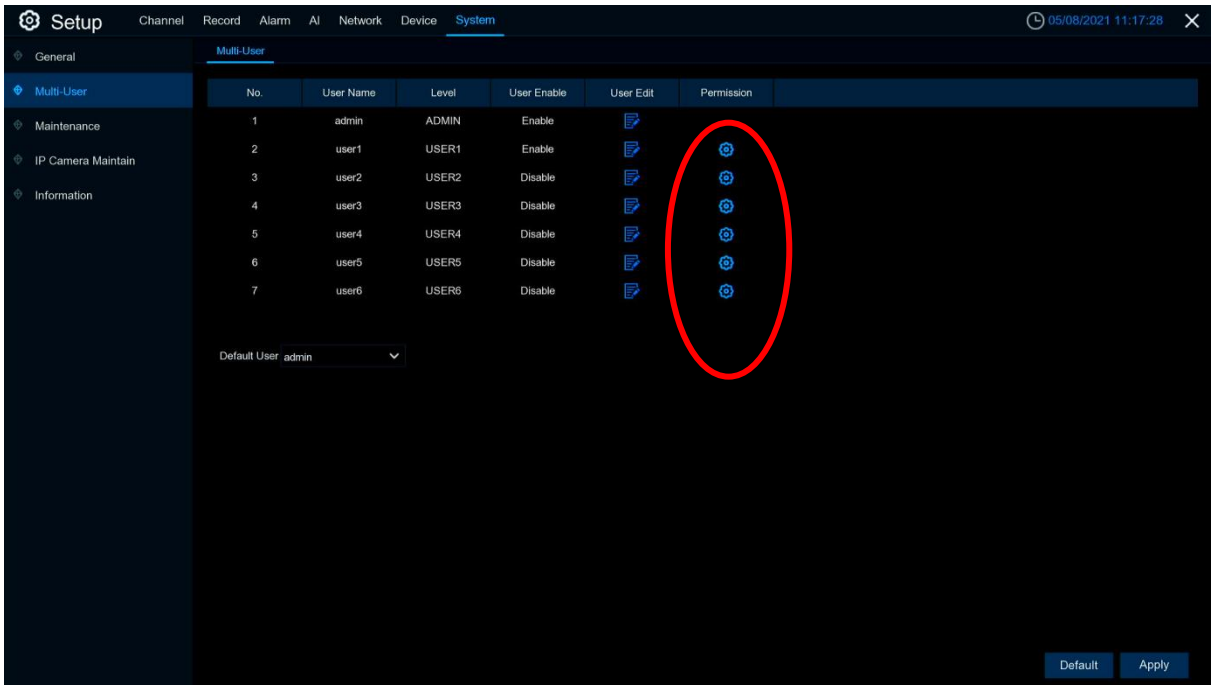


2. Select **Enable** from the drop-down next to **User Enable**.
3. Click the field next to **User Name** to change the user name for the account.

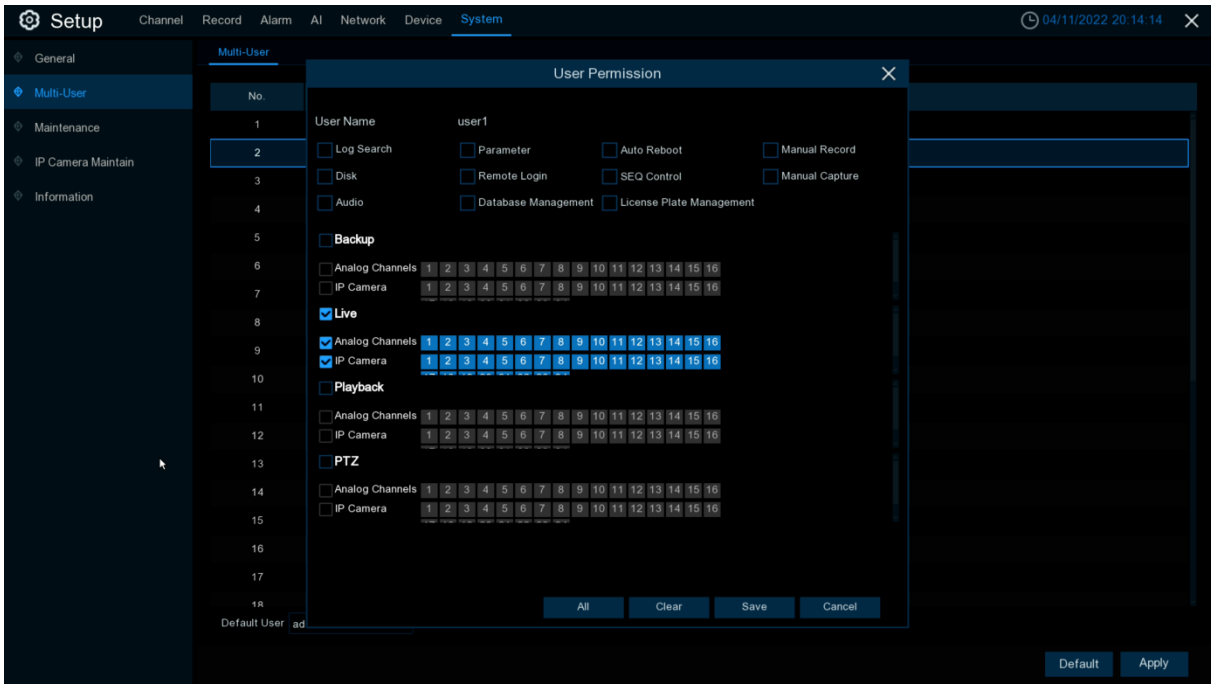
4. Select **Enable** from the drop-down next to **Password Enable**.
5. Click the field next to **Password** to enter the desired password.
6. Click the field next to **Confirm** to reenter the password.
7. Click **Number of single user logins** to set single user logins.
8. Click **Save**. You will be required to input your Admin password to authenticate.

5.7.2.3 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



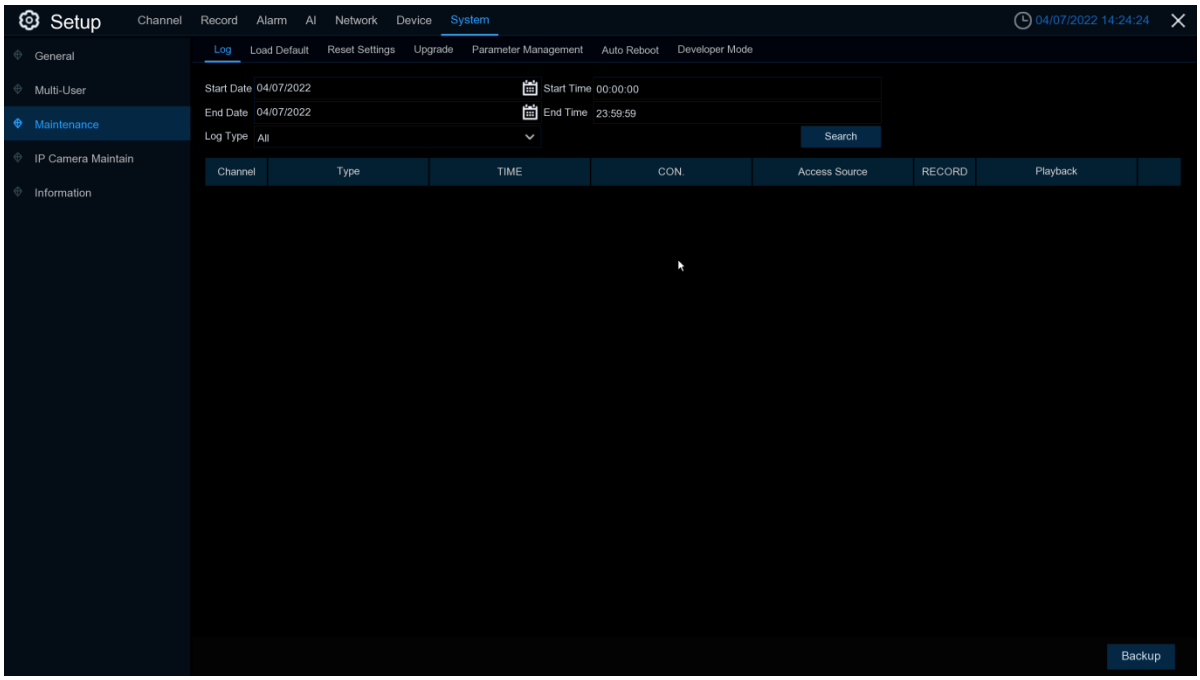
2. Check the boxes next to any system menus or capabilities you would like the user to access. Click **All** to check all boxes. Click **Clear** to check none of the boxes.
3. There is the following permissions to choose from:

- **Log search:** To see all of logs；
- **Parameter**: To set up all of pages parameters;
- **Maintenance:** Operation System version update, load to default settings, device reboot, device shut down, etc.
- **Manual Record**: Manually start the video and stop the video manually.
- **Disk**: Control and mange HDD and U-disk；
- **Remote Login:** Whether have permission to visit DVR remotely.
- **SEQ Control**: View the real -time preview of all channels.
- **Manual capture:** Manually start the grabbing and can stop the video manually.
- **Audio:** Control channel audio and intercom.
- **Database Management**: Whether it can be operated on the AI database
- **License Plate Management:** Whether it can be operated on the License Plate database
- **Backup**: After the enable box "√" in front of "backup" and select-able channels, ordinary users have the permissions of the selected channel video.
- **Live**: After the enable box "√" in front of "Preview" and the passage that can be viewed, the ordinary users have the permissions of the real -time preview of the selected channel.
- **Playback**: After the enable box "√" in front of "video playback" and the selected channel that can be viewed, ordinary users have the permissions of the selected channel video.
- **PTZ:** After the enable box "√" in front of "PTZ" and select-able channels, ordinary users have the permissions of PTZ operations.

4. Click **Save** button to apply your modifications.

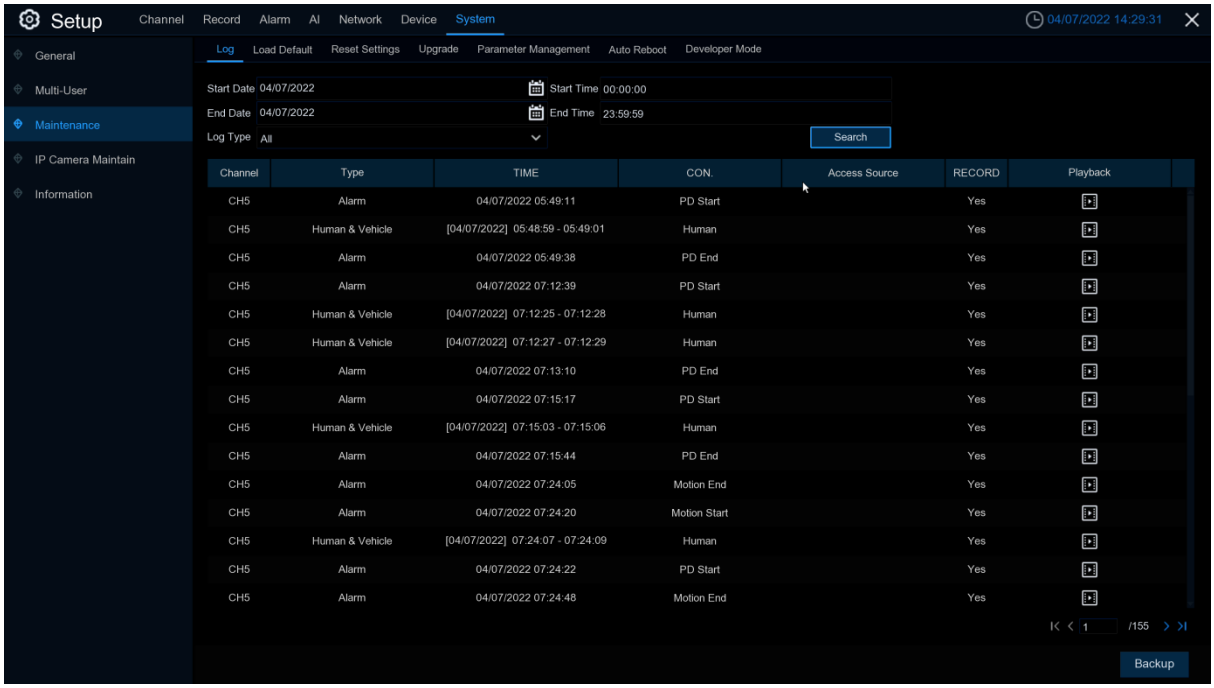
5.7.3 Maintenance

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.



5.7.3.1 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 search and backup:

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 drop-down next to **Log Type**, or select **All** to see the entire system log for the selected time period.

System: system setting, reboot, auto reboot, upgrade, time modify and NTP.

Configuration: IPC preview control, Privacy areas settings, recording mode settings, recording plan settings, main code flow settings, network settings, sub -code stream settings, email settings, color settings, mobile detection settings, hard disk settings, multi -user settings, NTP settings, image control, mobile, mobile Code flow settings, RTSP settings, IP filter settings, system restoration of factory settings, audio settings, video blocking alarm settings, export settings and import settings.

Alarm: Motion start, Motion end, IO start, IO end, PID start, PID end, LCD start, LCD end, SOD start, SOD end, PD&VD start, PD&VD end, FD start, FD end, CC start, CC end, CD start, CD end, QD start, QD end, Sound Detection start, Sound Detection end.

Account: Login, logout and switch users.

Recording: Search, playback and records backup.

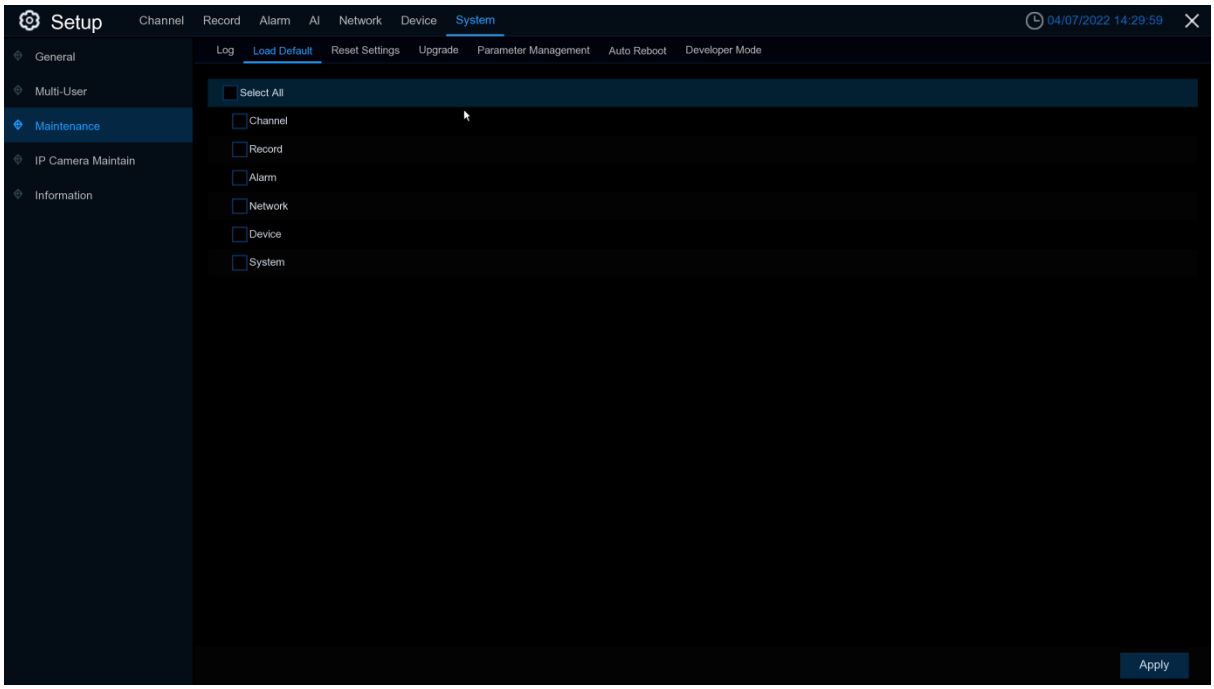
Storage: Format HDD, HDD Full and HDD error.

Network: Network down, Network up, Network error and Network mode changes

4. **Search**
5. Browse the system log from the time period：
   - Click **Playback** to playback the event.
   - Using menu right down |< < / > >| button to switch different pages.
6. Click **Backup** to create system log backup. Make sure your u disk is connected to DVR USB port.
7. Show backup drive menu, lead to backup folder, and click **OK** button to start.

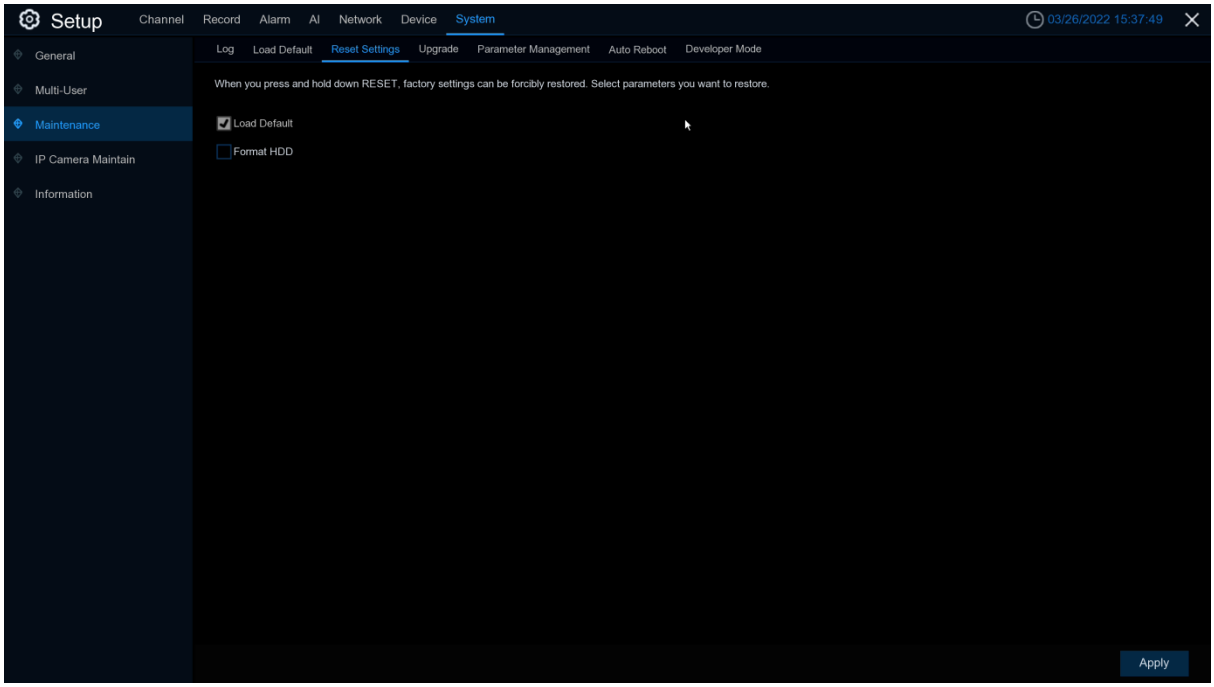
5.7.3.2 Load Default

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.

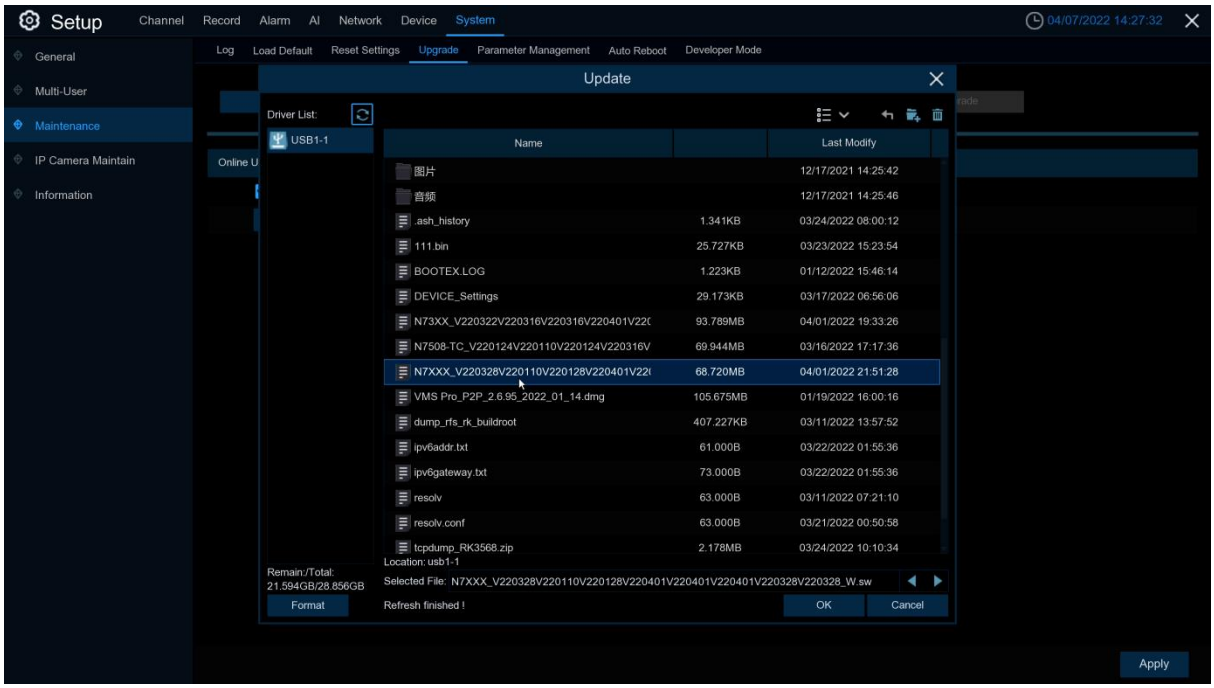
5.7.3.3 Reset Settings



Format HDD: Set up to format HDD when make setting to default.

5.7.3.4 Upgrade

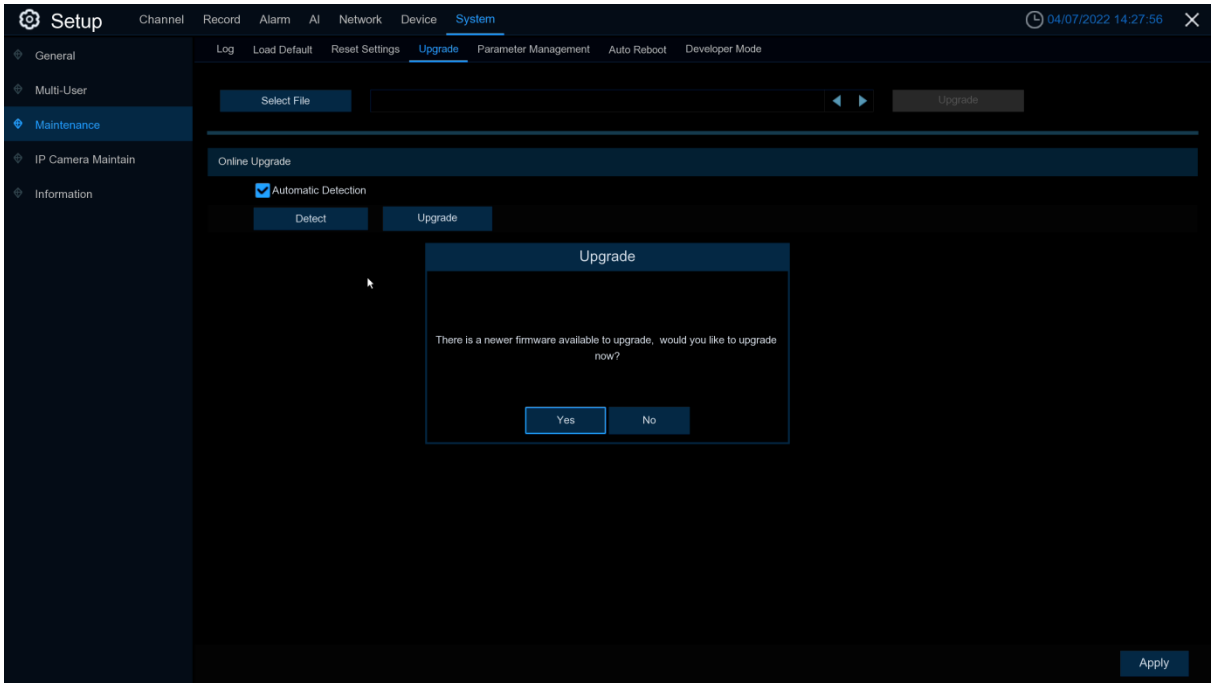
5.7.3.4.1 U disk file upgrade



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.

Note: You can optionally upgrade firmware using **UVS Device Utility.** See *Chapter 5 Upgrading Firmware* in *UA-XVR1620 Quick Start Guide.*

5.7.3.4.2 Upgrade



After uploading the upgrade firmware to the server path completely, click **Detect** button to detect online upgrade file manually. Turn on **Automatic Detection**---Detect the upgrade file automatically.

1. When turn on **automatic detection**, the DVR will check whether it's maintenance reboot while power on. If so, pass to detect there is new firmware package. (Judgment method: The system current time is 30 minute later than the auto reboot maintenance time setting.) If it's not reboot because maintenance, the detection will be running after 5minute later. While there is new firmware, the upgrade bar will show "There are new firmware available", the user Click this channel upgrade, it'll download firmware.
2. Turn on **Automatic Detection**, it'll detect whether there are new firmware periodicity. If so, the upgrade page will show "There are new firmware available", the user click this channel upgrade, it'll download firmware. The detection cycle is the random time after reboot period time 18~23 hours(including the maintenance, the unit is second).This cycle is from the device power on randomly and won't change this detect cycle until the device power off.
3. During the system running, the user can Click **Detect** to check whether there is new firmware. After clicking, it'll be a box prompt is detecting, after the detection is complete, the status bar display the result.

> **Note:** Detect manually won't influence the detection cycle.

