

# **UA-XVL1611/XVR1620**

## User's Manual





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[Technical Support Policy]



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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.

## 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.

## 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.



# **Note for Incompatible Cameras**

Certain GV-IP cameras are not supported by UA-XVL1611 and UA-XVR1620.

See the <u>technical notice</u> for details.

# **Chapter 1 Product Overview**

## 1.1 UA-XVR1620 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 UA-XVR1620 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.
	Load default settings of the DVR.
Reset	Note: The Reset button is below the USB port. Poke the Reset button to
	load default settings.
Power Switch	Turn on / off power supply.

## 1.3 UA-XVL1611 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.



## 1.4 UA-XVL1611 Rear Panel



Item	Description
Video Input	Connect with video input devices, BNC port.
Audio Input (1-4)	Connect with audio input signals, RCA port.
Audio Output	Audio signal output, RCA port.
VGA	Connect to your TV or a monitor with VGA input.
НОМІ	Connect to your digital TV or monitor with HDMI input.
RS-485	Connect to PTZ devices.
Sensor & Alarm	Optional. Connect to external sensor & alarm devices.
Power Switch	Turn on / off power supply.
LAN	Connect to your home network.
USB port	Connect the supplied mouse or USB flash memory.
	Load default settings of the DVR.
Reset	Note: The Reset button is below the USB port. Poke the Reset button to
	load default settings.
Power	Connect to the supplied power adaptor.

3



# **Chapter 2 DVR Installation & Connection**

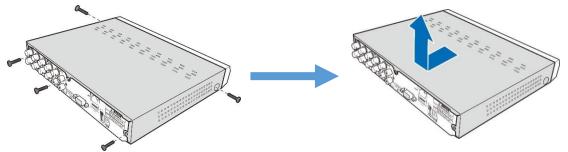
### 2.1 HDD Installation

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

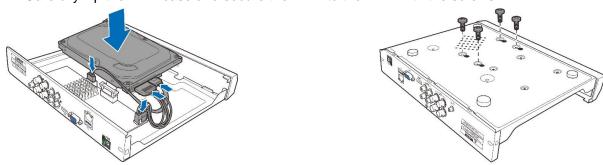
Caution: DO NOT install or remove the hard drive while the power is turned ON.

#### Note:

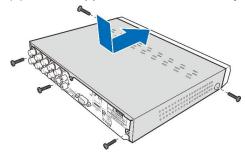
- 1. The DVR supports 3.5" and 2.5" SATA HDD of up to 10 TB only.
- 2. The following procedures are for reference only. The practical operation may be different depending on the model you purchased.
- (1) Cut power firstly, and then remove screws on both sides & rear panel, and open DVR upper cover.



(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.

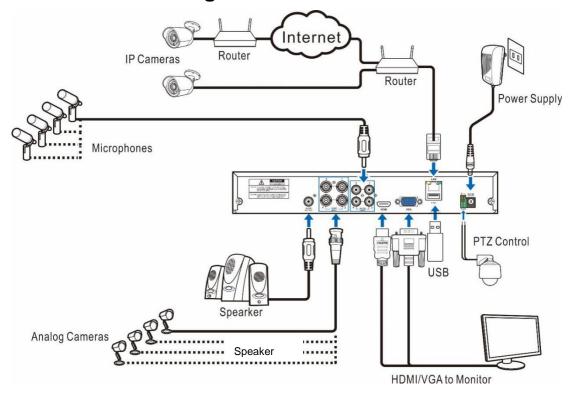


(3) Put the upper cover back carefully, and fix the cover with screws.





## 2.2 Connection Diagram



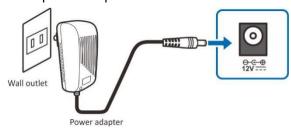
**Note:** Above diagram is for reference only. The practical connection may be different depending on the DVR you purchased.



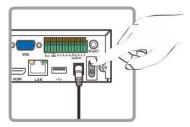
## 2.3 Power Supply Connection

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.



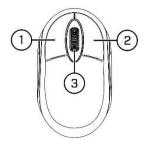
For specific models, press the **Power Switch** to turn on the power.





# **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.

7



## 3.2 Using the Virtual Keyboard

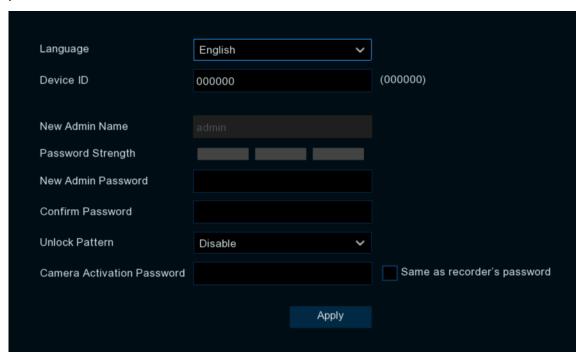
You will see the virtual keyboard automatically on the screen when you need to enter data.

Click to toggle the keyboard to upper case and more punctuation



### 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 <u>5.7.1</u> 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.

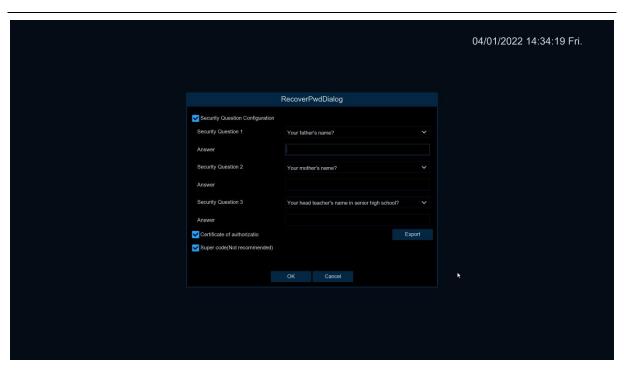
**Camera Activation Passwords:** The activation/connection password for the camera can be set when the device is first used.

- 1. Tick "Same as recorder's password": Channel management NVR private protocol activation/connection password cannot be set. It will be forced to by synchronized with NVR password. All IPC passwords added online using private protocols will be forcibly changed to NVR passwords. See below there will be warning message.
- Choose a self-defined camera activation password: Channel management --NVR private
  protocol activation/connection password can be set. Adding an IPC password that goes
  online using a private protocol will not be forcibly synchronized as the default password for
  the private protocol.



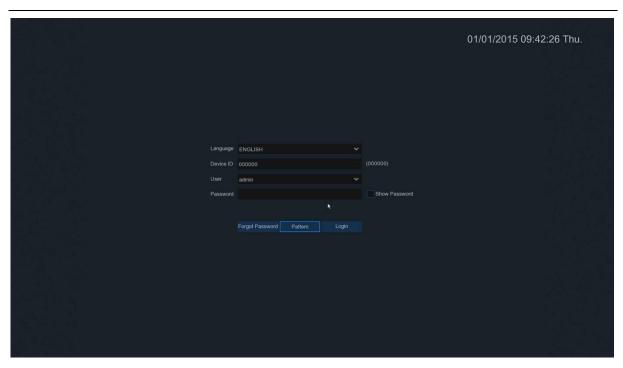
Click **Apply** to confirm your settings and goes to the login interface. Enter your user name & password to **Login** the DVR system.



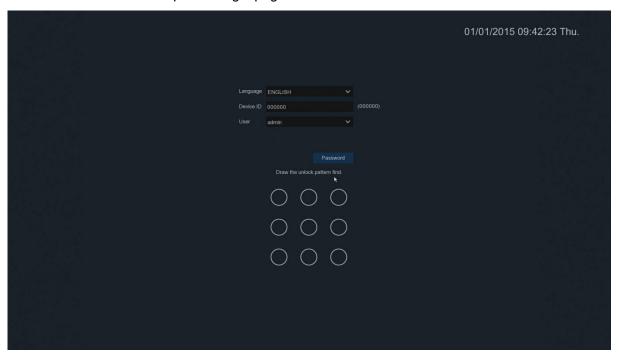


- Security Question Configuration: Reset the main user password through the security
  question and open the password retrieval interface. Choose three security questions and fill in
  the corresponding answer with a maximum of 64 characters.
- Certificate of authorization: Enable and click Export to 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.
- 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.

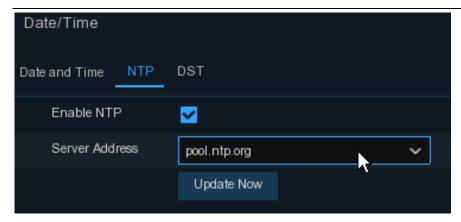


- Date: Click the calendar icon to set the system date.
- Time: Click to set the system time.
- **Date Format:** Choose from the drop-down list to set preferred date format.
- **Time Format:** Choose time format between 24Hour and 12Hour.
- **Time Zone:** Set the correct time zone.

### [NTP]

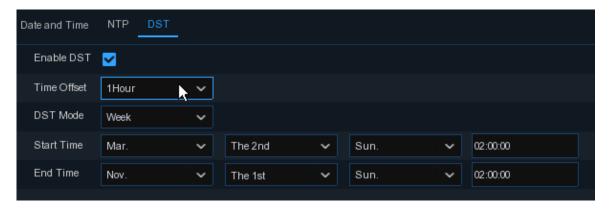
NTP stands for Network Time Protocol. This feature allows you to synchronize the date and time automatically on the DVR over Internet. Note that the DVR needs to be connected to the Internet to enable this function.





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

### [DST]

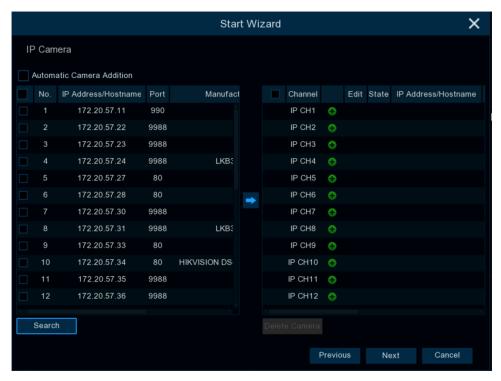


- Enable DST: Enable if Daylight Saving Time (DST) is observed in your region.
- Time Offset: Select the amount of time to offset for DST.
- **Time Mode**: Choose to set the daylight saving time in weeks or in days.
- Start Time/End Time: Set the start time and end time for daylight saving.

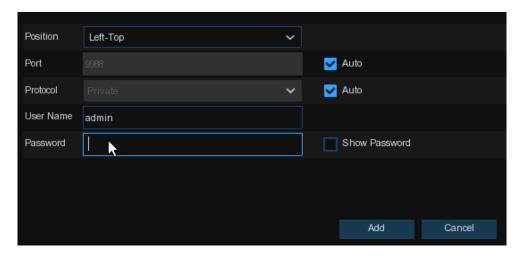


### 4.1.4 IP Camera

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.
  - Select Onvif for UA-B20004F / UA-B40004F / UA-B4000VF-S / UA-D20004F / UA-D40002F / UA-D4000VF-S / UA-R40002F-SA / GV-IP cameras
  - Select Private for UA-B580F3 / UA-R500F2 / UA-R560F2 / UA-R580F2 / UA-R800F2
- 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.
- Automatic Camera Addition: Check for the device to automatically add cameras to the channels where cameras are not added.
- Connect with default password: When enabled, the camera will connect with the set default password.

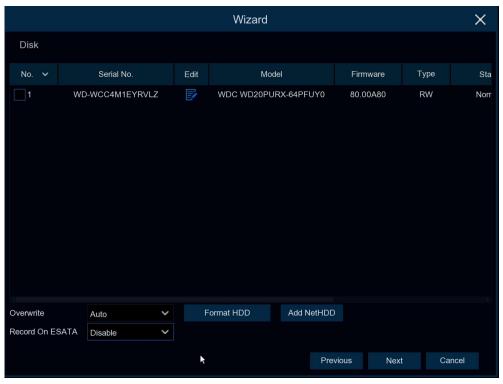
### Note:

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 <u>Network Cameras User Manual</u> for details.

### 4.1.5 Disk

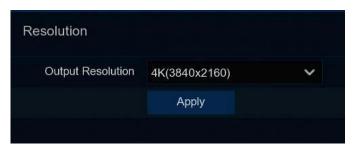


- **Format HDD**: If the HDD is installed in the DVR for the first time, it must be formatted. Select the HDD and click **Format HDD** button to format the HDD.
- Overwrite: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose 7 days, only the last 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 the following GV-Eye versions:

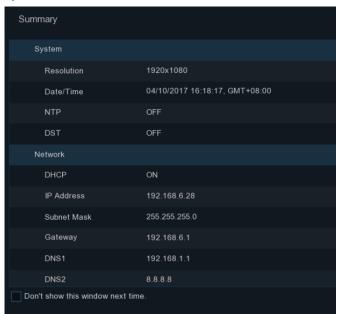
- UA-SVR1620: GV-Eye V2.9.1 or later.
- UA-XL1611: GV-Eye V3.1.1 or later.



## 4.1.8 Summary

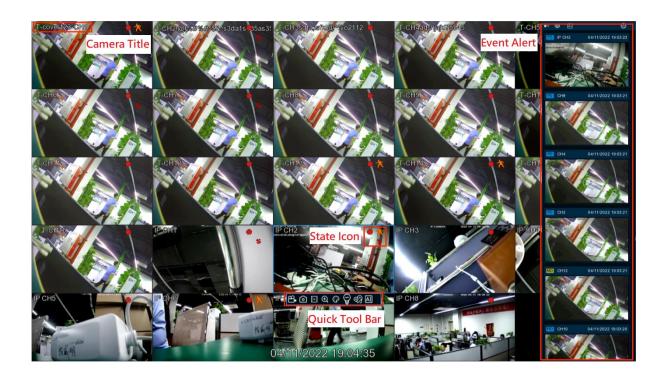
You can check the system summary information you had set in the start wizard and finish the wizard.

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

PIR: 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.

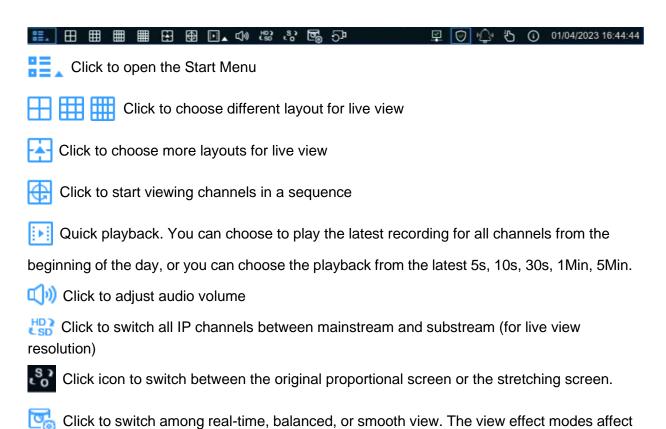


- Switch the real -time video stream between the main code stream and the sub -code stream. HD is the main code out of the picture, SD is a sub -code outflow picture.
- Click to enable/disable white light alarm. Further information please check <u>5.1.8 Deterrence</u>.

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

  Deterrence. This menu won't change the white light setting parameter.
- Olick to add customized tag. It can be playback the tag in "Searching".
- Al statistics are turned on, the mouse hovers on the icon to view Al statistics information

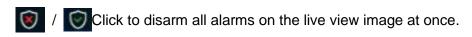
### 4.2.2 Task bar



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.





No Internet connection

Network was blocked

Network connection well

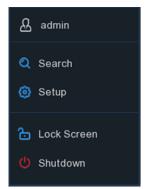
Manually turn on/off all channels white light and siren

turn on/off channels recording and IO alarm

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

### 4.2.3 Start Menu

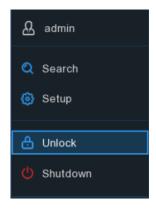
With the start menu, you can switch user, search & playback, enter system setup menu, lock & unlock the screen, shut down, reboot & logout the system.



- admin: To switch user. To enable multi-user, refer to <u>5.7.2 Multi-user</u>.
- 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 <u>4.2.3.1 Unlock and Lock Screen</u> for details.
- **Shutdown**: Shut down, reboot, and log out the system. Refer to <u>4.2.3.2 Shutdown</u> for details.



### 4.2.3.1 Unlock and Lock Screen

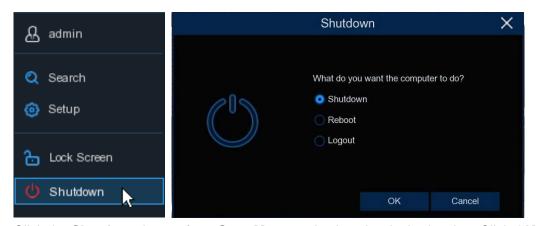


The screen will be locked to prevent unauthorized OSD operation while the DVR is not in menu operation for 1 minute.

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

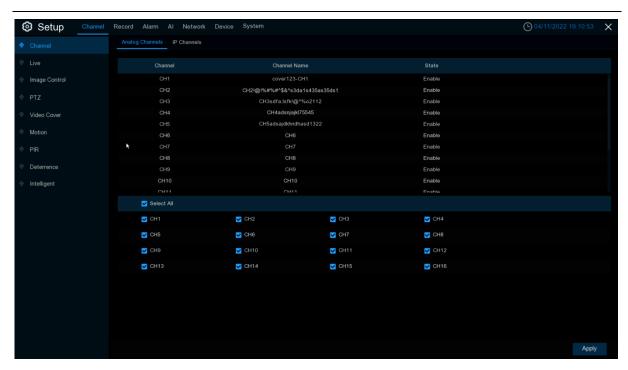
In this section, you are allowed to configure the camera, live view display, manage IP cameras, adjust IP camera's image, PTZ setup, motion setup, convert mode, and more.

### 5.1.1 Channel

## 5.1.1.1 Channel configure

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



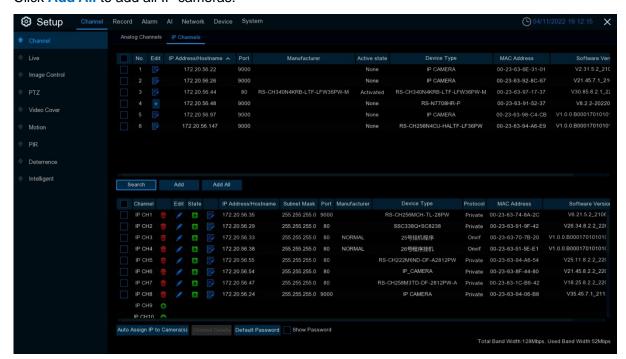


The DVR supports to disable analog channels to increase IP channels. If you want to disable an analog channel, uncheck the box and Click **Apply** to save.



#### 5.1.1.2 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: Select Modify camera's connection settings, and select Edit camera's connection information.

Add: 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.

**Automatic Camera Addition:** Check for the device to automatically add cameras to the channels where cameras are not added.

**Batch IP Modification:** Select the camera in the search list. Batch IP modification allows users to customize the start and end IP addresses, and make batch modifications.





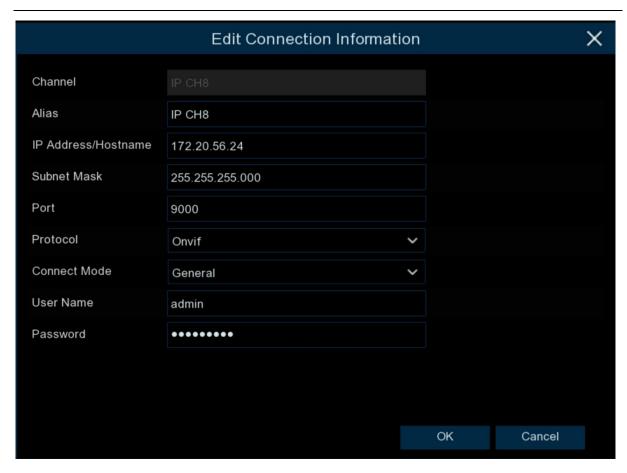
Click **Search** button to search IP cameras, and then Click one of the IP camera on the device list. **Alias:** Name of the IP camera

**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

**Connection 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.

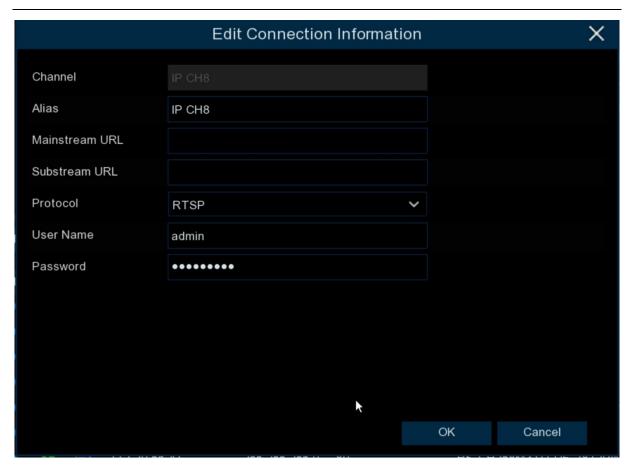




Mainstream URL: Using RTSP protocol shows this option, fill up the IP camera mainstream RTSP URL.

**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.

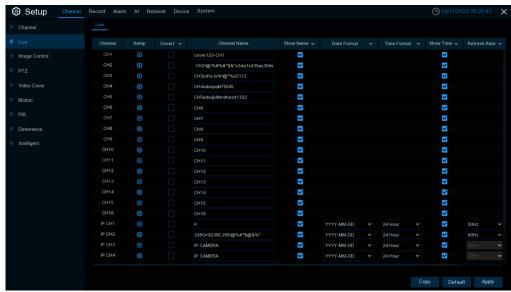
Show Password: select to fill up DVR password, every channel password proclaim in writing

**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

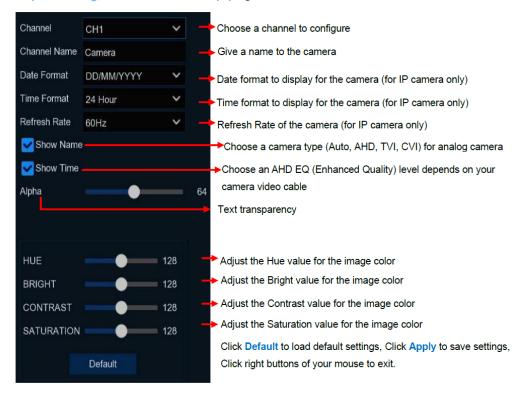
To configure camera parameters.



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.

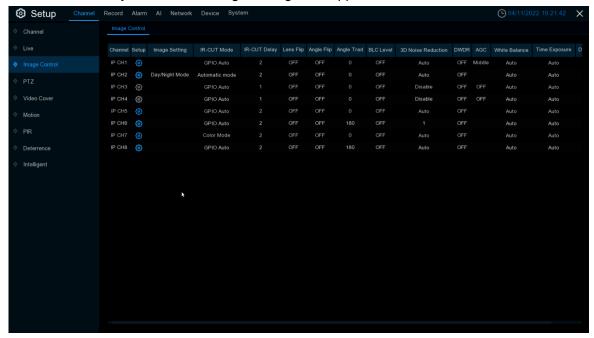


**Note:** 3 MP / 5 MP resolution is not supported by CVI signal.



# **5.1.3 Image Control**

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

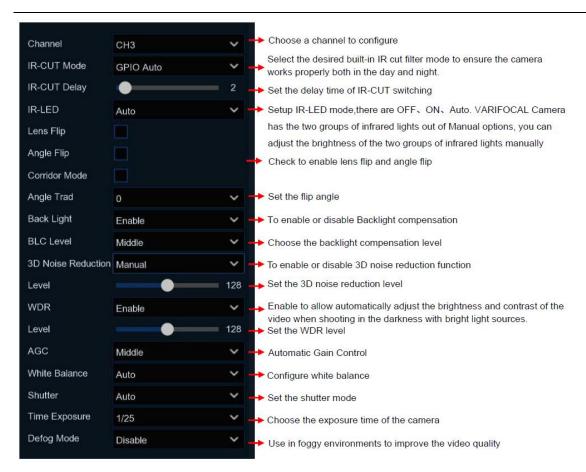


Channel: Channel name.

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.

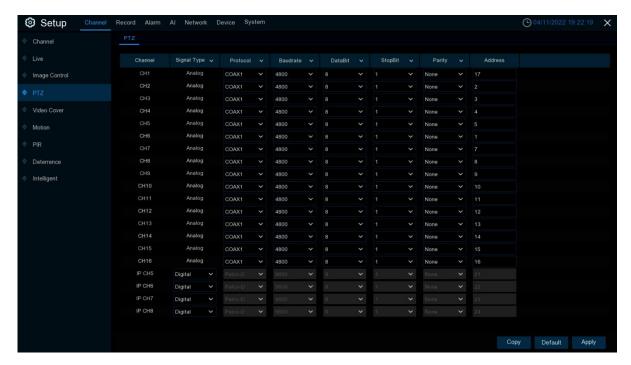






## 5.1.4 PTZ

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

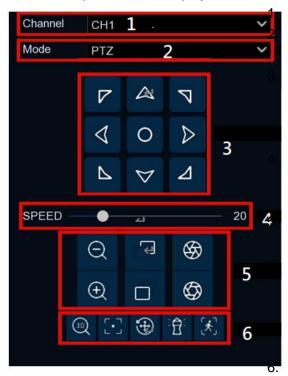


#### 5.1.4.1 PTZ control

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 <u>4.2.1 quick toolbar</u>, and choose the PTZ control icon .





Click to select the channel of the PTZ camera. PTZ Cruise Mode --PTZ, PRESET, Line Scan, Watch Mode, Tour, Pattern Scan. Click the middle button, the PTZ will continue to

Click the middle button, the P12 will continue to rotate horizontally; long -pressing the surrounding direction keys can control the level of PTZ levels, vertical, etc.

PTZ speed adjustment horizontal bar is divided into 1-100 gears. The larger the value, the faster the rotation speed.

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. 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;

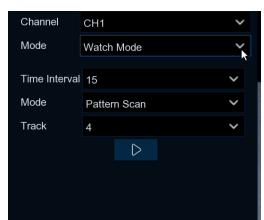


Click or to add new preset point. The

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.









Pattern Scan:

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

Cruise: Click start cruise on the previous

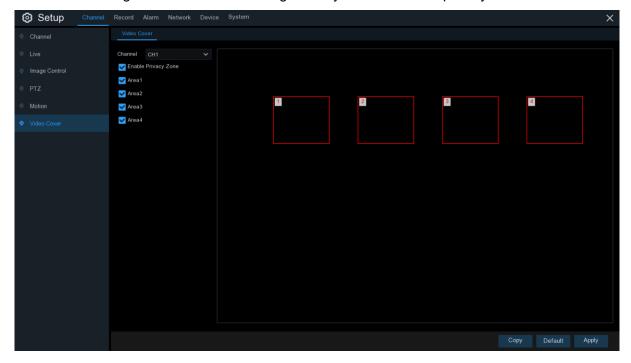
record route.

41



## 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.

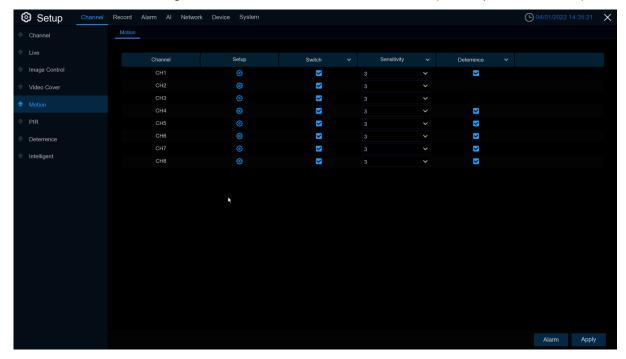


**Note:** The area of privacy zones you had set will be invisible in both live view & recording video.



# **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 / SMD by Recorder: Select trigger detection type. There are four options like Motion, Pedestrian, Vehicle, Pedestrian & Vehicle.

Motion Detection Area:

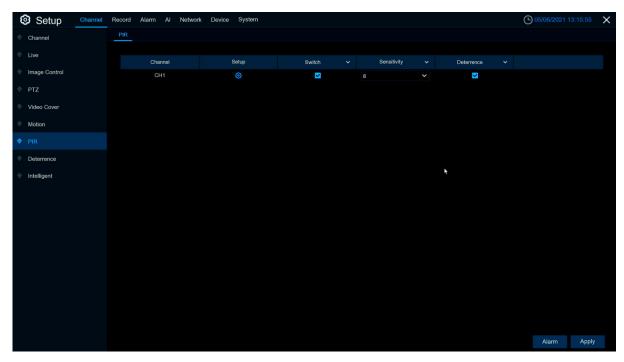
The whole screen is marked for motion detection (red blocks) as default. If you want to disable the motion detection on a certain area, click the grid cursor and then drag the mouse to highlight the scope to unmark the area into transparent blocks. After setting is completed, click the right button of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

Click Alarm button to configure the motion detection alarm function: <u>5.3.1 Motion Detection</u>



## 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.

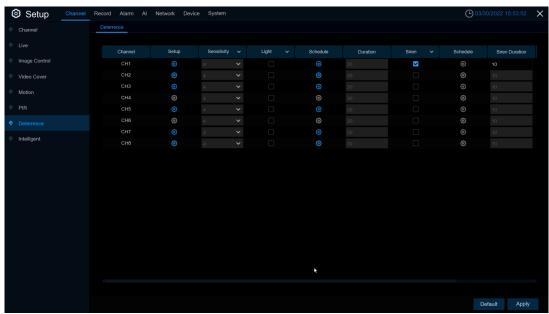
After setting is completed, Click the right button of your mouse to return and Click **Apply** to make the area setup effective.