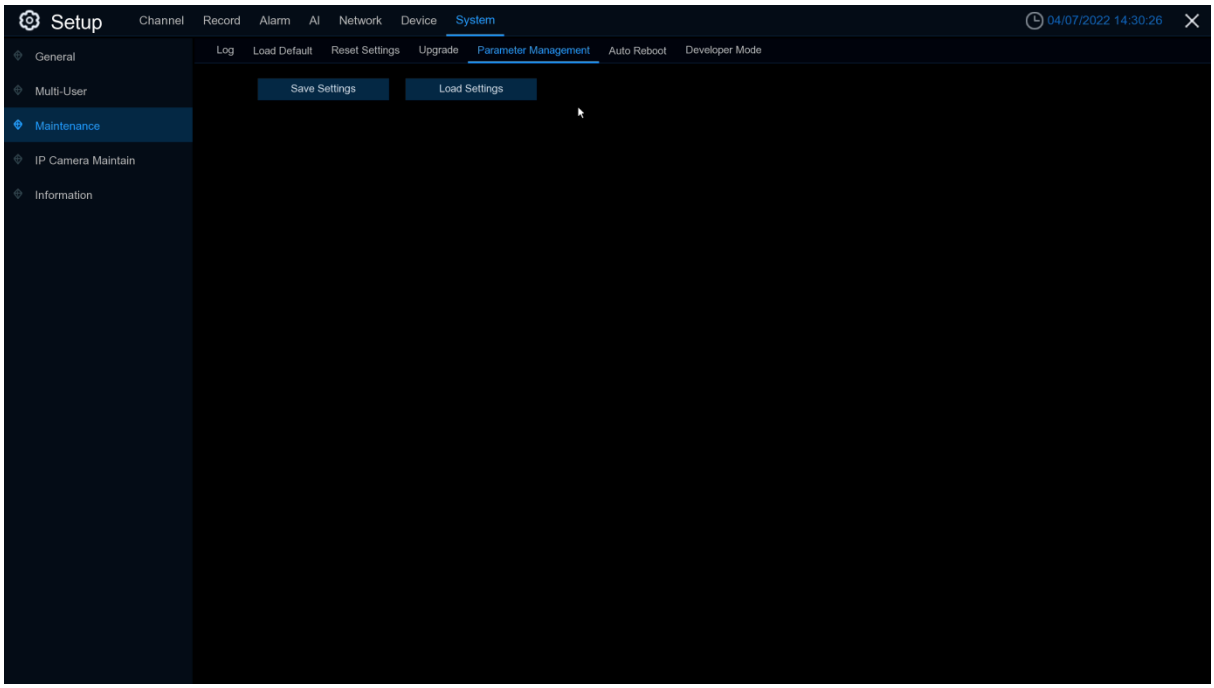
4. **Automatic Detection** --- From turn on to turn off, the detection cycle will stop.
   Automatic Detection --- From turn off to turn on, the detection cycle will start. The detection cycle is randomly in this time point 18~23hours later. After turning on the button, the detection will start 1 minute delay.

Note:

1. If during this minute, the user turns off the menu again, it'll stop counting and won't detection any more until turn on this function again.
2. The neutral program does not currently support FTP online upgrades.

5.7.3.5 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.

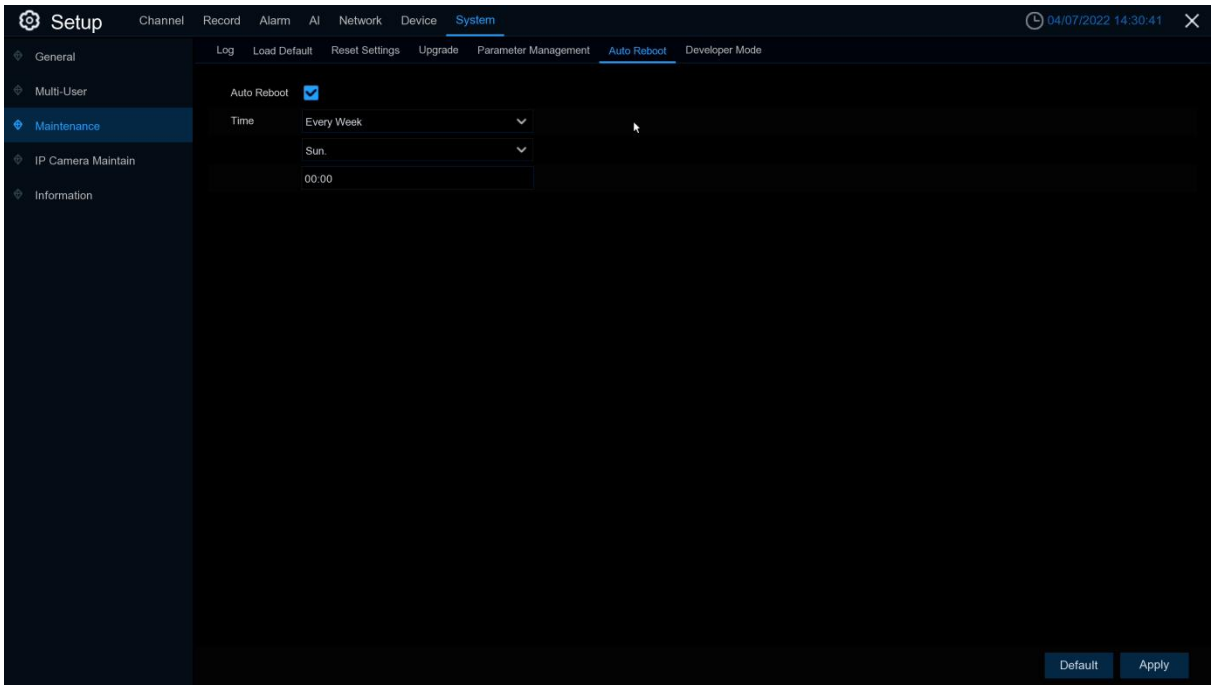


Save Settings: Click to save the DVR current system settings to the USB device. You will be required to input the Admin password to authenticate.

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.

5.7.3.5 Maintenance

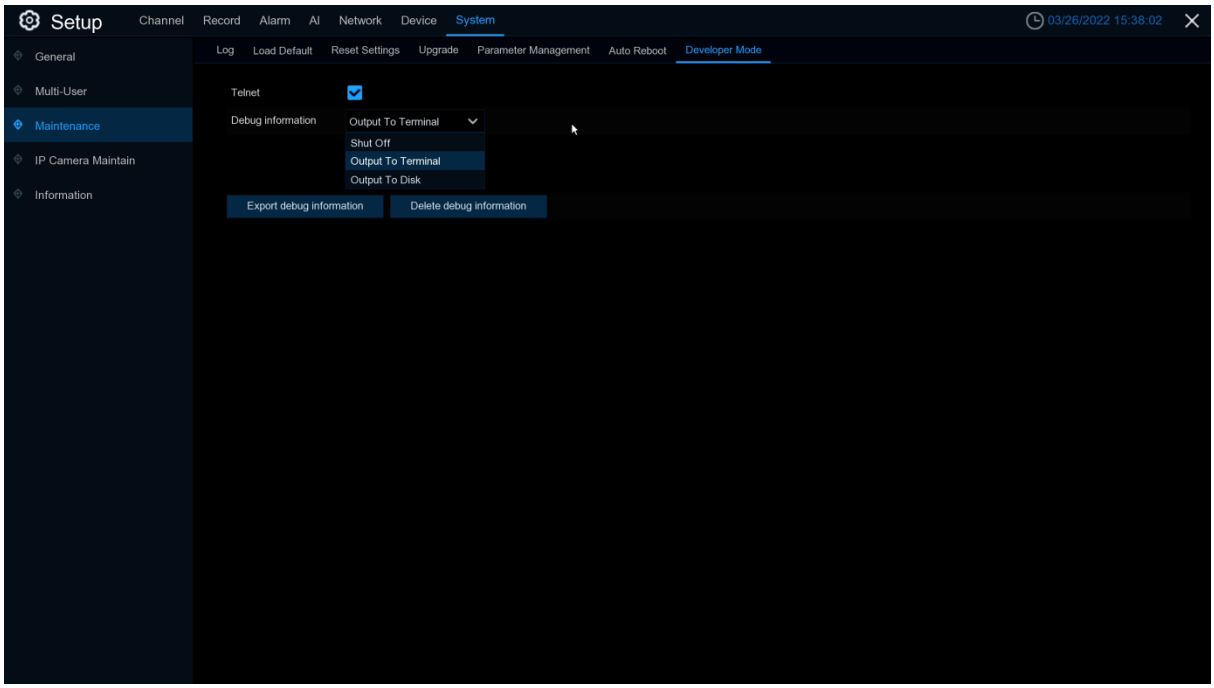
This menu allows the system to auto reboot the DVR regularly. It is recommended to leave this function enabled, as it maintains the operational integrity of your DVR.



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

5.7.3.6 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

Debug information: Select log save position

Shut Off: Don't save serial logs

Output To Terminal: Output serial logs to terminal

Output To Disk: Save serial logs to HDD.

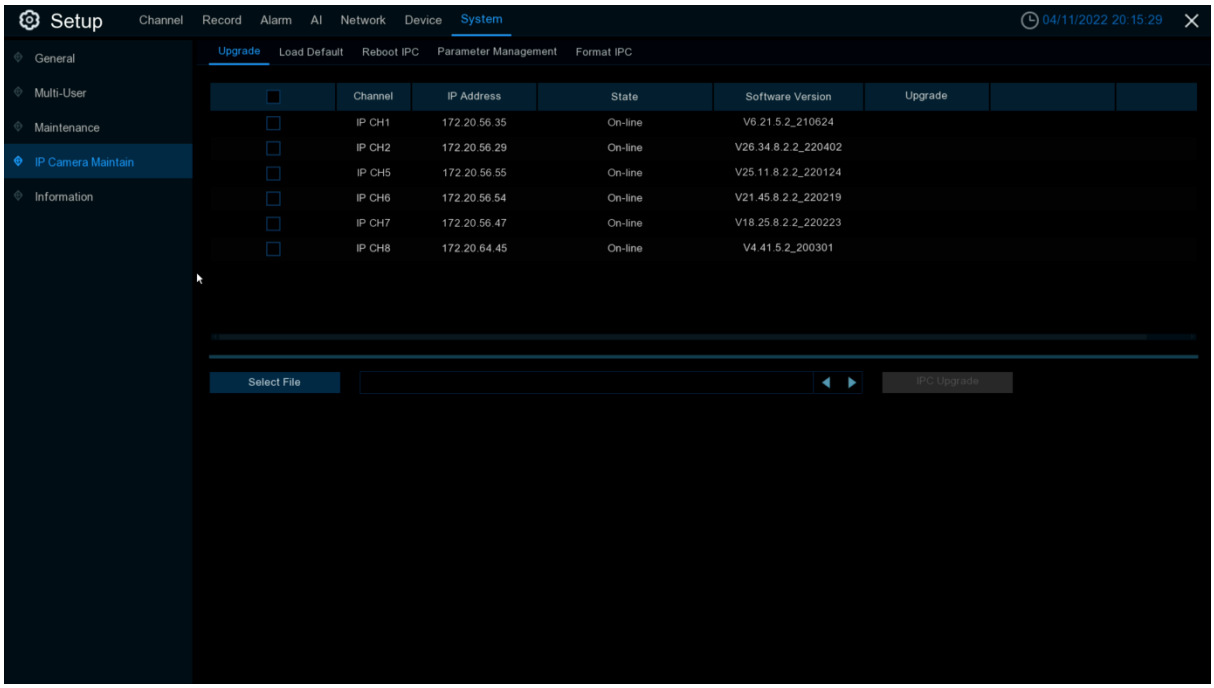
Export debug information: Export serial logs to u disk drive.

Delete debug information: Delete collect serial logs.

5.7.4 IP Camera Maintain

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

5.7.4.1 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**.
1. 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.

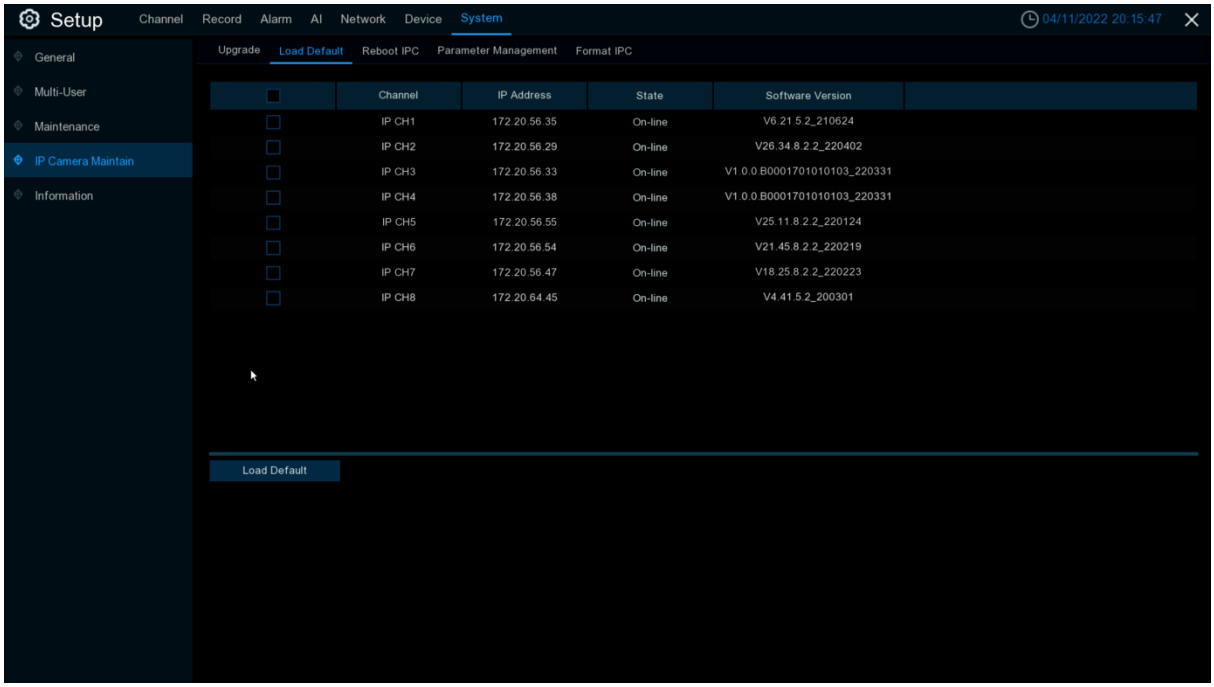
Auto Upgrade: Some IPC supports upgrading using the upgrade package in FTP. You only need to open FTP in the IE menu of IPC. Then upload the upgrade package to upgrade IPC FTP on DVR. Select **Enable / Disable** to enable or disable the feature.

Automatic Detection: 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 please view 5.7.3.4.2 Upgrade). If yes, you will be prompted whether to upgrade **Enable/Disable** this function.

Detect: Manually check for the latest upgrade package.

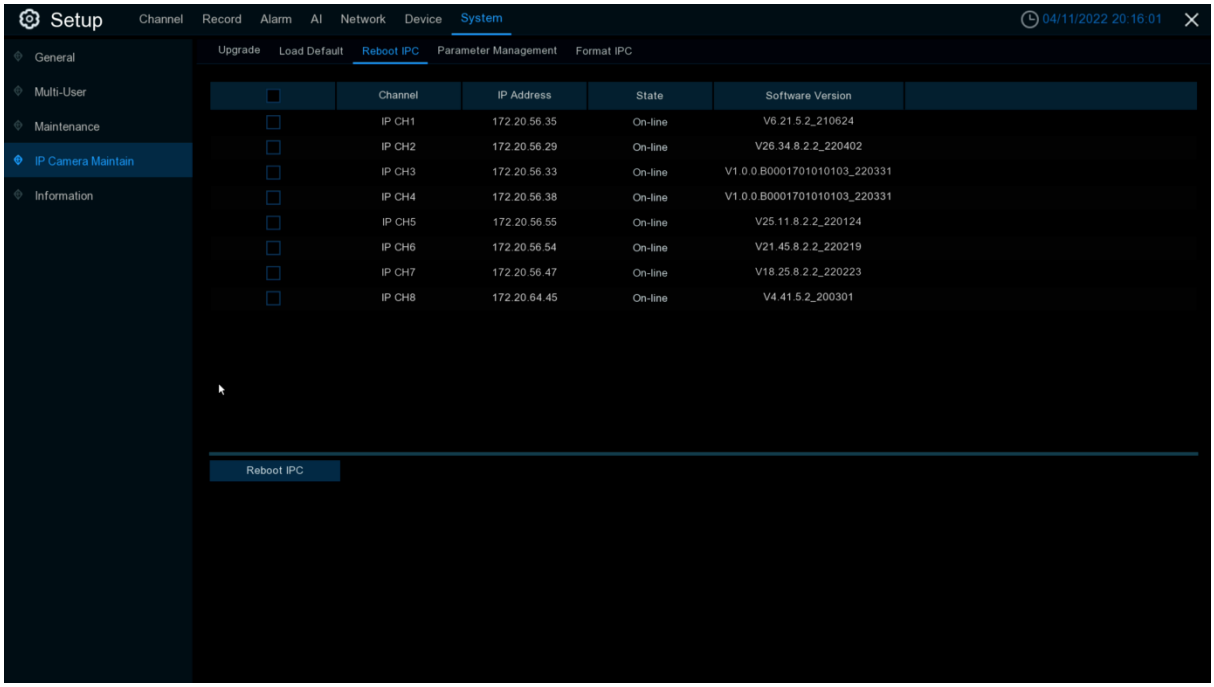
Upgrade: If the latest upgrade package is detected, Click to upgrade.

5.7.4.2 Load Default Settings for IP Camera



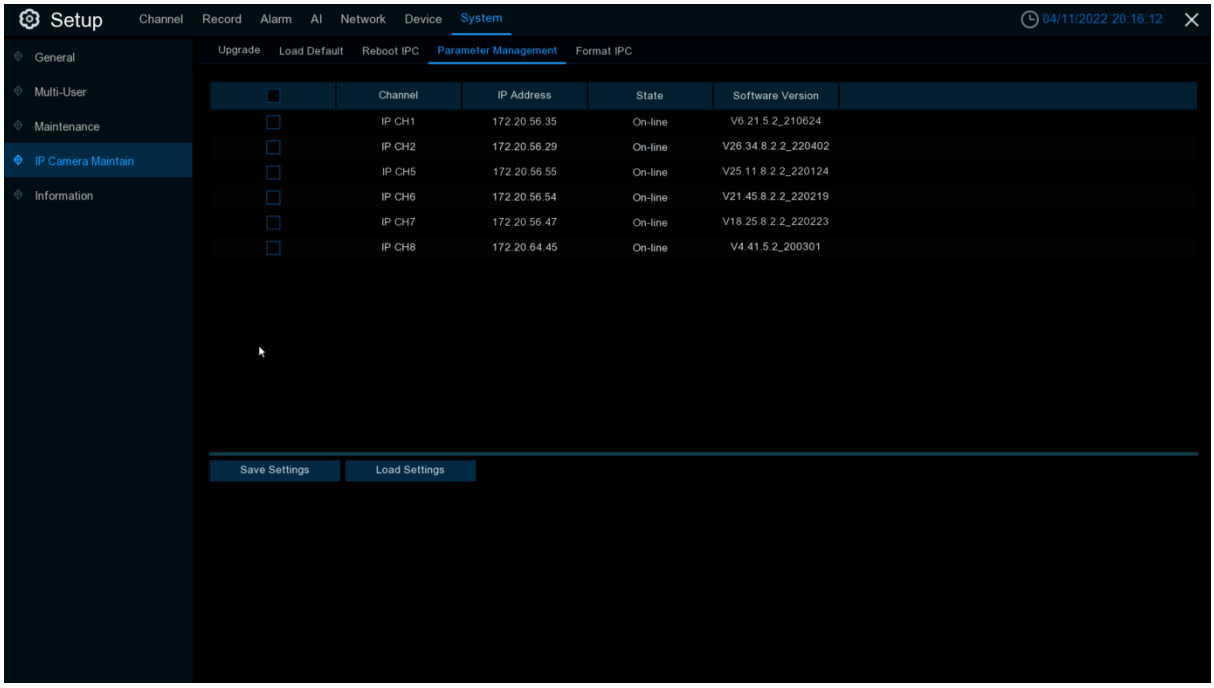
1. Choose the IP cameras you want to restore.
2. Click **Load Default** to restore settings. You will be required to input the Admin password to authenticate.

5.7.4.3 Reboot IPC



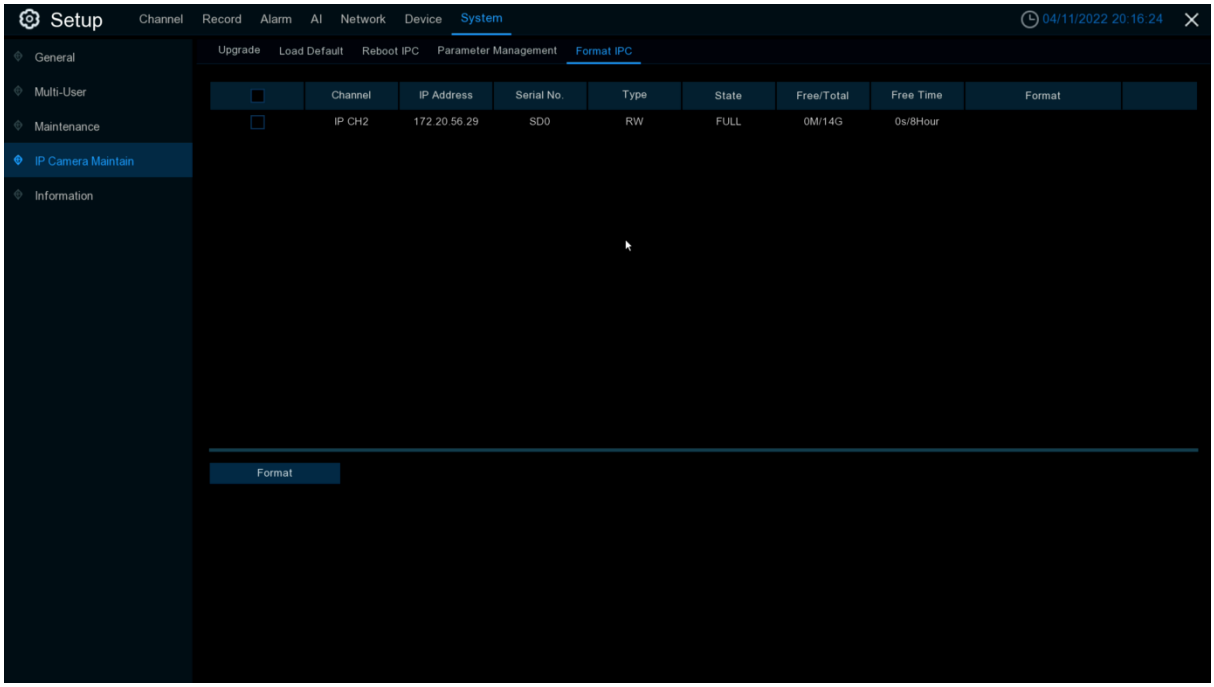
You can restart IPC in this menu. Check IPC and Click **reboot IPC.**

5.7.4.4 IPC Parameter Management



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.

5.7.4.5 Format IPC



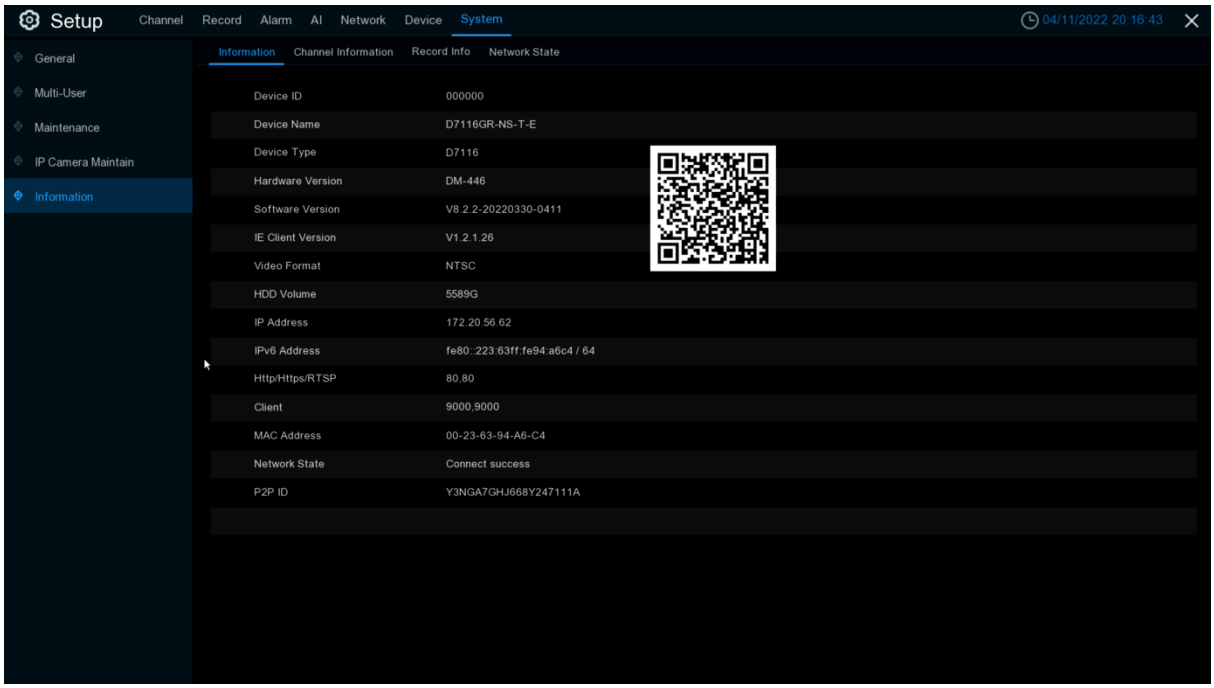
This function can detect SD memory card connected to an IPC with the API protocol, and Click Format's SD card for the IPC that can be formatted.