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



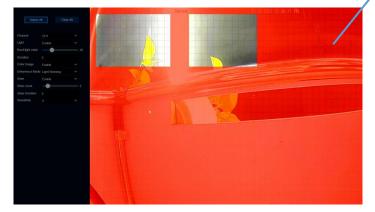
### 5.1.8 Deterrence

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.

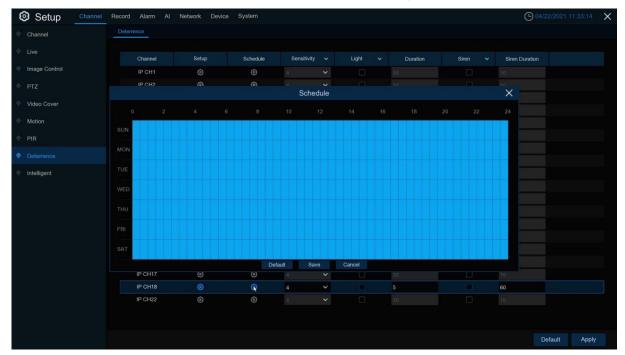
**Siren Duration:** Set the alarm siren time period.

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.



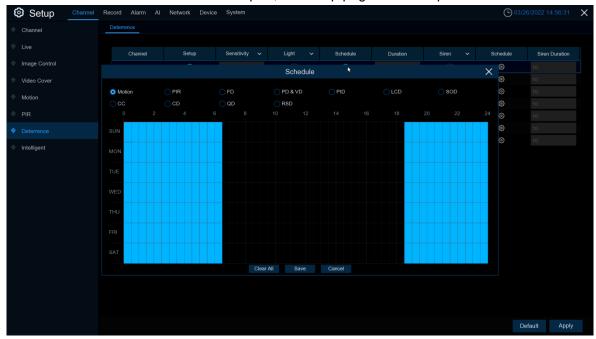
While schedule draw to blue, it means that during this period white light detection can be trigger.

**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.

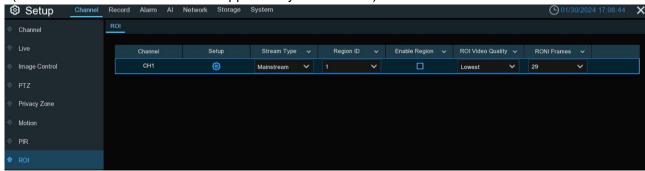
Clear All: To delete all of pages blue mark.



## 5.1.9 **ROI**

Regions of Interest (ROI) are selected regions for special attention in the video area. This function aims to improve the image encoding quality of the selected regions and reduce the encoding quality outside the selected regions, so as to ensure the image sharpness of the regions for special attention under the condition of constant bitrate. (Note: This function needs to be supported by the camera.)

(Note: This function needs to be supported by the camera.)



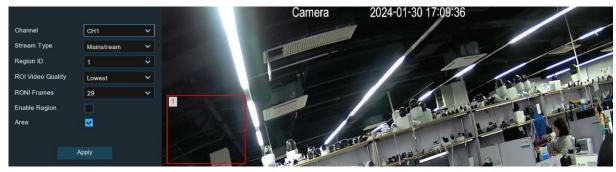
Stream Type: Select the stream type to set.

Region ID: Select the region ID to be set. You can set at most eight region IDs.

**ROI Video Quality:** Set the image quality in the region, the higher the quality the clearer and smoother the image.

RONI Frames: Set the frame rate of non-ROI area.

Setup: Click to open the setting page.



Area: Enable the switch to set the ROI area.



# 5.1.10 Intelligent

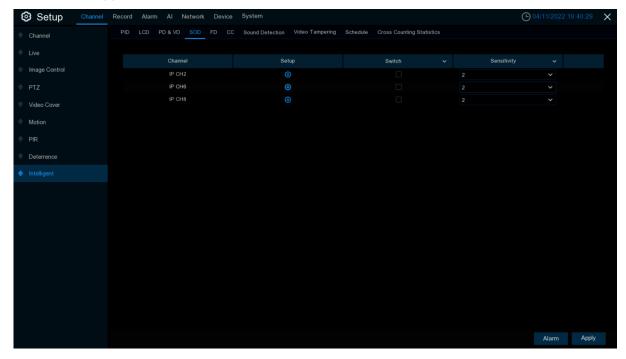
The optional intelligent functions include **SOD**, **Sound Detection** and **Video Tampering**. These functions are only supported by the AI-capable UA-IP cameras listed below:

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

Note: To configure AI functions, see 5.4 AI.

# 5.1.10.1 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.

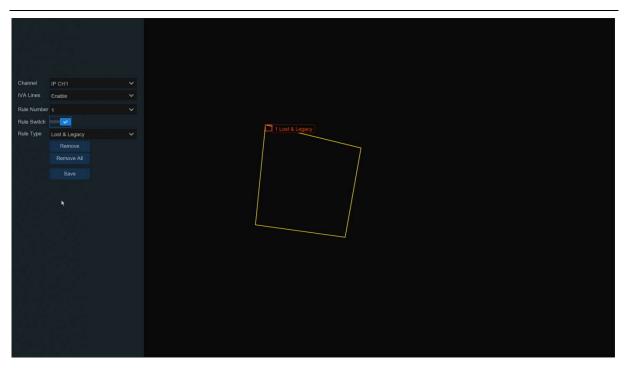


Switch: To enable or disable the SOD function

**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.



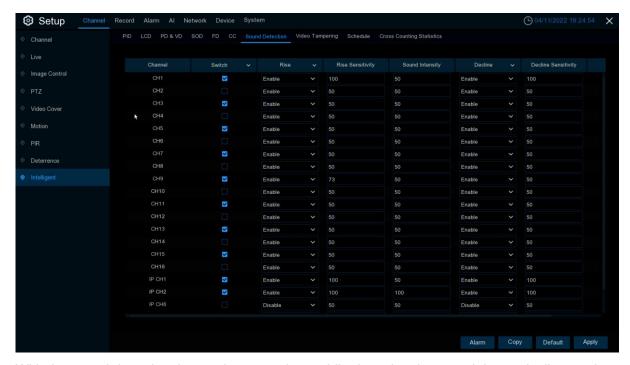
### **Notice:**

- 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 <u>5.3.4.1 SOD (Stationary Object Detection).</u>



#### 5.1.10.2 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.

Switch: Turn on/off the Sound Detection function.

**Rise:** Switch of volume raised; the alarm will be triggered only when volume rise sharply. **Rise Sensitivity:** The sensitivity of volume raised, the larger the value, the easier to trigger the alarm.

**Sound / Volume 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.

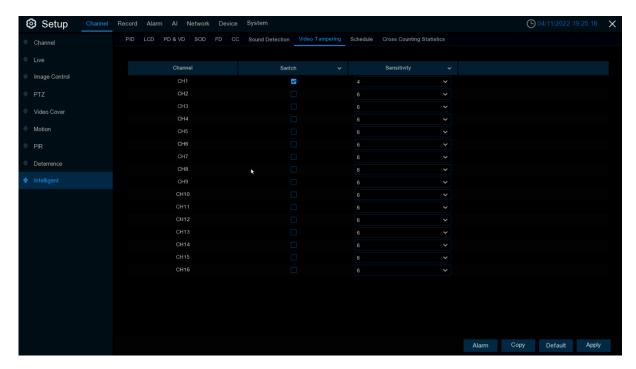
**Decline:** Switch of volume drop sharply; the alarm will be triggered only when volume rise sharply. **Decline Sensitivity:** The sensitivity of drop sharply, the larger the value, the easier to trigger the alarm. Set up value from 1—100.

**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 <u>5.3.4.1 Sound</u> Detection.



# 5.1.10.3 Video Tampering



The alarm triggered when the camera be covered largely.

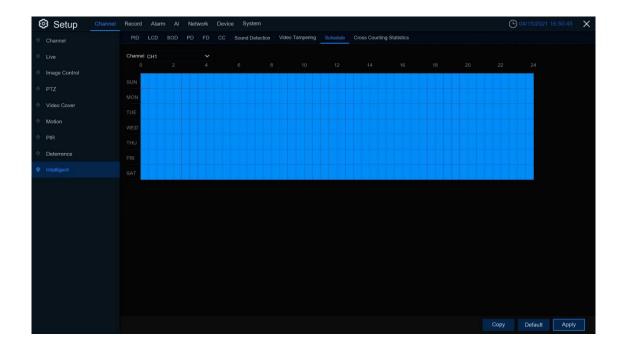
Switch: Enable or disable the alarm caused by video cover.

**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 <u>5.3.4.3 Video Tampering</u>.



## 5.1.10.4 Schedule



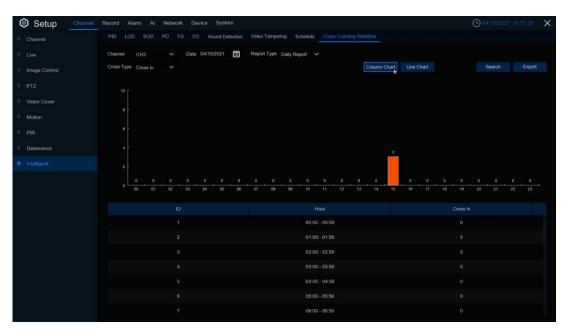
In order to activate the intelligent function, you need to configure the schedule. The schedule will be active in 24 hours x 7 days.

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.



# **5.1.10.5 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.

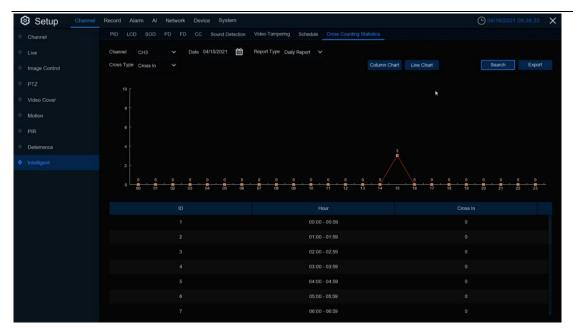
Click Search button to search CC statistics data

**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.







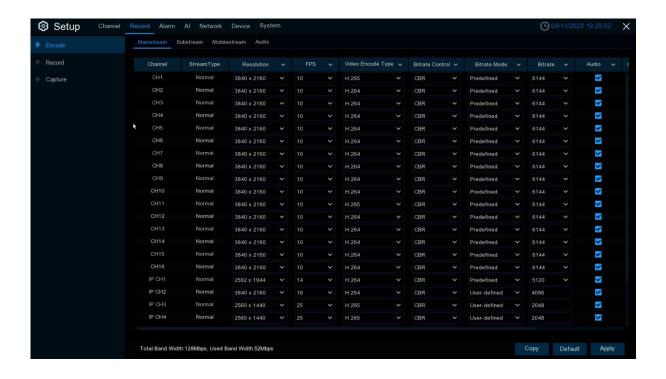
## 5.2 Record

This menu allows you to configure the recording parameters.

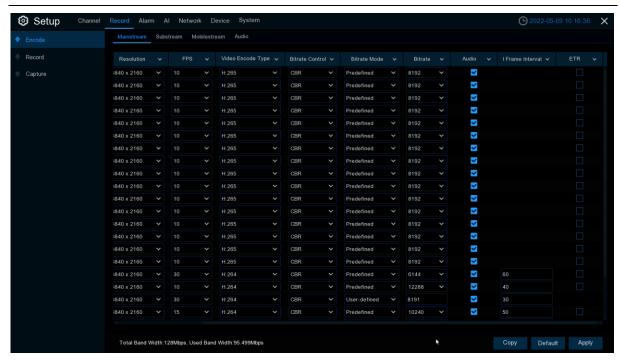
#### 5.2.1 Encode

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

**Bitrate Control / Encoding Mode**: 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 / Config 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.

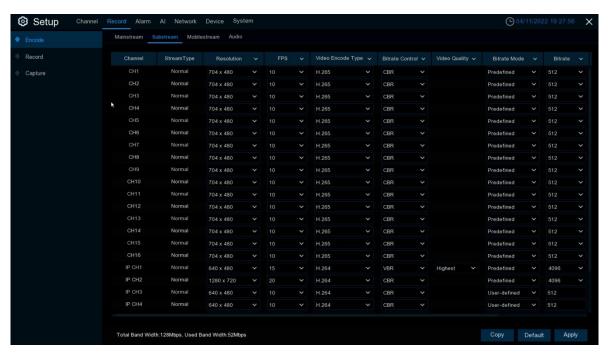
I Frame Interval: Set I Frame Interval, only available for IP channel.

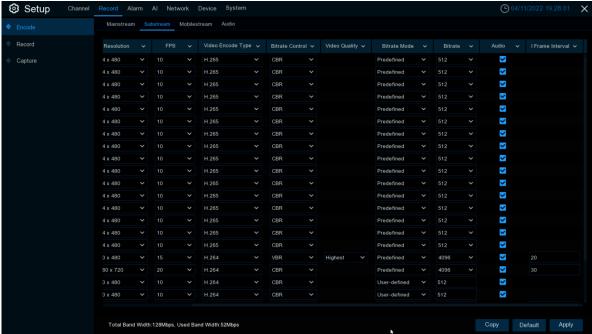
ETR: Once enabled, there will be two different frames and resolutions when alarm triggered and not triggered.

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

**Bitrate Control / Encoding Mode**: 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 / Config 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.

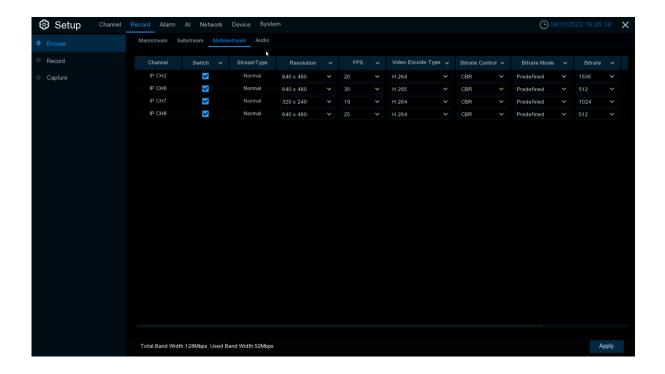
**Audio:** Select this option if you want to record audio along with video and have a microphone connected to the DVR or using a camera with audio capability.

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

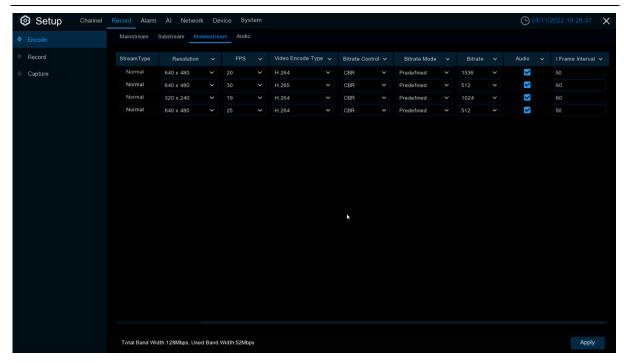
ETR: Once enabled, there will be two different frames and resolutions when alarm triggered and not triggered.

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

**Bitrate Control / Encoding Format**: 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 / Config 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.

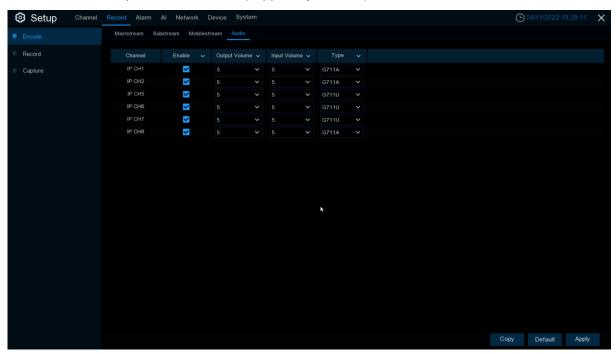
ETR: Once enabled, there will be two different frames and resolutions when alarm triggered and not triggered.

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.

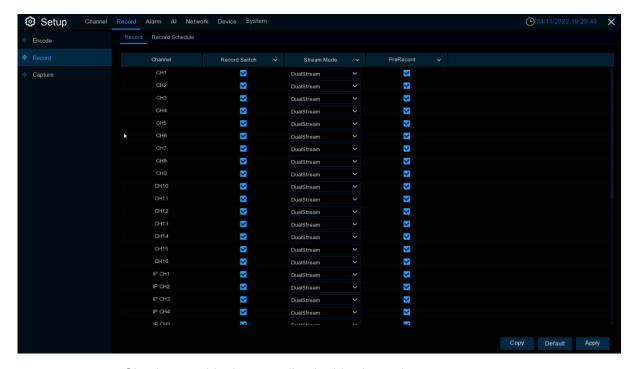
Output Volume: Set camera output volume.
Input Volume: Set camera input volume.
Type: Set camera audio decode type.



## 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.

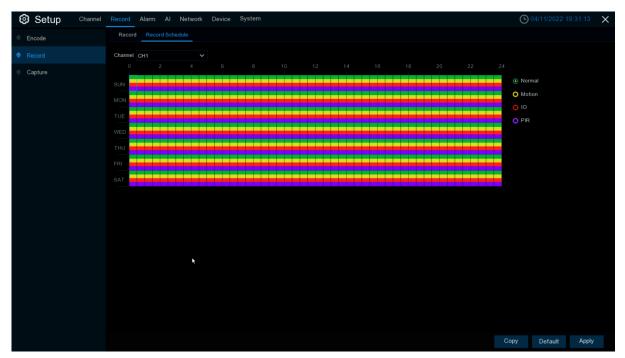
**Stream Mode:** Choose the recording quality. If you choose Dual-Stream, the system will record in both Mainstream & Substream.

**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.

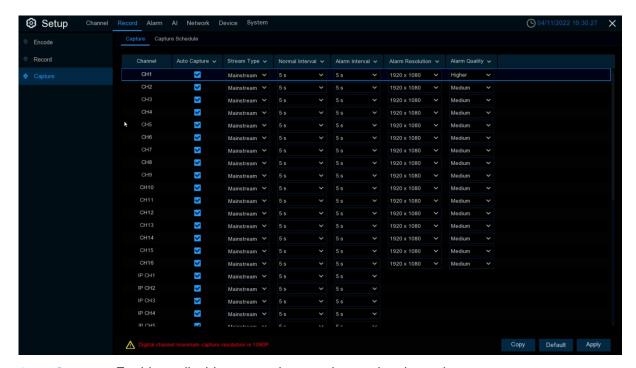
**No Record**: A time slot marked black means that there is no recording scheduled for the time slot.



# 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.

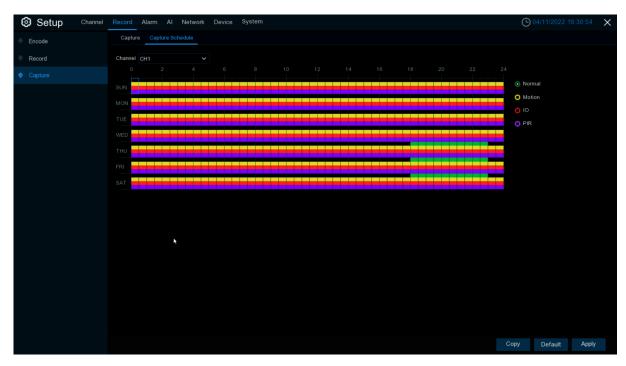
Alarm Interval: Time interval to capture an image when motion, IO alarm or PIR is triggered.

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.

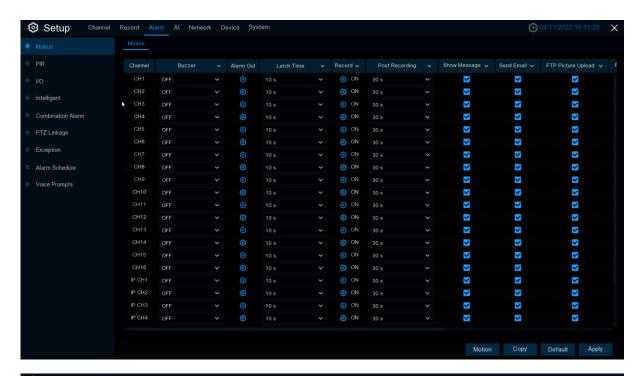
**No Capture**: A time slot marked black means that it won't capture any images for the time slot, but you can manually capture images if you enable the manual capture function in the channel.

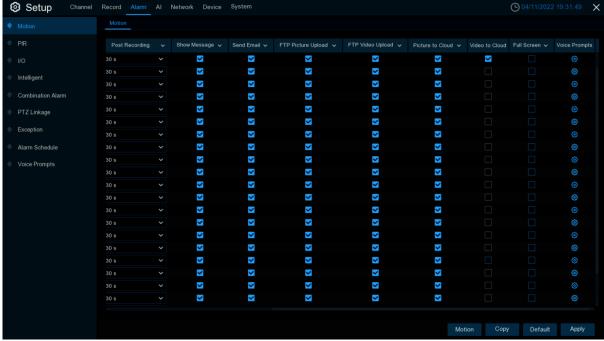


#### **5.3 Alarm Parameters**

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  $\uparrow$  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 <u>5.6.3 FTP</u>.

**FTP Video Upload:** To upload alarm videos to FTP server when motion is triggered. To enable FTP, please view <u>5.6.3 FTP</u>.

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

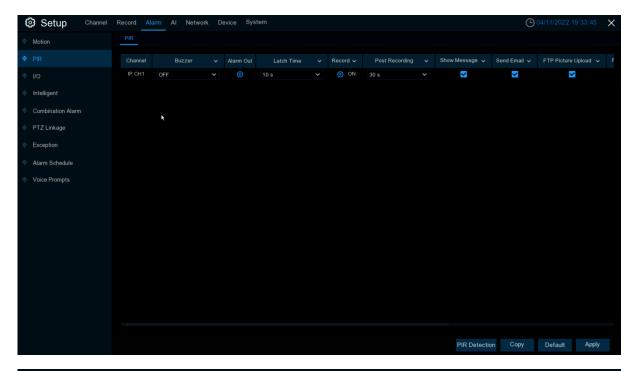
**Video to Cloud:** To upload alarm videos to cloud storage when motion is triggered. Please view 5.6.2 Cloud.

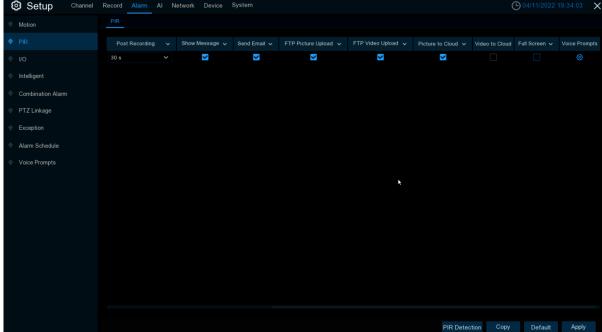
**Full Screen:** When sensor is triggered, the corresponding channel will be switched to the full screen mode.

**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 <u>5.3.9 Voice Prompts</u>.



### 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 (i) 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 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 <u>5.6.3 FTP</u>.

**Picture to Cloud:** To upload alarm images to cloud storage when PIR alarm is triggered. Please view <u>5.6.2 Cloud</u>.

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

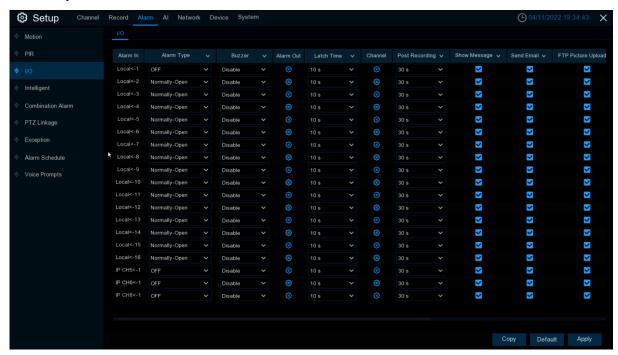
Full Screen: When PIR is triggered, the corresponding channel will be switched to the full screen mode.

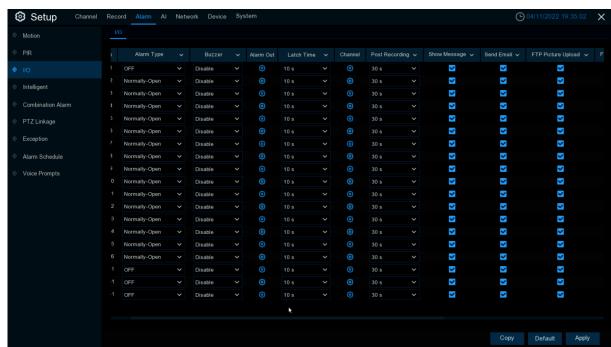
**Voice Prompts:** Voice prompts, when triggering **PIR**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details <u>5.3.9 Voice Prompts</u>.



#### 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 / IO State: 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 / Channel:** 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 / Email Alert:** 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 I/O alarm is triggered. To enable FTP, please view <u>5.6.3 FTP</u>.

**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.

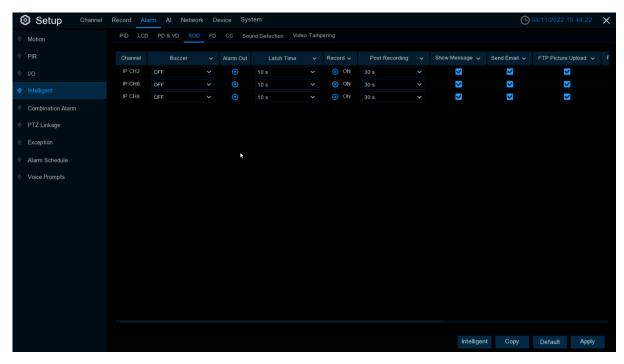
**Full Screen:** When sensor is triggered, the corresponding channel will be switched to the full screen mode.

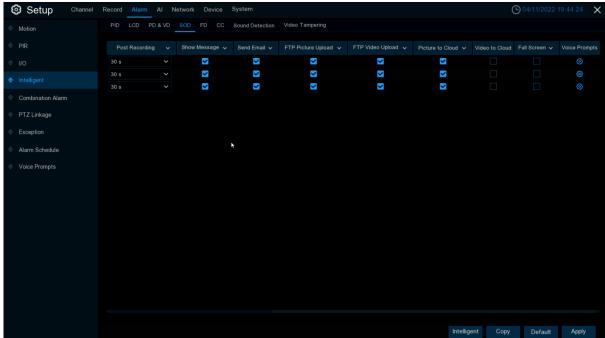
**Voice Prompts:** Voice prompts, when triggering **PIR**, the audio file imported by the voice prompt (requiring IPC to support the voice prompt function) can be visible for details <u>5.3.9 Voice Prompts</u>.



# 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



**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 <u>5.6.3 FTP.</u>

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

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

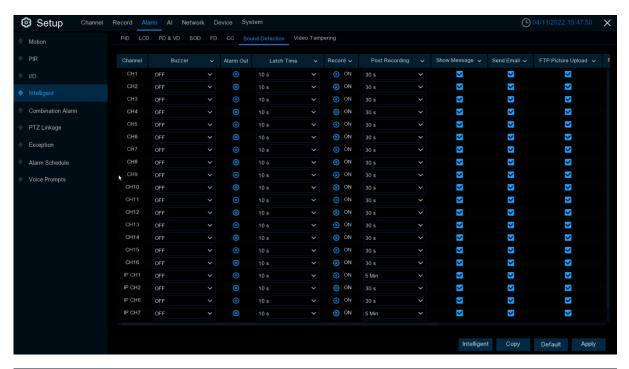
**Video to Cloud:** To upload alarm videos to cloud storage when **Intelligent** is triggered. Please view <u>5.6.2 Cloud.</u>

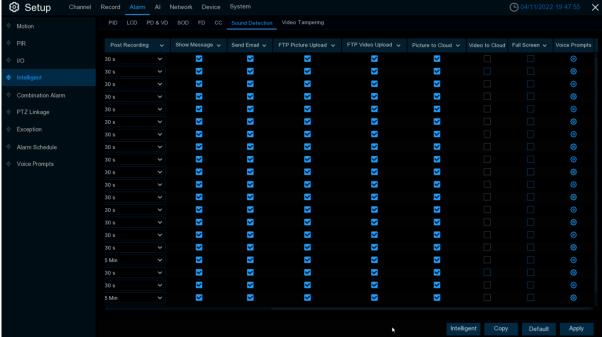
**Full Screen:** When sensor is triggered, the corresponding channel will be switched to the full screen mode.

**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 <u>5.3.9 Voice Prompts</u>.



#### 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

s 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 <u>5.6.3 FTP</u>.

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

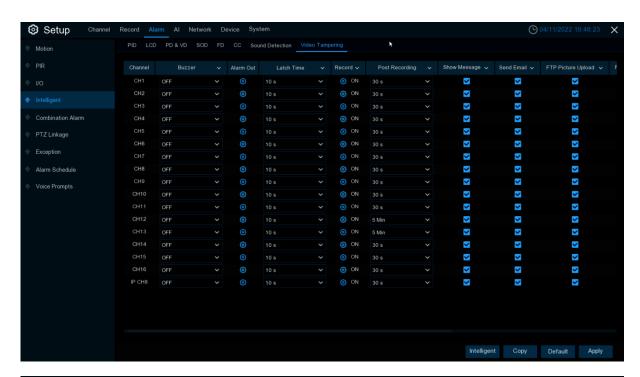
**Video to Cloud:** To upload alarm videos to cloud storage when **Intelligent** is triggered. Please view 5.6.2 Cloud.

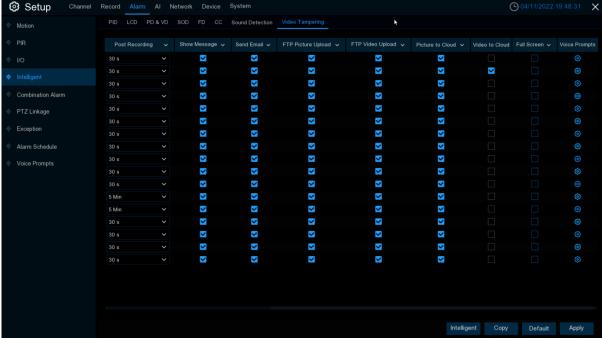
**Full Screen:** When sensor is triggered, the corresponding channel will be switched to the full screen mode.

**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 <u>5.3.9 Voice</u> 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

s 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 <u>5.6.3 FTP</u>.

**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 <u>5.6.2 Cloud.</u>.

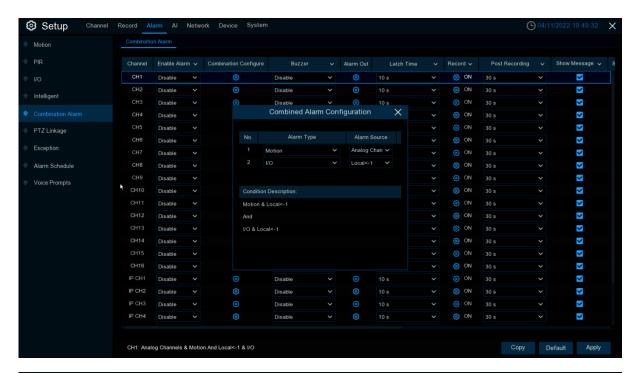
**Video to Cloud:** To upload alarm videos to cloud storage when **Intelligent** is triggered. Please view <u>5.6.2 Cloud</u>

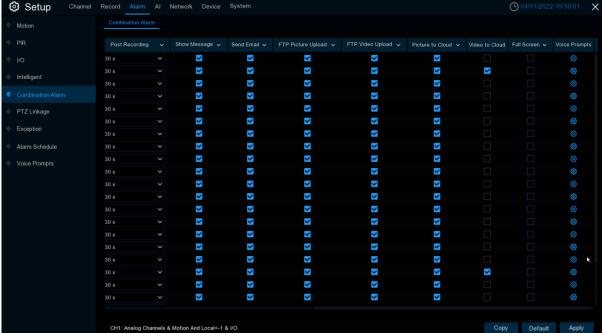
**Full Screen:** When sensor is triggered, the corresponding channel will be switched to the full screen mode.

**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 <u>5.3.9 Voice Prompts</u>.



### 5.3.5 Combination Alarm





Channel: Channel name.

Enable Alarm / Switch: 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

- 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 (i) 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  $\uparrow \uparrow$  and f 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 <u>5.6.3 FTP</u>.

**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 <u>5.6.2 Cloud</u>.

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

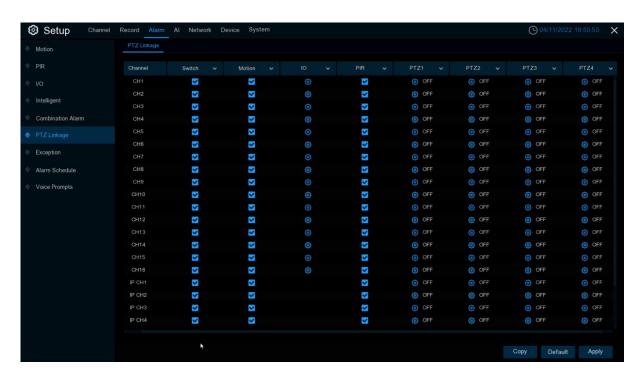


Full Screen: When Combination alarm is triggered, the corresponding channel will be switched to the full screen mode.

**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.

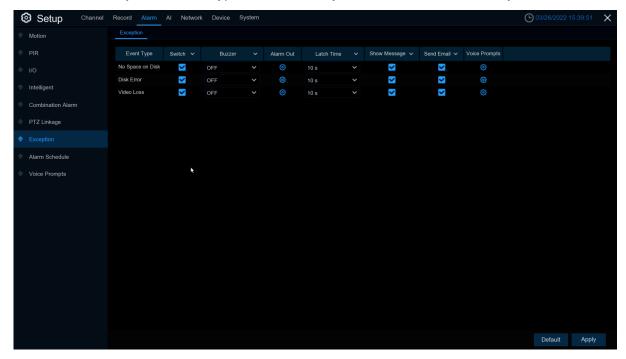
Click here CH1 V None V to choose the camera and present points that need to link.

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 / HDD Full: 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.

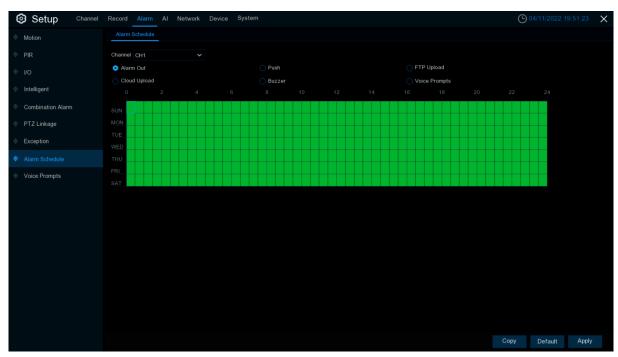
Send Email: Let the DVR to send you an auto-email when an event occurs.

**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 <u>5.3.9 Voice Prompts</u>.



## 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.

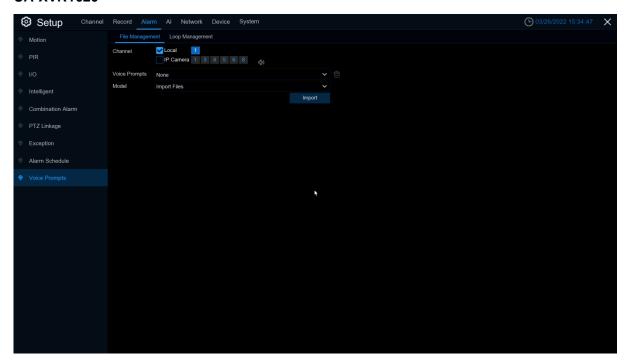


## **5.3.9 Voice Prompts**

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

#### **UA-XVR1620**



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)

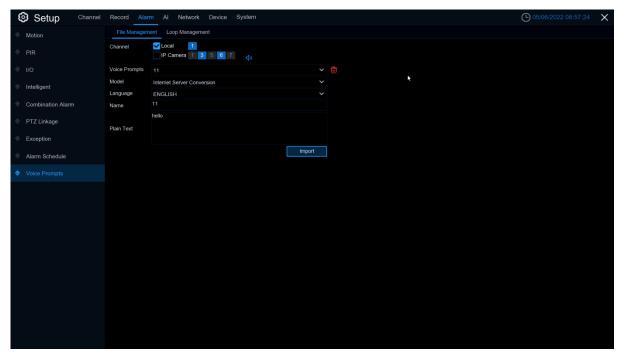
**Local Conversion** and **Internet Server Conversion** have more language box and text box than **Import File. Local Conversion** language selection is to English by default, and it doesn't choose any other language for the user.

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.



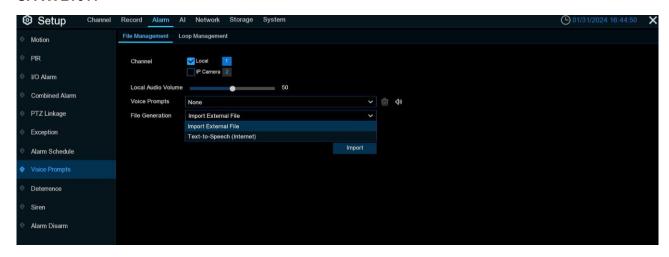
After importing audio file, you can select which file to play in Voice Prompt.

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)

#### **UA-XVL1611**



Click **import** to import broadcast audio, support two kinds of audio import methods, respectively, Import External File, Text-to-Speech (Internet).

Import External File: local import (supports importing MP3, WMA, WAV format audio files)

Text-to-Speech (Internet): Web server translation (by locally inputting the text content to be translated. Sent to the network server for translation into audio files. It is automatically saved to the local hard disk for storage)

The maximum input length of the text input box is 200 bytes.



Import File: Import audio file, the allowed file size for face and license plate library is 1~500K, and the allowed file size for non-face and license plate library is 1~5M.

After importing audio, it can be selected in Voice Prompts.

Voice Prompts: Support 2 kinds of Prompts, respectively: Local and IPC channel.

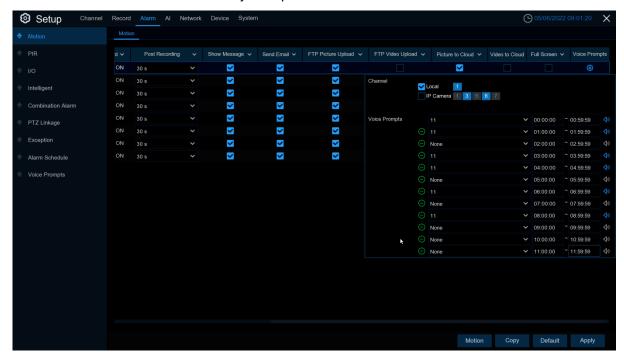
Local Audio Volume: you can adjust the volume output size of local broadcasting.

**Local:** local broadcasting (when selecting this type of broadcasting, the device side needs to be connected to the audio output device)

**IPC:** IP Camera Broadcasting (to select this broadcasting method, the camera program must have the voice broadcasting function, and at the same time, the camera side must support audio output)

#### 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.

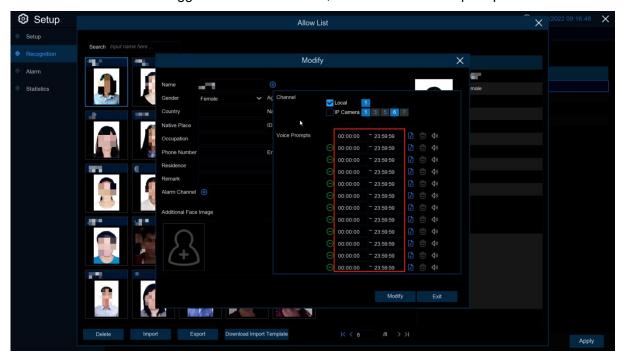




Voice broadcast setting based on face recognition: This function is to realize that when face recognition occurs, the system collects the alarm signal and the voice broadcast equipment for linkage, and automatically plays the associated audio to the scene "intrusion" object.

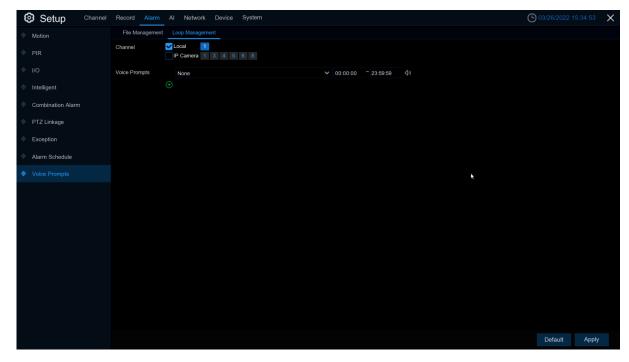
**Note:** Imported audio based on black and white list face images can only be used for the associated images.

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).

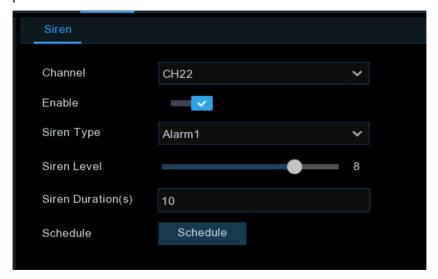


#### 5.3.10 Deterrence

See 5.1.8 Deterrence for details.

#### 5.3.11 Siren

If the camera connected to the device has a built-in speaker, you can set the siren-related parameters in this module.



Channel: Select the switch channel.

**Enable:** Used to set whether to enable the siren function.

**Siren Type:** Used to select the siren audio file. By default, two audio files are provided. You can also import three customized audio files (of PCM format or WAV format). The audio sample rate of the imported file cannot exceed 8000 Hz, and the file size cannot exceed 256 KB. After you select a customized audio file to be imported, a **Delete** button appears on the right of the file, and you can click the **Delete** button to delete the audio file. (Note: This function is supported by some IP cameras only.)

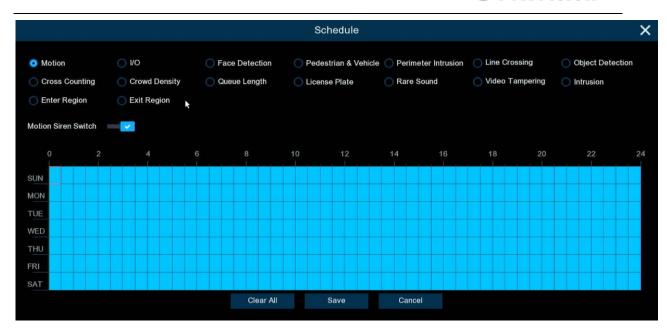
**File Name:** If you select **User-defined** for **Siren Type**, you can enter the file name and click the **Import** button on the right to import the customized audio file from a USB flash disk.

**Siren Level:** Used to set the siren volume level, which ranges from 1 to 10. The higher the level is, the louder the volume is.

**Siren Duration(s)**: Used to set the siren duration. You can adjust the value between 5 to 180 seconds.

**Schedule:** If the IP camera is connected to the NVR via the HTTP port, you can click the **Schedule** button to open the setting page.





If a channel is selected in the schedule, it indicates that the channel can trigger siren alarms during the corresponding period.

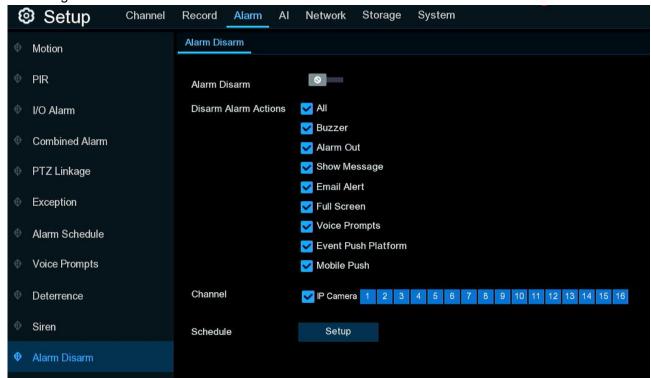
You can set the siren linkage alarm and effective time of a function by selecting the corresponding function sub-tab and switch.

Clear All: Click this button to clear the selected status on all sub-tabs.



#### 5.3.12 Alarm Disarm

After the one-click Alarm disarm function is enabled, you can cancel the response of the device to various alarms. On this page you can set the relevant parameters including the disarming switch, channel, type, and schedule. Note: The Exception system alarms are not controlled by one-click disarming.



Alarm Disarm: Used to set whether to enable the one-click disarming function.

**Disarm Alarm Action:** Used to set the alarm linkage types to be disarmed.

All: Select or clear all the types.

**Buzzer:** Used to set whether to enable the buzzer. When the one-click disarming function is enabled, you can select this option to disable the buzzer.

**Alarm Out:** Used to set whether to enable external alarm output. When the one-click disarming function is enabled, you can select this option to disable the external alarm device when an alarm is triggered.

**Show Message:** Used to set whether to display messages. When the one-click disarming function is enabled, you can select this option to not display the alarm messages when motion is detected on the preview page.

**Email Alert:** Used to set whether to send emails. When the one-click disarming function is enabled, you can select this option to make the NVR not automatically send an email when an alarm is triggered.

**Full Screen:** Used to set whether to display in full screen. When the one-click disarming function is enabled, you can select this option to make the channel configured with full-screen mode not enter full screen mode on the preview screen when the channel triggers an alarm.



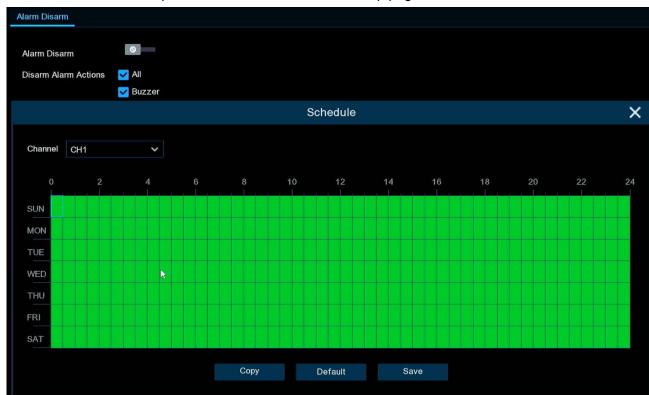
**Voice Prompts:** Used to set whether to enable voice prompts. When the one-click disarming function is enabled, you can select this option to disable voice prompts when a channel configured with voice prompts triggers an alarm.

**Event Push Platform:** When the alarm is triggered, the device does not push the alarm information to the third-party platform

**Mobile Push:** When one-key disarming is open, check Mobile Push, when alarm is triggered, the device will not push the alarm information to the app.

Channel: Select the channels to be disarmed.

**Schedule:** Click the setup button to enter the schedule setup page.



When the schedule is marked with a checked state, it indicates that the channel is in a disarmed state during the corresponding time period.



# 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.

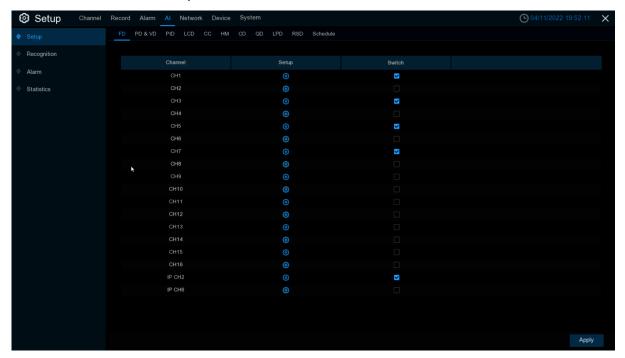
Camera Model/Type	Al Functions
UA-B580F3 (V1.01 or later) UA-R560F2 (V1.01 or later) UA-R580F2 (V1.01 or later) UA-R800F2 (V1.01 or later)	PD&VD (Human & Vehicles Detection)
	PID (Perimeter Intrusion Detection)
	LCD (Line Crossing Detection)
	SOD (Stationary Object Detection)
	CC (Cross Counting)
	FD (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** Al 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.



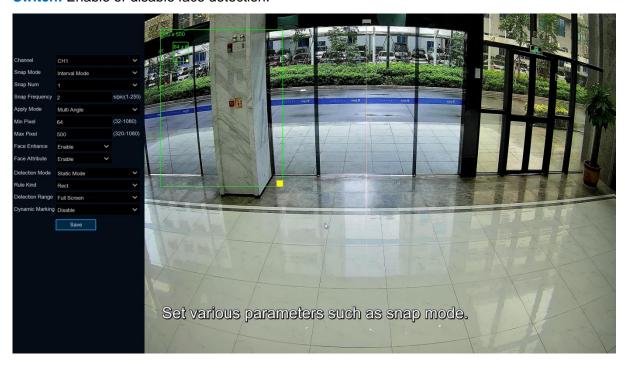
#### **5.4.1.1 Face Detection**

This menu sets the relevant parameters for face detection.



Setup: Click ito enter the setting page.

Switch: Enable or disable face detection.



Channel: Channel selection.



**Snap / Capture 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 / Qty: In Interval Mode, set the number of pictures pushed.

Snap Frequency / Capture Interval: Set the frequency of face push in Interval Mode.

Apply Mode / Face Angle: 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 / Hybrid**: 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 / Trigger Mode: Full screen (Rectangle) and Line rule.

**Detection Range:** Under rectangle rule, set up detect area is customize and default setting s Full Screen.

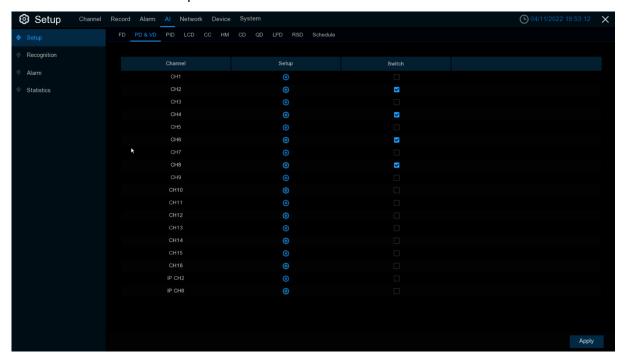
Rule Type: Under Line Rule, setting crossing rule. It needs to be lined in the right preview. The face is detected when from rule A→B or rule B→A.

**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 / Capture 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 / Qty: In Interval Mode, set the number of pictures pushed.

Snap Frequency / Capture Interval: 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, Motor Vehicle, and Non-motorized Vehicle are available.

**Detection Mode:** Set up **Motion Mode / Static Mode / Hybrid Mode.** 

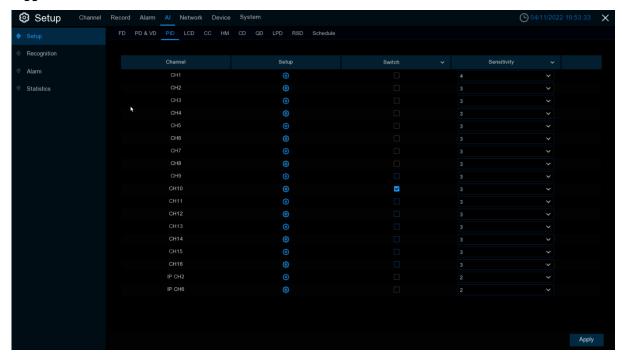
**Detection Range:** Set up detection area, customized or default full screen.

**Dynamic Marking:** Tracking box.



### **5.4.1.3 PID (Perimeter Intrusion Detection)**

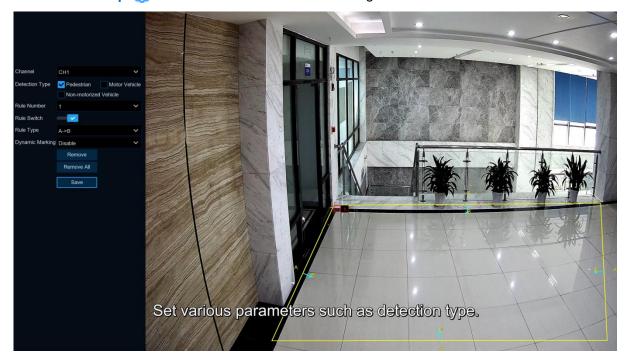
The Perimeter intrusion detection function can detect people, vehicles, or other objects moving in and out of a predetermined virtual area, and take certain specific measures when an alarm is triggered.



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.





Channel: Select the channel that you want to configure.

**Detection Type:** detection type

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

Rule Switch: Enable or disable the rules.

Rule Type: Select the rule type.

 $A \rightarrow B$ : DVR will only detect the action from side A to side B;  $B \rightarrow A$ : 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;

**Dynamic Marking:** Tracking box

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

Click Save to save the setting.

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.

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.

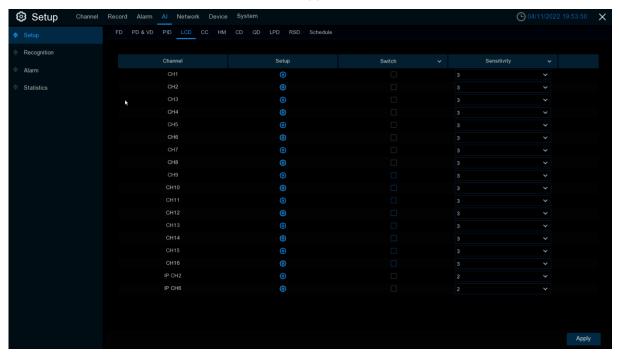
#### Notice:

- 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)**

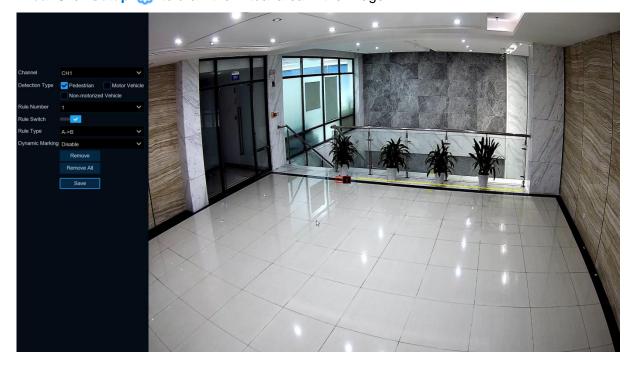
The LCD function detects people, vehicles or other objects crossing a predetermined virtual line and takes certain measures when an alarm is triggered.



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.





Channel: Select the channel that you want to configure.

**Target Validity:** Used to adjust the detection validity of the target. The higher the validity, the more closely the target matches the set criteria, for example, a motor vehicle. However, higher validity levels also increase the risk of false negatives, while lower validity values may lead to false positives. The range is from 1 to 4, with lower values indicating higher confidence levels.

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.

**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.

Rule Number: Select one of the rule numbers. The LCD function can set up to 4 areas.

Rule Switch: Enable or disable the rule switch.

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;

**Dynamic Marking:** Tracking box

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

Click Save to save the setting

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.

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.

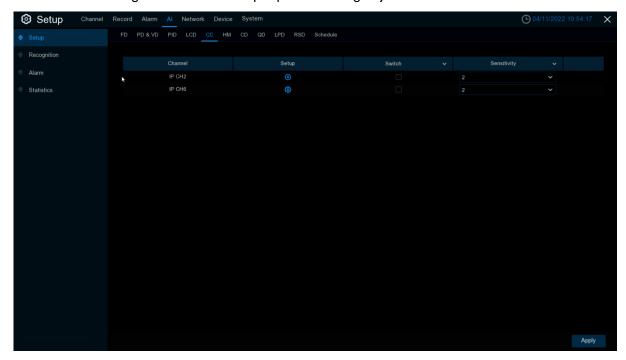
#### Notice:

- 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)

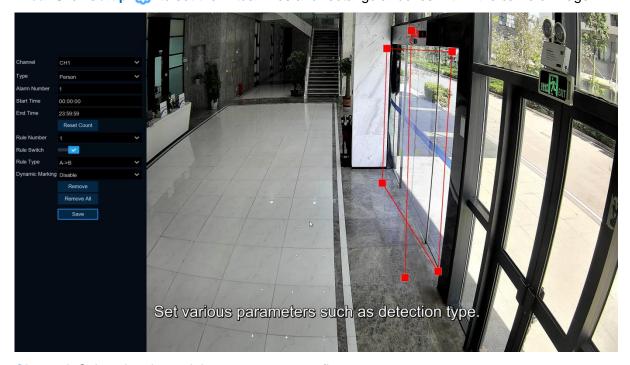
The Cross-Counting function statistics people or moving objects.



**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.



**Detection Type:** Detection 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.

Alarm Num: Set alarm number. Alarm Num= (cross in number) - (cross out number), which is in

Number of internal support exists.

Start Time: Set the counting start time.

End Time: Set the counting end time.

Reset Count / Recount: Let the count default to zero and recount.

Rule Number: Select the rule number. It is the number of virtual lines that you can draw the CC.

Up to 1 line.

Rule Switch: Enable or disable rule types.

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.

**Dynamic Marking:** Tracking box.

#### **Notice:**

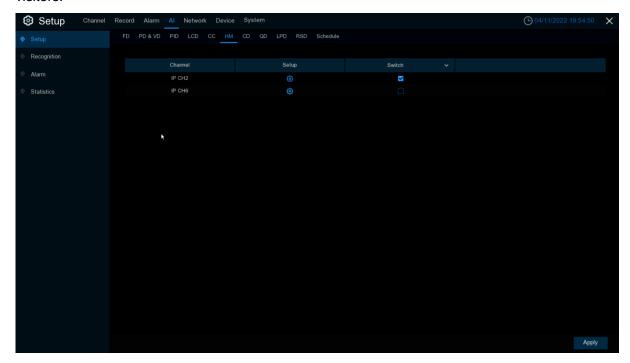
- 1) The periphery should not be too close to the edges / corners of the camera image, because it may not trigger detection when the target passes through the edges / corners.
- 2) The shape of the region cannot be too narrow / too small because detection may not be triggered when large targets cross the perimeter.
- 3) The lines should not be too close to the edge of the camera image to avoid alarm when the target passes through the camera.
- 4) 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.