5.7.5 System Information

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

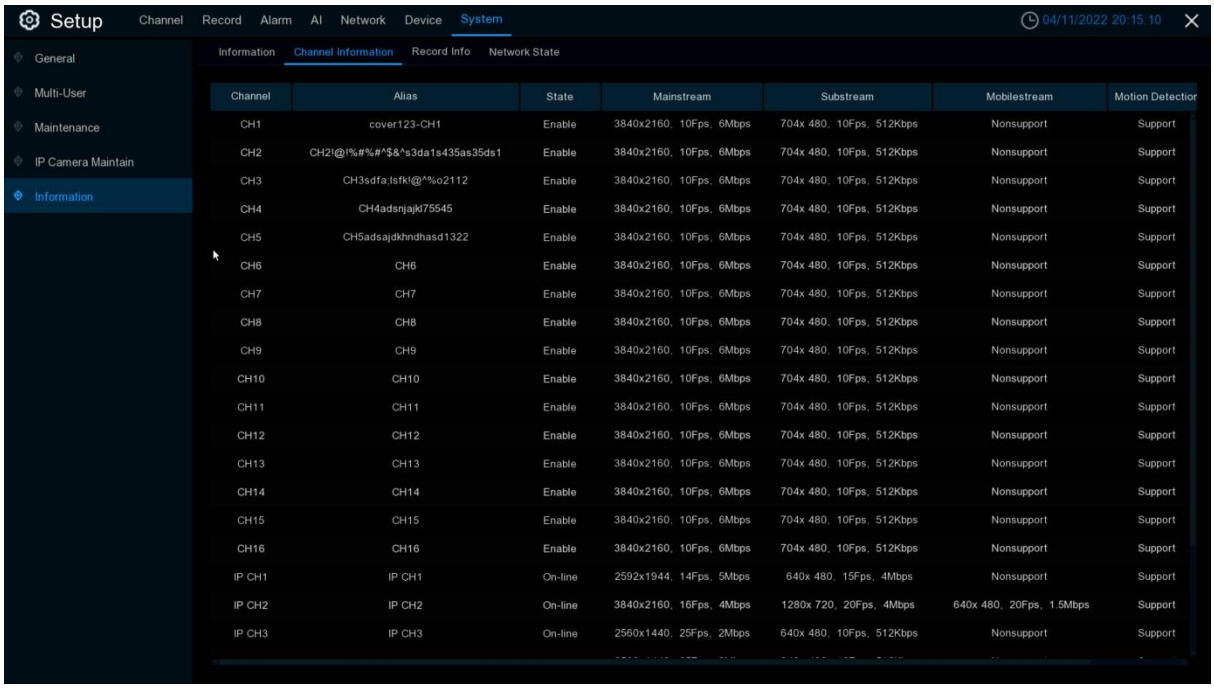
5.7.5.1 Information

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



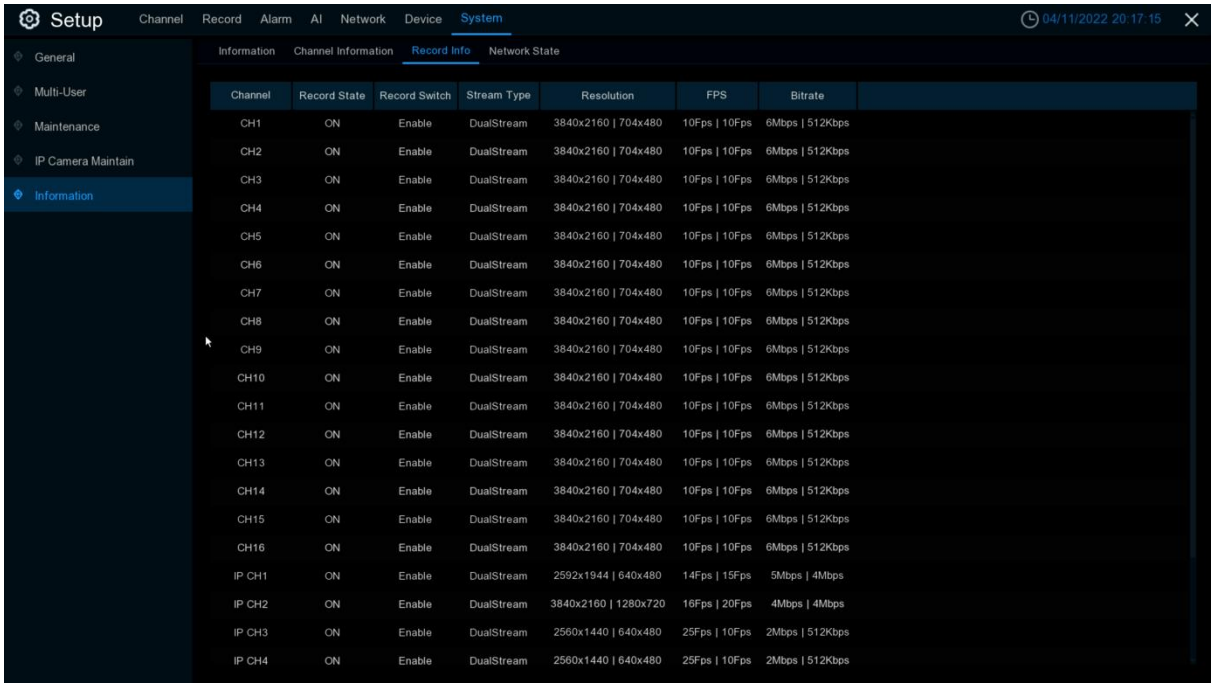
If your DVR supports P2P function, you will find the P2P ID & P2P QR code in the information page. You can scan this QR cord with mobile app to remote view the DVR.

5.7.5.2 Channel Information



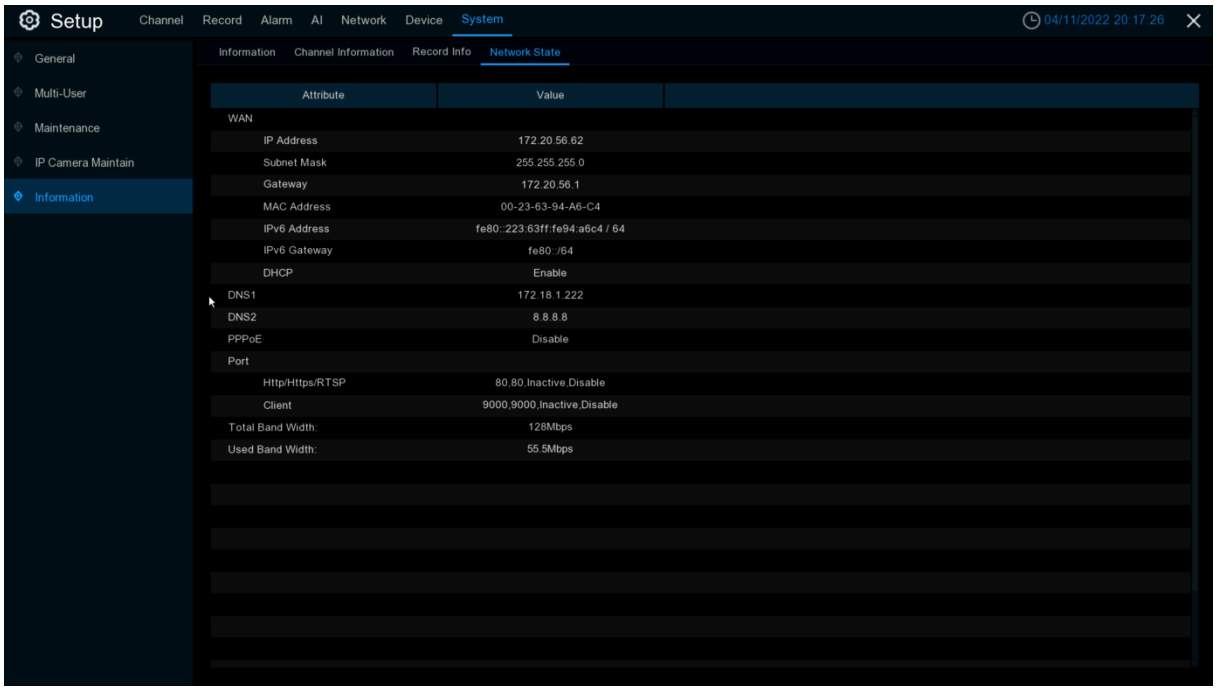
View channel information for each connected camera such as alias, mainstream and substream recording specifications, motion detection status & privacy zone.

5.7.5.3 Record Information



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

5.7.5.4 Network State



View network information.

Total Band Width: It shows the DVR's total input band width for IP cameras.

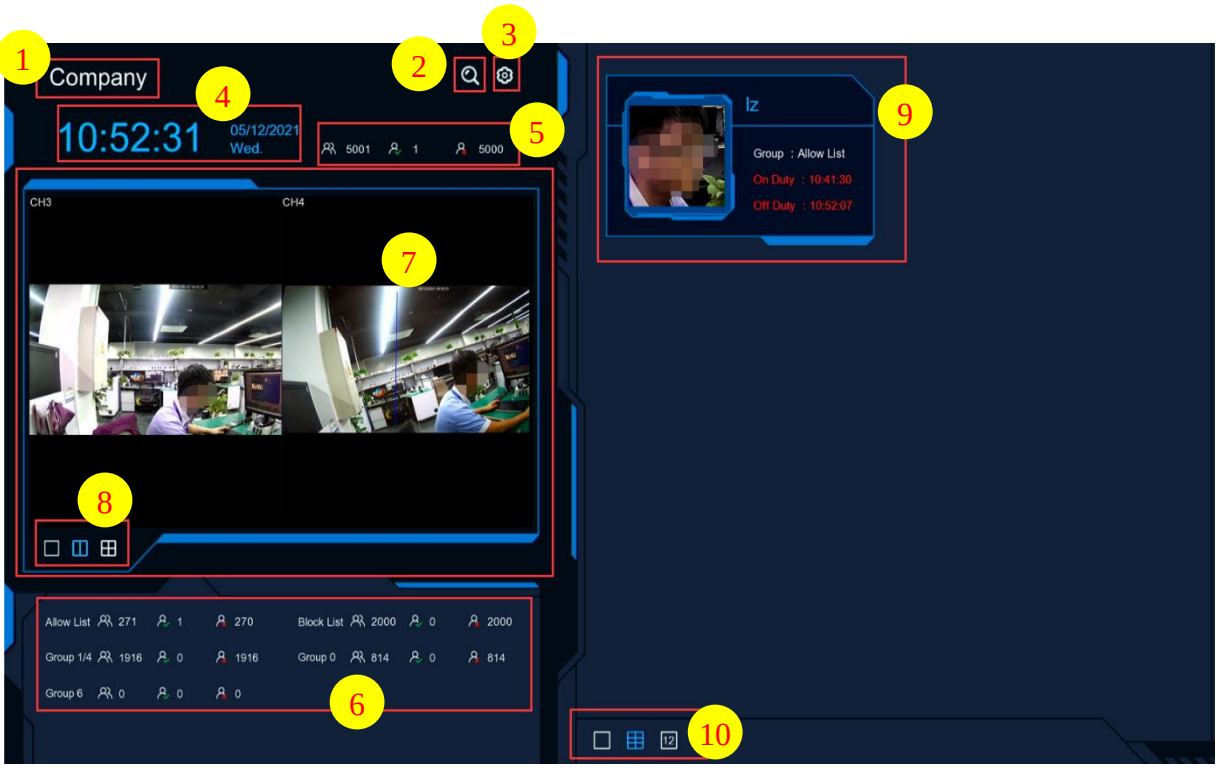
Used Band Width: It shows the used band width of IP cameras.

Chapter 6 AI Scenario

AI scenario application function you real view of the face attendance, more intuitive and convenient to view the real situation.

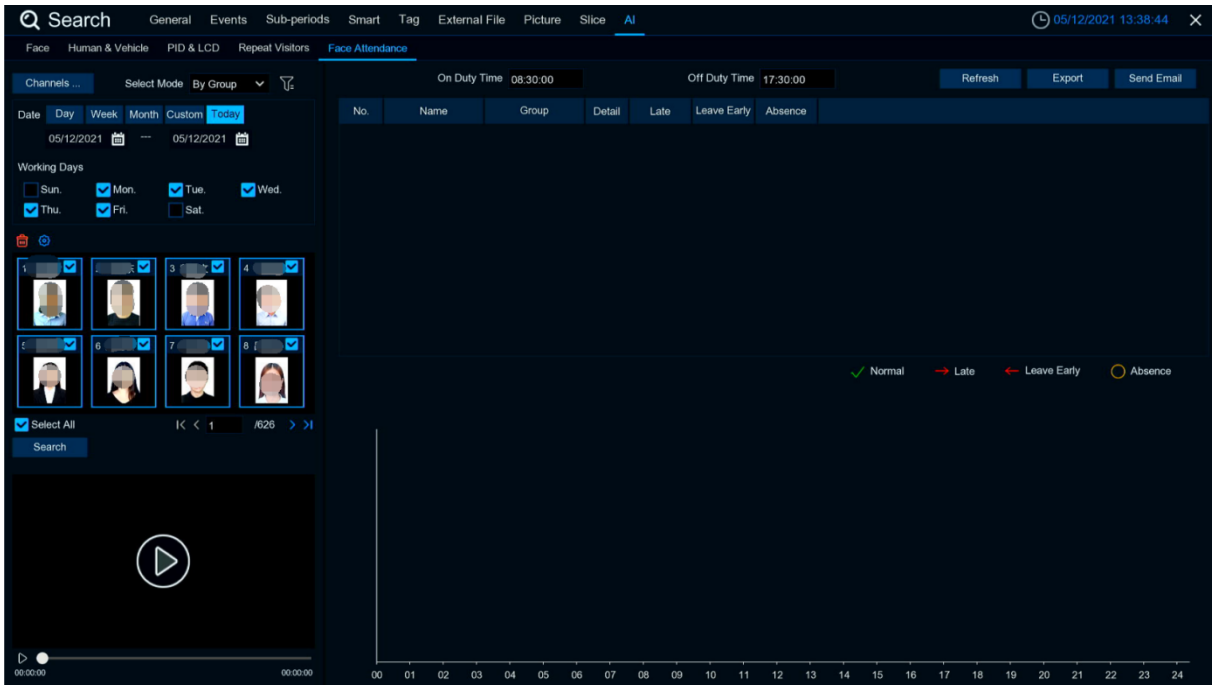
6.1 Face attendance

Face attendance screen, which can record face attendance in real time and check the attendance results in real time.

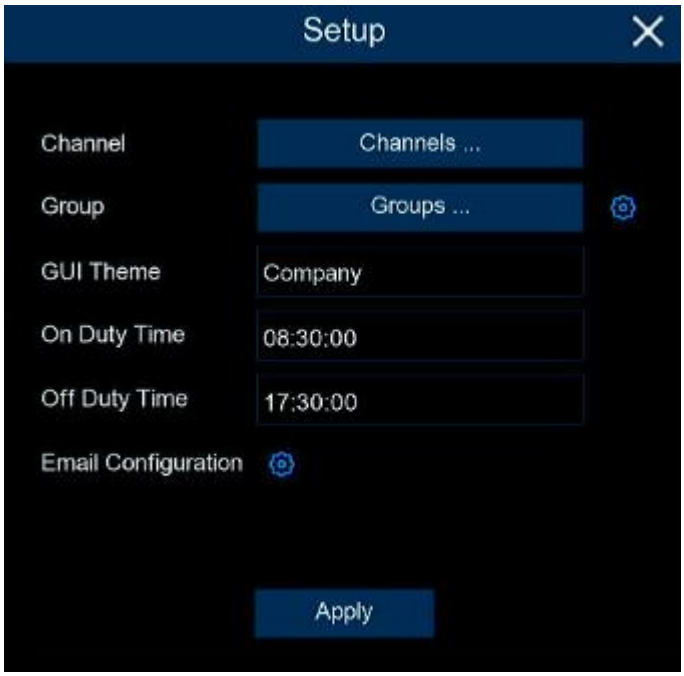


1. Interface theme of face attendance.

2. Click to enter the playback face attendance search interface, and select the face pictures in the face group by default.



3. Click to enter the setup interface.

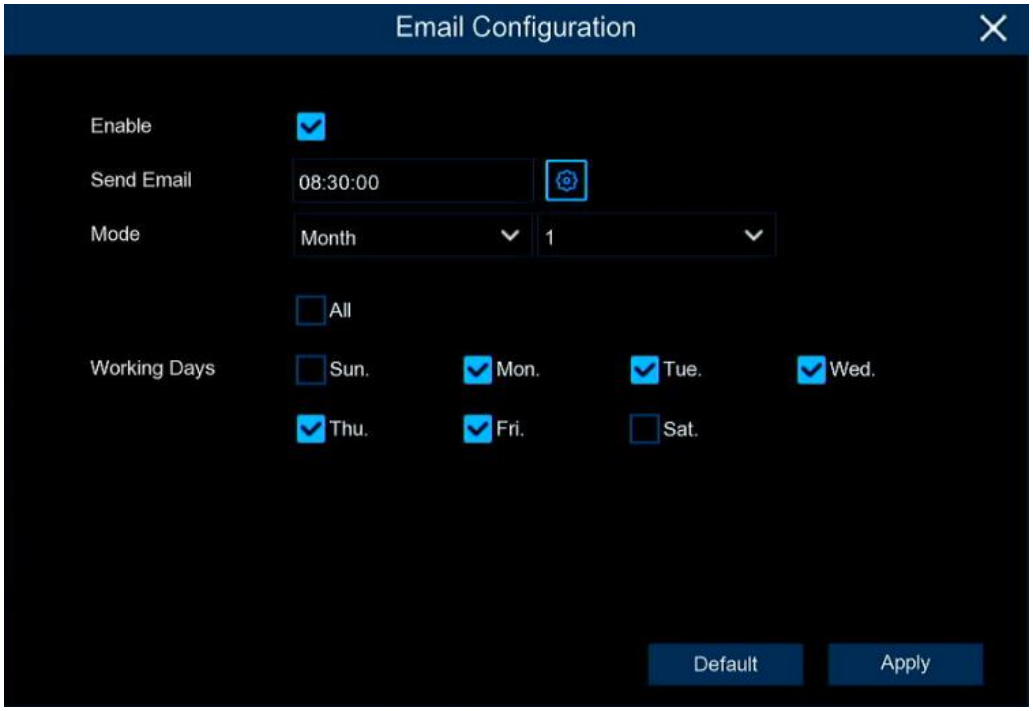


Channels: Channel selection

Groups: Select the faces of those face database for attendance, and Click to pop up to the AI face database Settings interface.

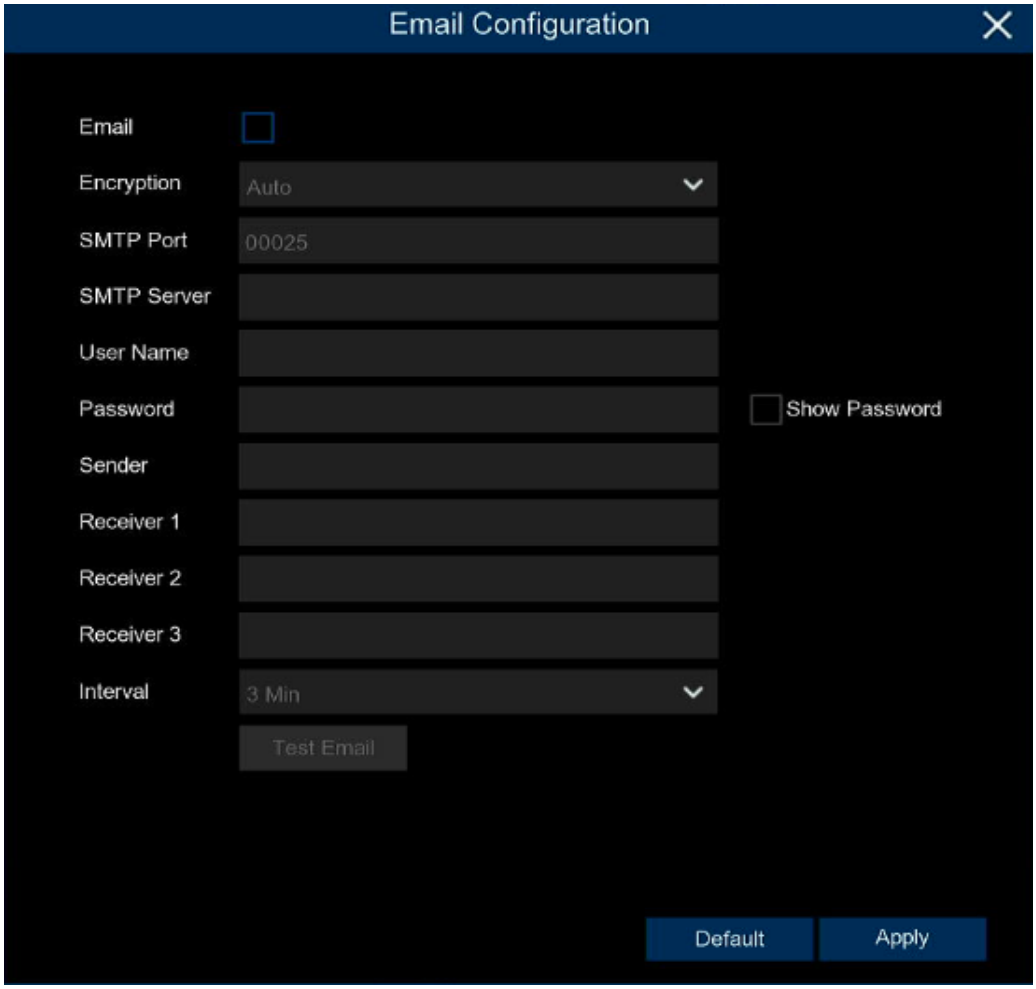
GUI Theme: Main interface diagram
On Duty Time: Set up the duty time
Off Duty Time: Set up the off duty time

Email Configuration: Send face email configuration, click to send face attendance result email configuration.



Enable: Turn on email to send face attendance results (the attendance result is a form file)

Send Email: Set the time of sending the face attendance result email, Click the pop-up system email setting interface on the right side to configure the system email. Please view 5.5.3.1 Email Configuration.



Mode: The mode of sending face attendance results, Day、Week and Month

Day: Send it once a day, and send you yesterday's face attendance results.

Week: Send once a week, you can choose the week to send sent face attendance results for the email time forward a week. For example:

When an email is sent on Monday, the attendance record is sent on last Monday and last Sunday.

When sending an email on Tuesday, the attendance record is last Tuesday to Monday.

Month: Send once a month, you can choose the day of each month to send the sent face attendance results for sending the email time pushed one month forward. For example：

When an email is sent on the 10th of each month, the attendance record is sent from the 10th of last month to the 9th of this month.

if the email is sent on May 10th, the attendance record sent is the attendance record from April 10th to May 9th.

Working Days: Select a working day, check **All**, every day is a weekday

Apply: Click **Apply** to save the settings

Default: Send attendance Mail Settings Recovery default

1. Displays the current date and time
2. Current total number of people attendance situation

Total number of attendance required

Number of attendances

No attendance

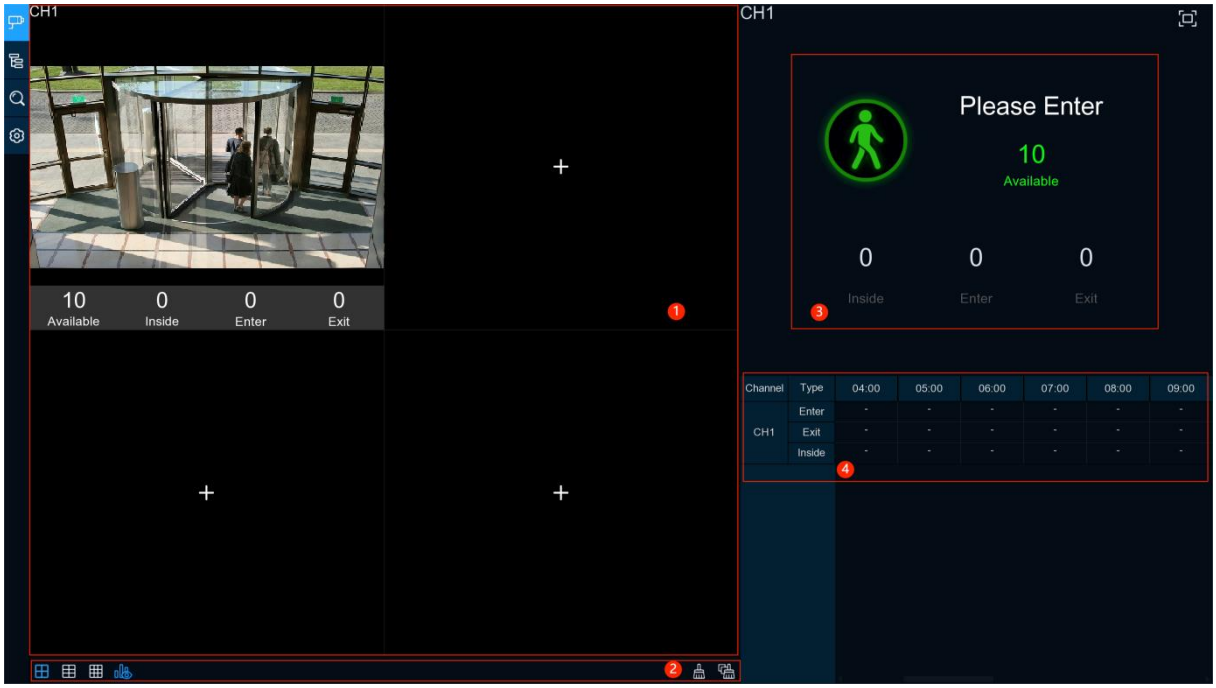
1. The attendance status of each face group
2. Channel has image, selected **Channels** to choose channel
3. Select the number of graph windows, single window , two windows , four windows .
4. Face real-time attendance push, display attendance face picture, name, from the group name, work attendance time and off-work attendance time.
5. The interface also displays the maximum number of face attendance pushes with 1 , 6 , and 12 .

6.2 Cross Counting

This is an AI application based on cross-count functions that helps control the attendance of customers / visitors / vehicles in public places such as restaurants, parks, zoos, theaters, museums, and parking lots.

6.2.1 Channel

Count and view real-time results through a single camera. Mainly used for small places with single entrances and exits.