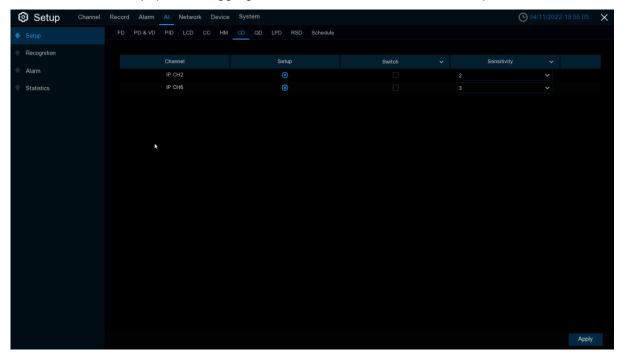
Rule Switch: Enable or disable rule switch.

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.

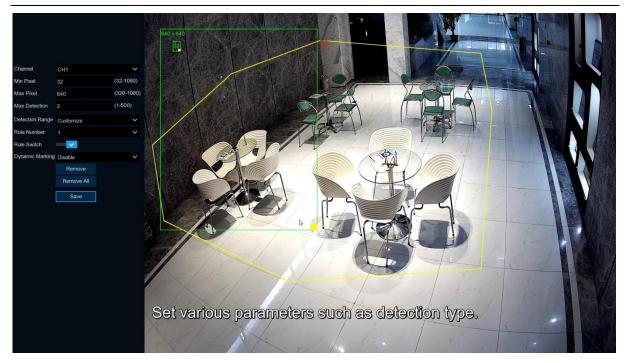


**Switch:** Enable or disable CD function.

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

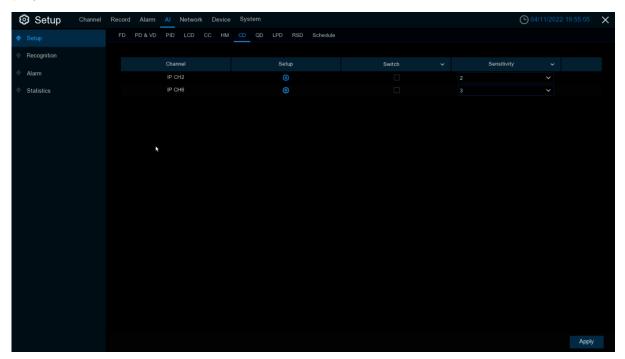
**Dynamic Marking:** Tracking box.

- 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)

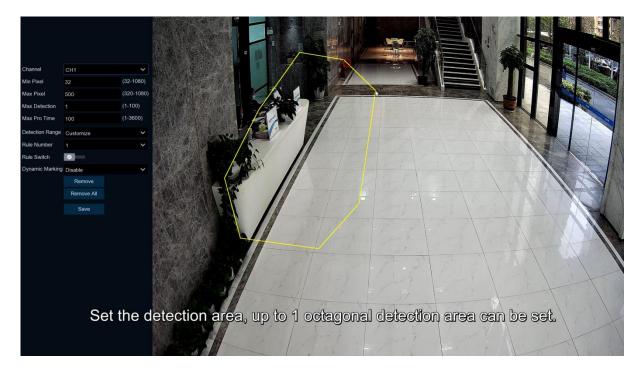
Queue Length Detection is used to detect the status of the cohort, including its length and stall time.



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

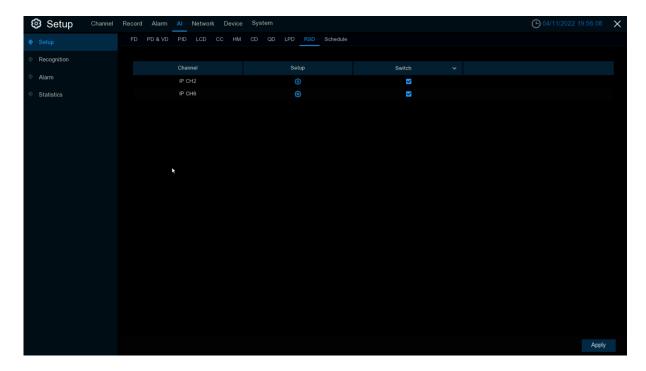
Max Pro Time / Max Staying Time: If the queue stagnation exceeds the given processing time, DVR sends alarm.

**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 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**, **Dog Barking**, or **Gunshot**.

### **5.4.1.10 Object Detection**

See <u>5.1.10.1 SOD (Stationary Object Detection)</u> for details.

#### 5.4.1.11 Sound Detection

See <u>5.1.10.2 Sound Detection</u> for details.

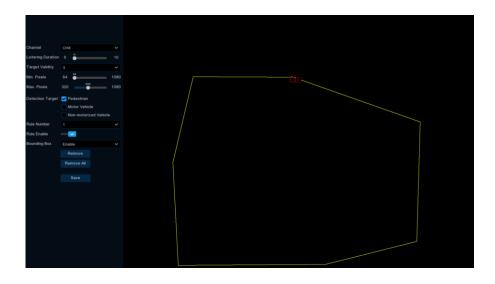
### 5.4.1.12 Video Tampering

See <u>5.1.10.3 Video Tampering</u> for details.

#### **5.4.1.13 Intrusion**

The Intrusion function can detect whether there is an object in the video to invade the set restricted area. Linkage alarm according to the judgment result.

**Note:** This function is only applicable to UA-XVL1611 with upcoming IP camera firmware.





Loitering Duration: Indicates that the target enters the alert area and stays there for the duration of the time before generating an alarm. For example, if it is set to 5, the alarm will be triggered immediately after the target invades the area for 5s, and the maximum duration can be set to 10s. Target Validity: The similarity between the detection target and the set detection type. The alarm is triggered only when the set similarity level is reached or exceeded. The higher the setting level the higher the similarity requirement, the more obvious the desired target characteristics and the higher the alarm accuracy. Levels can be set from 1 to 4.1 represents a similarity of 80% or more,2 represents a similarity of 60% or more,3 represents a similarity of 40% or more,4 represents a similarity of 20% or more.

Min. Pixel: Sets the min recognized pixel. The target has to be larger than the set pixel to be recognized.

Max. Pixel: Sets the max recognized pixel. The target has to be smaller than the set pixels to be recognized.

**Sensitivity:** The sensitivity setting for triggering area intrusion detection, the higher the sensitivity setting, the easier it is to trigger the alarm.

**Detection Target:** Setting the detection type;

Pedestrian: Only intruding pedestrians are detected;

Motorized: Only intruding motorized vehicles are detected;

Non-Motorized: Only intruding non-motorized vehicles are detected;

Don't Select Any Type: all moving targets are detected.

**Rule Number:** Select the rule number, click the left mouse button in the right preview screen to draw the detection area connected with the first and last endpoints, and then click Save to complete the area drawing. When you need to clear the warning area, click "Remove" to delete the selected area; click "Remove All" to delete all areas.

Rule Enable: Enable detection in Rule Switch.

Bounding Box: When on, the target detection box is displayed in the live screen.

## 5.4.1.14 Region Entrance / Exiting

The Region Entrance / Exiting detection function can detect whether an object enters / leaves the set warning area and link the alarm according to the judgment result. The specific setting steps are shown below.

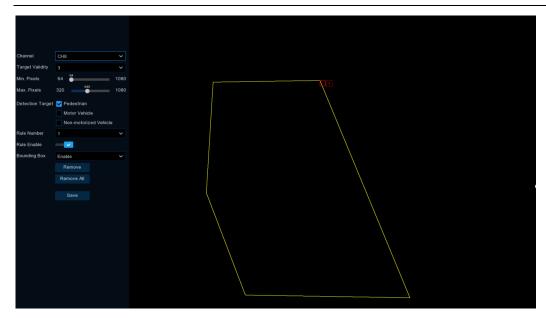
Note: This function is only applicable to UA-XVL1611 with upcoming IP camera firmware.

Switch: Check the box to enable the Intrusion function.

**Sensitivity**: The sensitivity setting for triggering area intrusion detection, the higher the sensitivity setting, the easier it is to trigger the alarm.

Click **Setup** icon ( to configure the detection conditions.





Channel: Select the channel you want to configure.

**Target Validity:** The similarity between the detection target and the set detection type. The alarm is triggered only when the set similarity level is reached or exceeded. The higher the setting level the higher the similarity requirement, the more obvious the desired target characteristics and the higher the alarm accuracy. Levels can be set from 1 to 4.1 represents a similarity of 80% or more,2 represents a similarity of 60% or more,3 represents a similarity of 40% or more,4 represents a similarity of 20% or more.

Min. Pixel: Sets the min recognized pixel. The target has to be larger than the set pixel to be recognized.

Max. Pixel: Sets the max recognized pixel. The target has to be smaller than the set pixels to be recognized.

**Detection Target:** Setting the detection type;

Pedestrian: Only Enter Region pedestrians are detected;

**Motorized:** Only Enter Region motorized vehicles are detected;

Non-Motorized: Only Enter Region non-motorized vehicles are detected;

**Don't Select Any Type:** All moving targets are detected.

**Rule Number:** Select the rule number, click the left mouse button in the right preview screen to draw the detection area connected with the first and last endpoints, and then click Save to complete the area drawing. When you need to clear the warning area, click "Remove" to delete the selected area; click "Remove All" to delete all areas.

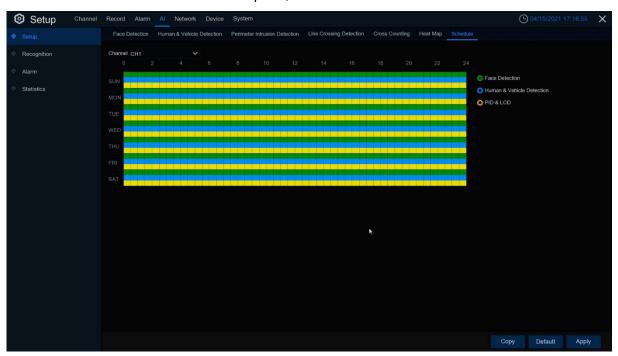
Rule Enable: Enable detection in Rule Switch.

Bounding Box: When on, the target detection box is displayed in the live screen.



### 5.4.1.15 AI Schedule

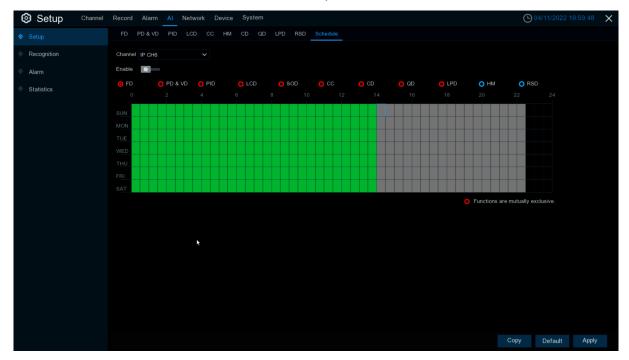
When IPC connects to DVR with media ports, the schedule is as below:



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.



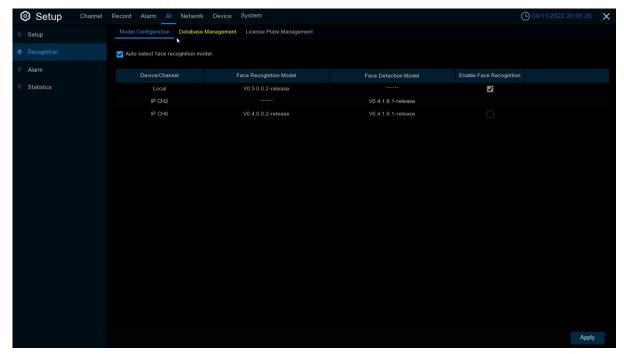
# 5.4.2 Recognition

#### 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 Al applications for different scenarios using Face Recognition results, see *Chapter 6 Al Scenario*.
- 3. To search for face recognition results, see 7.1.9 Al.

## **5.4.2.1 Model Configuration**

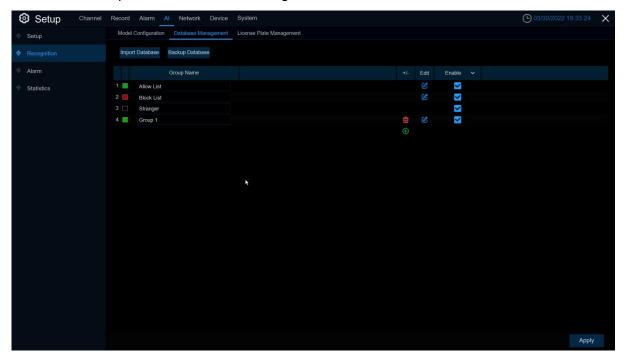
Select the algorithm model in this menu. There are local and IPC algorithm models.





## **5.4.2.2 Database Management**

This menu sets up a database for face recognition.

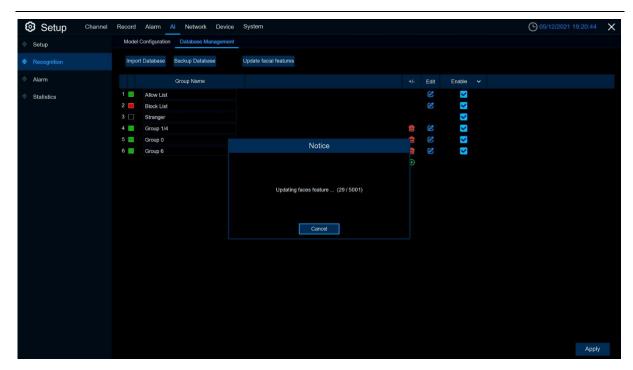


Import Database: Import the exported file to the device.

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.



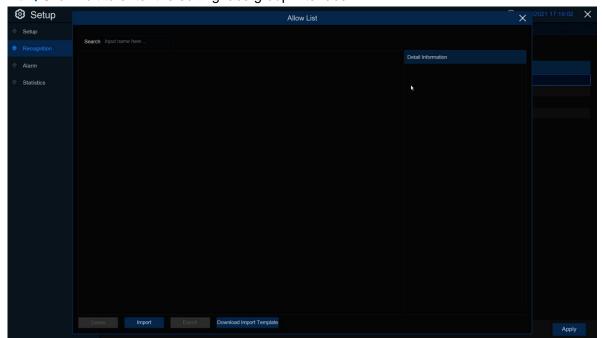


Click **Cancel** and a prompt will pop up to continue or suspend the update, the remaining not updated next Click to update.

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

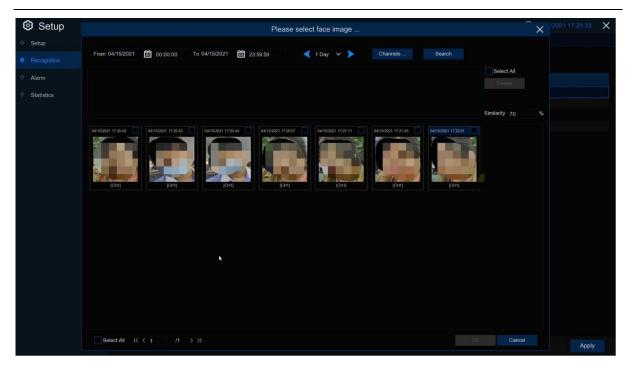
Enable: Enable or disable face recognition group.

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

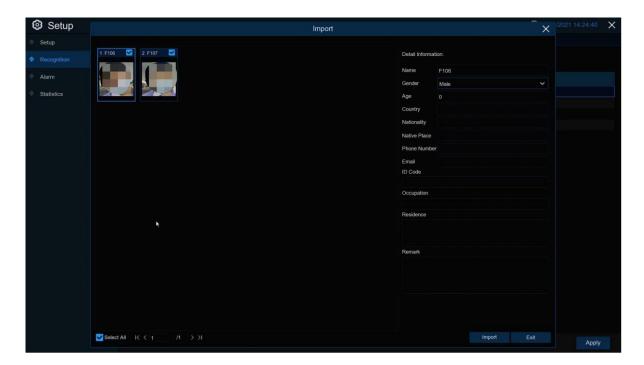


**Import:** Click **Local Storage Device** to enter local face interface.





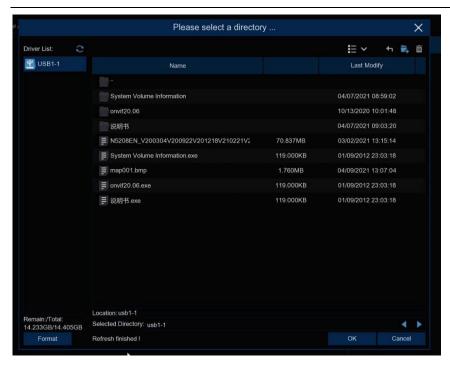
Select date, duration, and channels. Click **Search** to search all of faces saved to the devices during that time. If you select face similarity and then click **Search**, it will be searched out faces based on the similarity percentage. Check the face result images and click **Delete** to remove the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

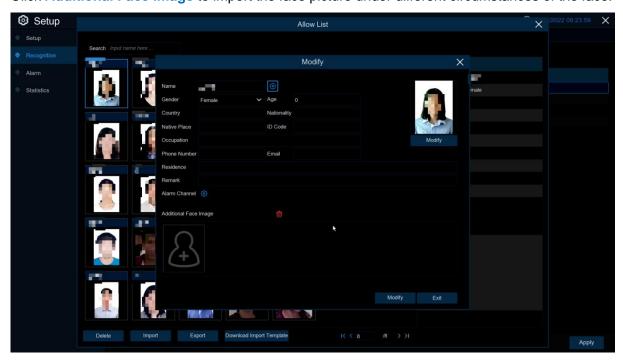




**Export**: Export the face picture to the external memory storage. Click to the face group picture to Export all the face pictures of the face group; if you click to the face group face picture to click **Export** to export the selected face picture.

**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.

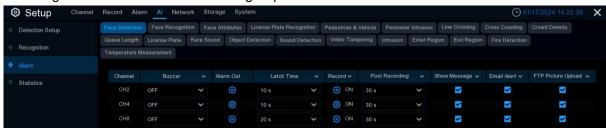




#### **5.4.3 Al Alarm**

#### 5.4.3.1 Face Detection

To configure alarm actions for different groups when faces detected.



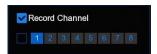
**Channel:** Select an available to configure.

**Buzzer:** The NVR can sound an alarm tone using its internal buzzer. Set the duration (in seconds) of the buzzer when the alarm is triggered.

**Alarm out:** optional function. the NVR supports connecting to an external alarm device, then you can set the external alarm device.

Latch Time: Set the external alarm time when an alarm is detected

Record: Click on to select the channel to be recorded when the alarm is triggered.



**Post Recording:** Set the length of time the NVR will continue to record after an event. The recommended recording time is 30 seconds, but can be set to a maximum of 5 minutes.

Show Message: Check this box to display the sicon on the live display screen when an alarm is detected.

Email Alert: When an alarm is detected, a capture image will be sent to the set email address. FTP Picture Upload: When an alarm is detected. The picture will be sent to the set FTP server. FTP Video Upload: When the alarm is detected. It will send the video to the set FTP server. Picture to Cloud: When an alarm is detected. It will send the captured picture to the set cloud storage server.

**Video to Cloud:** When an alarm is detected. Video to Cloud: When an alarm is detected, video will be sent to the set cloud storage server.

Full Screen: If this feature is enabled and an alarm is detected in a channel, the channel will be previewed in full screen mode.

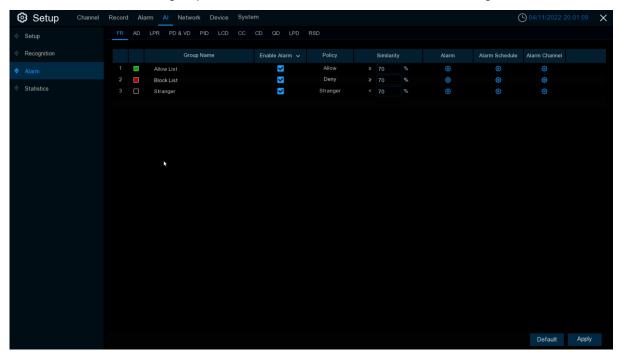
**Event Push Platform:** When an alarm is detected. An alarm message will be sent to the third-party platform that the device is connected to.

**Voice Prompts:** The audio file into which the voice prompt is imported when this alarm is triggered (requires IPC support for voice prompts).



# 5.4.3.2 Face Recognition

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

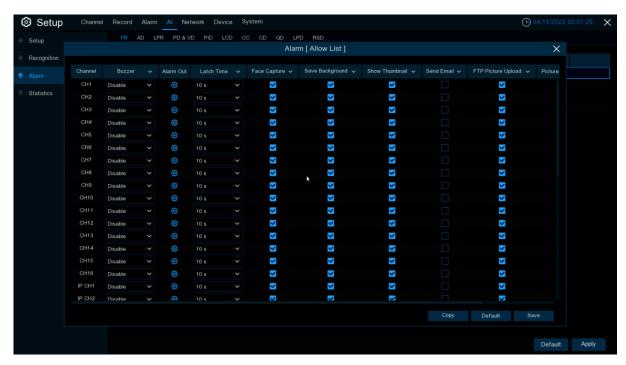


Enable alarm: Enable or disable face detection.

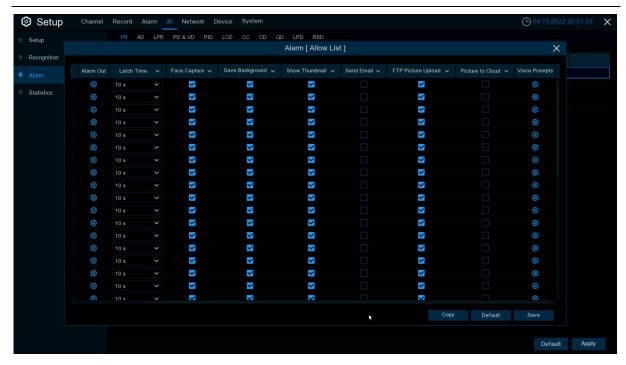
**Policy:** Set up face group alarm countermeasures.

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 <u>5.6.3 FTP</u>.

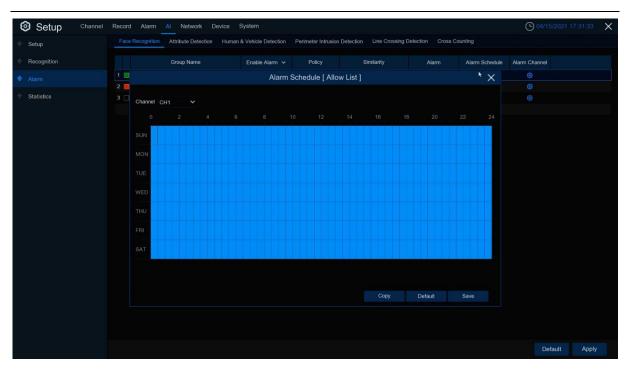
FTP Video Upload: To upload alarm video to FTP server when an alarm is triggered. To enable FTP, please view 5.6.3 FTP.

**Picture to Cloud**: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

**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.

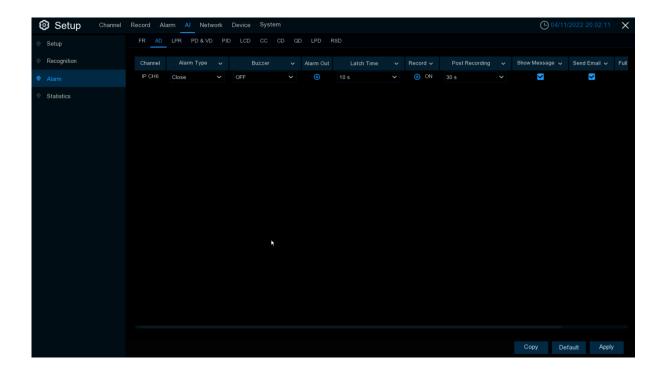




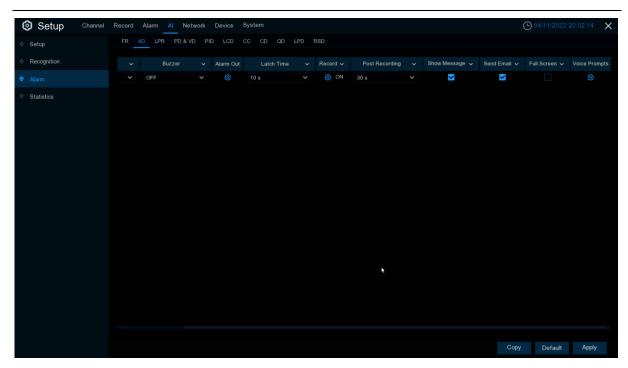
Check the time period. Click **Copy to** copy the current setting to other channels.

**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 <u>5.3.9 Voice Prompts</u>.

# 5.4.3.3 AD (Attribute Detection) / Face Attributes







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 <u>5.6.2 Cloud</u>.

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

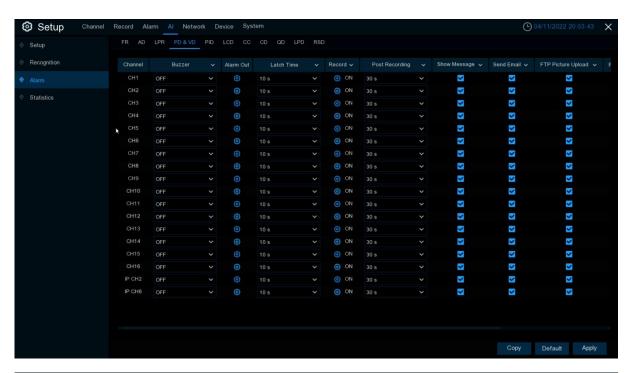


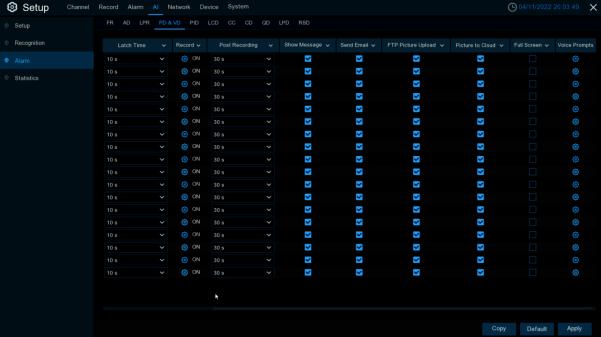
**Full Screen:** If this feature is enabled and face attendance are detected in the channel, you will see the channel in full-screen mode.

**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 <u>5.3.9 Voice Prompts</u>



## 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 (i) 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 <u>5.6.3 FTP</u>.

**Picture to Cloud**: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

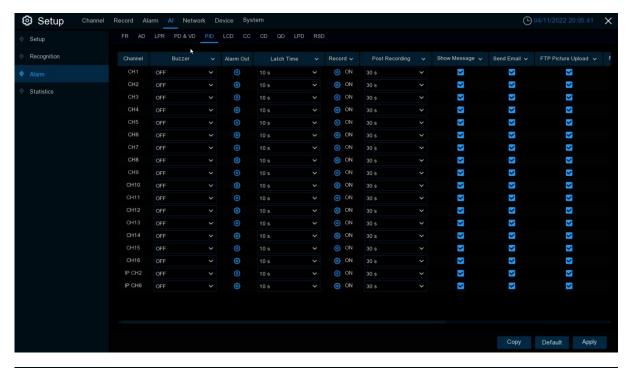
**Video to Cloud**: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

**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 **\$** 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 <u>5.6.3 FTP</u>.

**Picture to Cloud**: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

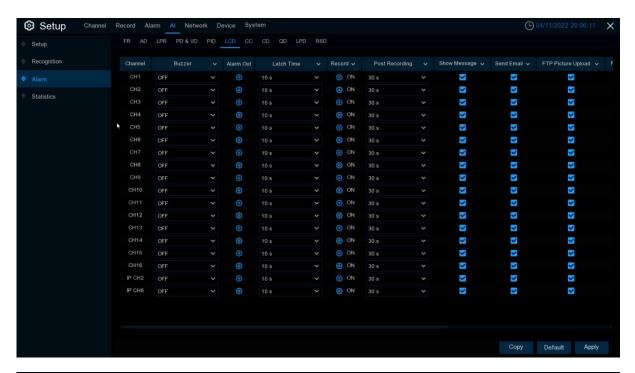
**Video to Cloud**: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

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 <u>5.3.9 Voice Prompts</u>.



## **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 **\$** icon when LCD alarm is detected.

**Send Email:** DVR send an automatic email when LCD alarm is detected.

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

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

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

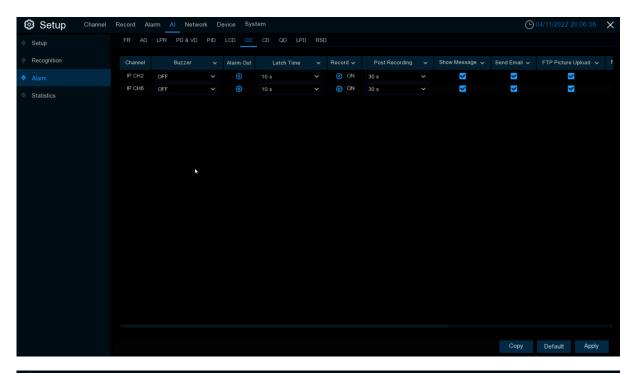
**Video to Cloud**: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

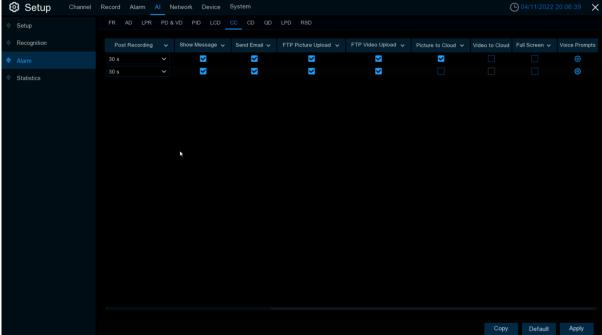
**Full Screen:** If this feature is enabled and the LCD alarm are detected in the channel, you will see the channel in full-screen mode.

**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 is detected.

Send Email: DVR send an automatic email when CC alarm is 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 <u>5.6.3 FTP</u>.

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

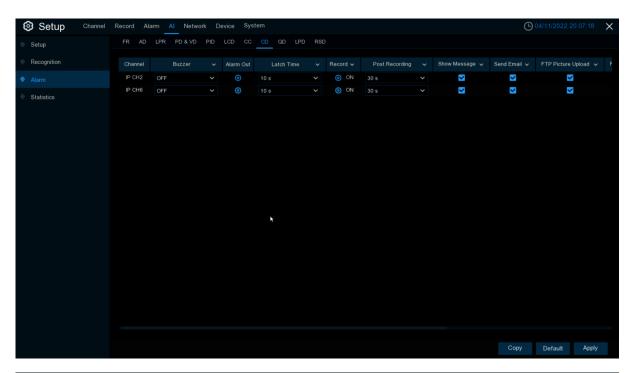
**Video to Cloud**: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

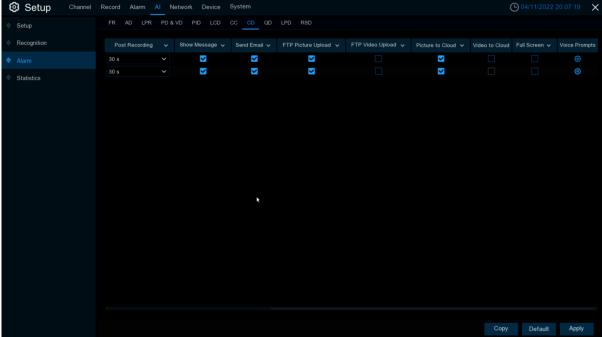
**Full Screen:** If this feature is enabled and the CC alarm are detected in the channel, you will see the channel in full-screen mode.

**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 (i) 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 is detected.

Send Email: DVR send an automatic email when CD alarm is 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 <u>5.6.3 FTP</u>.

**Picture to Cloud**: To upload alarm images to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

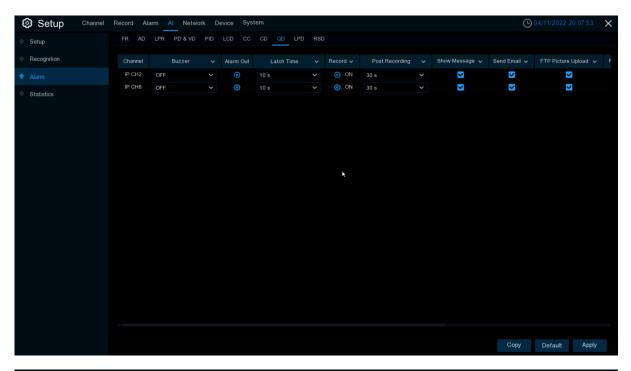
**Video to Cloud**: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

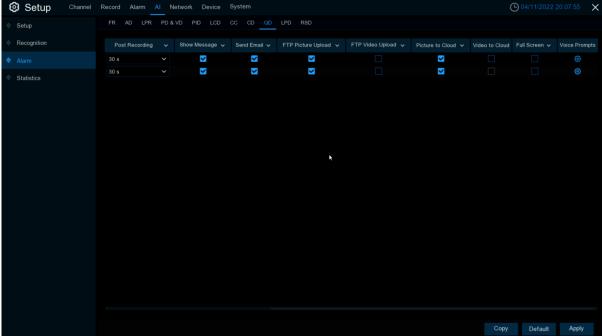
**Full Screen:** If this feature is enabled and the CD alarm are detected in the channel, you will see the channel in full-screen mode.

**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 <u>5.3.9 Voice Prompts</u>.



## 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 (i) 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 is detected.

Send Email: DVR send an automatic email when QD alarm is 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 <u>5.6.3 FTP</u>.

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

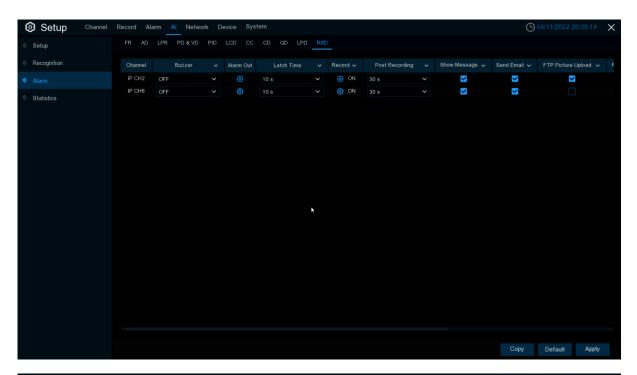
**Video to Cloud**: To upload alarm video to Cloud server when an alarm is triggered. To enable Cloud, please view <u>5.6.2 Cloud</u>.

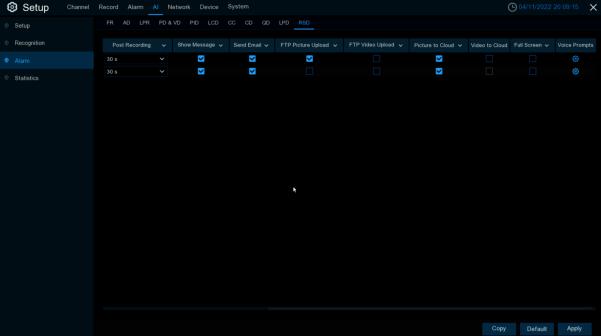
**Full Screen:** If this feature is enabled and the QD alarm are detected in the channel, you will see the channel in full-screen mode.

**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 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 (i) 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 is detected.

Send Email: DVR send an automatic email when RSD alarm is 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 <u>5.6.3 FTP</u>.

**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 <u>5.6.2 Cloud</u>.

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.

### 5.4.3.11 Object Detection

See 5.3.4.1 SOD (Stationary Object Detection) for details.

#### 5.4.3.12 Sound Detection

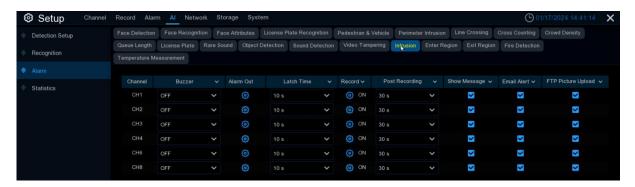
See 5.3.4.2 Sound Detection for details.

## 5.4.3.13 Video Tampering

See 5.3.4.3 Video Tampering for details.



#### 5.4.3.14 Intrusion



**Channel:** Channel name

**Buzzer:** The NVR can use its internal buzzer to sound an alarm tone. Set the duration (in seconds) of the buzzer when the alarm is triggered.

**Alarm out:** optional function. the NVR supports connecting to an external alarm device, then you can set the external alarm device.

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

Record: Click the icon to select the channel to be recorded when the alarm is triggered.



**Post Recording:** Set the length of time the NVR will continue to record after an event. The recommended recording time is 30 seconds, but can be set to a maximum of 5 minutes.

Show Message: Check this box to display the sicon on the live display screen when an alarm is

Email Alert: When an alarm is detected, a capture image will be sent to the set email address. FTP Picture Upload: When an alarm is detected, a picture will be sent to the set FTP server. FTP Video Upload: When the alarm is detected, the video will be sent to the set FTP server. Picture to Cloud: When the alarm is detected, it will send the captured picture to the set cloud storage server.

Video to Cloud: Sends video to the set cloud storage server when an alarm is detected.

Full Screen: If this feature is enabled and an alarm is detected in a channel, the channel will be previewed in full screen mode.

**Event Push Platform:** When an alarm is detected, an alert message will be sent to the third-party platform that the device is connected to.

**Voice Prompts:** The audio file into which the voice prompt is imported when this alarm is triggered (requires IPC support for voice prompts)



### 5.4.3.15 Region Entrance / Exiting

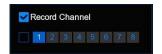
**Channel:** Channel name

**Buzzer:** The NVR can use its internal buzzer to sound an alarm tone. Set the duration (in seconds) of the buzzer when the alarm is triggered.

**Alarm out:** optional function. the NVR supports connecting to an external alarm device, then you can set the external alarm device.

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

Record: Click the icon to select the channel to be recorded when the alarm is triggered.



**Post Recording:** Set the length of time the NVR will continue to record after an event. The recommended recording time is 30 seconds, but can be set to a maximum of 5 minutes.

Show Message: Check this box to display the sicon on the live display screen when an alarm is detected.

**Email Alert:** When an alarm is detected, a capture image will be sent to the set email address.

FTP Picture Upload: When an alarm is detected, a picture will be sent to the set FTP server.

FTP Video Upload: When the alarm is detected, the video will be sent to the set FTP server.

**Picture to Cloud:** When the alarm is detected, it will send the captured picture to the set cloud storage server.

Video to Cloud: Sends video to the set cloud storage server when an alarm is detected.

**Full Screen:** If this feature is enabled and an alarm is detected in a channel, the channel will be previewed in full screen mode.

**Event Push Platform:** When an alarm is detected, an alert message will be sent to the third-party platform that the device is connected to.

**Voice Prompts:** The audio file into which the voice prompt is imported when this alarm is triggered (requires IPC support for 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.

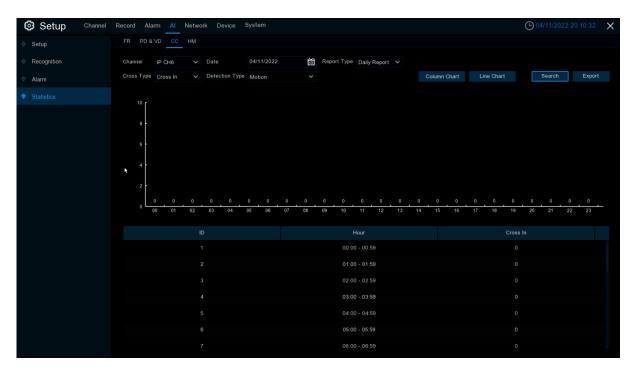


Select Intelligent Groups, Channels, date, and statistical time to search result.



### 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.

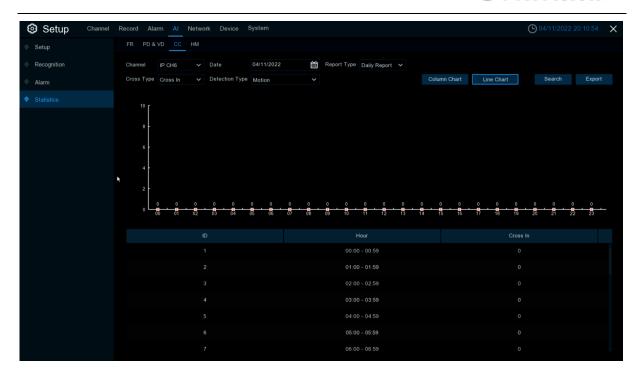
Click **Search** to search the result.

**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.

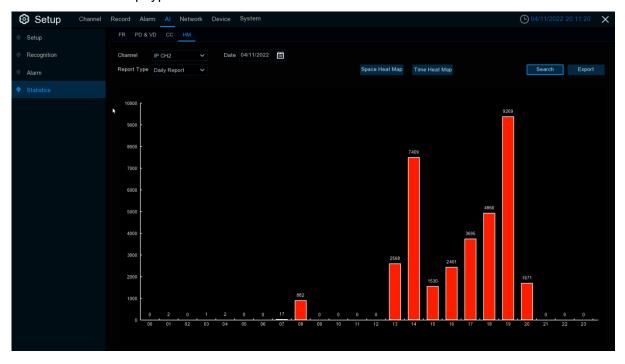
Click **Search** to search the result.

**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**.



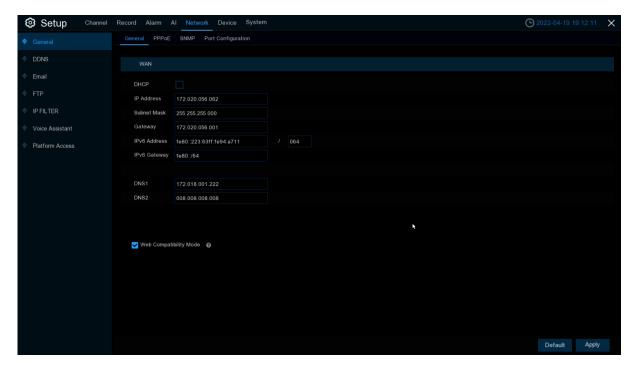


#### 5.5 Network

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.

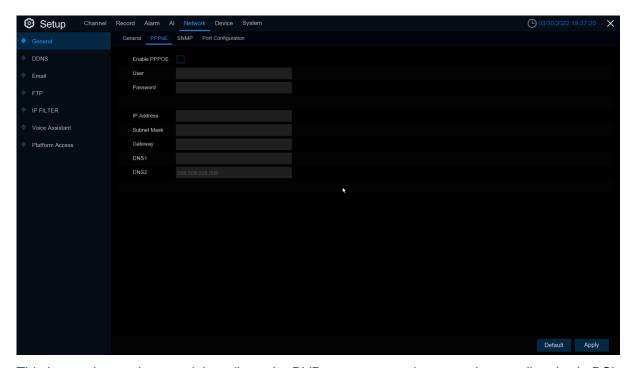


**IPv6 Gateway:** Please fill the gateway to be set if your network support IPv6. Format like "ABCD:EF01:2345:6789:ABCD:EF01:2345:6789".

**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

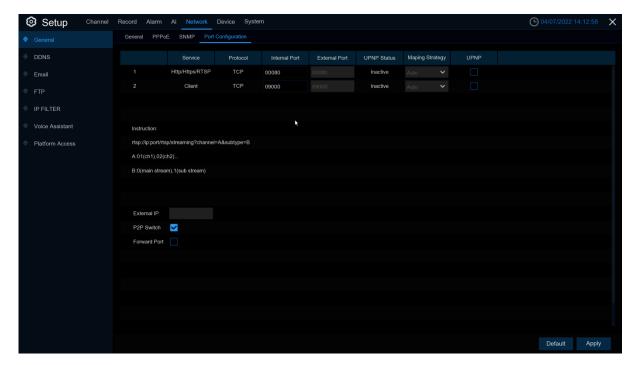


This is an advanced protocol that allows the DVR to connect to the network more directly via DSL modem.

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.

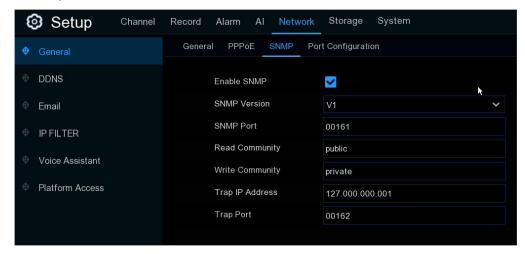


#### Note:

- 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 <u>technical</u> notice.

#### 5.5.1.4 SNMP

The acquisition of device parameters and the reception of device alarms are realized through the SNMP protocol.

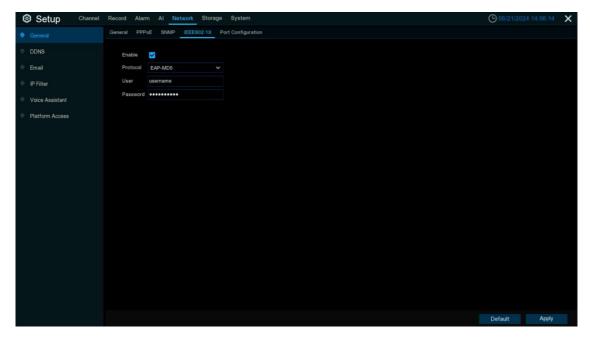


#### Note:

- 1. Before setting SNMP parameters, users need to download the SNMP software and receive information of the device through the SNMP port, such as software version number, device type, channel IP, resolution, frame number, and so on.
- 2. Set the Trap management address so that the device can send alarm and exception information to the management station.



## 5.5.1.5 IEEE802.1X



Enable: Used to turn on or off IEEE802.1X.

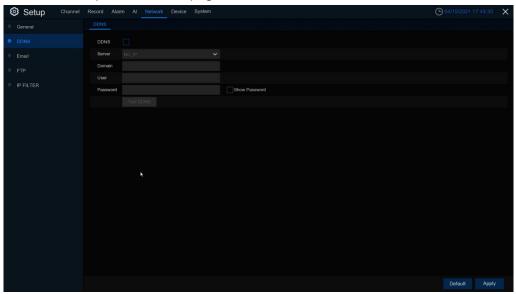
Protocol: Select the desired authentication method.

**Username / Password:** The username and password must be the same with the username and password applied for and registers in the authentication server.



## 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.

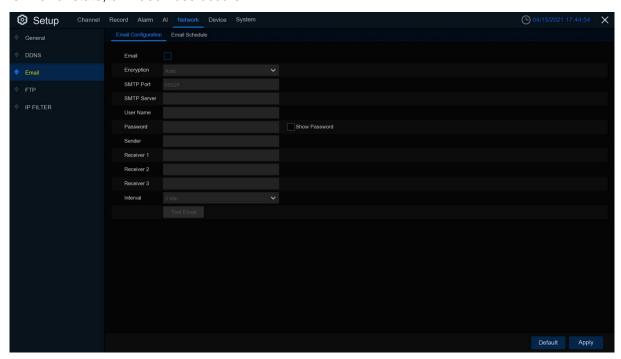
After all parameters are entered, Click **Test DDNS** to test the DDNS settings. If the test result is "Network is unreachable or DNS is incorrect", please check whether the network works fine, or the DDNS information is correct or not.

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.

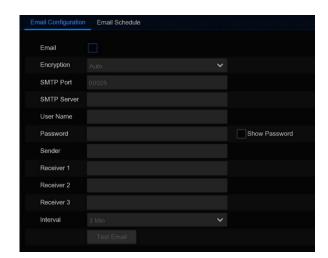


### 5.5.3 Email

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.

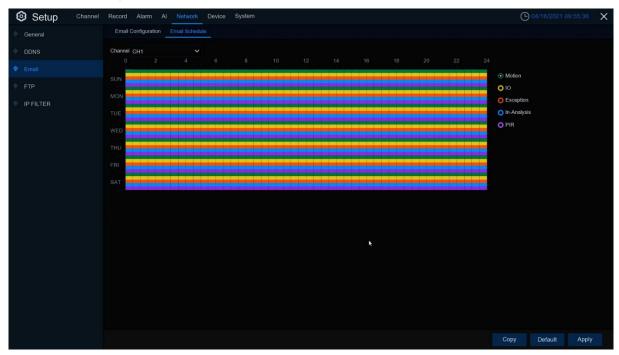
Password: Enter the password of your email.

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

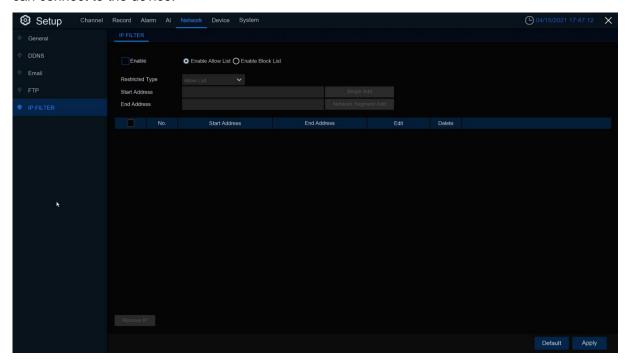
Exception: Red area In-Analysis: Blue Area

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.

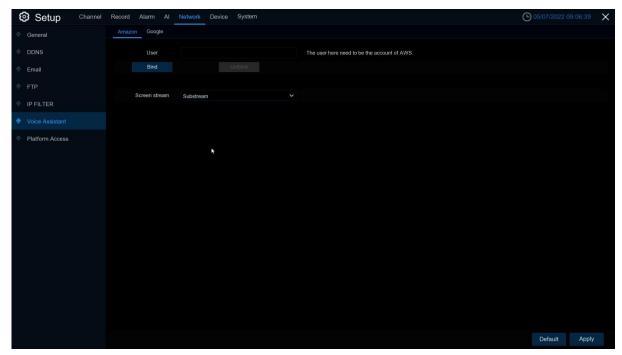


### 5.5.5 Voice Assistant

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

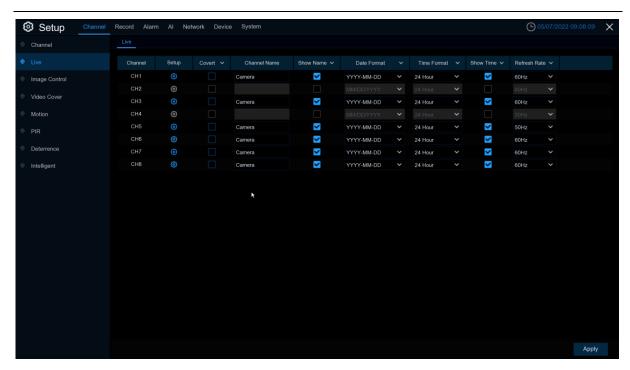
#### 5.5.5.1 Amazon

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.

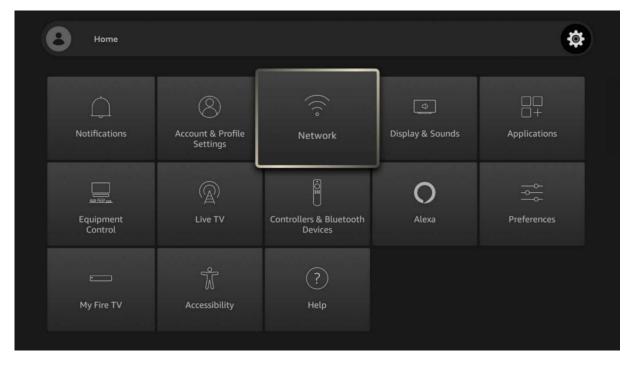


2. Enter "**Channel–Live**" page, set a channel name so that easy to show this channel video on TV or monitoring.



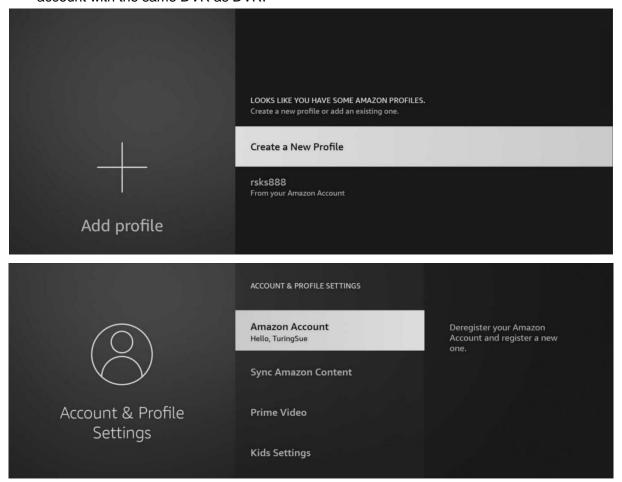


3. Connect Fire TV Stick to the TV monitor and turn on the power. Connect Fire TV Stick to Wi-Fi, which is in the same local area network as DVR.

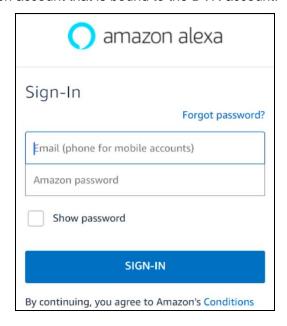




4. Use the existing configuration file or add a new configuration file, and log in to the Amazon account with the same DVR as DVR.

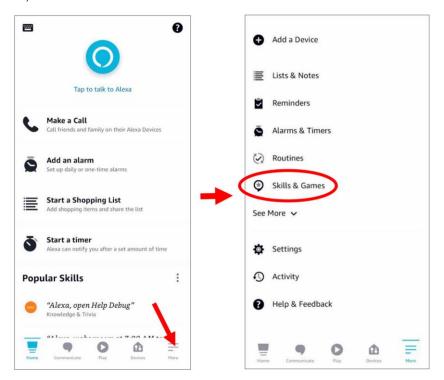


Search from the App Store and install Amazon Alexa to your mobile phone, and then log in with the same Amazon account that is bound to the DVR account.

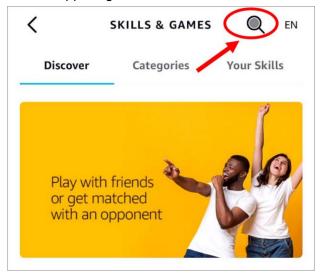




6. Click "More", and then click "Skills and Games".

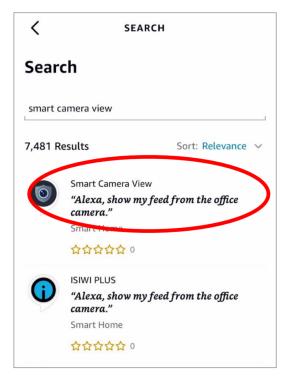


7. Click the search icon in the upper right corner.

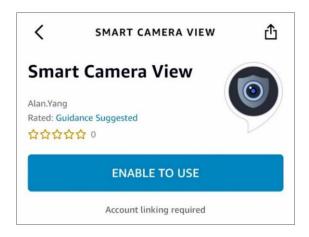




8. Enter keywords: Smart Camera View, and search.

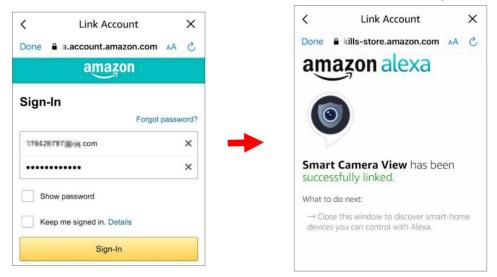


9. Click "ENABLE TO USE".

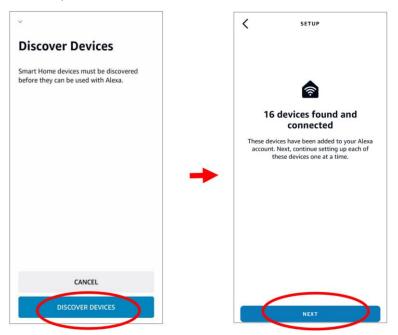




10. You need to link your Amazon account. Log in to the Amazon account with the same account you have bound with the DVR. After the function is successful, click "Completed".

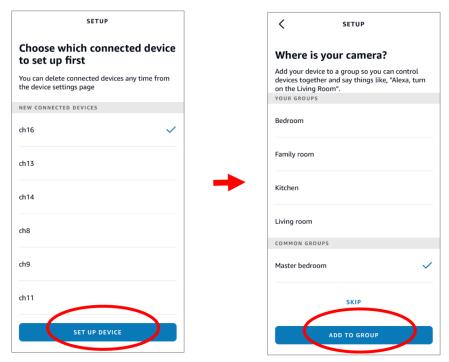


11. Click "Discover Devices" waiting for the application to search the camera. After finding and connecting the device, click Next.





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

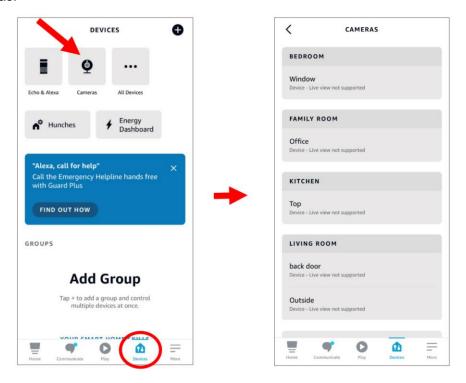


13. Repeat step 11 to add all cameras, then click **Done**.





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

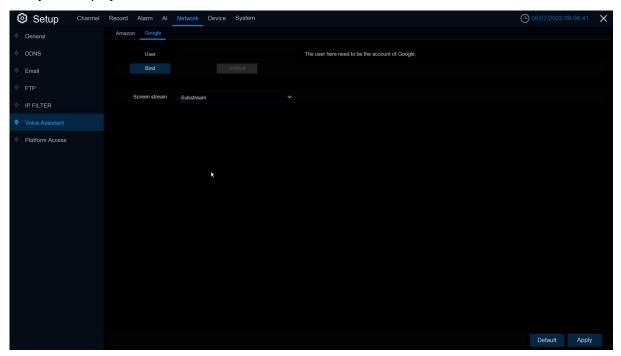


- 15. Hold on Fire TV stick controller audio button, and speak out command clearly. Speak the command like this: Show the XXX camera/Show XXX (the camera's name) For example, if the channel name is "Office", you can say "Show the Office camera".
- 16. Wait for a while, and the real time streaming will 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.