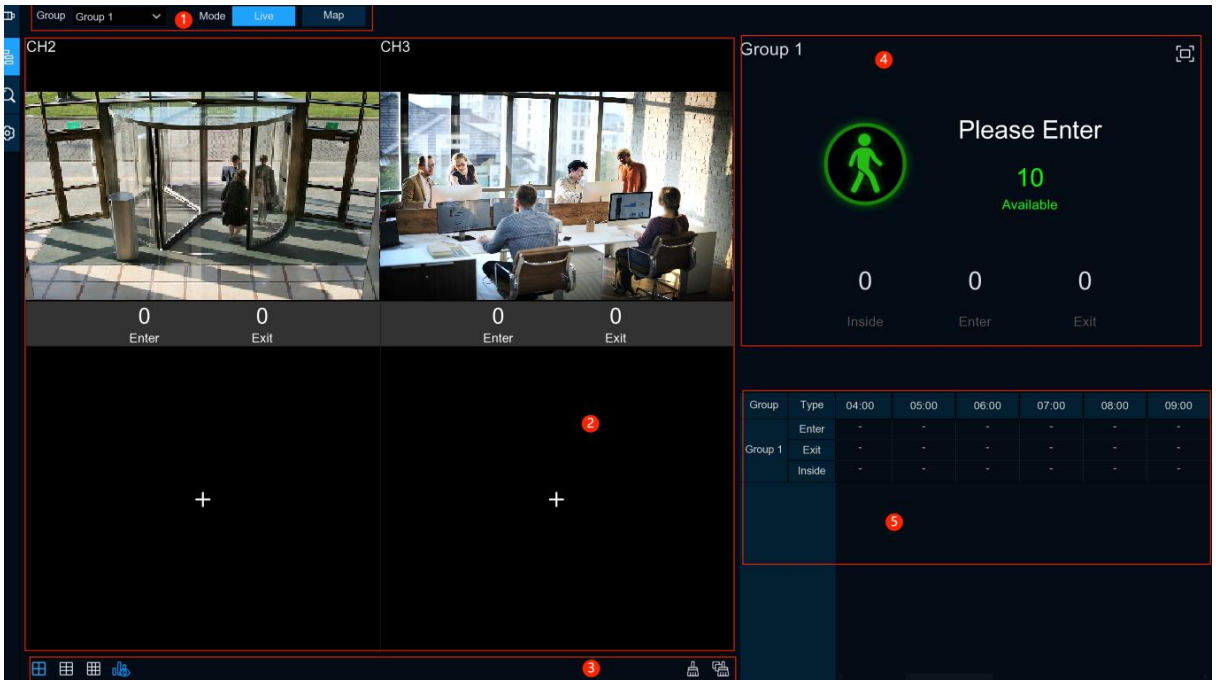
1. Channel drawing and real-time line crossing statistical data, the drawing channel can be selected in **Channels;**

Available: Number of remaining allowed
Inside: Current existing quantity in the control area
Enter: Number of recorded entries
Exit: Number of departures recorded

2. Select the number of drawing windows, four windows , six windows , nine windows ; click display / hide the statistics under the channel; click to clear the current selected channel statistics. Click to clear all the channel statistics.
3. Real-time count data information, click to display the total statistics on the full screen.
4. Data and exit information of each channel in each time period.

6.2.2 Group

Statistics and view real-time results by group. It is mainly used in large places with multi-channel entrances and is monitored by multi-channel cameras.



1. Group can select the displayed group information displayed, Live displays the channel preview screen and statistics, and Map shows the map information;
2. Channel drawing and real-time line crossing statistical data, select in **Group** to select each group drawing channel;

Enter: Number of recorded entries

Exit: Number of departures recorded

3. Select the number of drawing windows, four windows , six windows , nine windows ; click display / hide the statistics under the channel; click to clear the current selected channel statistics. Click to clear all the channel statistics.

4. Real-time count data information, click to display the total statistics on the full screen.

   Available: Number of remaining allowed

   Inside: Current existing quantity in the control area

5. Data and entry and exit information of each group and each time period.

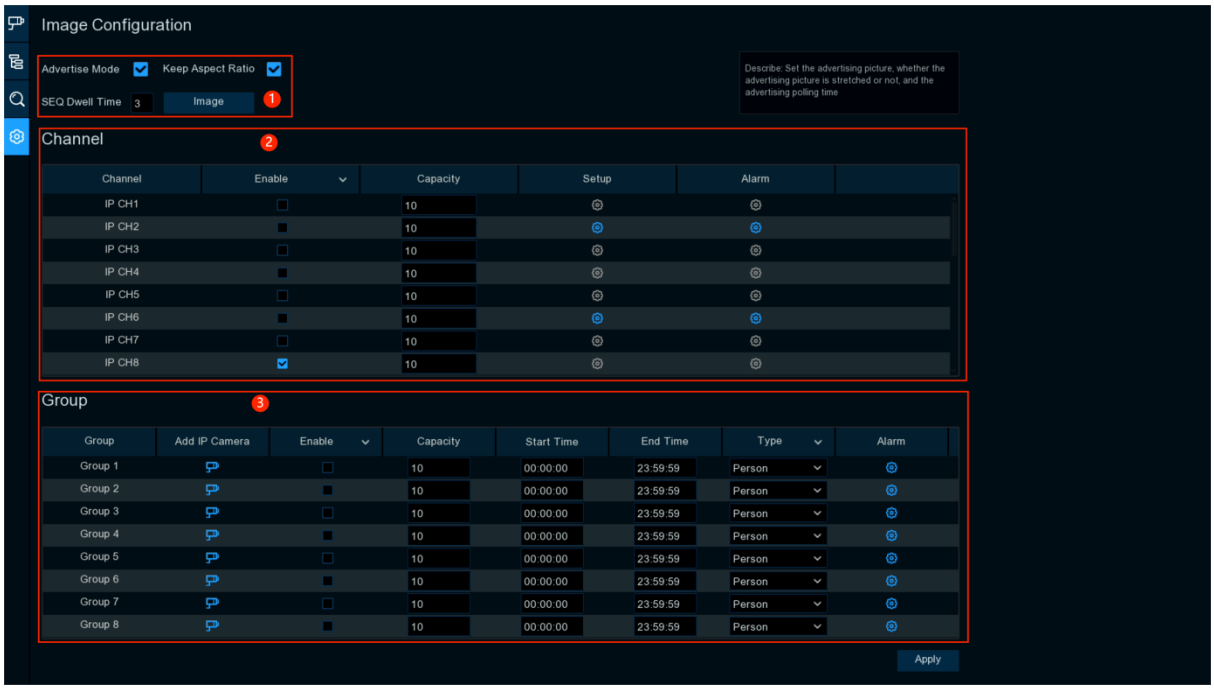
(Graph 2)

6. Map information configuration, click to add a map picture, click to set the position of the IPC schematic map on the map, click to display the map information and the Cross -Counting statistics of the current group in the full screen

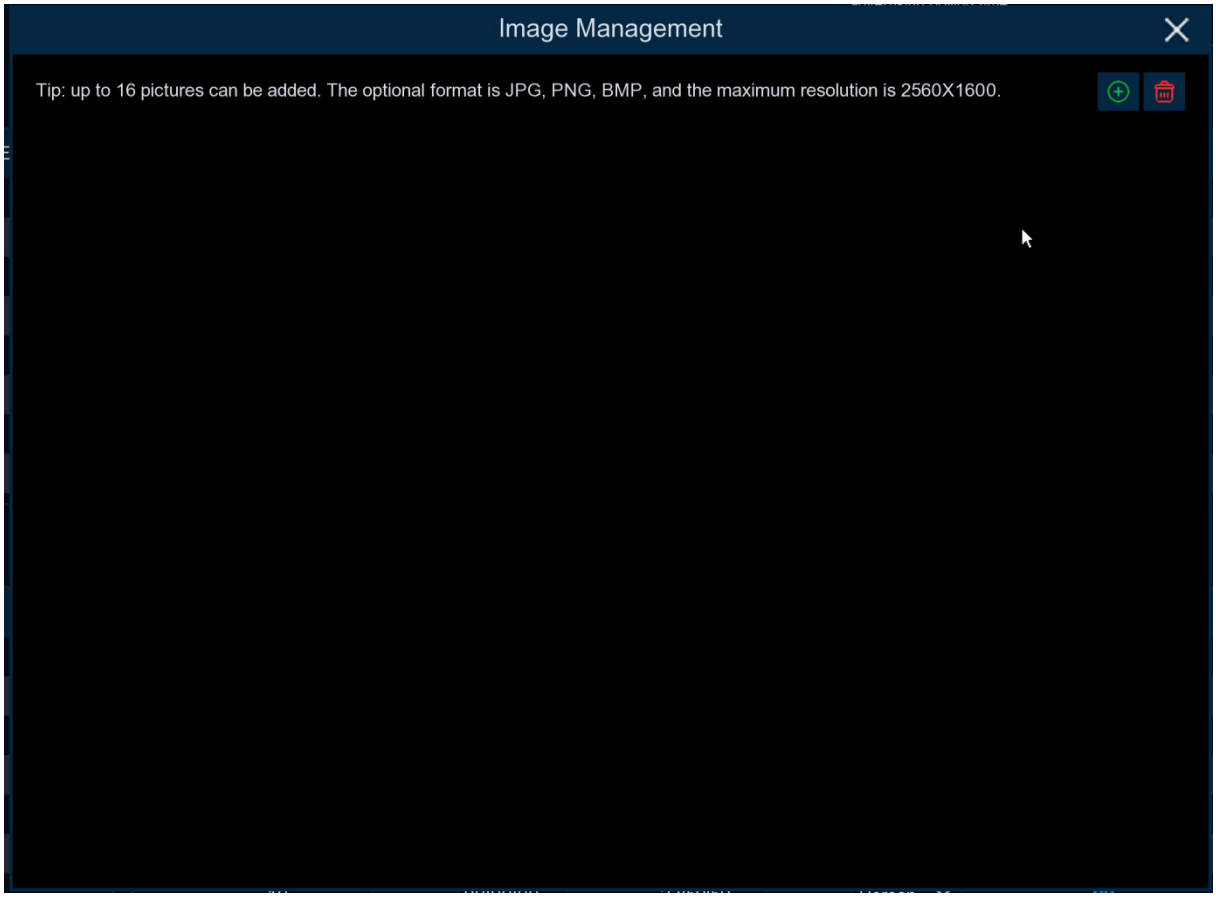
6.2.3 Search

Search for channels and groups separately. Select the channel or group that you want to search for, set the search duration by day, week, month, or year, and select the type of target that you want to search for. Click the search icon and the results appear on the right side of the window.

6.2.4 Setup



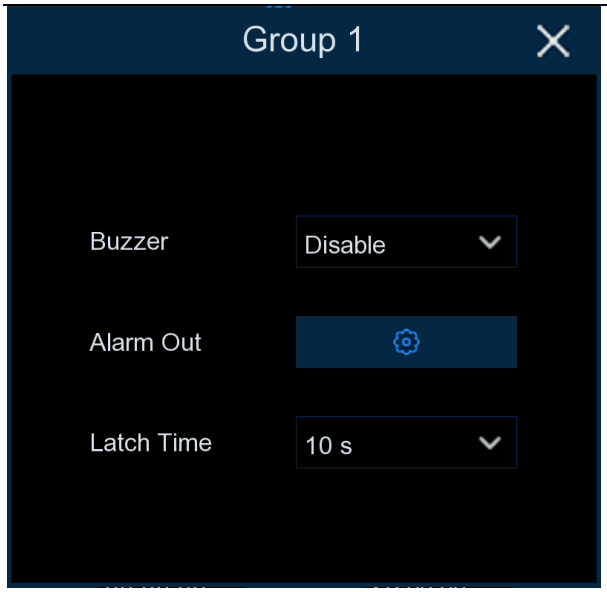
1. Check **Advertise mode** for AD mode; set the SEQ residence time in seconds, which determines the time that each image stays on the screen, by default to 3 seconds. Click **Image** to load ad pictures from USB memory and supports the addition of up to 16 images in jpg, png and bmp format, picture resolution can't over 2560x1600.



Click add new picture. Click delete added picture one by one.

Check **Keep Aspect Ratio** box if you want to display an image with the original aspect ratio, or unchecked the box if you want the image to stretch out and appear in the full screen. Return to Channel View Mode or Group View Mode, and Click the full-screen button in the upper right corner to display your ad image and the real-time count data for the selected channel or group.

2. Set **Enable** selects which channels to display on the channel page. If the camera in the channel supports AI functionality, **Setup** and **Alarm** icons will be blue; Instead, if the camera does not support AI functionality, the icon will be gray. Set up **Capacity** which is the maximum limit for attendance. Click **Setup** to configure the detection condition. Click **Alarm** to enter alarm when the number is 0.



Buzzer: Set the buzzer duration in seconds when the available number is 0.
Alarm Out: If your DVR supports a connection to an external alarm device, you can set it to sound an alarm.
Latch Time: Configure the external alarm time with the available number of 0.

3.Click the Add IP Camera icon to add the channel to the group. Up to eight groups can be set, but can only be added to one group per channel. If channels are enabled in channel view mode, they are not allowed to add to any group. Select the Enable box to activate the group. You can set the number of **Capacity**, **Start Time**, **End Time**, detection type (**Person**, **Vehicle** and **Motion**).

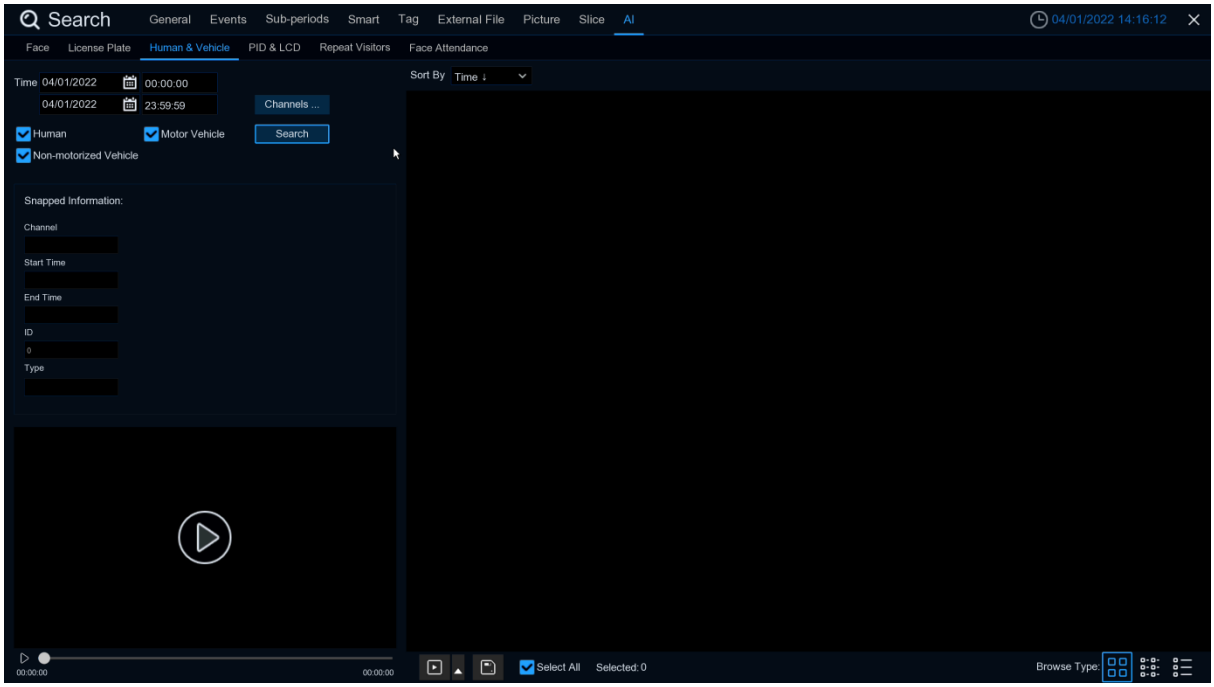
Click **Alarm** to enter configuration page when the number is 0.

6.3 Object Classification

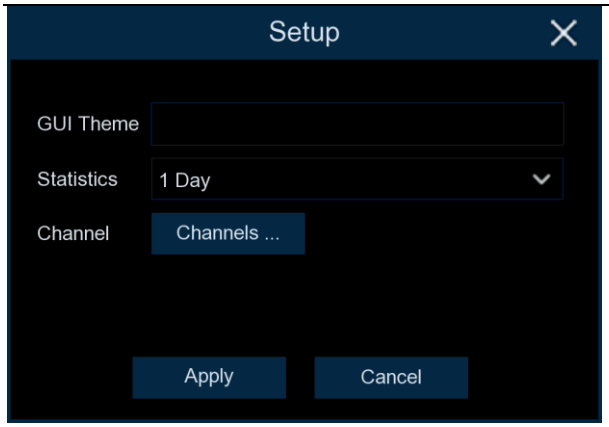
Face, Human, Motor Vehicle, NON-Motor Vehicle detection scene interface display full screen, it can view detection results real time.

1. Interface theme of machine and non-human statistics

2. Click to enter playback Human & Vehicle search interface.



3. Click to enter setup page.



GUI Theme: Local Theme

Statistics: Statistical time, you can choose 1 day, 2 days, 3 days, 4 days, 5 days, 6 days, 7 days, week, month and year.

Channels: Channel selection, you can select the statistical channels

4. Show the current date and time
5. Channel diagram. In **Channels** select the channels
6. Select the number of drawing Windows, one window , two windows , four windows .
7. Real-time push display switch, click the icon to display / hide the corresponding detection results of real-time push
8. Real-time push of face detection, and display of the detected face picture, name, and source group name.
9. Real-time push of humanoid detection, showing the detected humanoid pictures, detection channels and detection time
10. Real-time push of motor vehicle type detection, showing the detected motor vehicle pictures, detection channels and detection time
11. Real-time push of non-motor vehicle testing, display the detected non-motor vehicle pictures, detection channels and detection time
12. Statistics of the number of human faces, human shapes, vehicle models and non-motor vehicles captured.

Chapter 7 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.

Note: To play the video clips saved locally on your PC, install and launch one of the following players **before** locating the recordings. Wait for 3 ~ 30 seconds before the video starts to play.

1. USAVision Player
2. VLC Media Player
3. KM Player

7.1 Using Search Function

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

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. **Channel Selection:** To choose the channels 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 7.1.1.1 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 channel you want to capture, and then Click the icon to save the snapshot.

Add default bookmark

Add custom bookmarks;

Switch the original proportional screen or stretching screen.

1. **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;

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

7.1.1 Search & Play Video in General

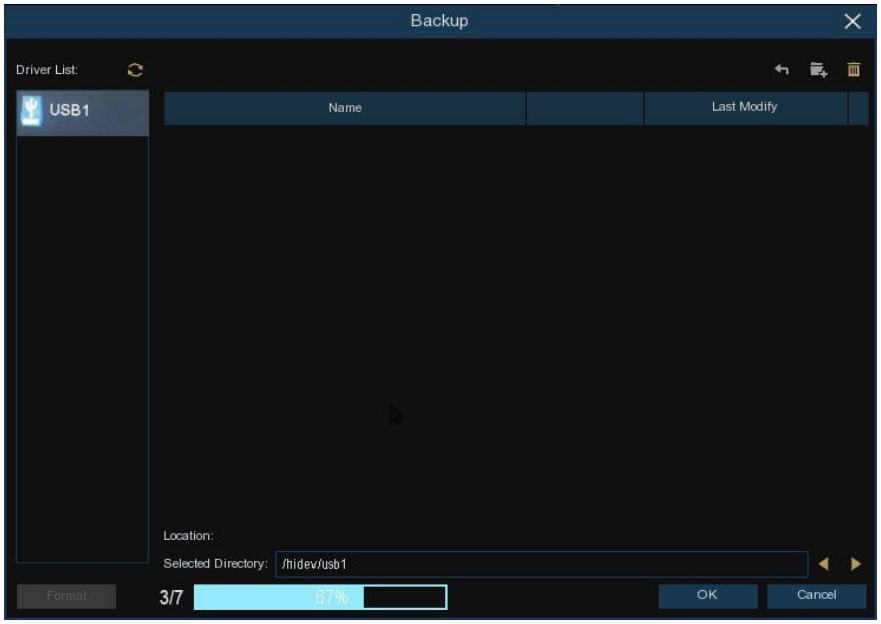
This menu gives an option to search & play recording for a selected date.

1. Click icon to search for video recording from the calendar.
2. Choose **Search Type**
3. Check channels you would like to search, or check **Channel,**to search all connected channels.

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.
9. Tag function, click to add **Costumed Tag**. Click to add **Default Tag**. You can make a mark at the current time of the current channel. After the addition is completed, you can jump to the previously made "mark" in the label return interface to play back.

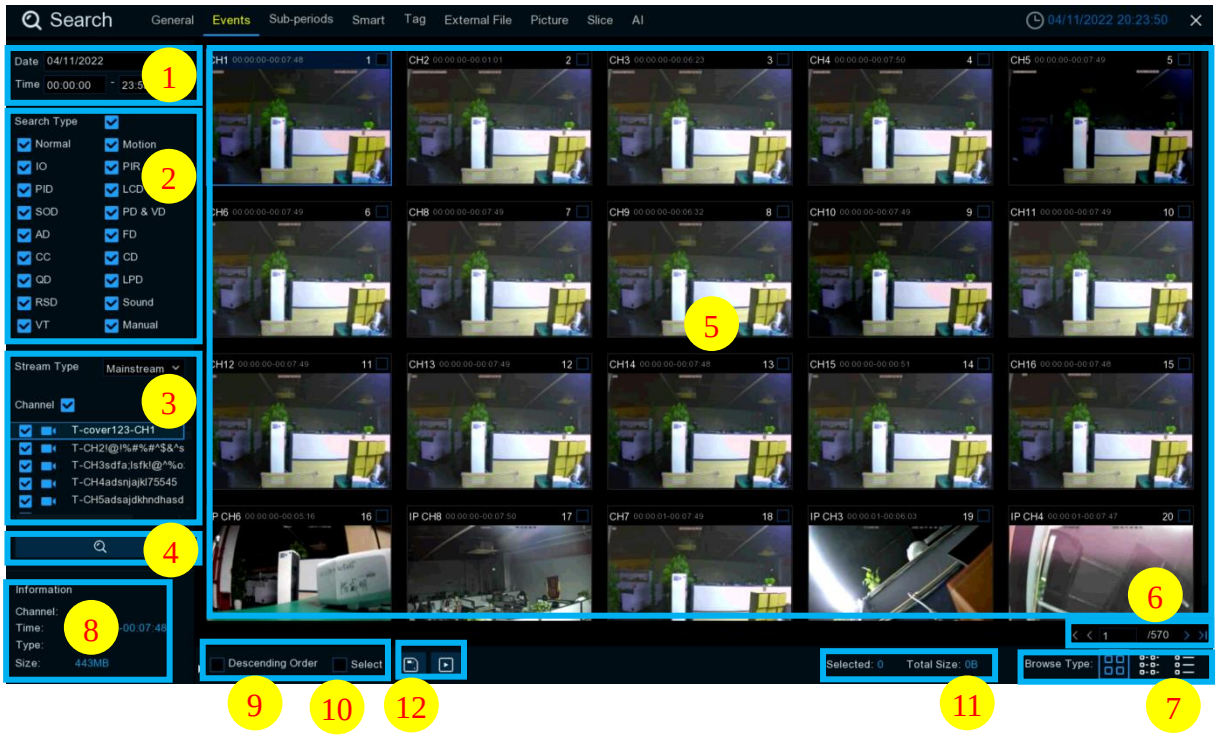
7.1.1.1 Video Clip Backup

1. Insert your USB flash drive to the DVR.
2. Start a video recording playback.
3. Click icon.
4. Check the channel(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.



7.1.2 Event Search, Playback & Backup

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



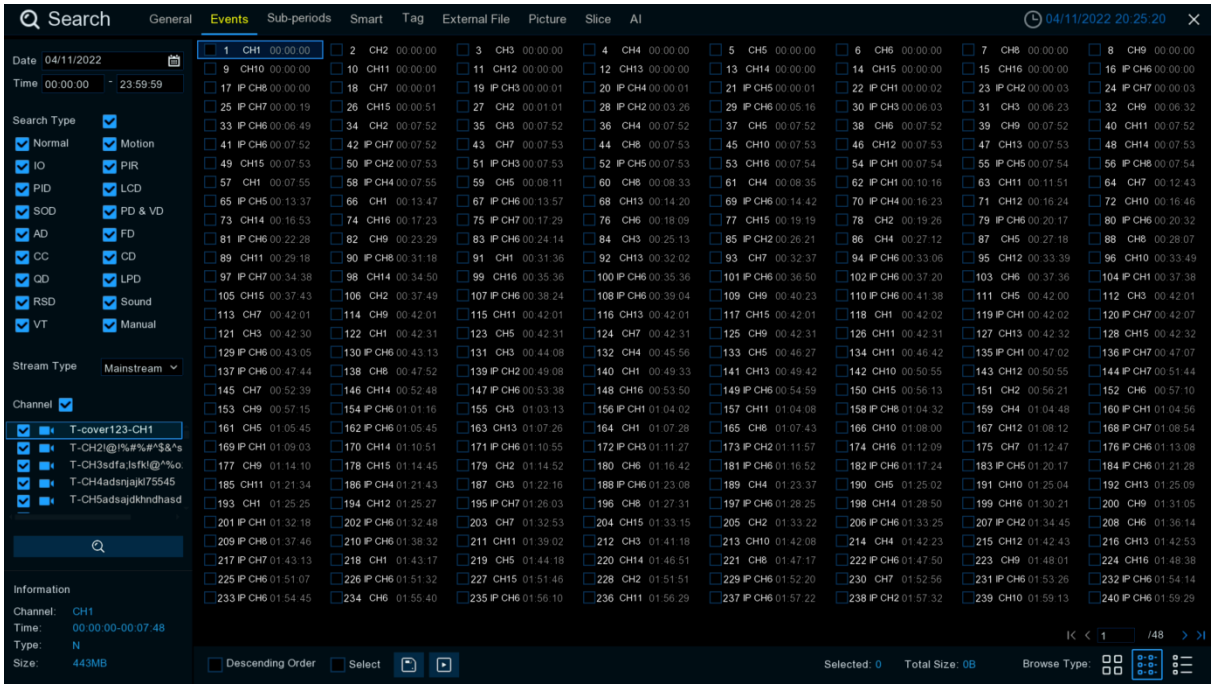
To search, play & back up for events:

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 channels you want to search, or check **Channel** to choose all channels.