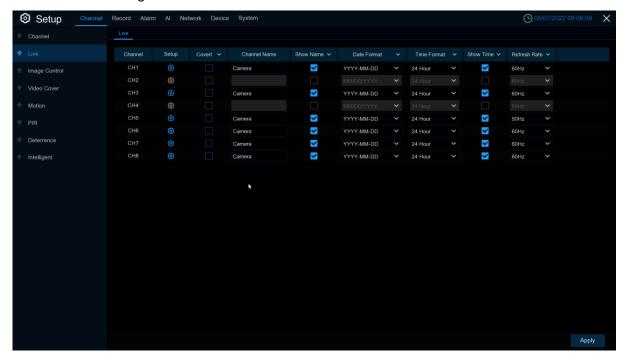


# 5.5.5.2 Google

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.



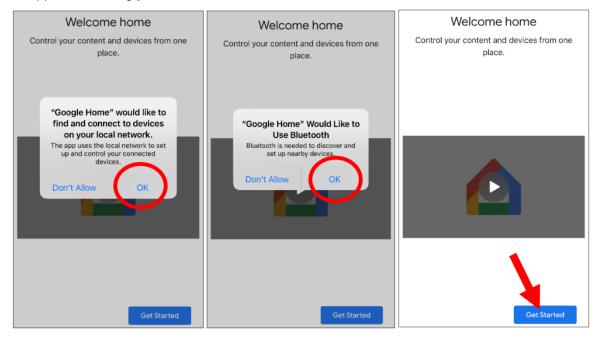
2. Enter "Channel-Live" page, set a channel name so that easy to show this channel video on TV or monitoring.



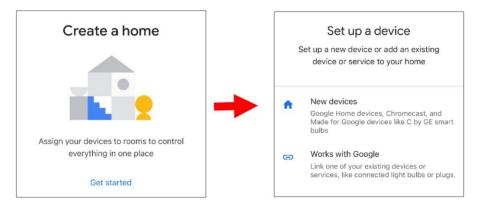
3. Connect ChormeCast to your TV monitor and power on.



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".

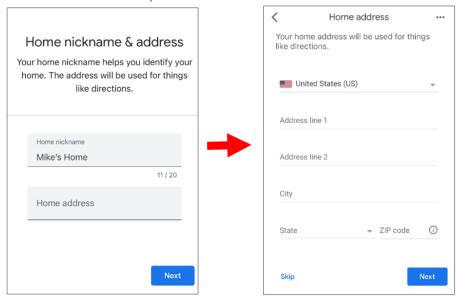


- 5. Login in your bonded google account.
- 6. Click "Get Started" to create home, and then Click "New devices".

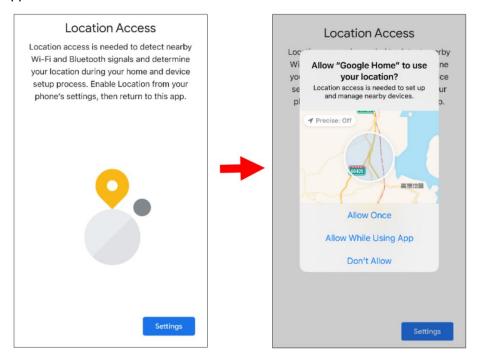




7. Enter home name and address, and then click "Next".

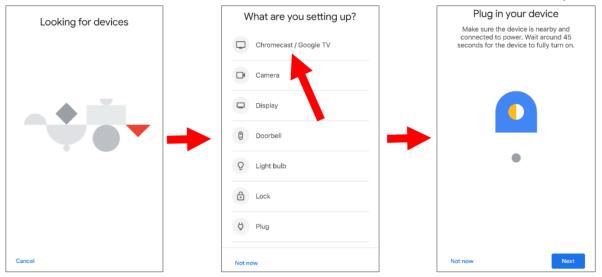


8. Allow application location access.





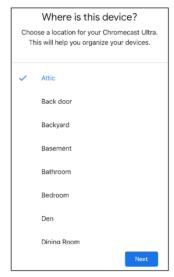
9. The application will try to search your local network devices automatically. Choose Chromecast. Make sure Chromecast is turned on, and then continue with the next step.



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

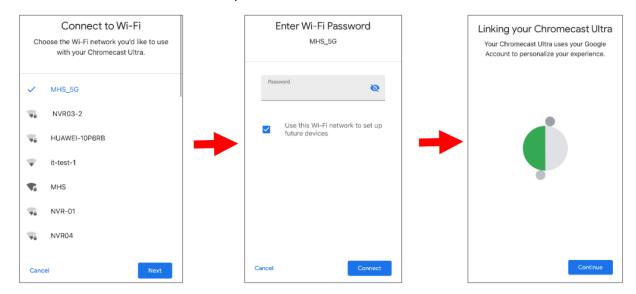


10. Select Chromecast position, and then Click Next.





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.

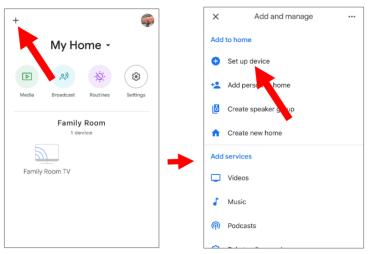




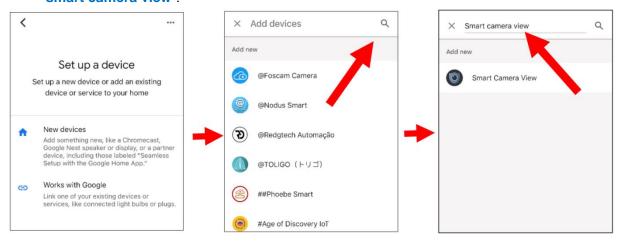
13. Click Next->Skip->Finish Tutorial.



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

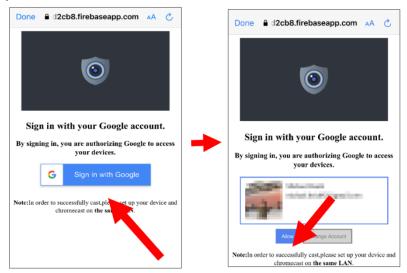


12. Select "Works with Google". Click the search icon in the upper right corner and then enter "smart camera view".





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

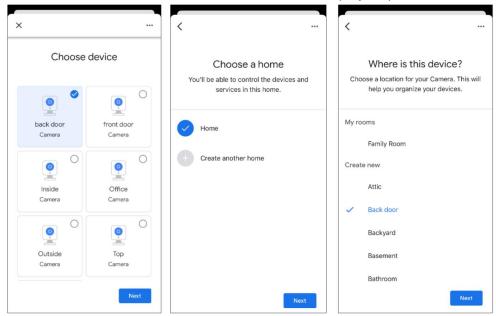


14. Wait for a minute, and the application will connect to Google home.

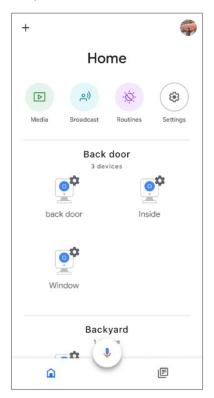




14. The camera available in DVR will now be displayed. Select one of the cameras and touch the next button. Select a home and location for the camera step by step.



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.

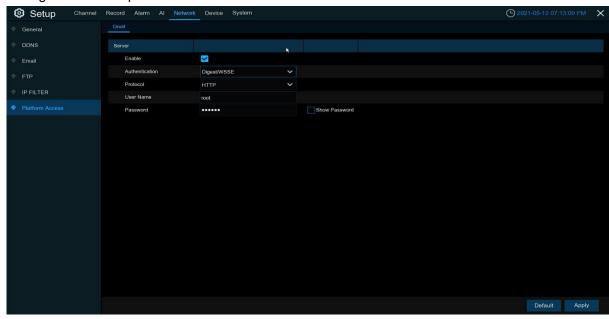




# 5.5.6 Platform Access

### 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

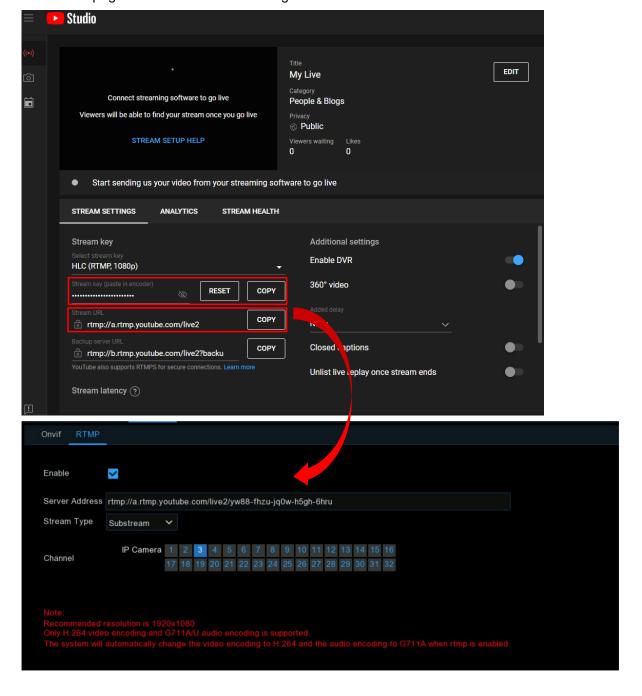
Password: Login user password

**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:

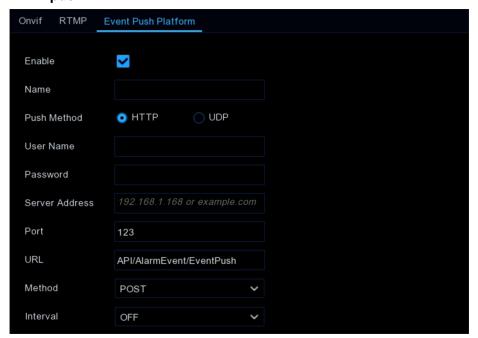
- 1. To ensure the live broadcasting effect, it is recommended that the resolution of the stream not exceed 1920 × 1080.
- 2. Live broadcasting can be conducted for only the data streams of H.264 video encoding format and G711A/U audio encoding format.
- 3. A YouTube live code can be set for only one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

#### 5.5.6.3 Event Push Platform

It is used to push the alarm information from the device to the specified third-party platform (the use of this function is required to ensure that the third-party platform has completed the docking debugging with the device).

Event push is divided into HTTP push and UDP push: HTTP has POST and GET methods; UDP has unicast, multicast and broadcast methods.

#### **HTTP** push



**Enable:** Enable or disable the event push function.

**Name:** Set the name of the device to be used for sending alert messages to the third-party platform.



Push Method: Support HTTP push method and UDP push method, check HTTP for HTTP push

method, check UDP for UDP push method.

User Name: User name of the third-party platform
Password: Password of the third-party platform
Server Address: Address of the third-party platform

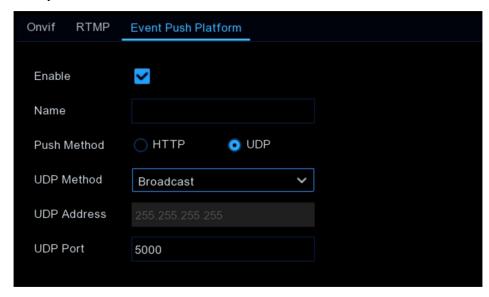
Port: Third-party platform server port (port range 1-65535).

**URL:** Third-party platform server API interface.

**Method:** HTTP push type. Support POST method and GET method: only HTTTP-POST method supports push map, others are just push message without accompanying push map; the alarm type of push map is consistent with the preview alarm bar on web side.

**Interval:** Interval of keepalive, according to the set time, the device will send messages to the server regularly, UDP has no keepalive mechanism.

#### **UDP** push



**Enable:** Enable or disable the event push function.

Name: Set the name of the device used to send alert messages to the third-party platform.

**Push Method:** Support HTTP push method and UDP push method. If HTTP is checked, it is HTTP push method, if UDP is checked, it is UDP push method.

**UDP Method:** Support Unicast, Multicast and Broadcast:

**Unicast:** Enter the IP address and port of the client's UDP server to receive push messages, and only this address can receive messages.

**Multicast:** Multiple client UDP servers on the same network segment with the same UDP address and port can receive the message, and other non-UDP addresses will not receive the message.

Broadcast: All UDP servers on the same network segment can receive the message.

**UDP Address:** UDP server address.

**UDP Port:** UDP server port (port range 1-65535).

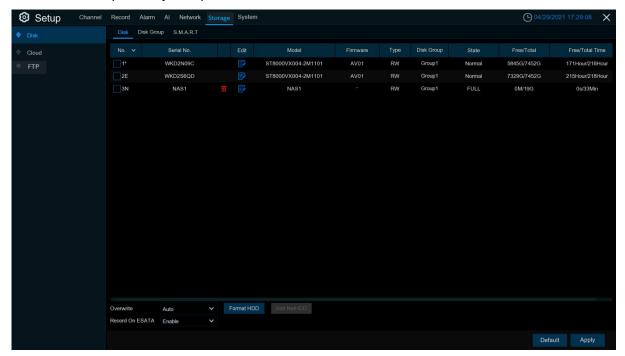


# 5.6 Storage

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

### 5.6.1 Disk

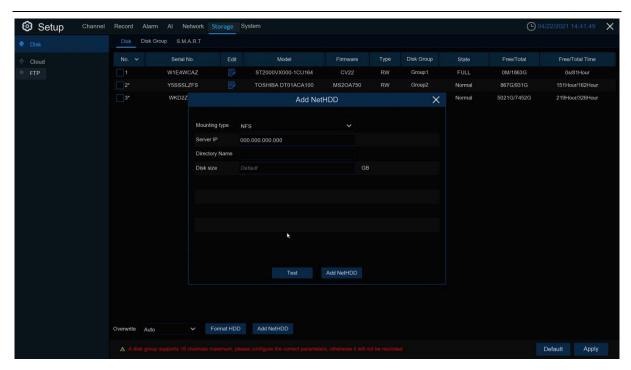
This menu allows you to check & configure the internal HDD(s). You need to format the HDD only at the first startup and if you replace a new HDD.



**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 / NAS HDD: 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.

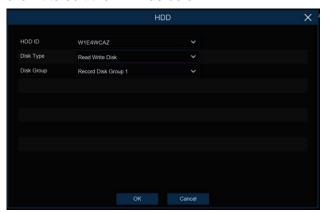
Add NetHDD / NAS HDD: Click to add NAS.

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.

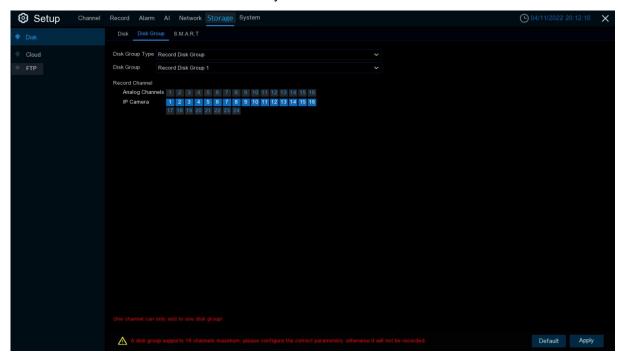
Read-write mode is the normal status for an HDD to save recording or search recording to play. To prevent important video data from being overwritten during cyclic recording, the HDD can be set as **Read-only** mode. New recording will be not able to save into this read-only HDD. You can still search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

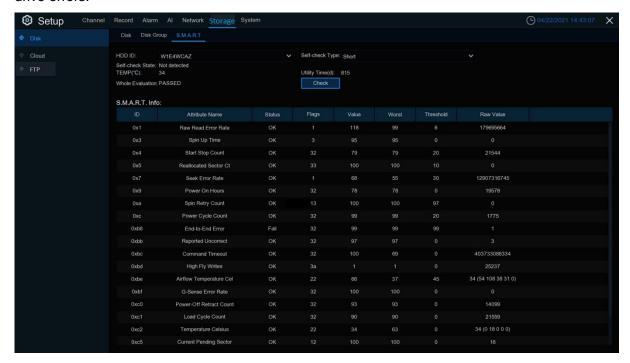


- 1. Use **Disk Group Type** to select the type of group to configure.
- 2. Use **Disk Group** to select the specific group within the selected group type.
- 3. Click the numbered boxes representing channels to record channels to HDDs in the selected group.
- 4. Click Apply to save.



#### 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.



**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

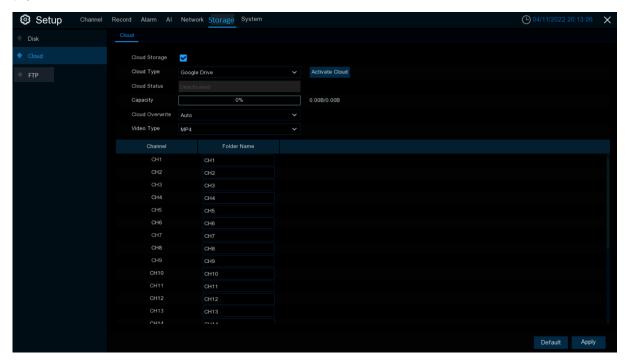
**Conveyance:** This is a very quick test that verifies the mechanical parts of the hard drive are working.

**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 <a href="www.dropbox.com">www.dropbox.com</a>, 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.

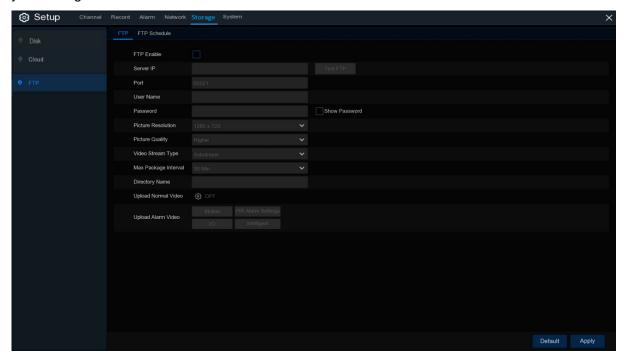
**Drive Name**: Enter the cloud storage name for your DVR.

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 <u>5.5.3 Email</u>). 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 <u>USAVision Player</u>.

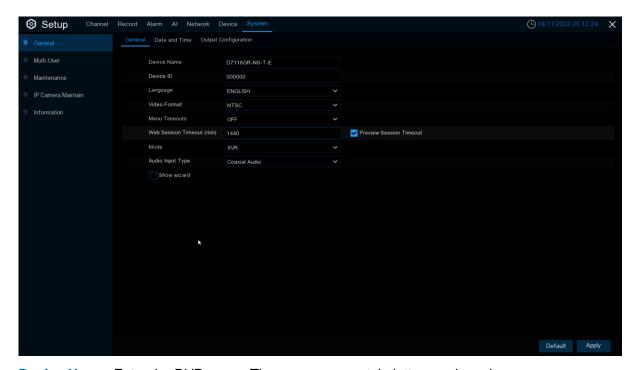


# 5.7 System

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 / Idle Lock Time: 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)



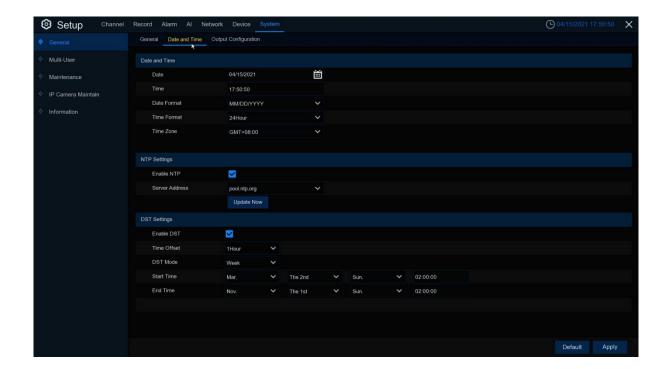
**Web Session Timeout (min):** Set the time to automatically log out of the web after a period of no operation when using the wed side to log in. The system default is 5 minutes, adjustable from 5-1440minutes.

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

**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 iii to change the date.

Time: Click the time box to change the time.

Date Format: Select the preferred date format.

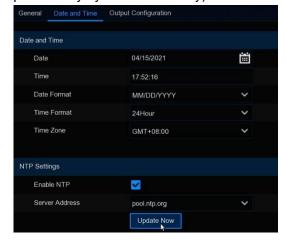
Time Format: Select the preferred time format.

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



#### 5.7.1.2.2 NTP

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).



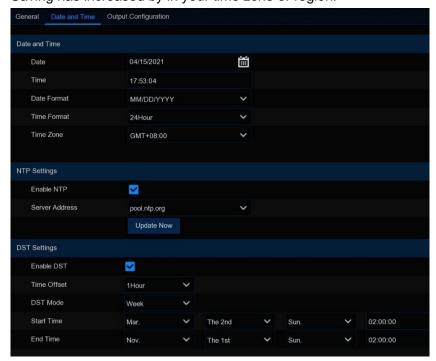
Check to enable the NTP, and select a Server Address, Click Update Now to manually sync the date & time.

Click Apply to save your settings.

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

### 5.7.1.3 DST

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.

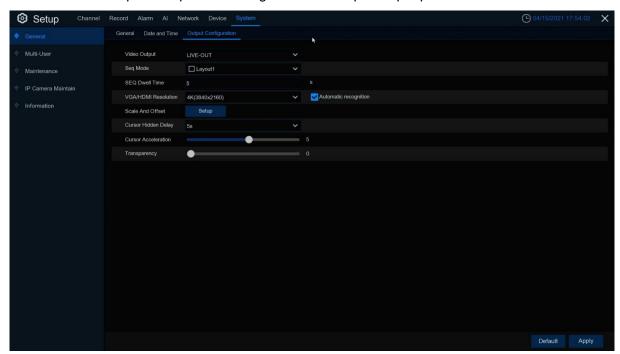
## **5.7.1.4 Output Configuration**

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.

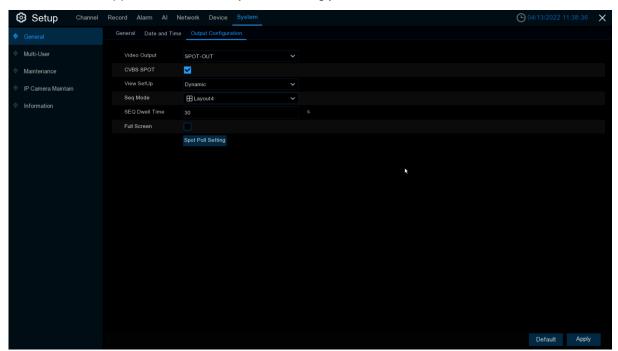
Y Offset: To move the displayed screen to up or down.

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.

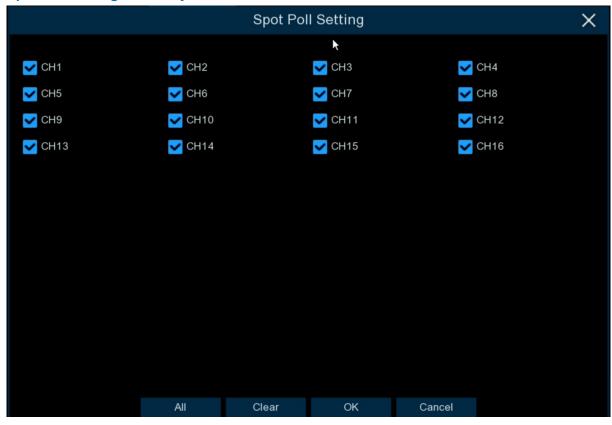
**SEQ Mode:** Select **Dynamic** mode to show the video channels on SEQ.

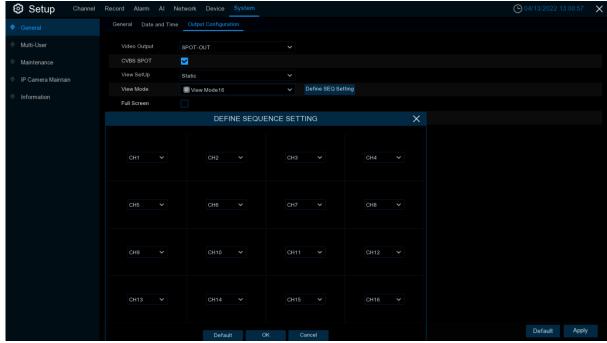


**SEQ Dwell Time:** Enter in seconds the maximum length of time you would like to display a video channel in sequence mode before displaying the next video channel (300 seconds is the maximum).

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

Spot Poll Setting: Select Dynamic mode to SEQ channels.





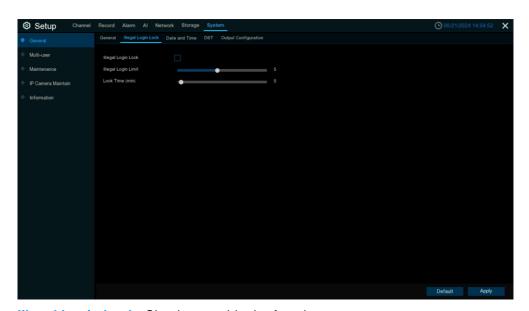
View Mode: Select Static mode multi-window number.

Define SEQ Setting: Select Static mode each window display.





# 5.7.1.5 Illegal Login Lock



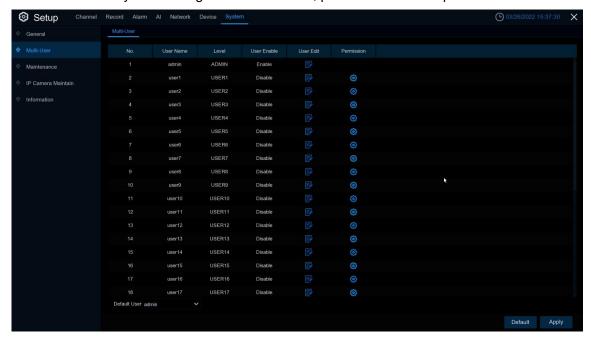
**Illegal Login Lock:** Check to enable the function.

**Illegal Login Limit / Lock Time (min):** Specify to activate the lockout when reaching the number of failed login attempts and for the lockout duration.



## 5.7.2 Multi-User

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



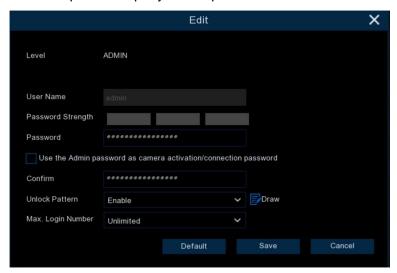
The system supports the following account types:

- 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.

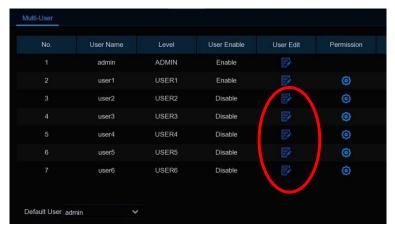


# 5.7.2.1 Changing Password and Single User Number

To change the password for the administrator or user accounts, click the User Edit icon Example. 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.

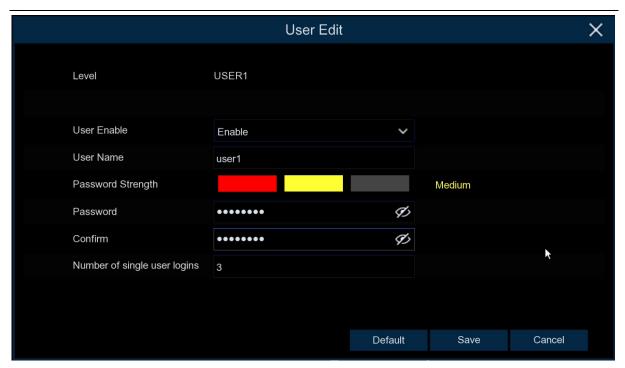


## 5.7.2.2 Add New Users



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



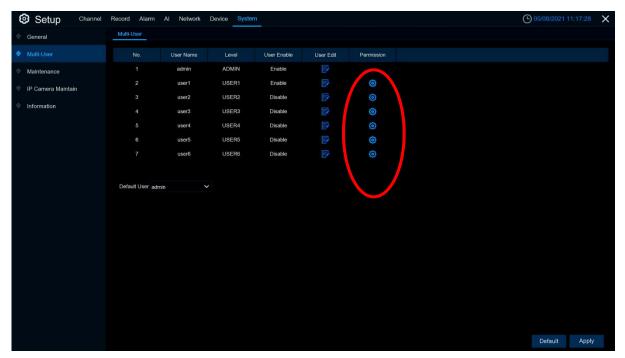


- 2. Select **Enable** from the drop-down next to **User Enable**.
- 3. Click the field next to **User Name** to change the user name for the account.
- 4. Select **Enable** from the drop-down next to **Password Enable**.
- 5. Click the field next to **Password** to enter the desired password.
- 6. Click 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.