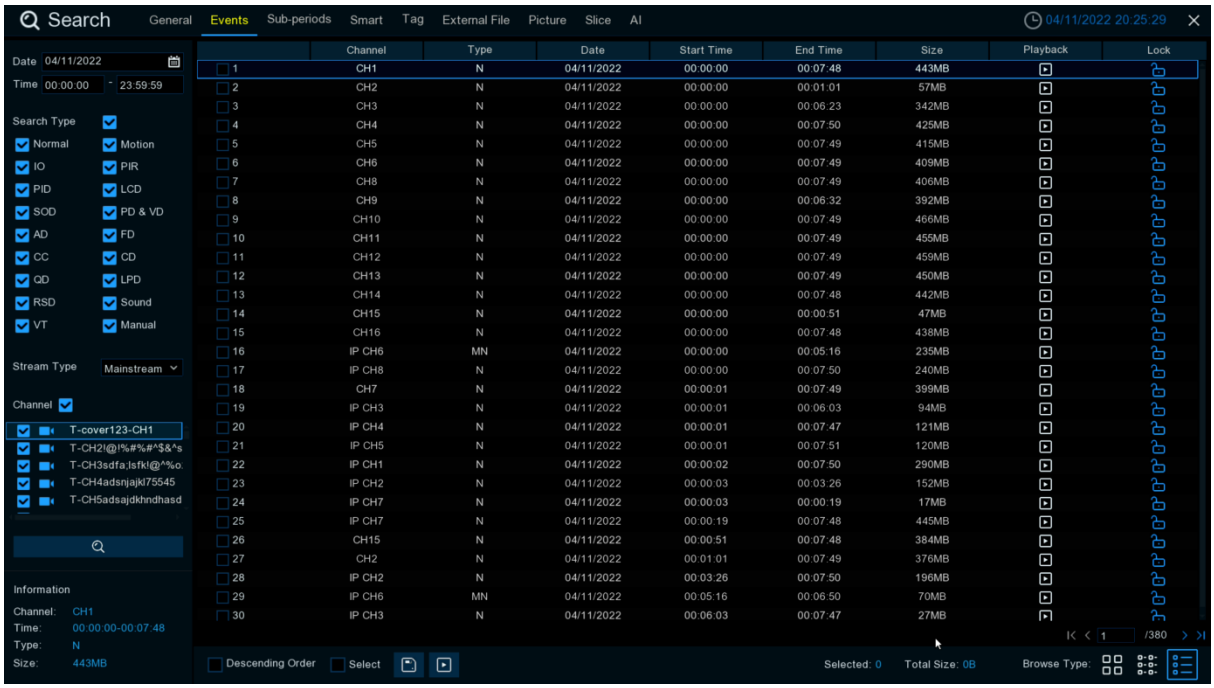
4. Click icon to start search.
5. Events fitting your search criteria are displayed in list form. You can double Click the left button of your mouse upon one of the events to play the video immediately.
6. Click icons in the bottom-right corner of the menu to browse between pages of events, or input the page you want to browse.
7. You can switch the view of list form in by Click ing 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.



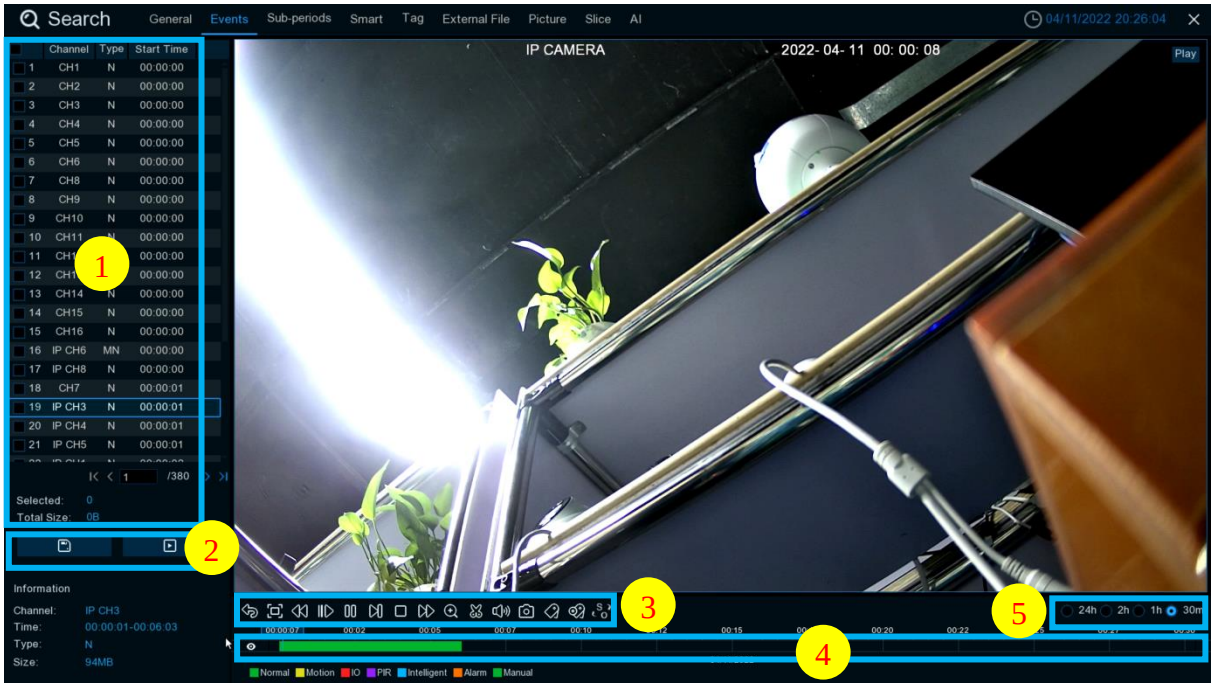
Detailed view. You can view the details of the events.



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.

1. 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.
2. 10.The number of selected files, total size information will be displayed at the right bottom of the screen.
3. 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.

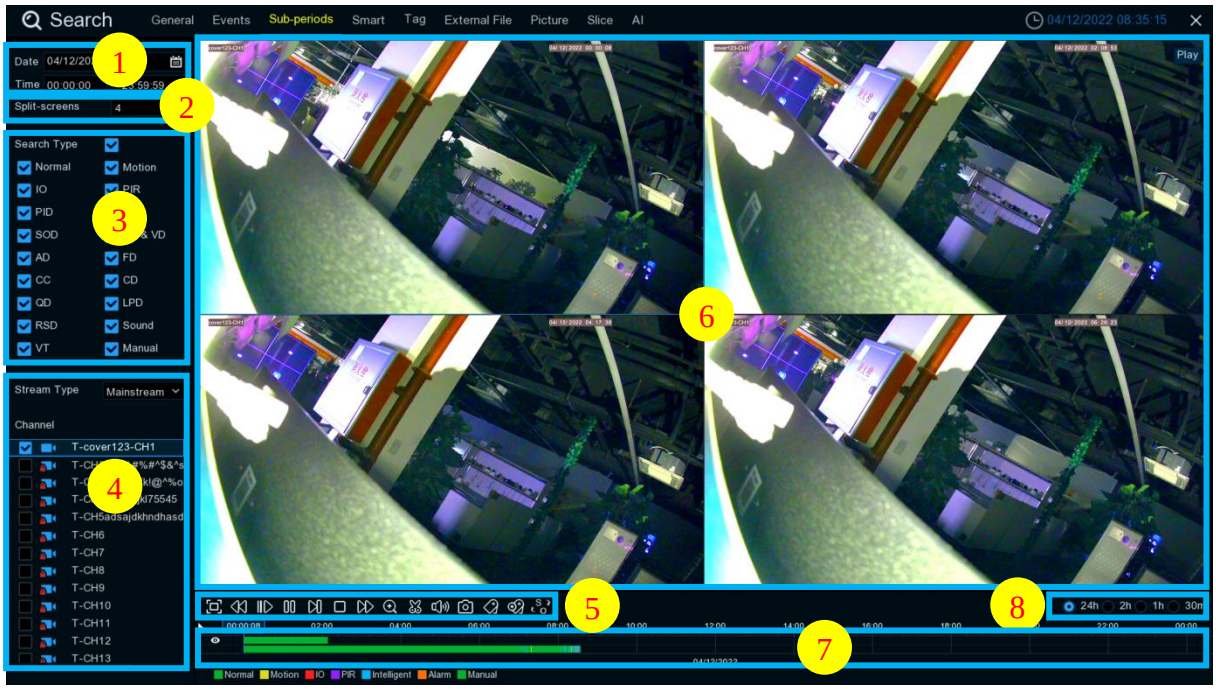
7.1.2.1 Event Playback Control



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.

7.1.3 Sub-periods Playback

Sub-periods playback allows you to play multiple normal recordings and motion events simultaneously from a single channel. 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 channels you want to search. Please note that this function only supports to search & play one channel 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 Click ed. The color bar on the bottom of the timeline indicates the time span for the whole videos you have searched.

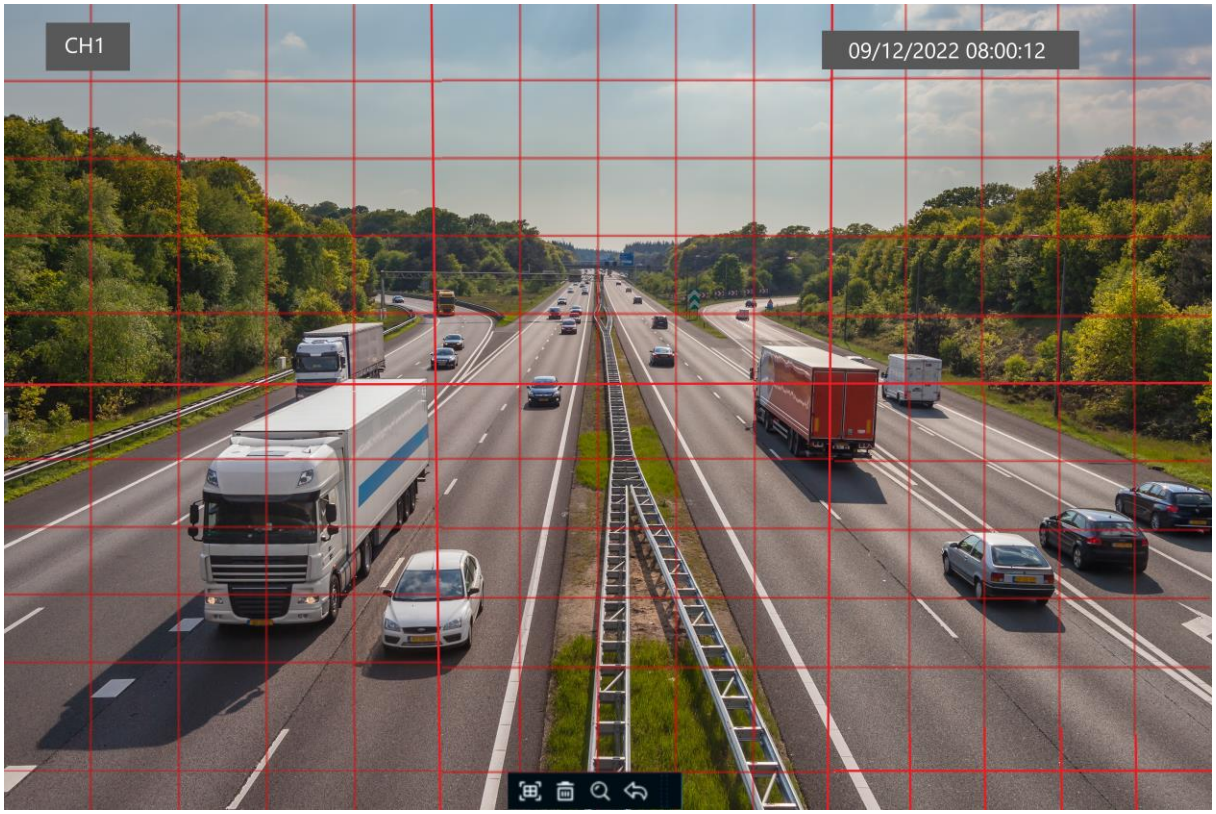
8. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.

9. Tag function, click to add Costumed Tag. Click to add Default Tag. You can make a mark at the current time of the current channel. After the addition is completed, you can jump to the previously made "mark" in the label return interface to play back.

7.1.4 Smart Search & Playback

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

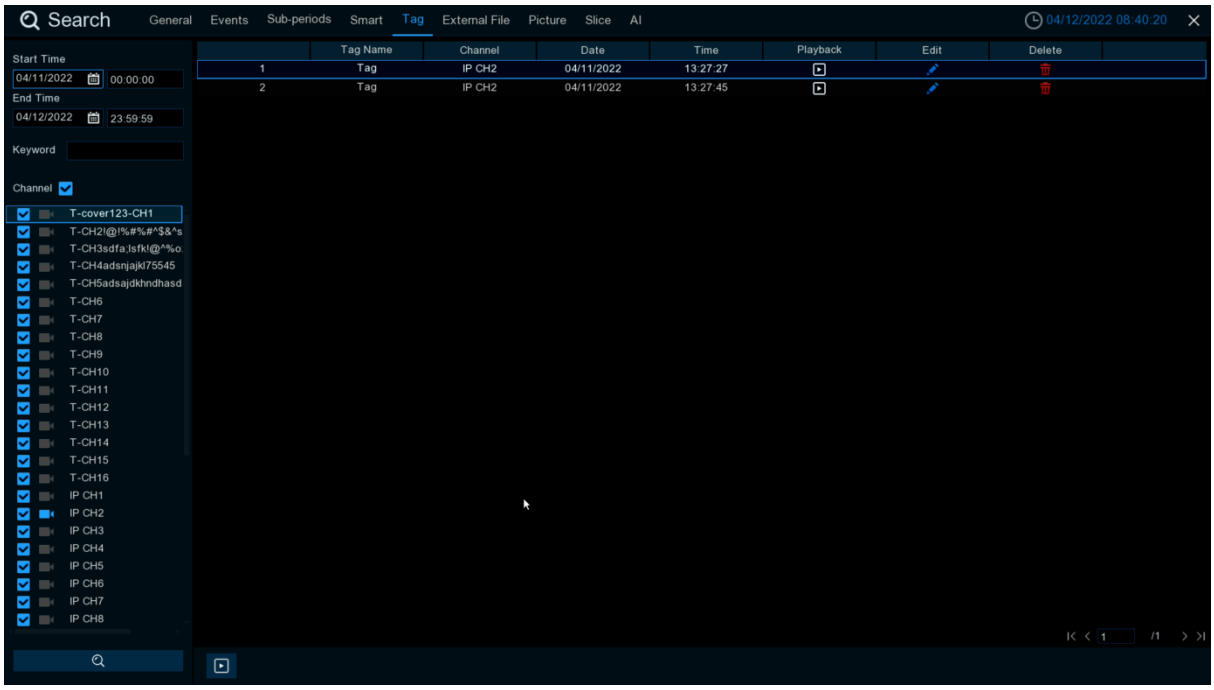
This feature can identify whether it is triggered by the Motion in Motion. If so, it will be displayed as blue in the playback time bar below. Click button to enter smart area set up page.



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

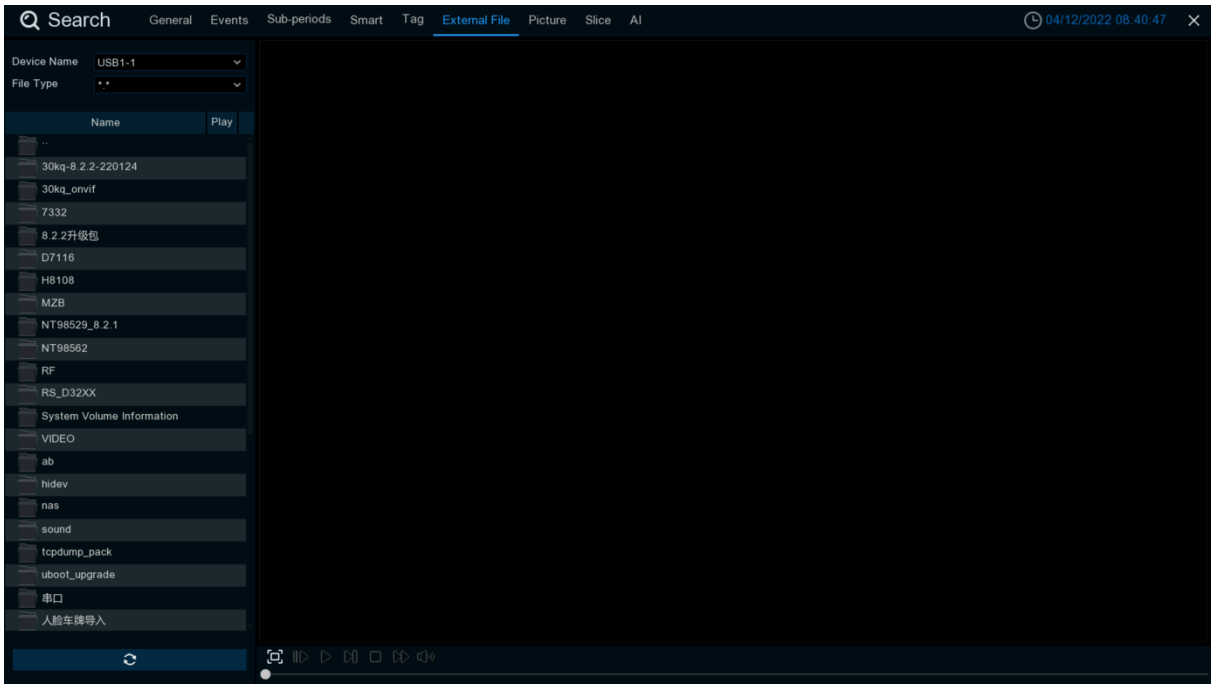
7.1.5 TAG Playback

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.



7.1.6 External file playback

Here you can play videos in the external U disk. Select files on the left to play automatically.



7.1.7 Picture Search & View

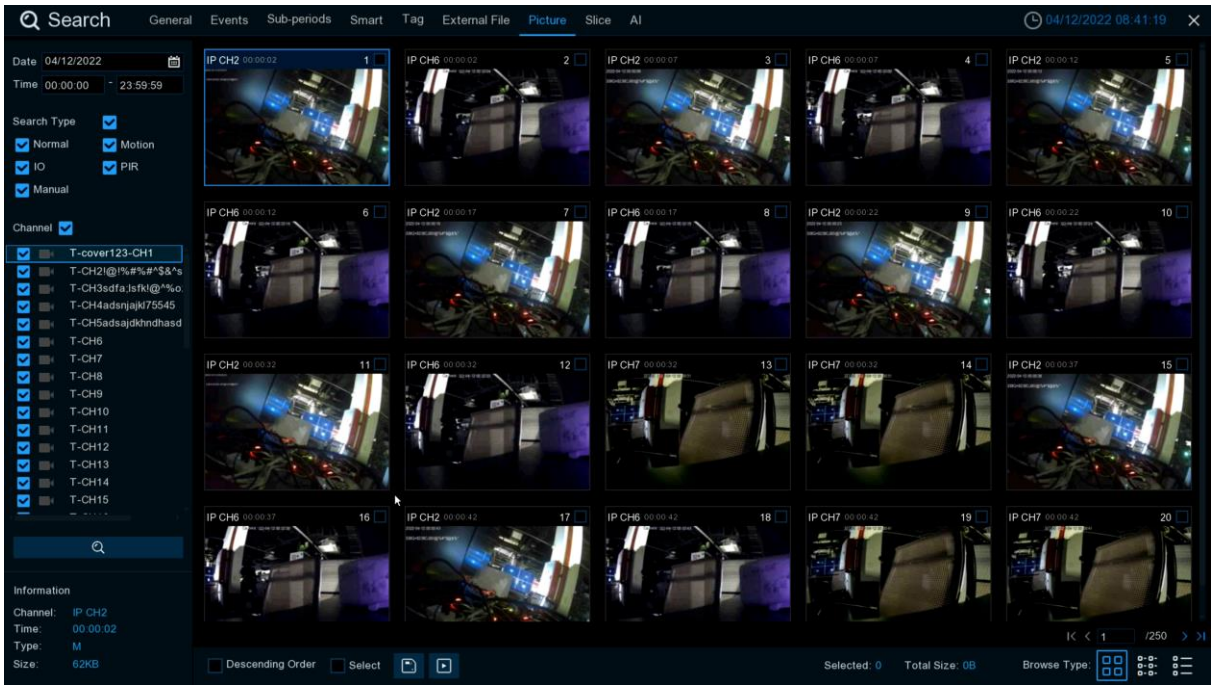
This function can be used to search, play and copy snapshots to a USB flash drive.

To search, play & back up pictures:

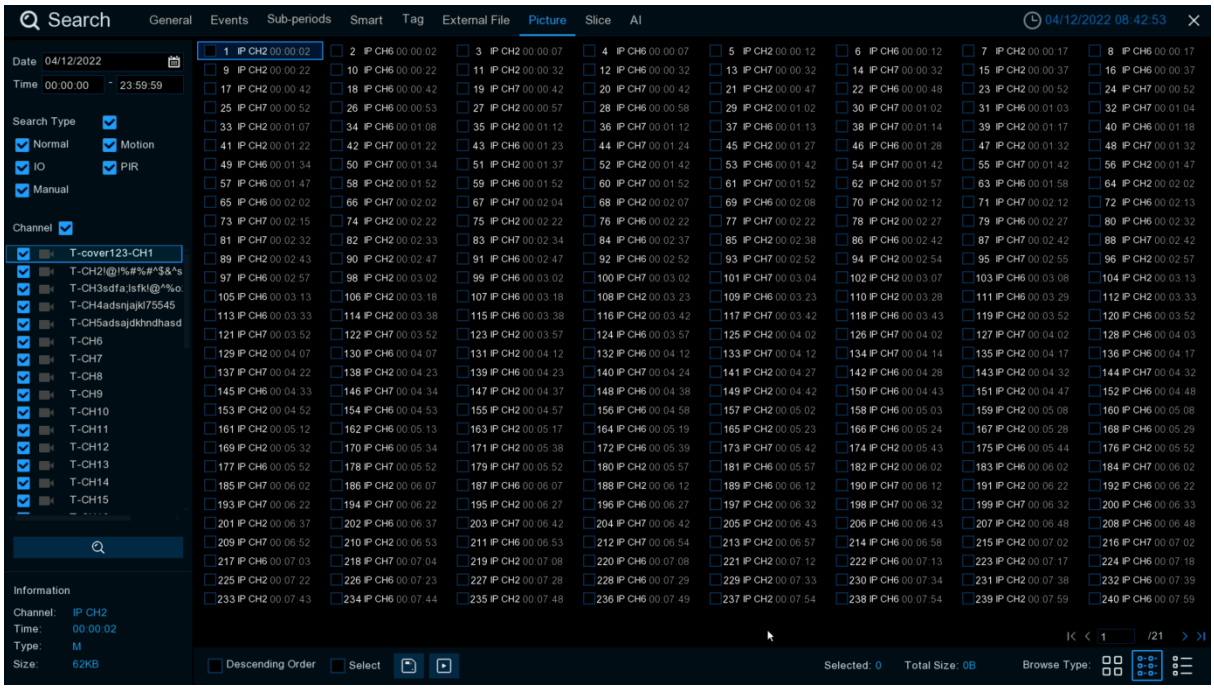
1. Choose the date & time you want to search.
2. Check the picture capture types you want to search, or check **Search Type** to choose all.
3. Choose the channels you want to search, or check **Channel** to choose all channels.
4. Click button to start search.
5. Pictures fitting your search criteria 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 Click the icons below shown at the right bottom corner of the screen:

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

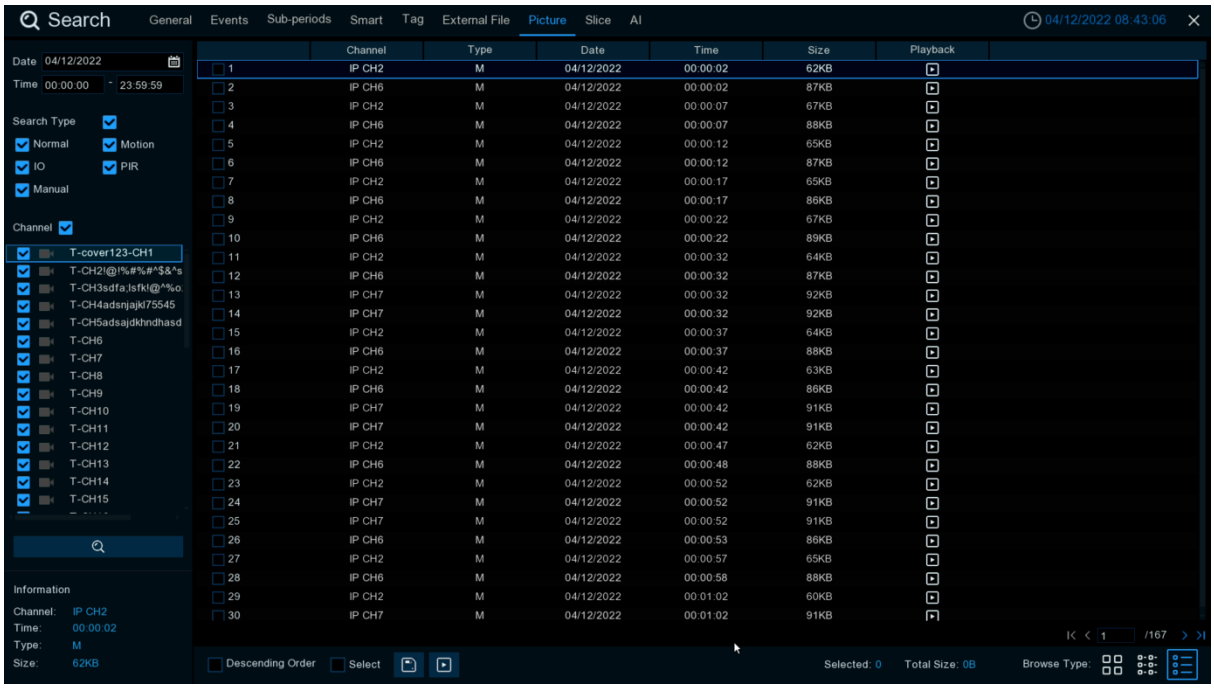
   List view. The events will be displayed in list.