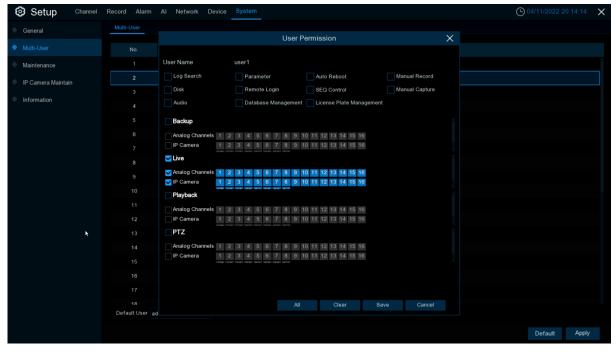


## 5.7.2.3 Setting User Permissions

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.



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 are the following permissions to choose from:

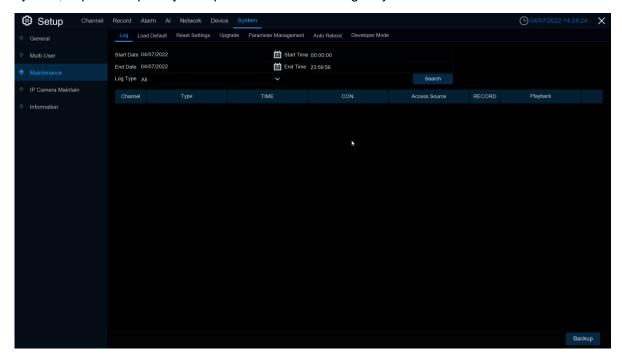


- Log search: To see all of logs;
- Parameter: To set up all of pages parameters;
- Maintenance: Operation System version update, load to default settings, device reboot, device shut down, etc.
- Manual Record: Manually start the video and stop the video manually.
- Disk: Control and mange HDD and U-disk;
- 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 Al database
- License Plate Management: Whether it can be operated on the License Plate database
- **Backup**: After the enable box " $\sqrt{}$ " 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

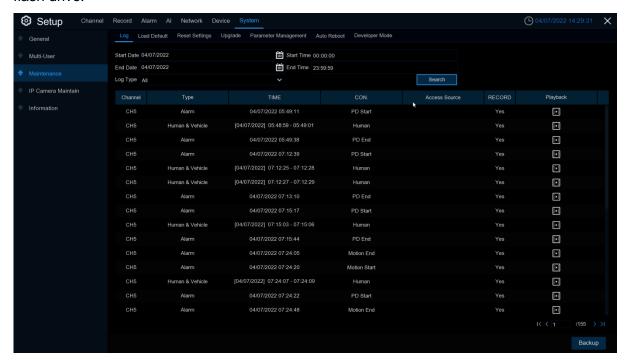
In this section, you will be able to search & view the system log, load default settings, upgrade the system, export & import system parameters and manager system auto reboot.





## 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.



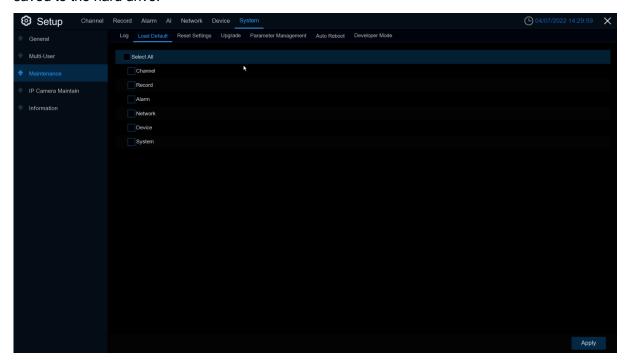
Storage: Format HDD, HDD Full and HDD error.

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 K < / > > 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

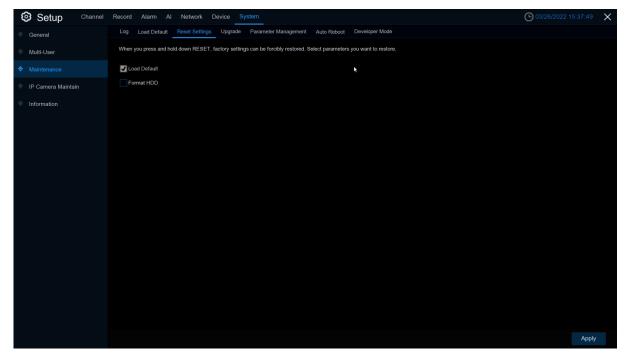
Reset the DVR settings to its out-of-box state. You can choose to reset all settings at once, or just settings on specific menus. Restoring default settings will not delete recordings and snapshots saved to the hard drive.



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**

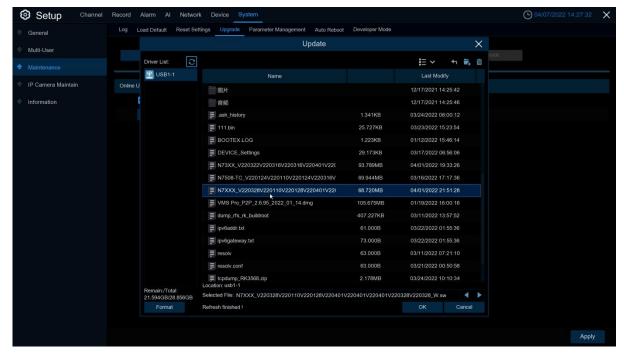


Format HDD: Set up to format HDD when make setting to default.



# **5.7.3.4 Upgrade**

# 5.7.3.4.1 U disk file upgrade

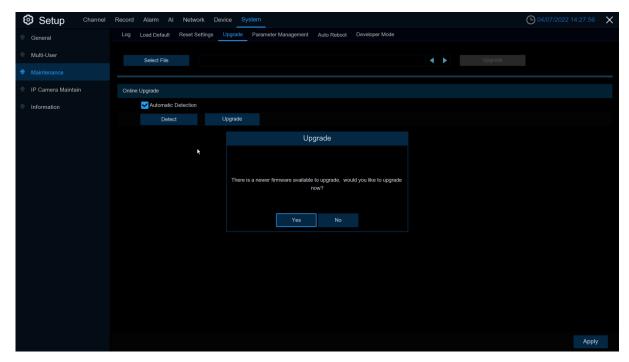


- 1. Copy the firmware file (.sw file) to your USB drive, and insert the USB flash drive into the DVR's USB port.
- 2. Click Select File button to choose the firmware file in your USB flash drive, then Click OK.
- Click Upgrade button to start system upgrade. The system upgrade will last around 5-10 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-XVL1611 / 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.
- 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.

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.

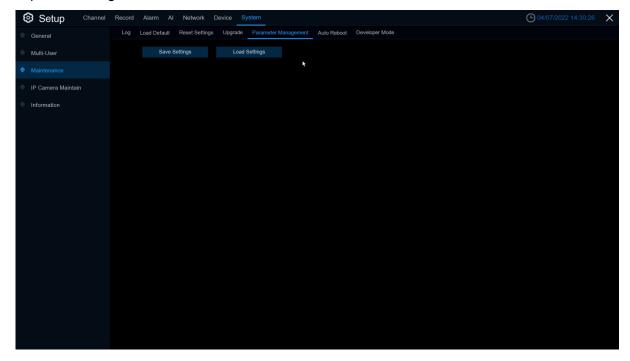


#### Note:

- 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.



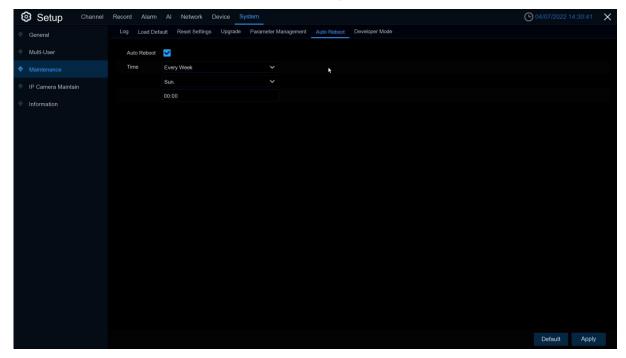
**Save Settings**: Click to save the DVR current system settings to the USB device. You will be required to input the Admin password to authenticate.

**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 Auto Reboot

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



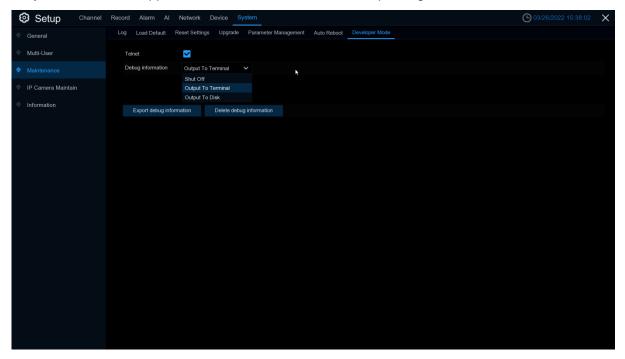
Auto Reboot: Check to enable.

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



# 5.7.3.6 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.

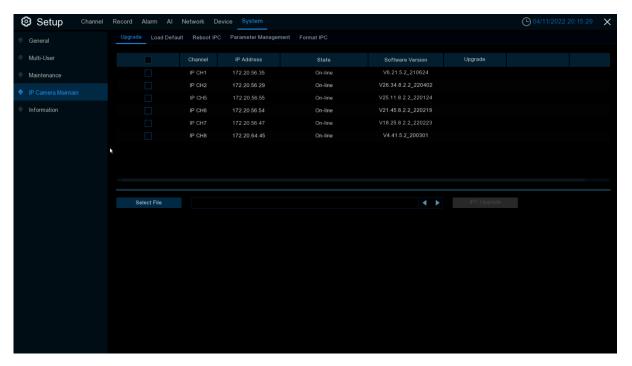
**Note:** This function is currently not supported.



## 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.
- 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.

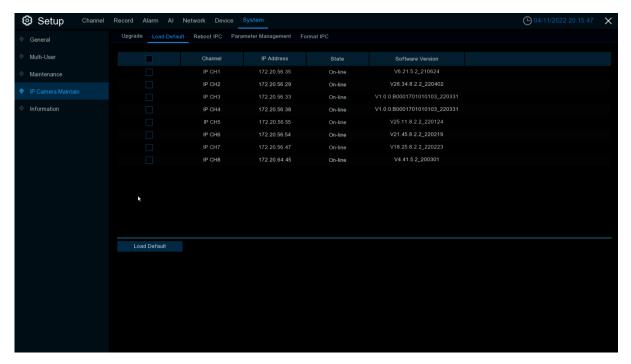
**Automatic Detection:** Automatically detect upgrades. Check whether there is the latest upgrade package in the FTP server at regular intervals and when starting up. If yes, you will be prompted whether to upgrade please view <u>5.7.3.4.2 Upgrade</u>). If yes, you will be prompted whether to upgrade **Enable/Disable** this function.

**Detect:** Manually check for the latest upgrade package.

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



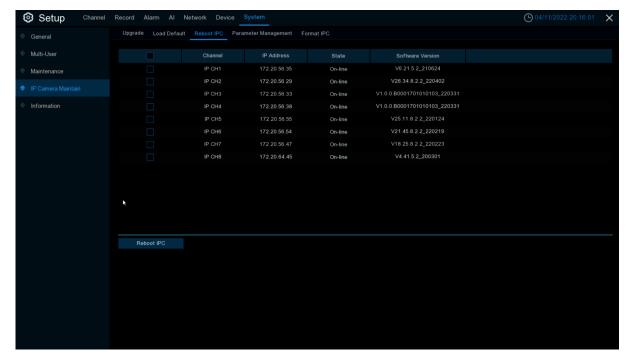
# 5.7.4.2 Load Default Settings for IP Camera



- 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.

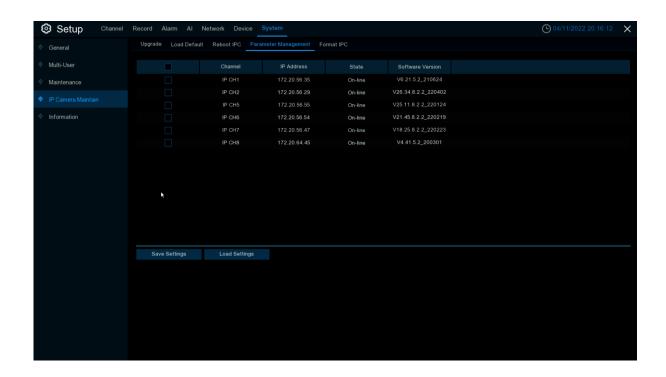


#### **5.7.4.3 Reboot IPC**



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

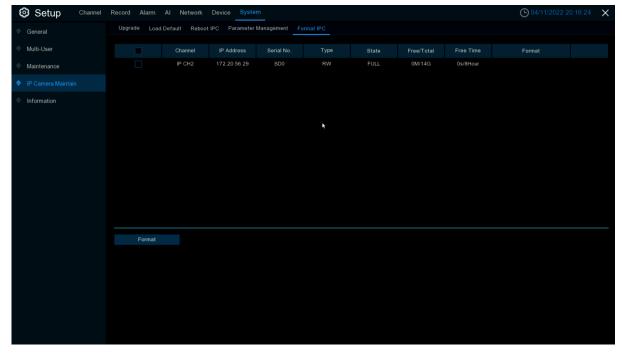
### 5.7.4.4 IPC Parameter Management





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.

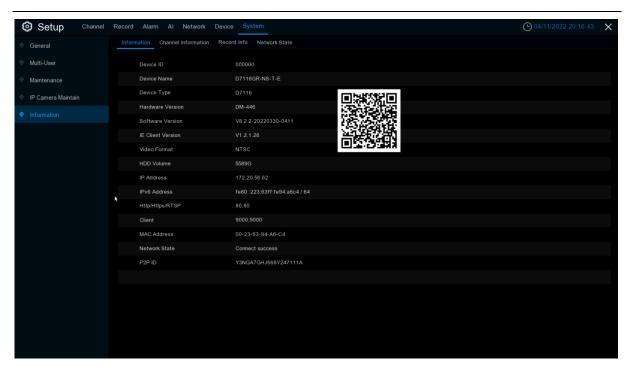
# 5.7.5 System Information

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

#### 5.7.5.1 Information

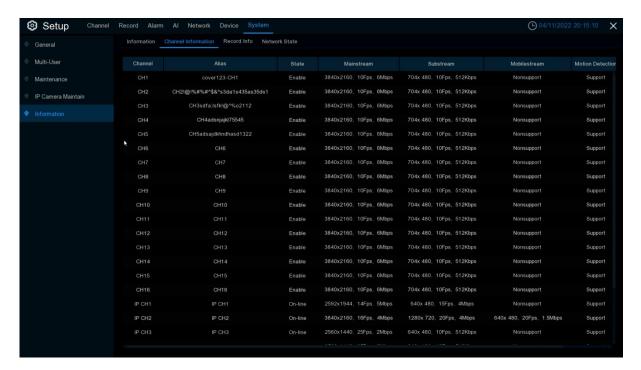
View system information such as device ID, device model name, IP address, MAC address, firmware version and more.





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.

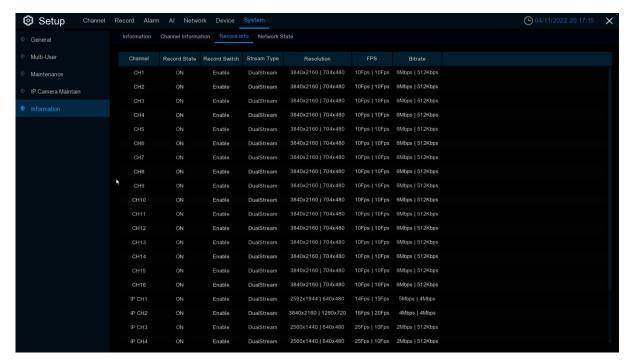
### 5.7.5.2 Channel Information



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

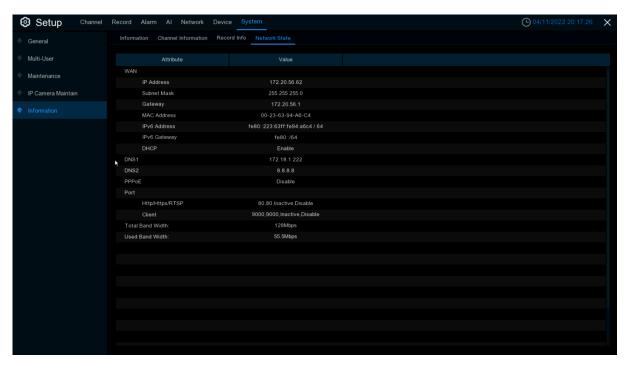


#### 5.7.5.3 Record Information



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 Al Scenario**

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

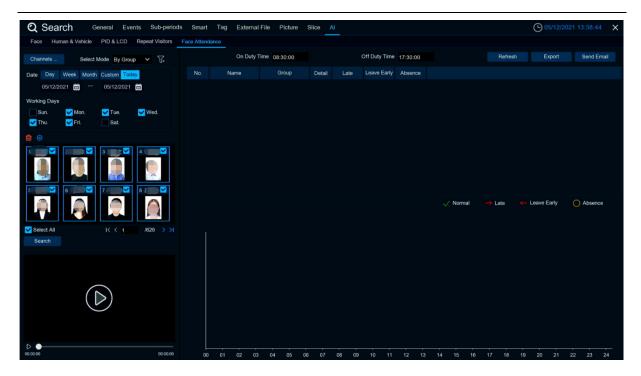
### 6.1 Face attendance

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

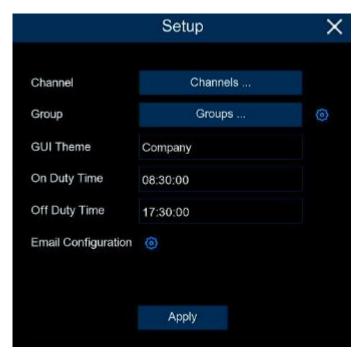


- 1. Interface theme of face attendance.
- 2. Click to enter the playback face attendance search interface, and select the face pictures in the face group by default.





3. Click to enter the setup interface.



Channels: Channel selection.



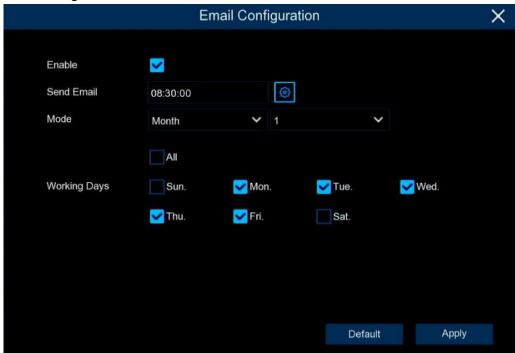
**Groups**: Select the faces of those face database for attendance, and click to pop up to the Al face database Settings interface.



**GUI Theme**: Main interface diagram

On Duty Time / Start Time of Work: Set up the duty time
Off Duty Time / End Time of Work: Set up the off-duty time

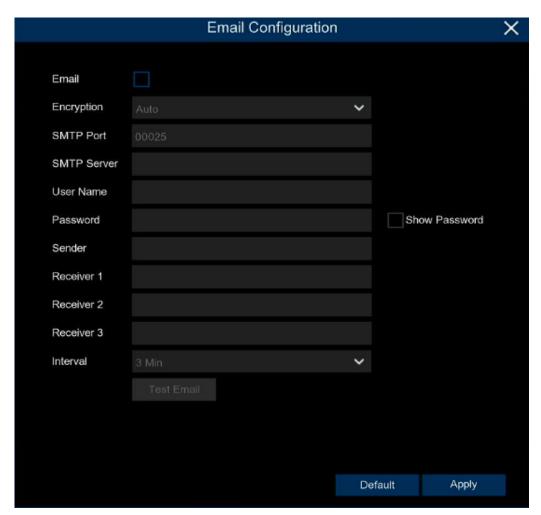
**Email Configuration**: Send face email configuration, click to send face attendance result email configuration.



**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 <u>5.5.3.1</u> Email Configuration.

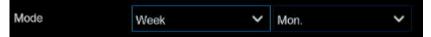


**Mode**: The mode of sending face attendance results, Day, Week and Month **Day**: Send it once a day, and send you yesterday's face attendance results.



**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

4. Displays the current date and time

, and 12 12 .

5. Current total number of people attendance situation

2	Total number of attendances required
2	Number of attendances
۶	No attendance
6.	The attendance status of each face group.
7.	Channel has image, selected Channels to choose channel.
8.	Select the number of graph windows, single window , two windows , four
	windows .
9.	Face real-time attendance push, display attendance face picture, name, from the group name, work attendance time and off-work attendance time.
10.	The interface also displays the maximum number of face attendance pushes with 1 , 6

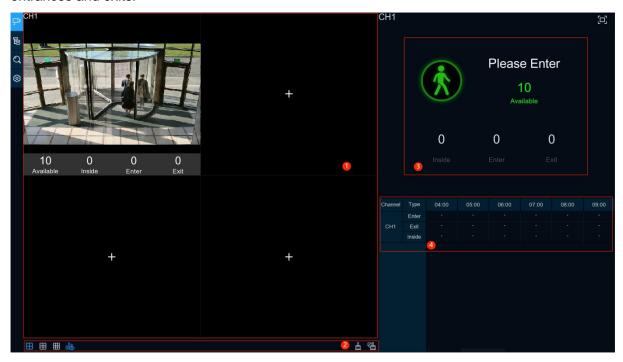


# **6.2 Cross Counting**

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.



 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

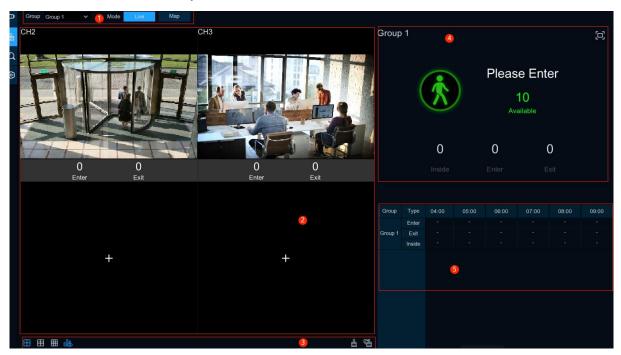
Enter: Number of recorded entriesExit: Number of departures recorded



- 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;





3. Select the number of drawing windows, four windows , six windows , nine , six windows , nine , six windows , nine 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

**Enter**: Number of recorded entries **Exit**: Number of departures recorded

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



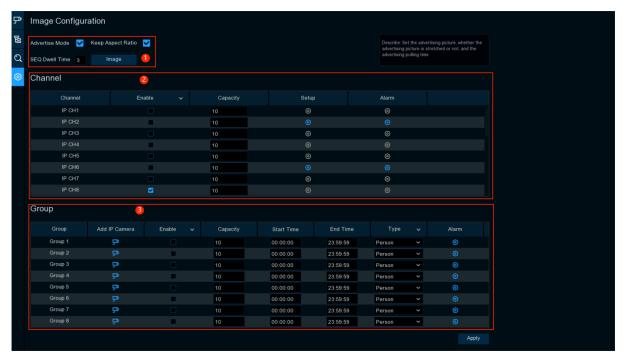
# 6.2.3 Search



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.

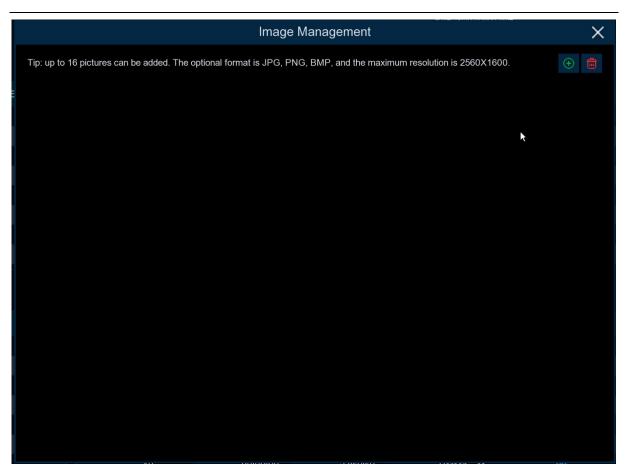


# 6.2.4 Setup



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
File(s) 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 2560 x 1600.



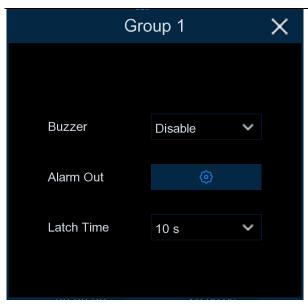


Click to add new picture. Click to delete added picture one by one.

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.

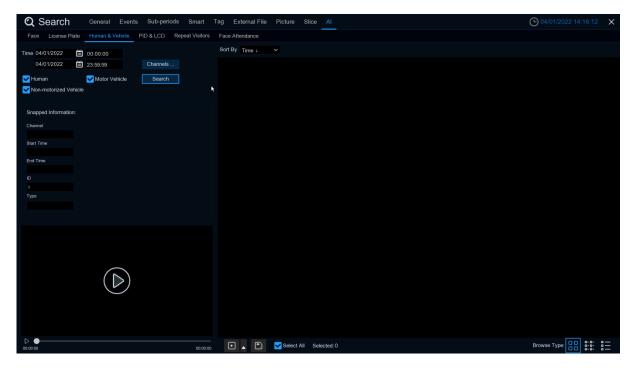


# 6.3 Object Classification

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

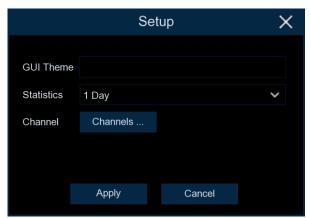


- 1. Interface theme of machine and non-human statistics
- Click to enter playback Human & Vehicle search interface.





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

- 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.
- 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.

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

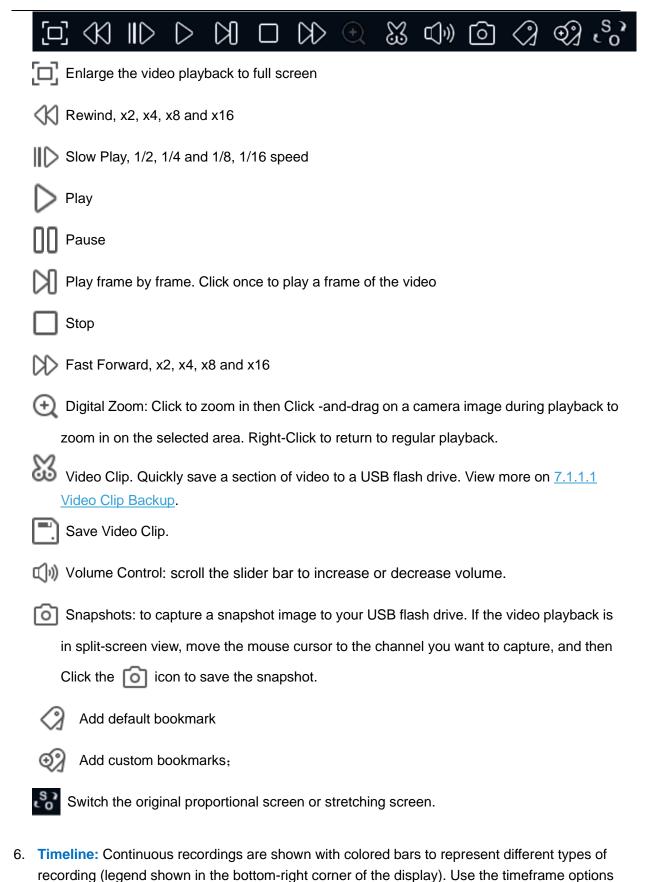
### 7.1 Using Search Function

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



- 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.





( 24h ) 2h ) 1h ) 30m ) to view a smaller or larger time period.



Different types of recording shown in different colors:



Continuous Recording in Green color;

Motion Recording in Yellow color;

I/O Recording in Red color;

Motion & I/O Recording in Orange color;

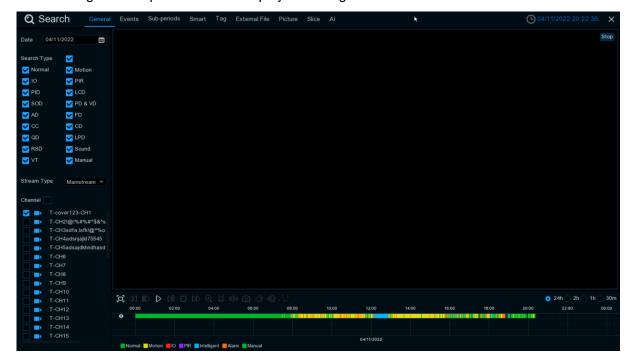
Intelligent Recording in Blue color;

PIR Recording in Purple color;

7. Playback Status: display the video play status.

### 7.1.1 Search & Play Video in General

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

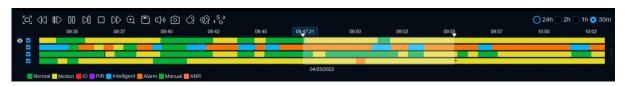


- 1. Click icon to search for video recording from the calendar.
- 2. Choose Search Type.
- 3. Check channels you would like to search, or check Channel to search all connected channels.
- 4. The search result will display on the timeline from 00:00 to 24:00.
- 5. Click button to start playback.
- 6. Control the playback with buttons on Video Playback Controls.