List view. The events will be displayed in list.

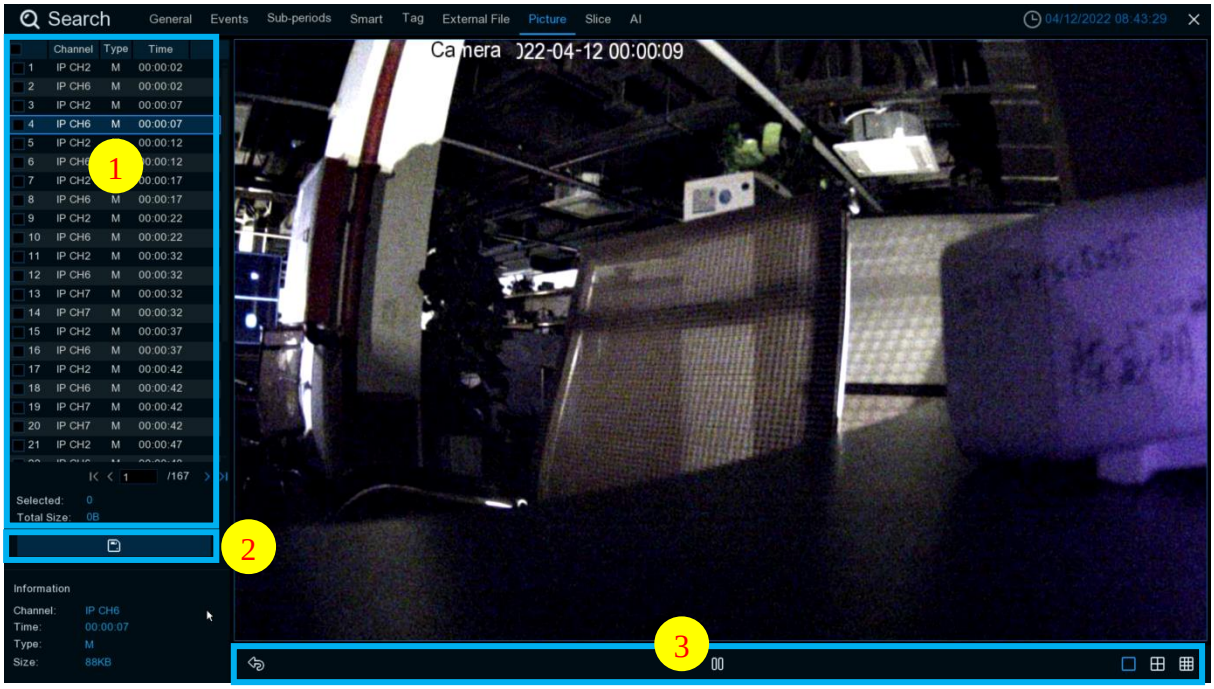


Detailed view. You can view the details of the events.



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.

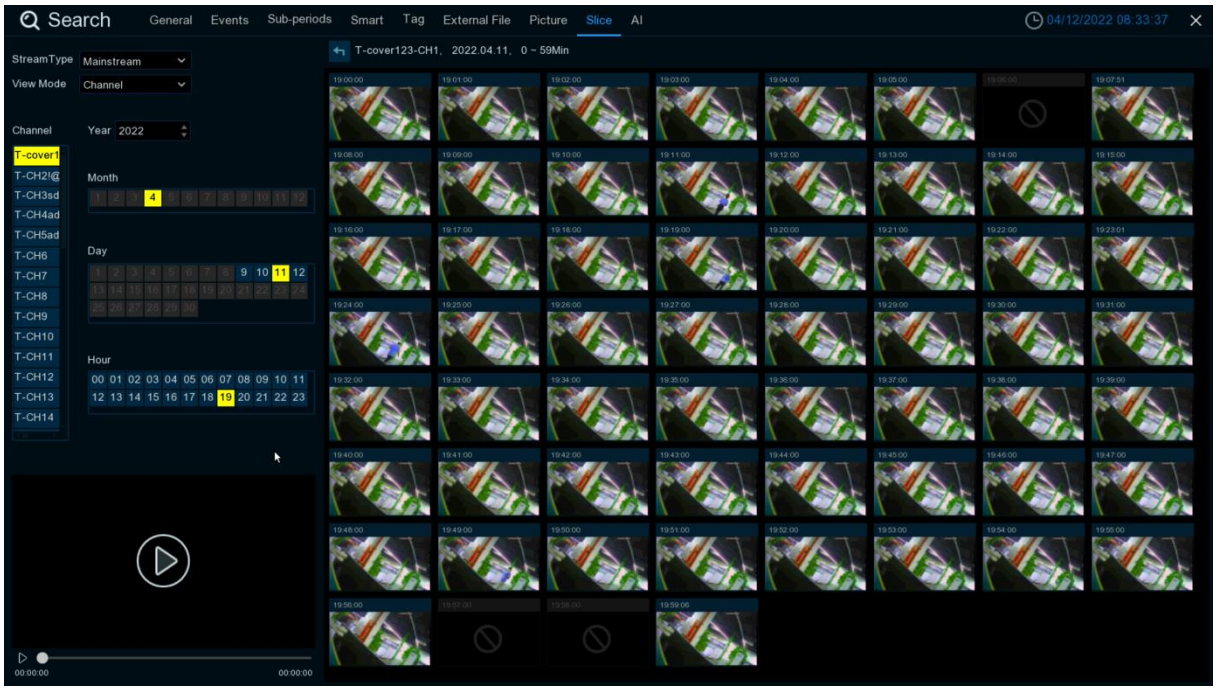
7.1.7.1 Picture Preview Control



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.

7.1.8 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.

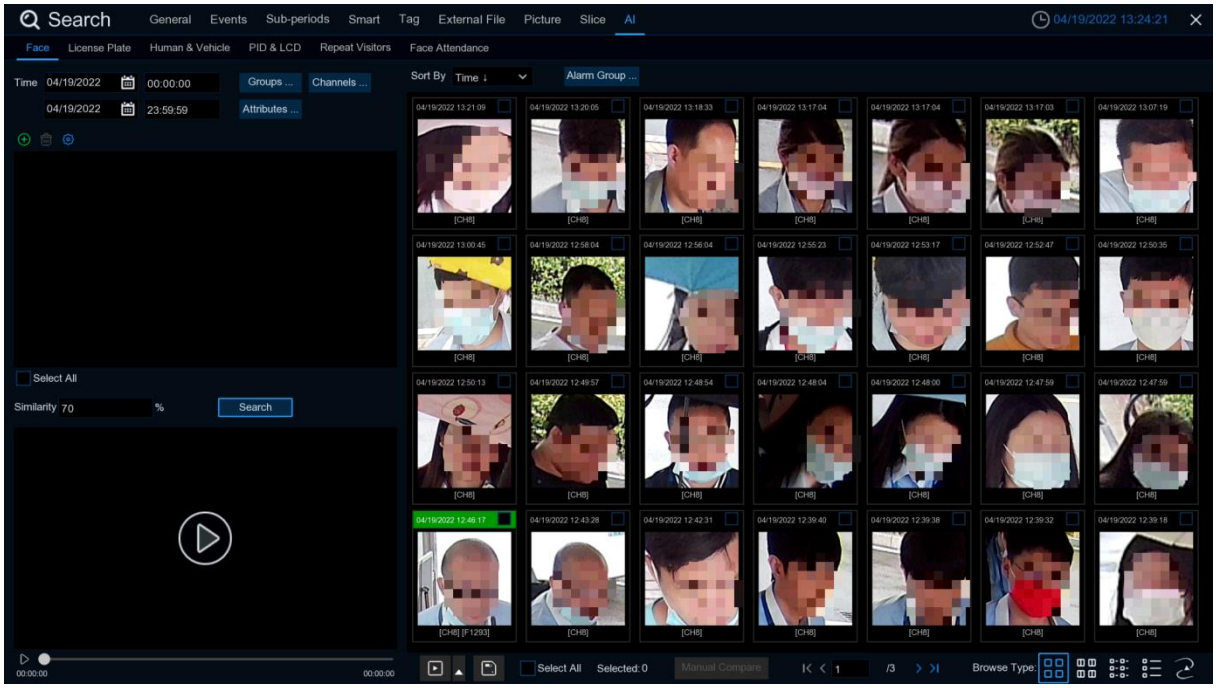


1. Select channel and stream
2. Select the channel and date to play
3. The results that meet the search criteria are displayed in the form of a list. You can use the left mouse button on one of the events to play the video in a small window.
4. Small window play preview. Click the enlarge button in the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

7.1.9 AI

7.1.9.1 Face

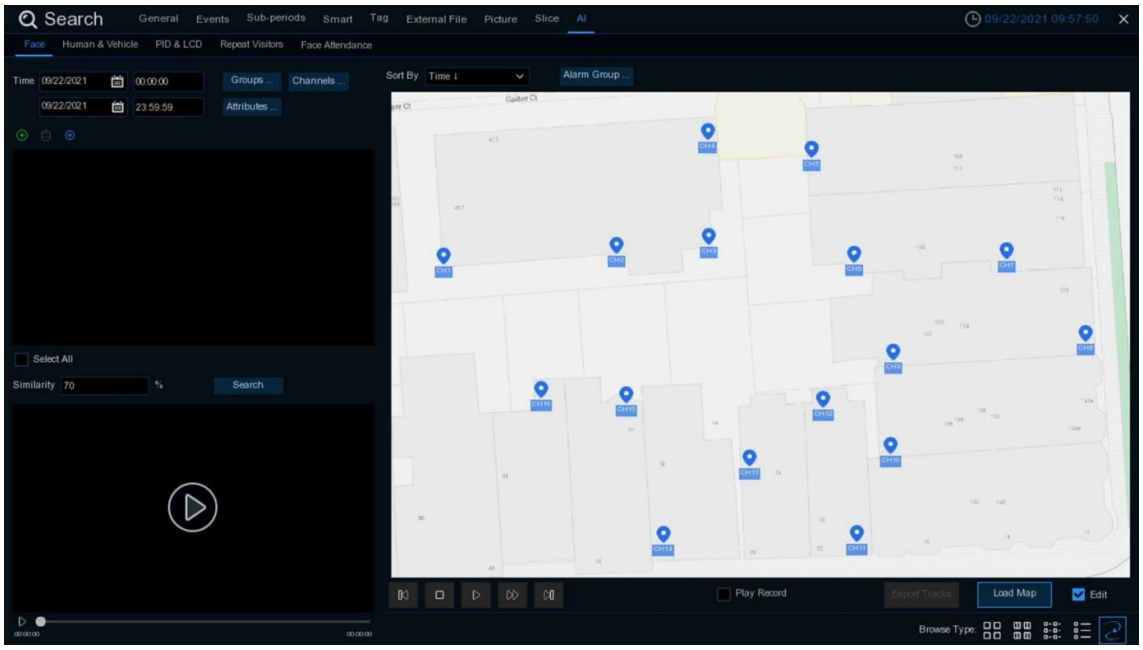
Select the date, time, channel and face group and Click search, you can search the everyone face information of the group during this time period.



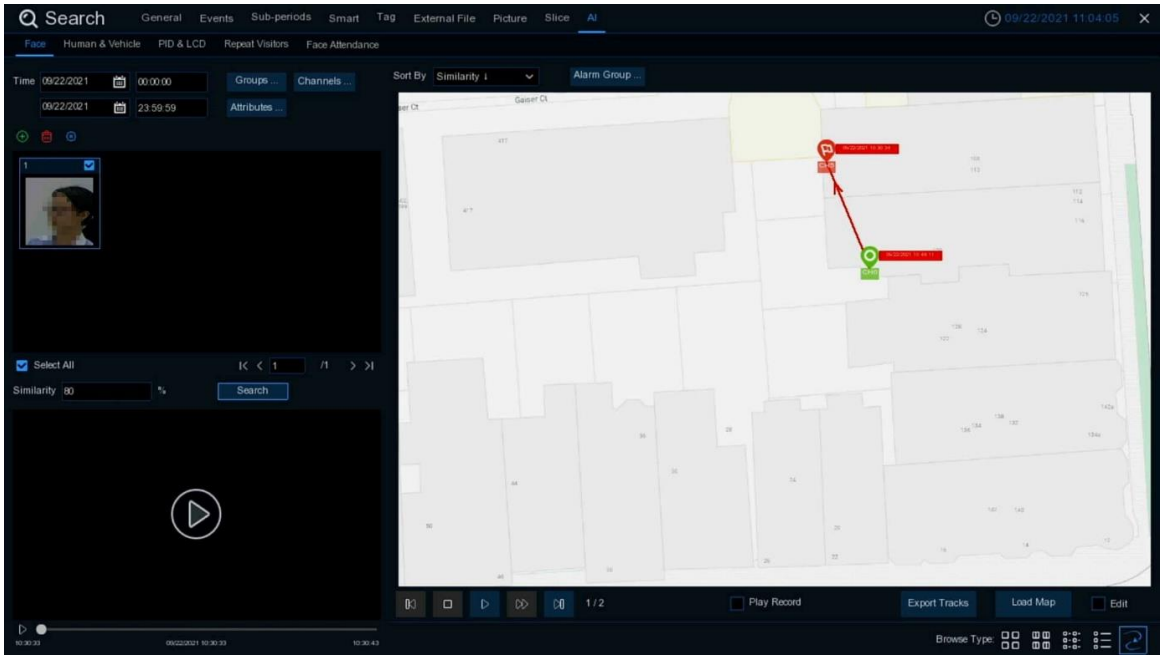
1. Click ⊕ to customize to add the search face. Choose **Groups** to select the face pictures of the whole group of the face database for comparison search.
2. Click **Channels** to select the channel for the search
3. Click **Attributes** to set the face attribute conditions for the search, and you can choose to select Gender, Age, Mask, Glasses and Expression
4. Click **Alarm Groups** to select the face group where the face contrast has occurred
5. Select the search area picture, click 🗑 to delete the picture, click ⚙ to pop up to the AI face database setting interface.
6. Right-select **Import To** in the search results to import this image into the face database grouping.
7. In the search results, right-select **Detail Information** to view the details of the face.
8. **Click Custom Playback** to enter the time when the face is detected for playback.
9. Click ▦ ☰ to view the different viewing methods.

7.1.9.1.1 Tracks

Click on the lower right corner to enter the electronic track chart menu.



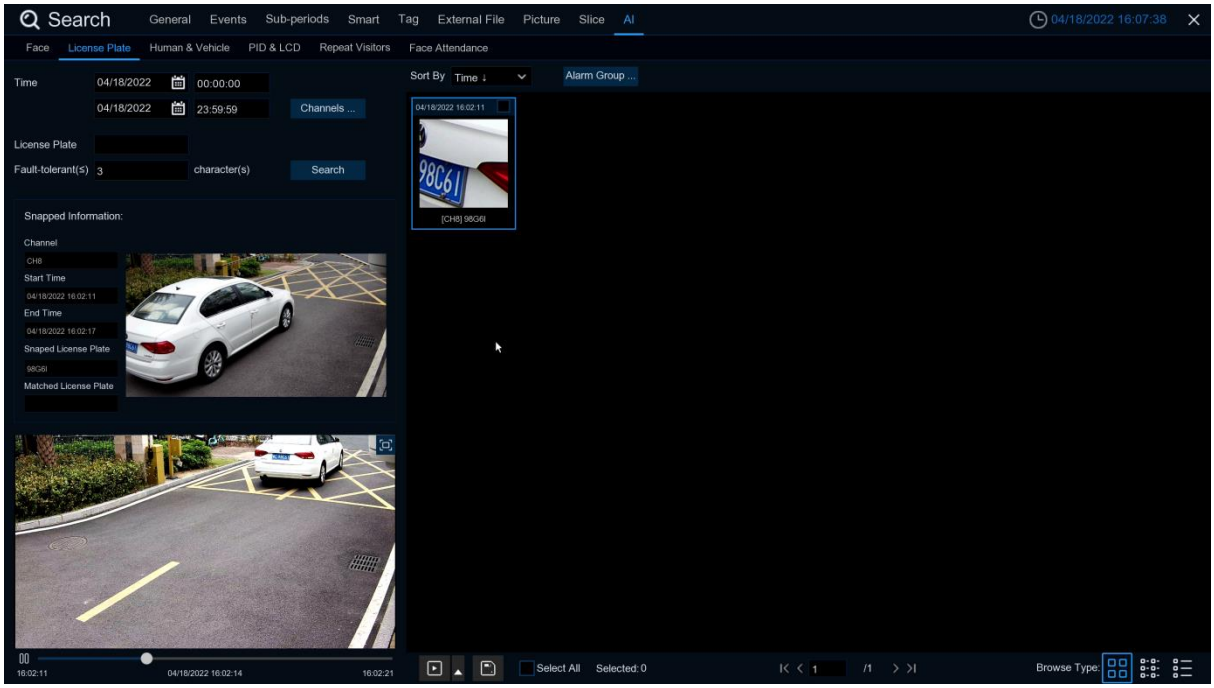
Click Load Map to pop up U disk, select map to add. Click **Edit** to drag the IPC icon to the location you want to place, unchecked and exit edit mode. Then Click select the face from the local face library or U disk, click search (only support one face search), you can search out the IPC that has detected the face, there will be a color mark on the map.



If you click the left button on an IPC icon and play back, there will be a simple playback in the lower right corner. If multiple IPC detect the face, the point playback will automatically judge the person's movement and introduce an arrow.

7.1.9.2 License Plate

If the alarm is triggered and the video is recorded, you can view the video details or export in this interface.



Time: Set the time period to query the license plate detection event. The date can be set by clicking on it.

License Plate: Filter and query according to the license plate information.

Fault-tolerant: Fault tolerance rate, such as when set to three characters, the white list in the group is B594SB, and triggered when a license plate number of B734KB enters the monitoring area. That is, the detection license plate number has 0~3 characters and the database license plate number is different will be identified.

Snapped Information: Details of the alarm event, with the following five items:

Channel: Channel selection

Start Time: Start time of the event.

End Time: End time of the event.

Snapped License Plate: The license plate number captured by the camera by taking the license plate photo.

Matched License Plate: License plate number obtained from the database.

Sort By: Event videos are sorted by time.

Channels: License plate detection events triggered by each channel

Search: Query according to the selected settings.

Alarm Group: Select the different groups in the database to compare and search for the display results.

This function is to click the triangle icon in the lower right corner of the event video when selected: 5s, 10s, 20s, 30s, 1min, 2min, 5min, 10min, Custom Playback. If 30s, the video will be extended by 30 seconds.

You can back up the video to the U disk, the video format support RF, AVI, MP4 three.

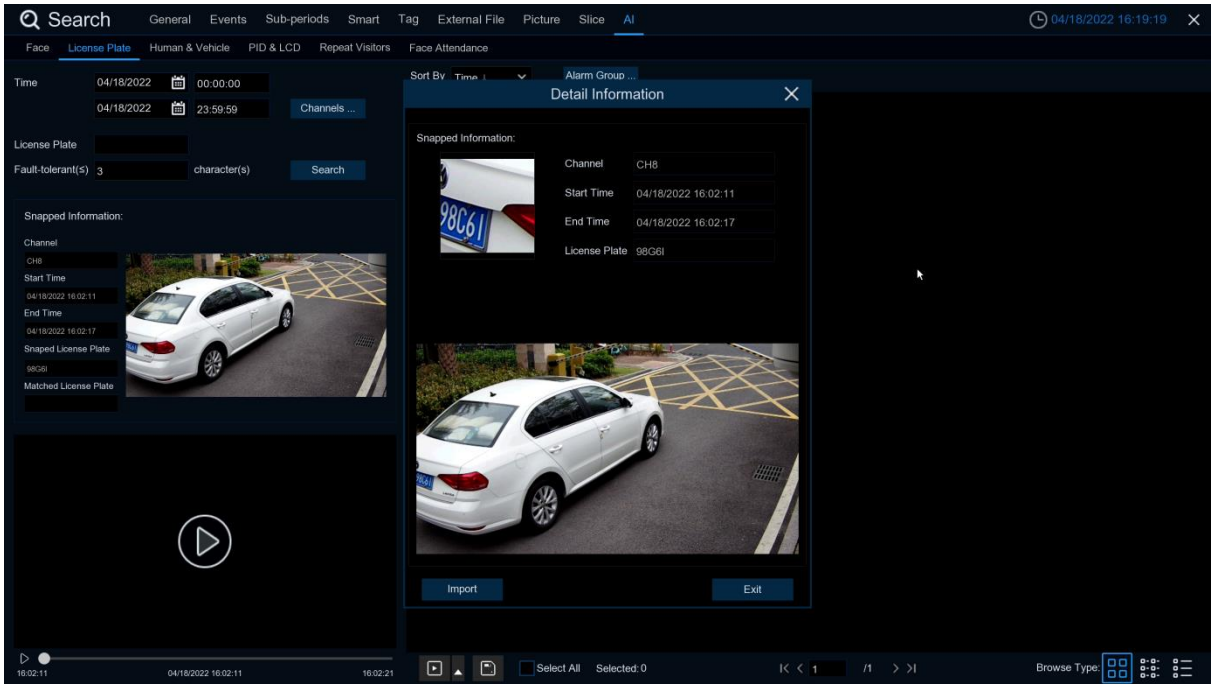
All videos are selected and the number of videos selected.

Click to turn the page.

Click to select different views.

Choosing an event right-click pop two features:

Detail information: View the event details.

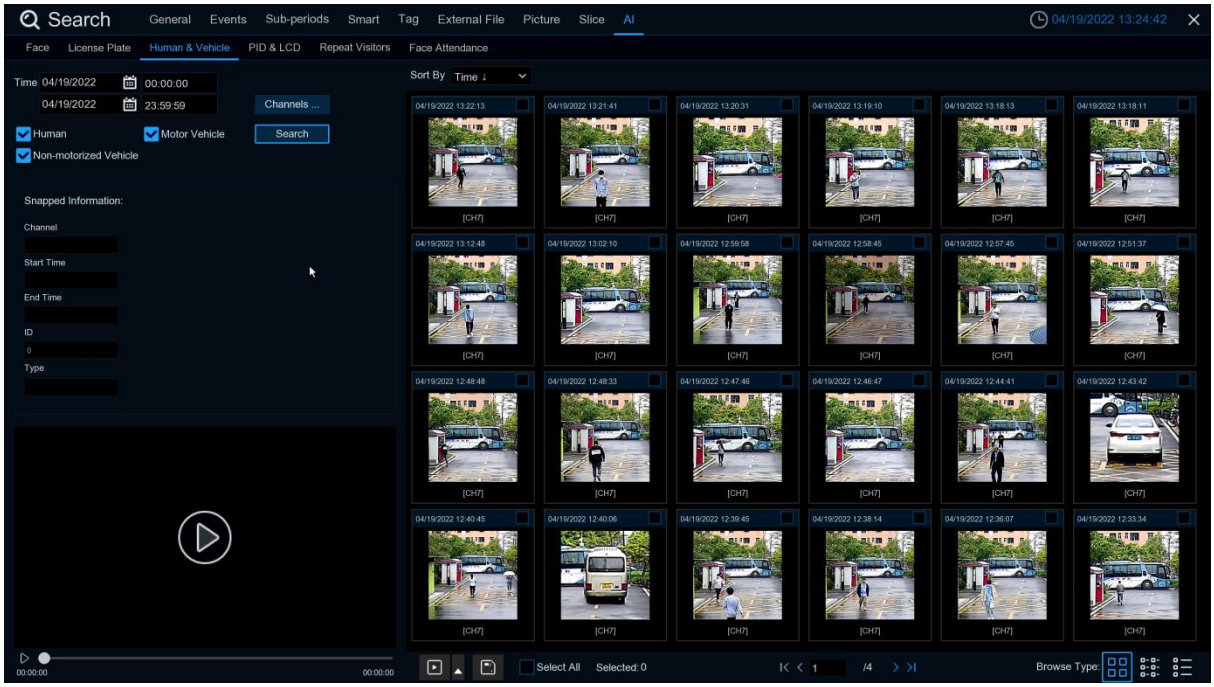


Custom Playback: Playback settings, click to set how long the event plays earlier and how long it delays. The maximum time limit is 10Min.

Double-click the event or drag to the bottom-left corner to play the event video.

7.1.9.3 PD & VD

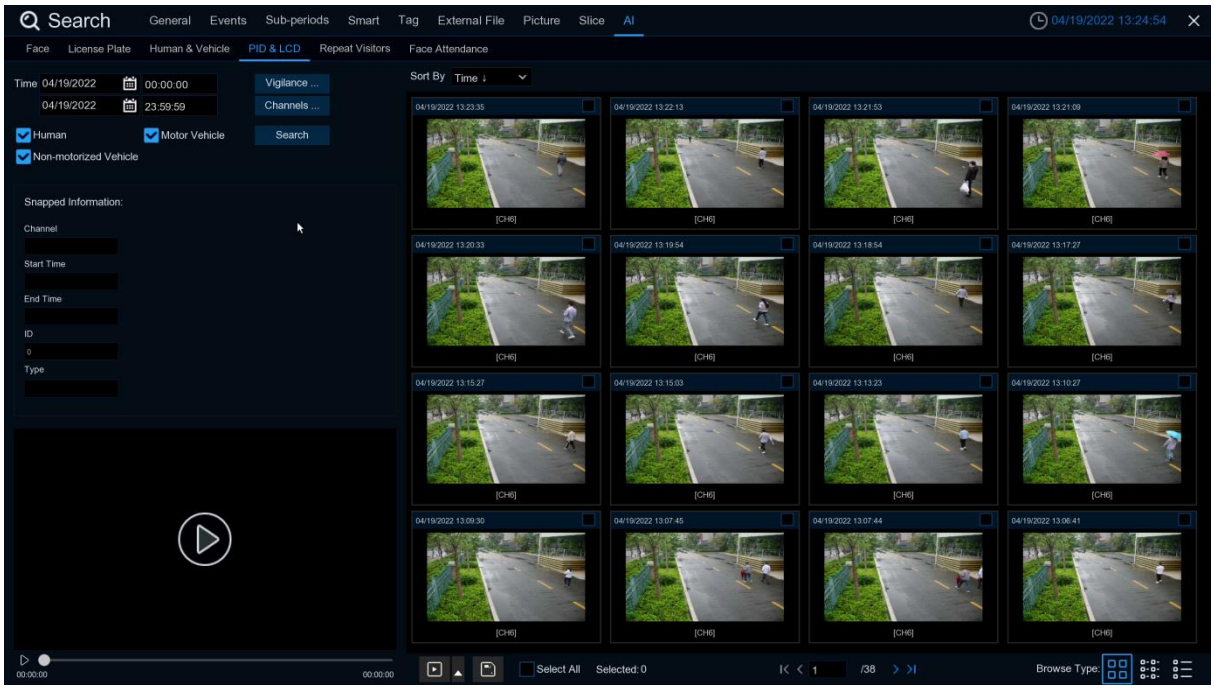
After selecting the date, time, channel, and pedestrian and car shop type, click to search to search for the pedestrian and car shop information of the group during this time period.



Left click will have basic information on the left side, right click will customize playback and view details. Click on the lower left corner to play for simple playback, double-click to zoom in, and enter the normal playback mode.

7.1.9.4 PID&LCD

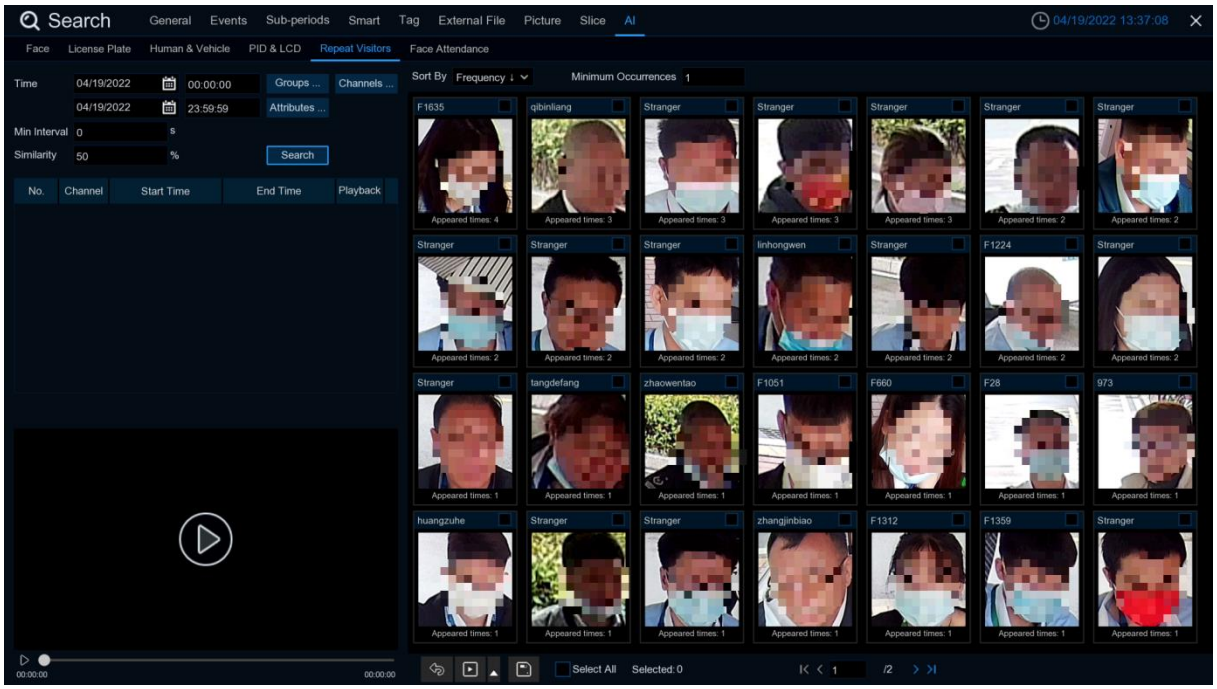
Select the date, time, channel, and alert type, and the person and car type to search for the PID and LCD triggered by the group during this time period.



Left click will have basic information on the left side, right click will customize playback and view details. Click on the lower left corner to play for simple playback, double-click to zoom in, and enter the normal playback mode.

7.1.9.5 Repeat Visitors

Here you can search and count all the number of times the same face has appeared.

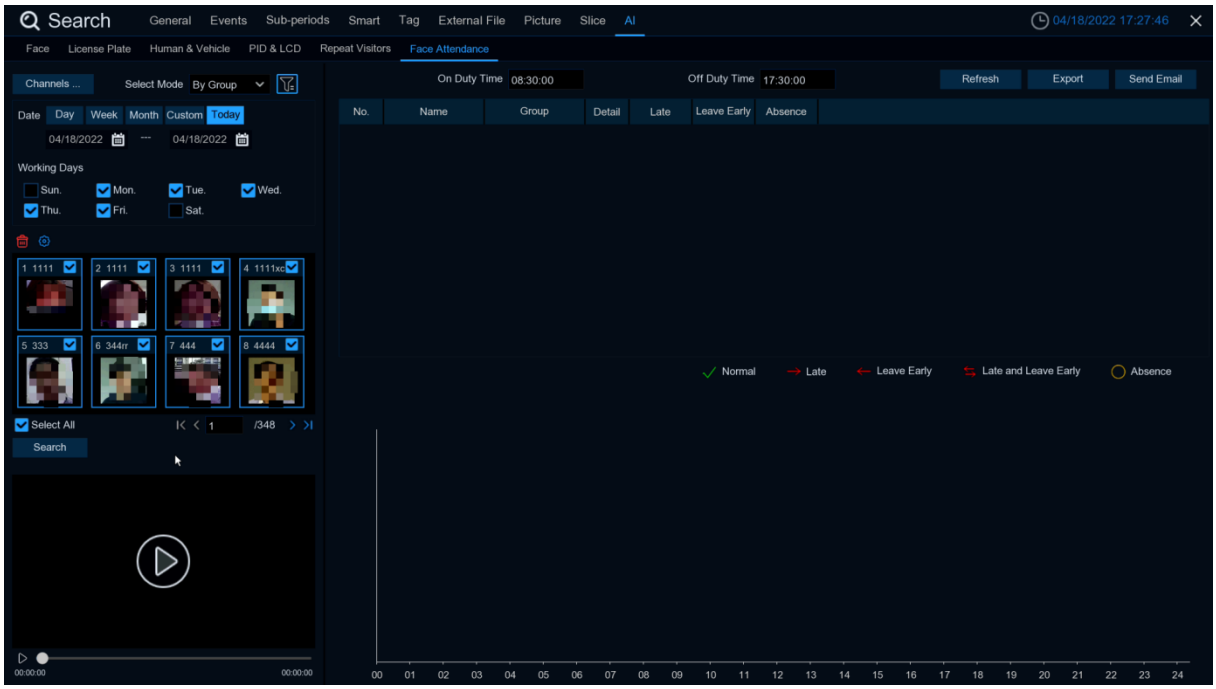


1. Select the date and time that you want to search for.

2. Select the face library group you need to contrast and search groups by default.
3. Select the channel that you need to search for.
4. Select the corresponding face attribute in the face attribute interface.
5. Enter the minimum number of seconds separated by interval.
6. Left click the search results, click the search results, on the left there will be detailed playback and information, right click to import the face library or edit the face library picture information and view the details.
7. Enter the **Minimum number** of face appearances at Minimum Occurrences for filtering
8. Click Sort By to sort, with a rise or down order of time or quantity
9. Check the search results or click All to select all the search results, click icon to customize the play, or click to back up the picture and video to the USB flash drive.

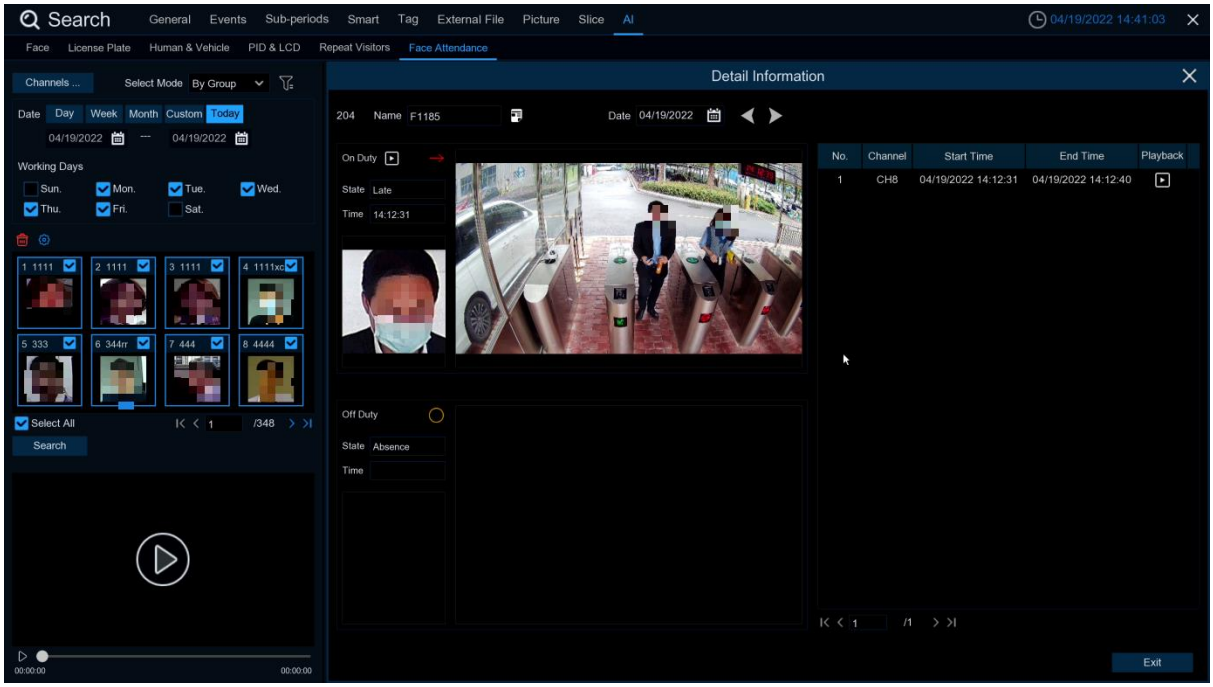
7.1.9.6 Face Attendance

The attendance system lets you check to see if someone appears at the specified time. And automatically determine whether they are late or leave early.



1. **Channels**: Select the channel for face attendance
2. **Select Mode**: Select the face picture of attendance, with By Group and By Person modes
   By Group: Select face pictures through the face group, that is, add shuffling all face pictures.
   By Person: Through the face map selection, click the right button of By Person to pop up the face map interface of the selected face library.
3. **Date**: Select the search date, the default is the system time day, and there are five selection modes: Day, Week, Month, Custom, and Today.
4. **Working Days:** Select the working days
5. **On Duty Time**: Set up the working hours
6. **Off Duty Time:** Set up the closing time
7. Click **Search**. You can search for the results.

Click on a result, and all the detection records are displayed below. Click Detail on the Detail icon to enter the details interface.



Here are details on attendance, including the first appearance and the last appearance. Click to perform a simple playback in the lower left corner

Click **Export** to save the searched attendance information generation file to the U disk.
Click **Send Email** to send the searched attendance information generation file to the mailbox.

Chapter 8 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.

8.1 Basic System Environment Requirements

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

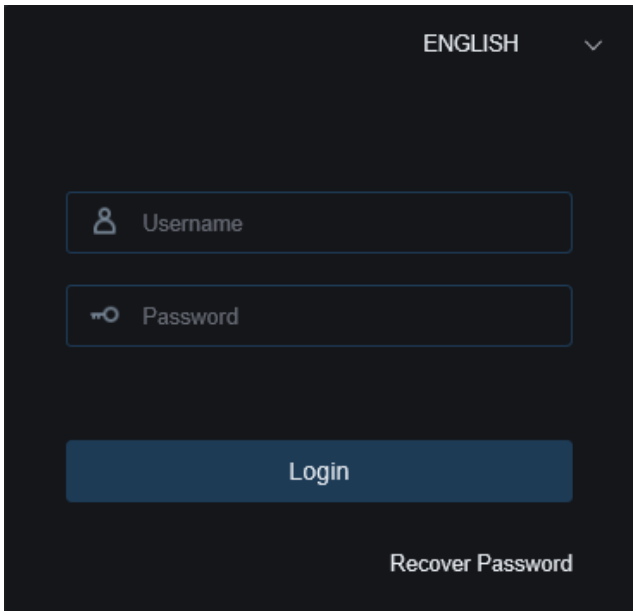
Item	Minimum	Recommended
CPU	Intel® Core™ i5 CPU	Intel® Core™ i5 CPU or higher
RAM	4G or more	8G or more
Hard Drive	500G or more	1000G or more
Display RAM	2G or more	4G or more
Display Resolution	1280*1024	1920*1080
OS	Windows 7 or above Mac OS X® 10.9 or above	
DirectX	DirectX 11	
Direct3D	Acceleration 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	

8.2 Web Plugin Download and Installation

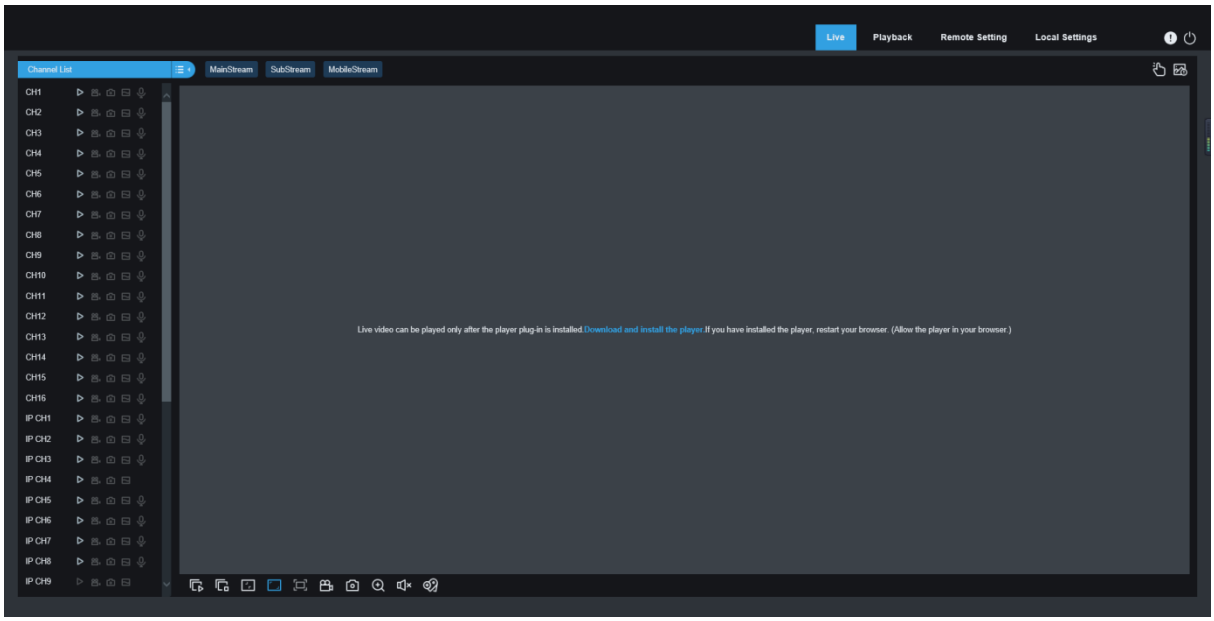
To access the Web Client, do the following:

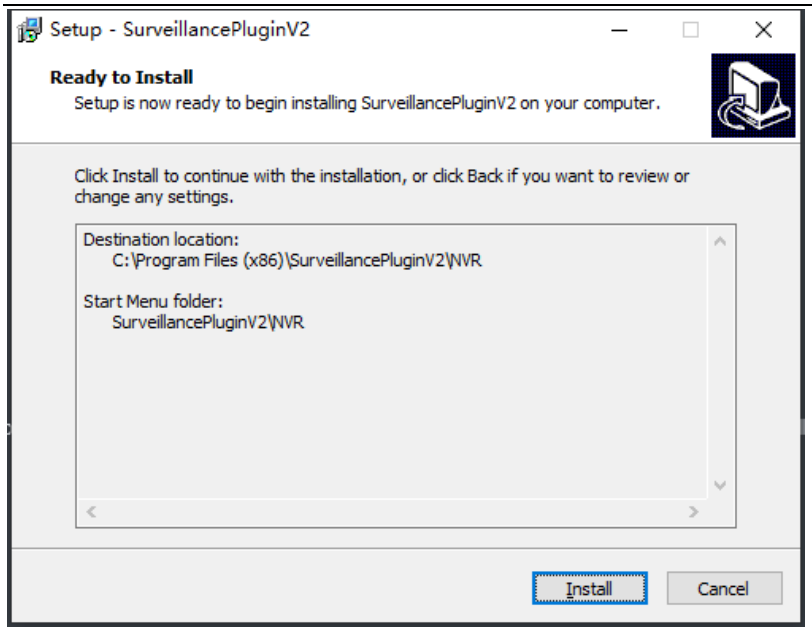
For IE Browser:

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 username and password to login the web client.

Note: When using Apple Safari/Google Chrome/Firefox/Microsoft Edge browser, you do not need to download the plug-in, you can log in to DVR directly.

8.3 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.

8.3.1 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- Channel: Quick turn on camera channel

Click icon show channels list.

Click icon shut up channels list.

Turn on/off live streaming. While real time streams turn on, the icon is blue.

Manual record, click and start to record manually. Click icon again to stop recording and the records saved to local PC. Manual recording icon shows blue which recording.

Manual capture. Click to save the snapshot to your local PC.

Bitrate icon. Camera set up main/sub/mobile streaming. Mobile stream only be used in IP channels.

2- Realtime setting:

Main stream: High video quality to view on main stream.

Sub stream: Middle video quality to view on main stream.

Mobile stream: The lowest video quality to view on mobile stream. Advantage: Use smaller bandwidth, only support on IP camera.

3- Main menu:

Preview: Check realtime video on camera.

Playback: Check the records in DVRHDD drive.

Remote setting: DVR menu to set up device parameters.

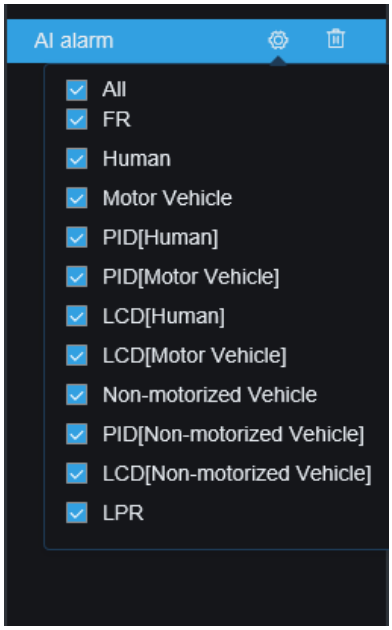
Local setting: Set up Web records and picture save location, select video “file type”.

4- Information: Mouse stop, check system user, IE version and plug-in version

5- Manual Alarm: Manual enable /disable Alarm Out

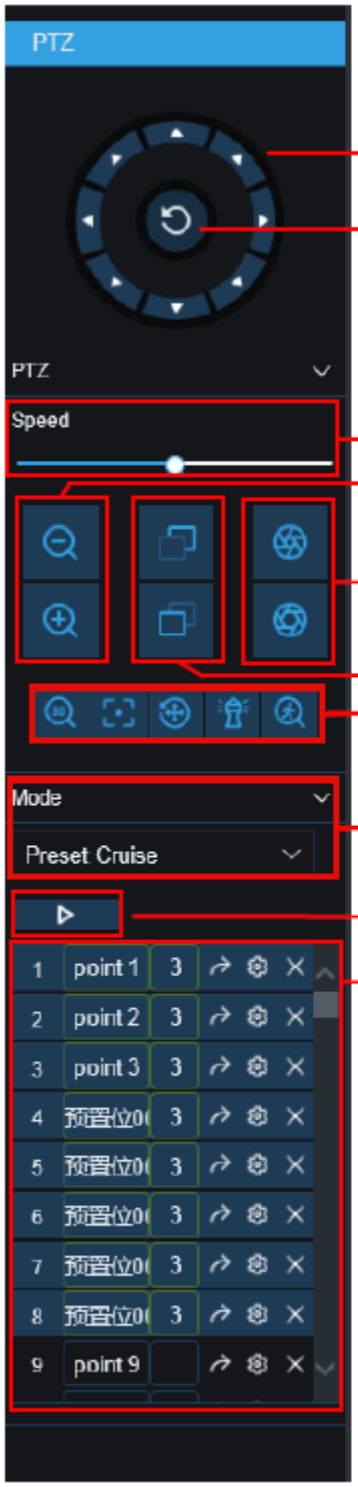
6- **Color setting:** Click to hidden the settings.

7- **AI alarm：** Trigger AI alarm push, click click AI type detection, click to delete.



8- **PTZ Control:** Click to show/hidden PTZ.

9- PTZ Control Plug-in



Direction arrow: long-pressing the surrounding direction keys can control the level of PTZ levels, vertical, etc. move PTZ

Default cruise

PTZ speed: Adjustment horizontal bar is divided into 1--100

Zoom+/Zoom -: Click - /+ to control lens enlarge and narrow

IRIS: Click this button to adjust IRIS enlarge or narrow

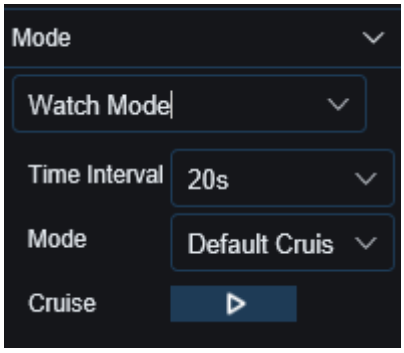
Focus: Click - /+ adjustment the lens focus

The first icon is 3D PTZ, the second is auto focus, the third is reset PTZ, the fourth is watch point mode, the fifth is manual human tracking. Please view in 5.1.4.1 PTZ Control.

PTZ Mode: PTZ, PRESET, Line Scan, Watch Mode, Tour, Pattern Scan Please view in 5.1.4.1 PTZ Control.

Cruise: Start/stop PTZ cruise

Preset: Modify preset point name, move to, add, delete

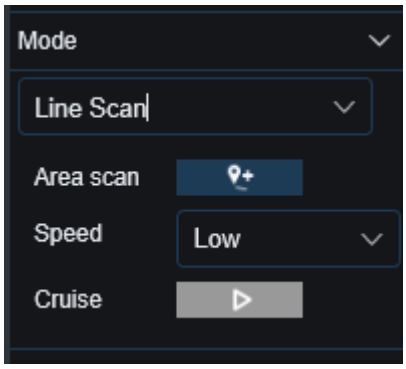


Watch Mode：

Time Interval: watch mode waiting time interval, the time since stop watch mode operation.

Mode：select watch mode, default/preset/line scan/tour/pattern scan

Click ▷ to start cruise.

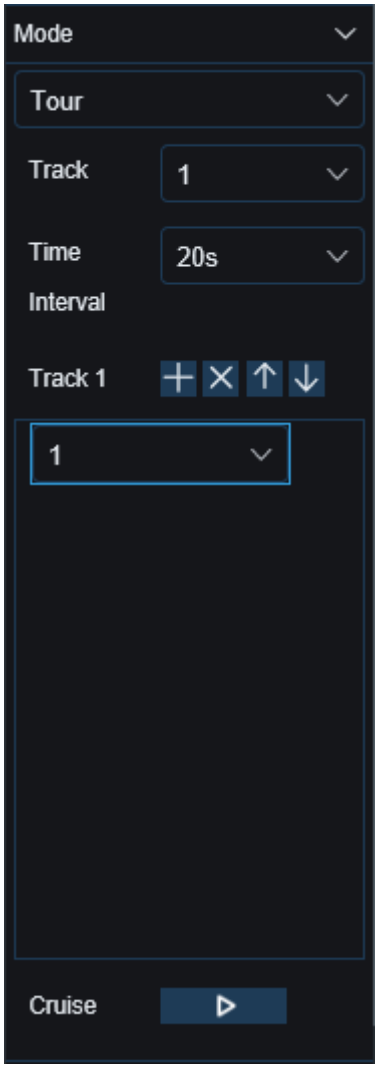


Line Scan:

Area scan: Click to record the start position, after moving PTZ, click to record the stop position；

Speed: Line scan speed；

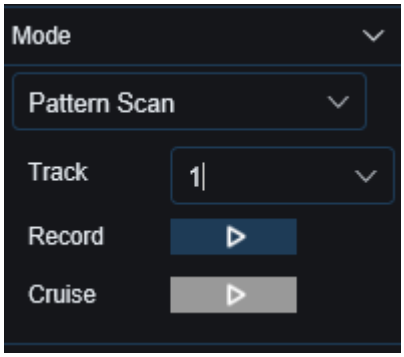
Click ▷ to start line scan, PTZ start line scan. PTZ only move in the same horizontal direction on this mode.



Tour：

Time Interval: every point stay time.

Click ＋ to add preset point. Click ✕ to delete preset point. Click ↑/↓ move up/move down preset points. Click ▷ to start cruise.



Pattern Scan：

Record: Click to record the cruise route.

Click to stop record.

Cruise: Click to cruise the recorded route

10- Live View Control Buttons:

switch windows modes

Open all of channels

Close all of channels

Original: Display preview with original scale

Stretch: Stretch the live window to suitable every scale screen

full screen

Manual record: Click the manual recording of all the display channels. Click again to stop recording. Manual video is saved to your PC

Manual capture: Click to grab the screen of all the current display channels to save to your computer

Digital: Click live image. Click -one part of image zone to enlarge. Right-click to return normal view.

Volume control: adjust level volume +/-. Mute mode

Intercom: Click to speak with DVR, re-click to turn off. (Note: this function need DVR supports)

White light, manual control siren and white light (Need IPC supports).

Siren, manual control siren to alarm (Need IPC supports).

Click to add customize tag please (7.1.5 TAG)

11- Guide: Display the current channel number. Use direction keys to control.

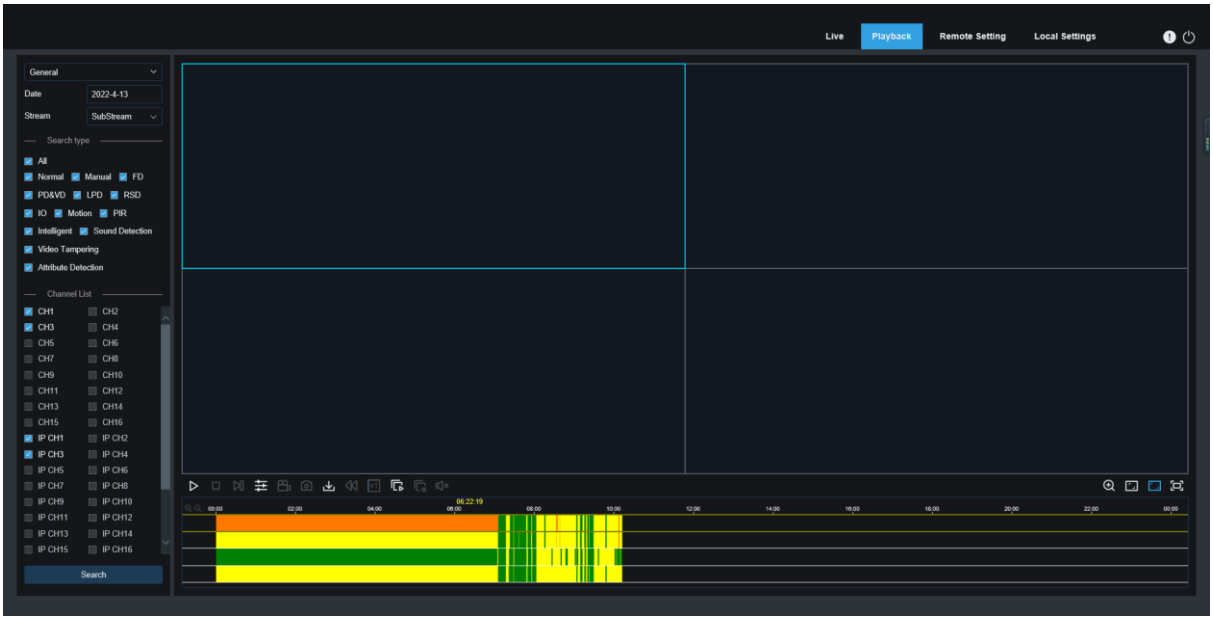
12- Page: Click channels to show on the screen.

8.3.2 Playback

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

Note: To play the video clips downloaded from the Web Client Manager, install and launch one of the following players **before** locating the recordings. Wait for 3 ~ 30 seconds before the video starts to play.

1. USAVision Player
2. VLC Media Player
3. KM Player

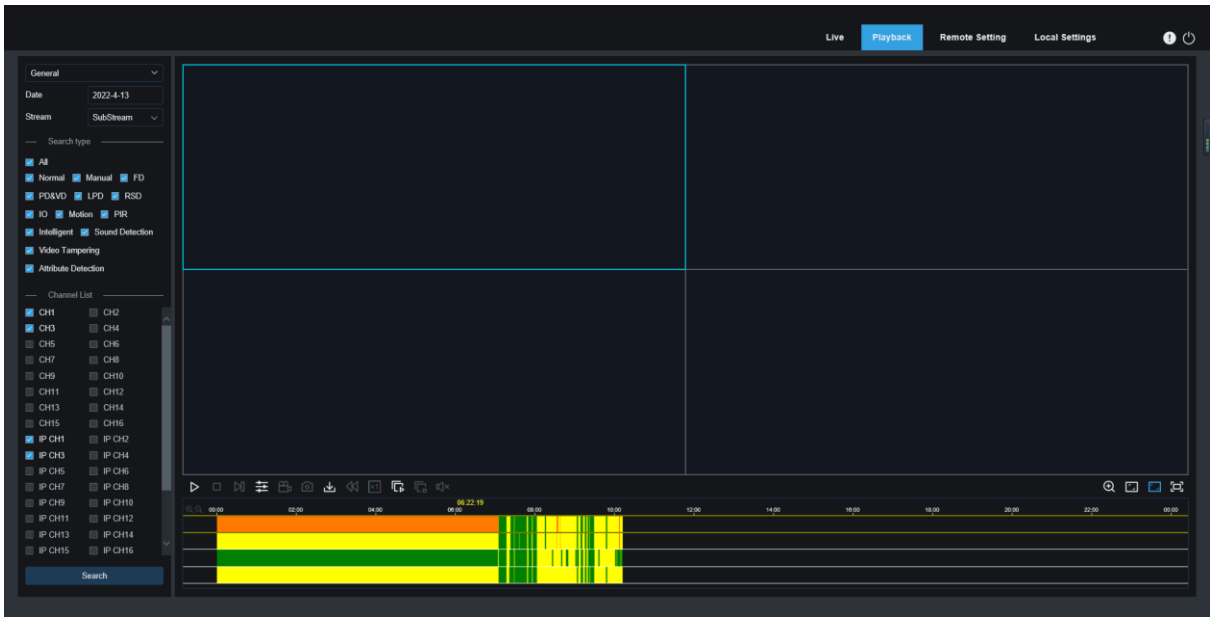


To search recordings:

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 channels you would like to search for recordings from. Check **Synchronous playback** to play all channels 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.

8.3.2.1 Playback Control Buttons



Play the recordings

Pause

Stop

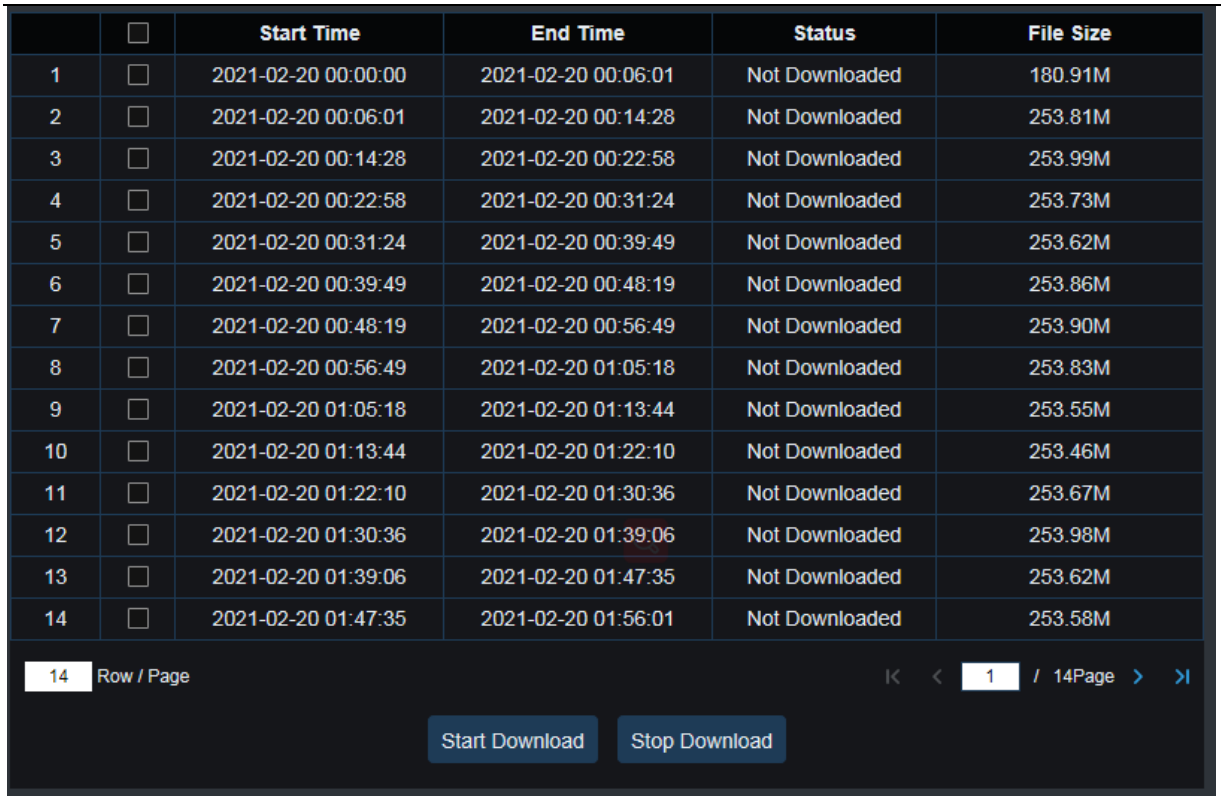
Go Forward One Frame: Move frame-by-frame through playback. Only available when the **Synchronous playback** option is not checked.

Synchronous playback: Click to play the selected channel at the same time at the same time.

Click upon one of the channels 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 channels which is being played and then Click capture 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	☐	2021-02-20 00:00:00	2021-02-20 00:06:01	Not Downloaded	180.91M
2	☐	2021-02-20 00:06:01	2021-02-20 00:14:28	Not Downloaded	253.81M
3	☐	2021-02-20 00:14:28	2021-02-20 00:22:58	Not Downloaded	253.99M
4	☐	2021-02-20 00:22:58	2021-02-20 00:31:24	Not Downloaded	253.73M
5	☐	2021-02-20 00:31:24	2021-02-20 00:39:49	Not Downloaded	253.62M
6	☐	2021-02-20 00:39:49	2021-02-20 00:48:19	Not Downloaded	253.86M
7	☐	2021-02-20 00:48:19	2021-02-20 00:56:49	Not Downloaded	253.90M
8	☐	2021-02-20 00:56:49	2021-02-20 01:05:18	Not Downloaded	253.83M
9	☐	2021-02-20 01:05:18	2021-02-20 01:13:44	Not Downloaded	253.55M
10	☐	2021-02-20 01:13:44	2021-02-20 01:22:10	Not Downloaded	253.46M
11	☐	2021-02-20 01:22:10	2021-02-20 01:30:36	Not Downloaded	253.67M
12	☐	2021-02-20 01:30:36	2021-02-20 01:39:06	Not Downloaded	253.98M
13	☐	2021-02-20 01:39:06	2021-02-20 01:47:35	Not Downloaded	253.62M
14	☐	2021-02-20 01:47:35	2021-02-20 01:56:01	Not Downloaded	253.58M

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

Stop All Channels: Click to stop playing all channels. 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.

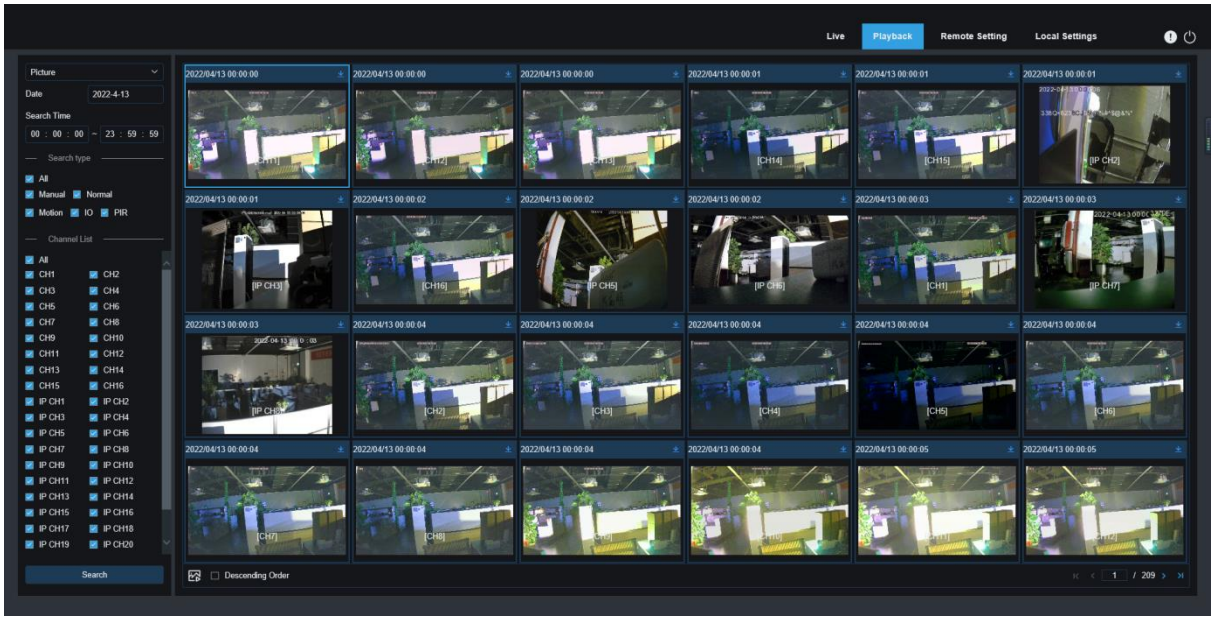
Original Proportions: Shows the playing video at the original proportions.

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

To enlarge the web client to full screen.

8.3.2.2 Picture playback

After setting the capture in 5.2.3.1 Capture, you can search the captured image here.



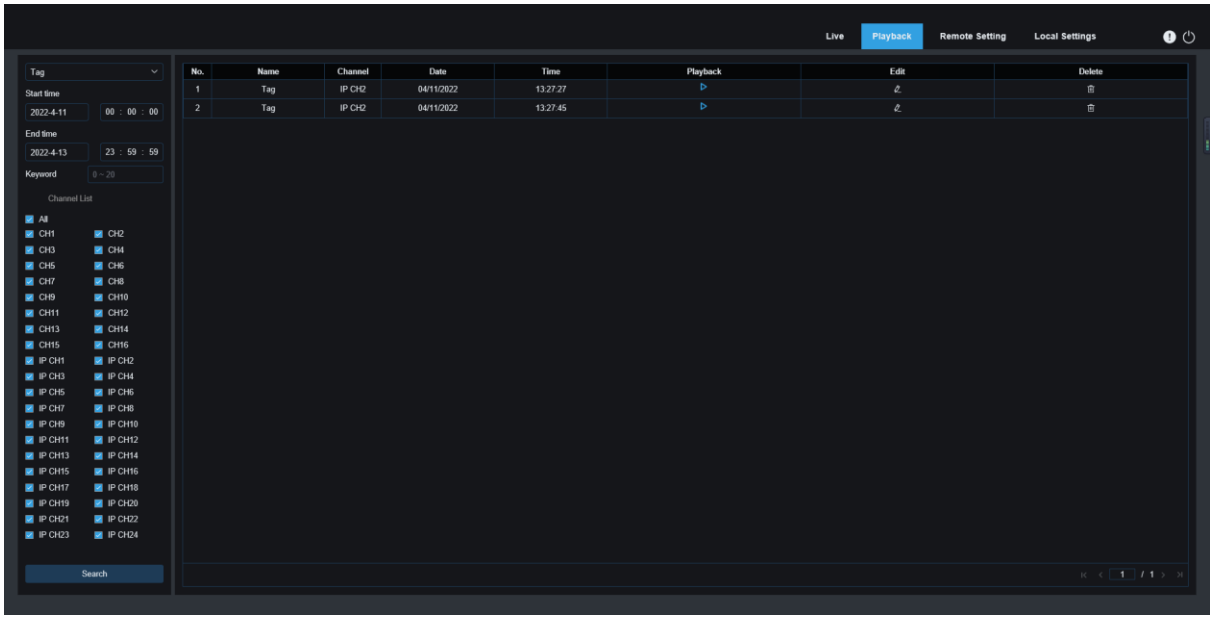
Search capture:

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 channel to search for videos.
6. Click Search.
7. The picture that meets your search conditions will be displayed on the right side

You can double click any picture to enter the small fragment back interface. Click to return to the previous page.

8.3.2.3 Tag playback

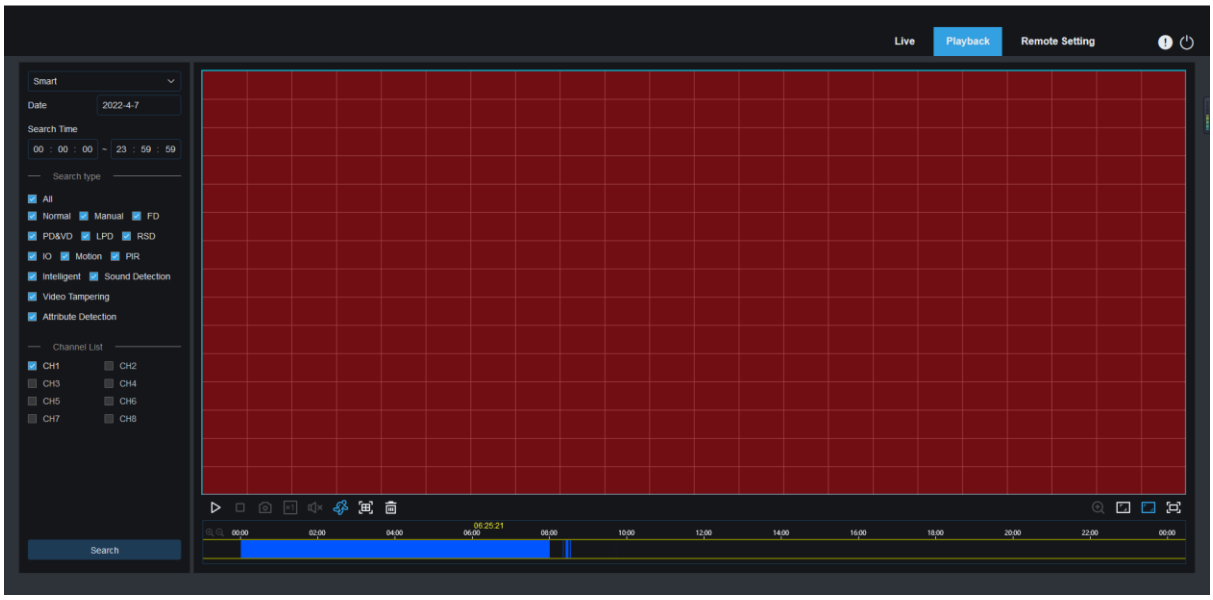
In this menu, you can view all the tags that have been added.



Please view 7.1.5 TAG Playback.

8.3.2.4 Smart playback

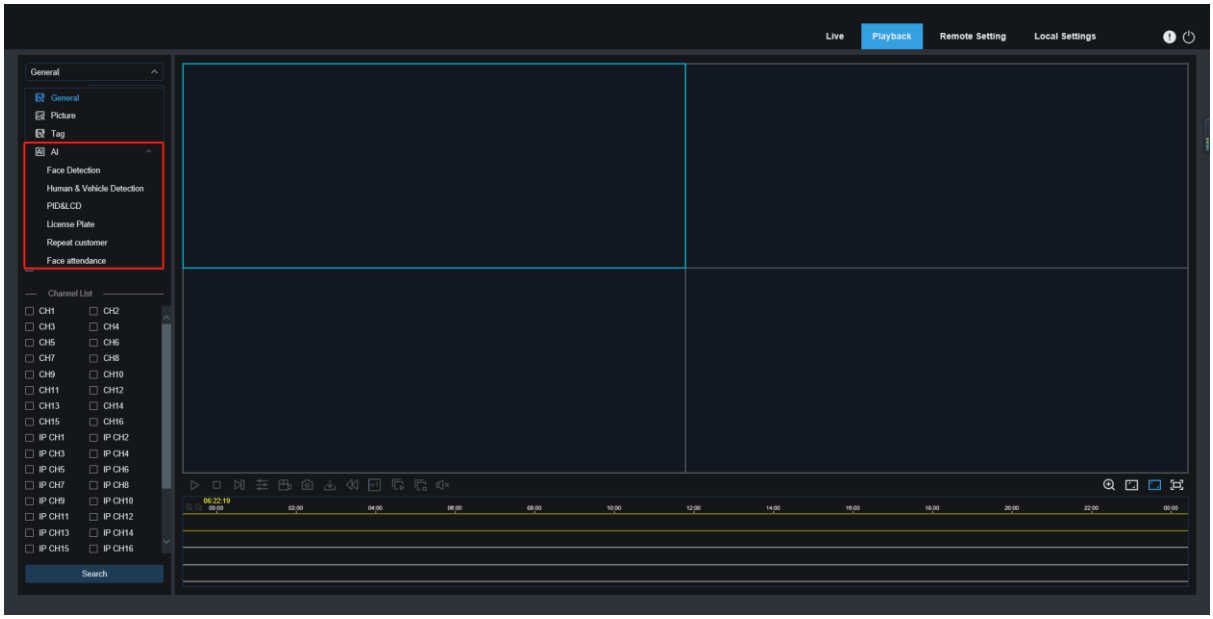
On 5.1.6 Motion set up motion detection, human triggering motion detection alarm, you can find Smart Pickled Played Video.



Click button to show smart set up area. Click button to select all area; click to delete all selected area.

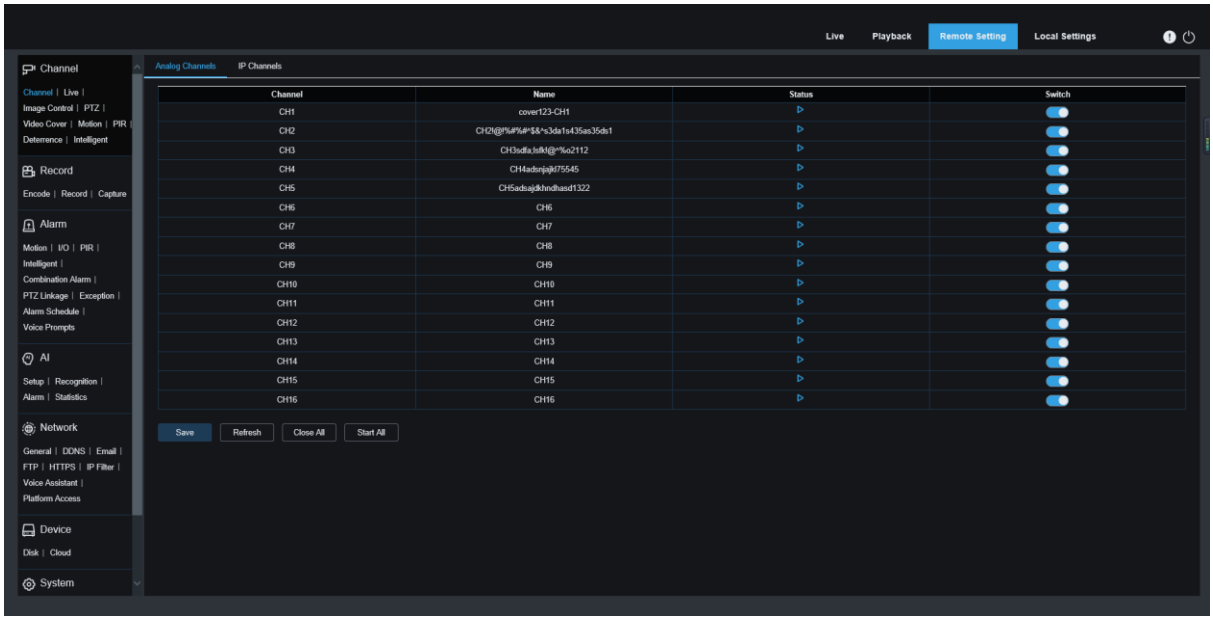
8.3.2.4 AI Playback

On 5.4 AI set up AI alarm, you can search AI alarm events here. Search face detection, license plate detection, PD&VD, PID&LCD, repeat customer, face attendance.



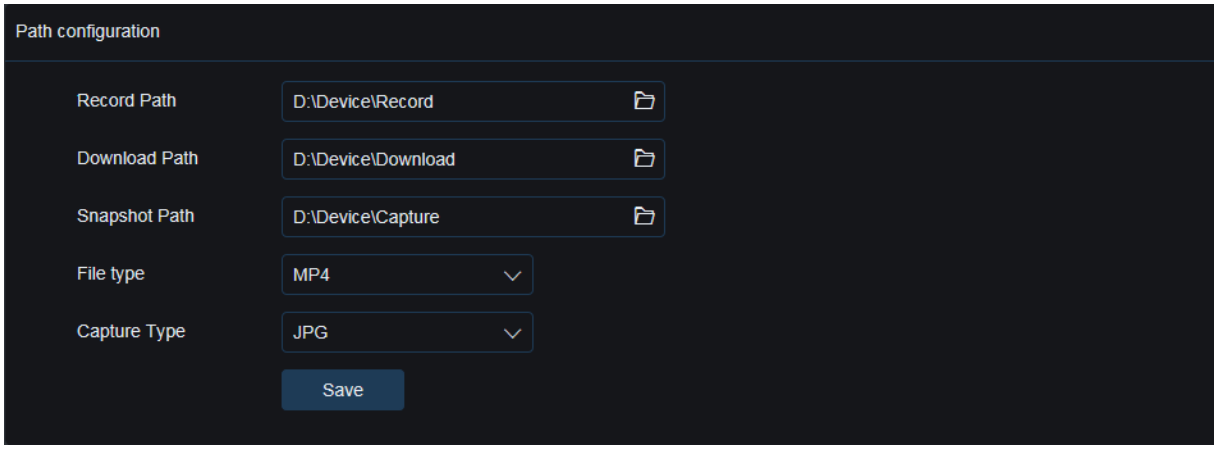
8.3.3 Remote Setting

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



8.3.4 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 capture snapshots to be saved on your computer.

File Type: Choose your preferred file type for manual recordings.

Capture Type: Choose your preferred file type for manual capture.

Save: Click to save the modifications.

Appendix

A. Supported Hard Disk Drives

To see the supported hard disk drives for UA-XVR1620, see the UA-HD DVR HDD Compatibility Table here.

B. 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 there's 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, consult with our technical personnel. We strongly suggest user to set password easy to be remembered and relatively safe. If you have safety requirement, 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. Place the DVR in a place with good air circulation and away from heat sources to ensure stability and life of the DVR.
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 the DVR runs, the data on your HDD will be lost.
7. **Q: Can I play back while recording?**
   A: Yes. The system supports the function of playing while recording.
8. **Q: Can I clear some records on the HDD of the 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: 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: 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: Check if:

    a) PTZ in the front side is malfunctional.
    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: 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: Check if the alarm setting, alarm connection and alarm input signals are correct.

14. **Q: Why does buzzer keep alarming?**

    A: 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, change the setting to No Record. To stop Startup recording, 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 channel as off status in record setting.