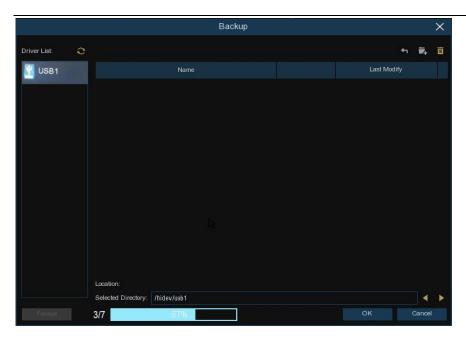
- 7. Use the timeframe options ( 24h 2h 2h 1h 30m ) to view a smaller or larger time period.
- If you want to quickly save a section of video during playing back to a USB flash drive, use the
   Video Clip backup function.
- 9. Tag function, click to add Costumed Tag. Click to add Default Tag. You can 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



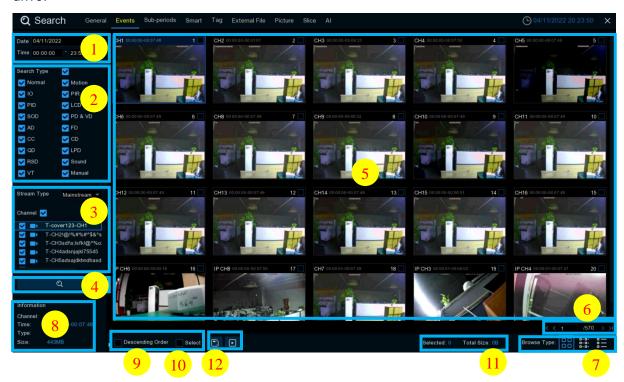
- 1. Insert your USB flash drive to the DVR.
- 2. Start a video recording playback.
- Click icon.
- 4. Check the channel(s) you want to make a video clip backup.
- 5. Move the mouse cursor to the timeline where you want to start the video clip.
- 6. Press and hold the left button of your mouse, and drag 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.
- 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.

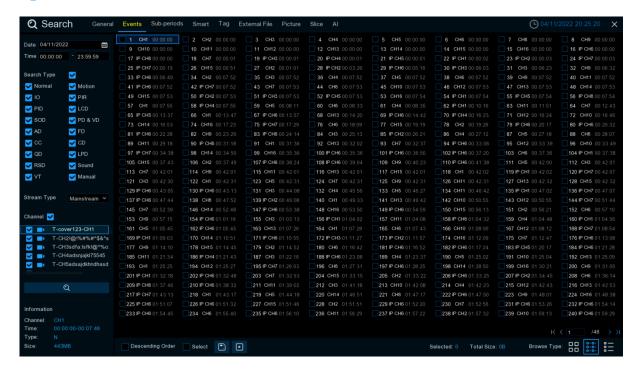


#### To search, play & back up for events:

- 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.

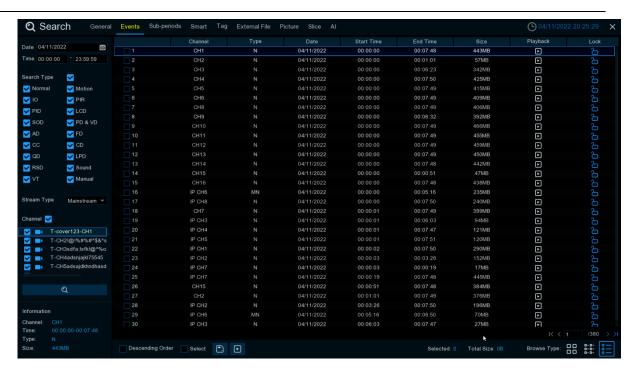


- 4. Click Q icon to start search.
- 5. Events fitting your search criteria are displayed in list form. You can double click the left button of your mouse upon one of the events to play the video immediately.
- 6. Click K 1 106 >>1 icons in the bottom-right corner of the menu to browse between pages of events, or input the page you want to browse.
- 7. You can switch the view of list form in by clicking below icons which is show at the right bottom corner of the screen:
  - Thumbnails view. You can view the snapshots of the events.
    - List view. The events will be displayed in list.



- Detailed view. You can view the details of the events.
- 8. When you click the left mouse button on one of the video clips, the system displays the event video clip information in the lower left corner of the screen.
- 9. Check the checkbox to sort the files in a descending order.
- 10. Check the checkbox after the event number to select a file, or check the checkbox after the event number to select all video clips on the page.
- 11. The number of files selected and the total size information will be displayed in the lower right corner of the screen.
- 12. After selecting "File", click the icon to save the picture to a USB flash drive, or click the icon to play the video clip.



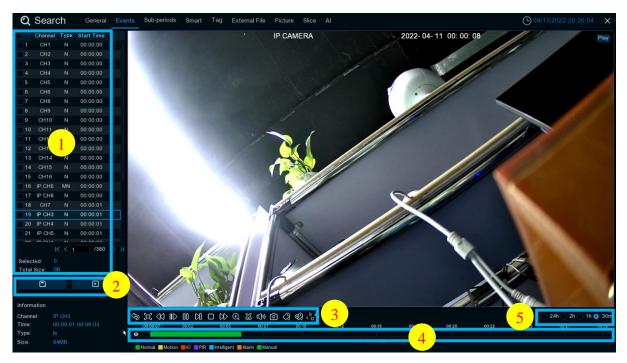


In the detailed view mode, you can lock the video events to keep events from being overwritten in the hard drive. Click the  $\$ icon to lock or click  $\$ to unlock the events.

- 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. 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

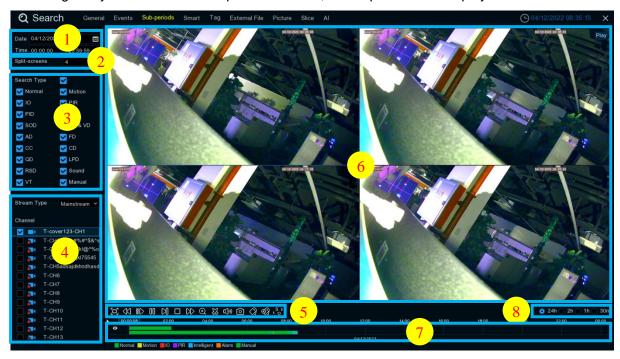


- 1. Event List, you can select the events here.
- 2. Click icon to save your selected event videos to USB flash drive. Click icon to play video.
- 3. Control the playback with buttons on Video Playback Controls. You can Click icon or click right button of your mouse to exit the playback and return to event search window.
- 4. The event you are playing now will be displayed on the timeline.
- 5. Use the timeframe options ( 24h 2h 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 2h 1h 30m) to view a smaller or larger time period.



9. For the 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.



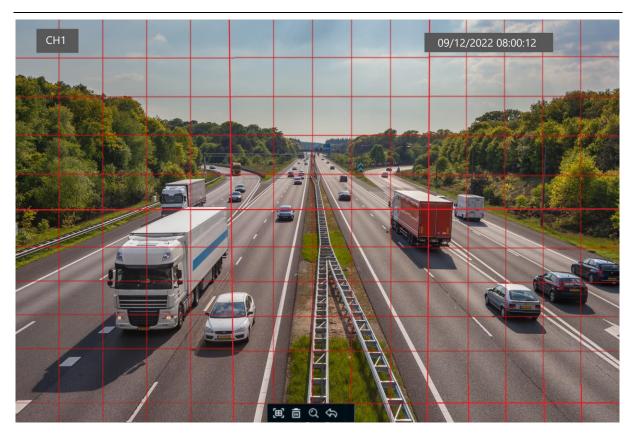
This feature can identify whether it is triggered by the Motion in Motion. If so, it will be displayed as

blue in the playback time bar below. Click



button to enter smart area set up page.



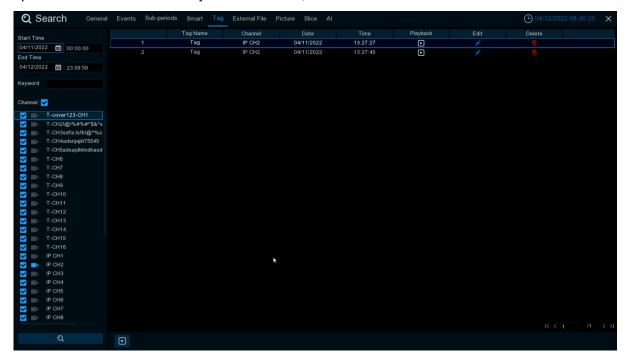


Click this icon on Video Playback Controls, the camera will be shown in full screen and the Smart controls bar will be visible.



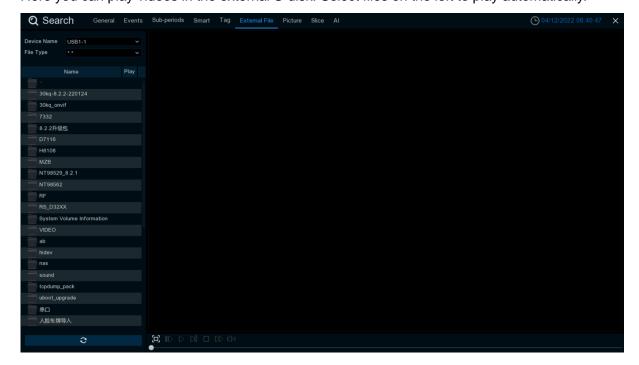
# 7.1.5 Tag Playback

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

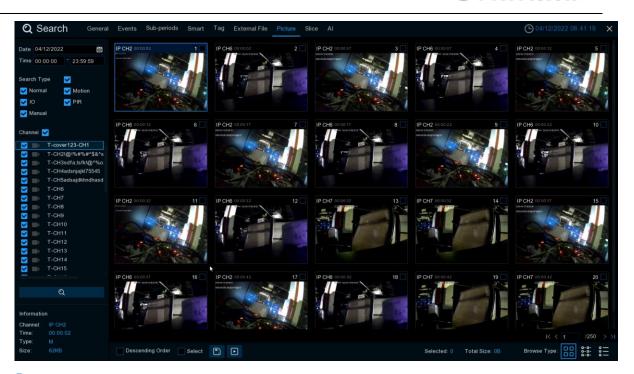
This function can be used to search, play and copy snapshots to a USB flash drive.



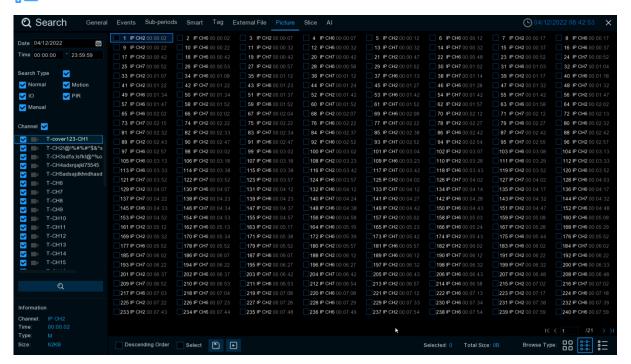
#### To search, play & back up pictures:

- 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 Q 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 K ( 4 1/15 > )1 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.



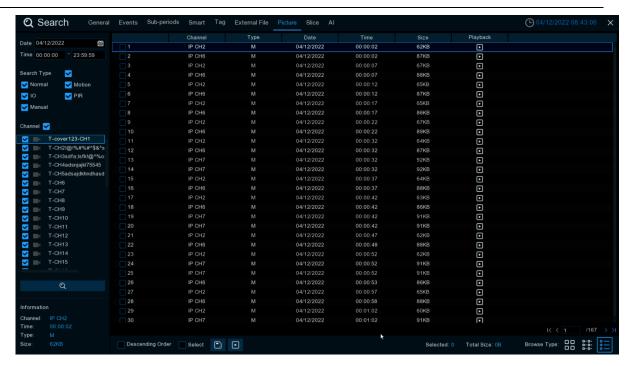


List view. The events will be displayed in list.



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.

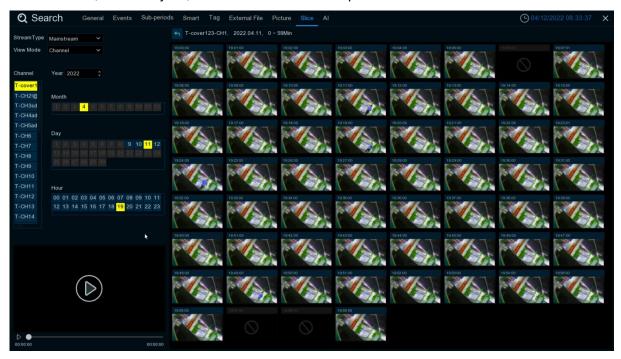
Press | button to display previous snapshot or group of snapshots, press | to display the next snapshot or group of snapshots.

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



# 7.1.8 Split Playback / Slice 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 face information of the group during this time period.

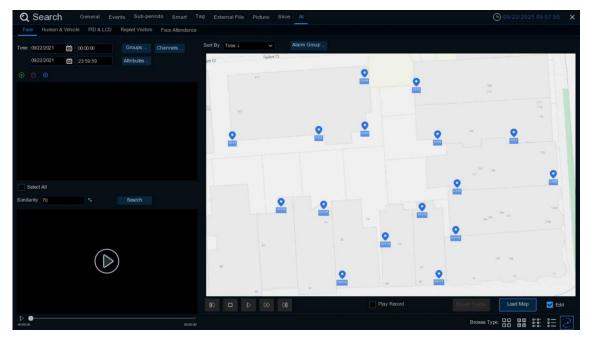


- 1. Click to customize to add the search face. Choose **Groups** to select the face pictures of the whole group of the face database for comparison search.
- 2. Click Channels to select the channel for the search.
- 3. Click **Attributes** to set the face attribute conditions for the search, and you 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 Al 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.

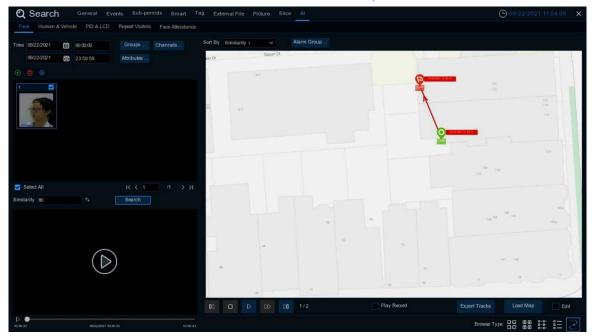


### 7.1.9.1.1 Tracks

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  $\oplus$  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.

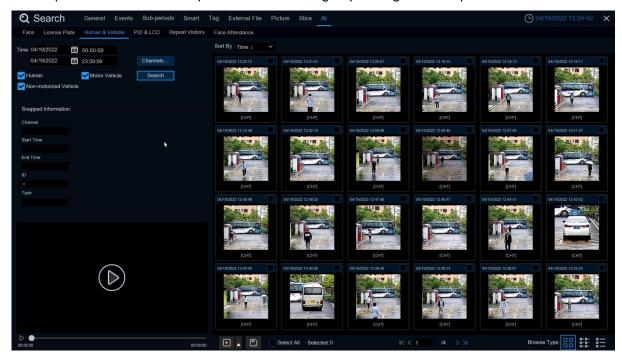


If you click the left button on an IPC icon and play back, there will be a simple playback in the lower right corner. If multiple IPC detect the face, the point playback will automatically judge the person's movement and introduce an arrow.



### 7.1.9.2 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.

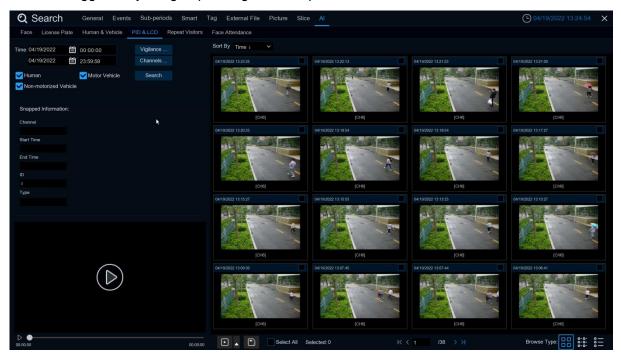


Left click will have basic information on the left side, right click will customize playback and view details. Click on the lower left corner to play for simple playback, double-click to zoom in, and enter the normal playback mode.



### 7.1.9.3 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.



### 7.1.9.4 Repeat Visitors

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

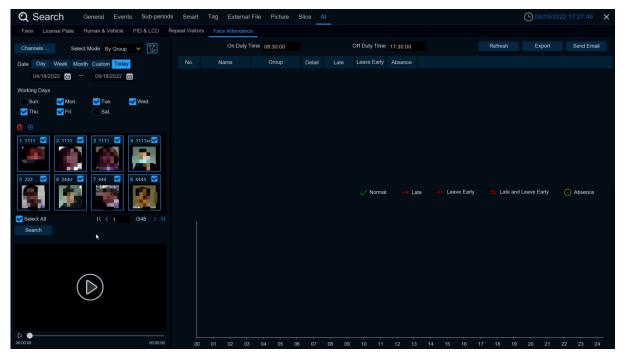


- 1. Select the date and time that you want to search for.
- 2. Select the face library group you need to contrast and search groups by default.
- 3. Select the channel that you need to search for.
- 4. Select the corresponding face attribute in the face attribute interface.
- 5. Enter the minimum number 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 con to customize the play, or click to back up the picture and video to the USB flash drive.



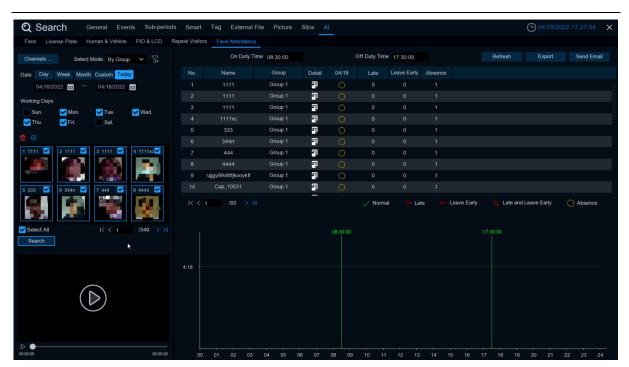
### 7.1.9.5 Face Attendance

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.

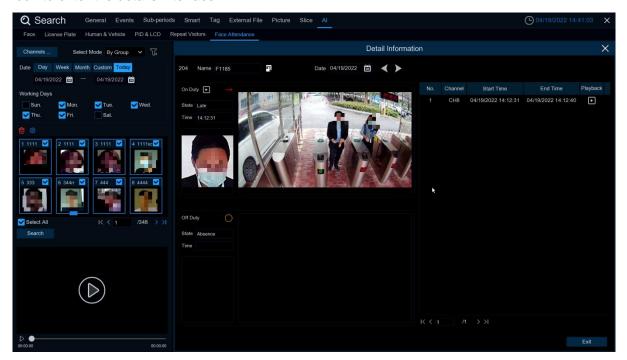


- 1. Channels: Select the channel for face attendance
- Select Mode: Select the face picture of attendance, with By Group and By Person modes
   By Group: Select face pictures through the face group, that is, add shuffling all face pictures.
   By Person: Through the face map selection, click the right 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

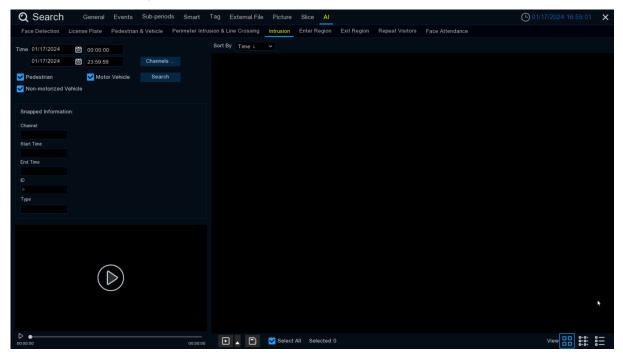
Click **Export** to save the searched attendance information generation file to the U disk.

Click **Send Email** to send the searched attendance information generation file to the mailbox.



### 7.1.9.6 Intrusion / Region Entrance / Exiting

Select the date, time, channel and detection target type and click Search to search the alarm events captured during the selected time period.





## **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	

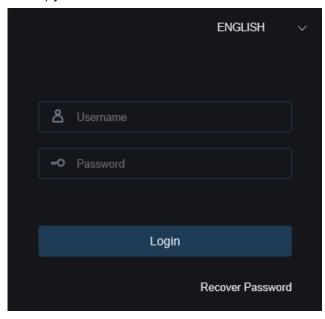


### 8.2 Web Plugin Download and Installation

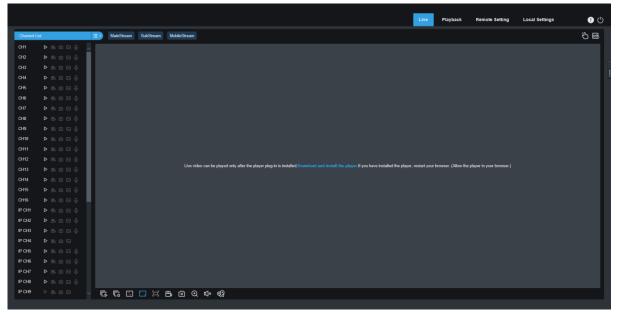
To access the Web Client, do the following:

#### For IE Browser:

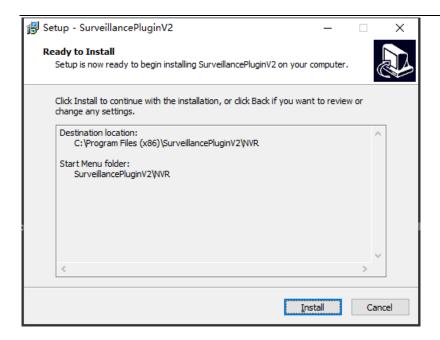
1. Launch the explorer on your PC and enter the DVR IP address or DDNS domain name (Host Name) you have set on DVR in the URL box.



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.

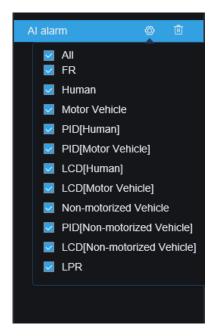
Remote setting: DVR menu to set up device parameters.

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- **Exit.**
- 6- Manual Alarm: Manual enable /disable Alarm Out.



7- Al alarm: Trigger Al alarm push, click for Al type detection, click iii to delete.





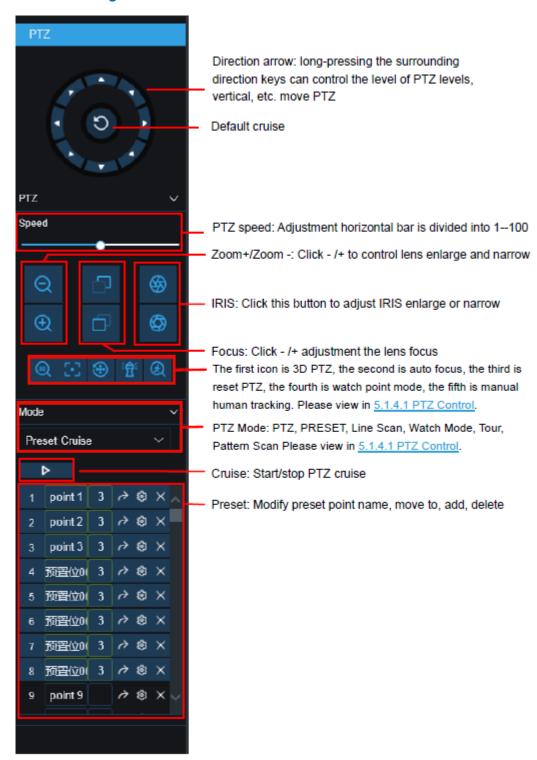
8- Color setting: Click to hidden the settings.



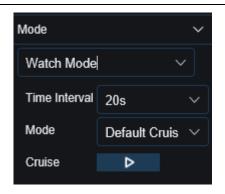
9- PTZ Control: Click to show/hidden PTZ.

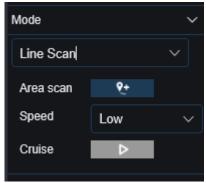


### 10- PTZ Control Plug-in











#### 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;

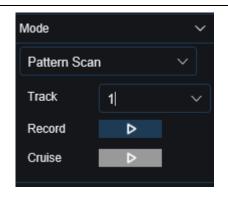
Speed: Line scan speed;
Click to start line scan, PTZ start line scan. PTZ only move in the same horizontal direction on this mode.

#### 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

11- 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 Playback)
- 12- Guide: Display the current channel number. Use direction keys to control.
- 13- Page: Click channels to show on the screen.

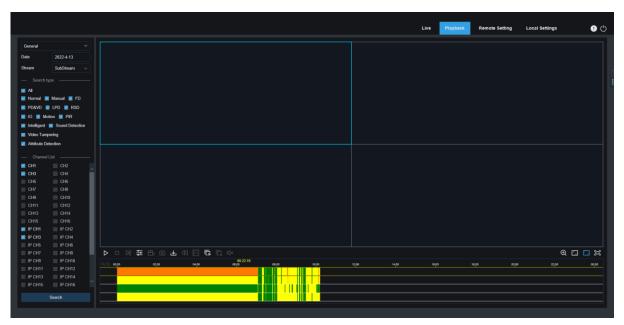


### 8.3.2 Playback

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. <u>USAVision Player</u>
- 2. VLC Media Player
- 3. KM Player



#### To search recordings:

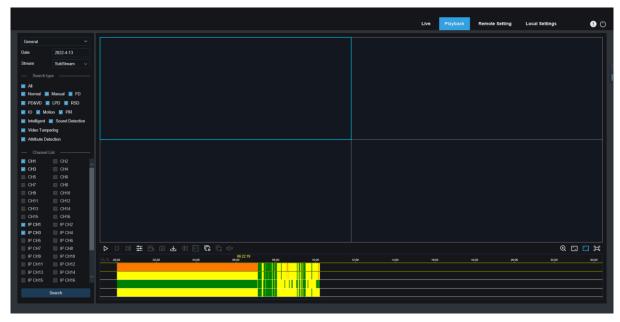
- 1. Click Playback in the top-right corner of the window.
- 2. Select a day on the calendar to search for recordings from. Days with recordings appear with a red underline.
- 3. Select the recording type to search for from the dropdown next to **Type**, or select **All** to search for all recordings.
- 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 <u>5.2.2.1</u>

  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.



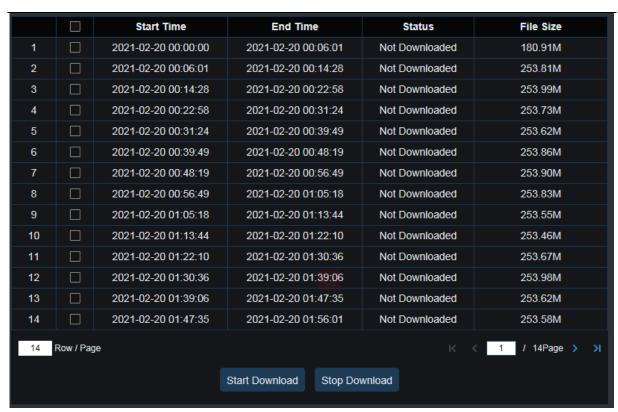
7. Recordings that fit your search will be displayed in the timeline. Click a section of video where you would like to begin playback and Click the play button.

### 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.





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

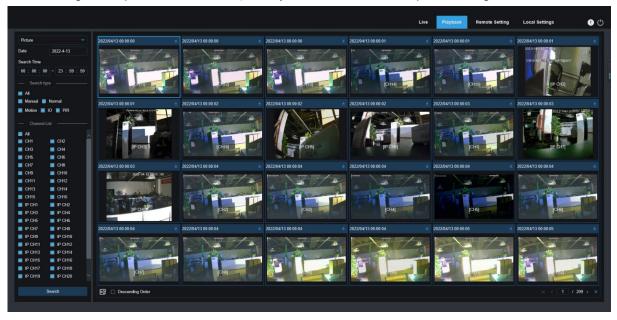
Synchronous playback option is not checked.

- 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 <u>5.2.3.1 Capture</u>, you can search the captured image here.



#### Search capture:

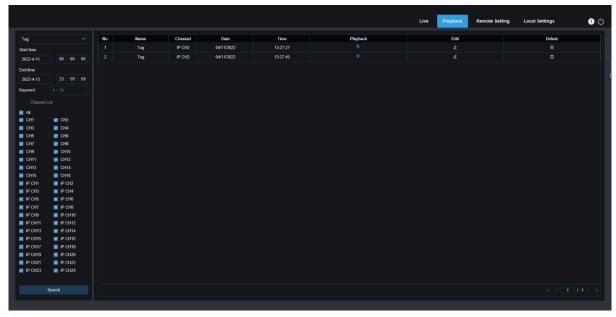
- 1. Click playback in the upper right corner of the window.
- 2. Select picture from the drop-down menu in the upper left corner.
- 3. Select a day to search on the calendar. The date with the snapshot is underlined in red.
- 4. Select the image type to search from the list in the search type menu, 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

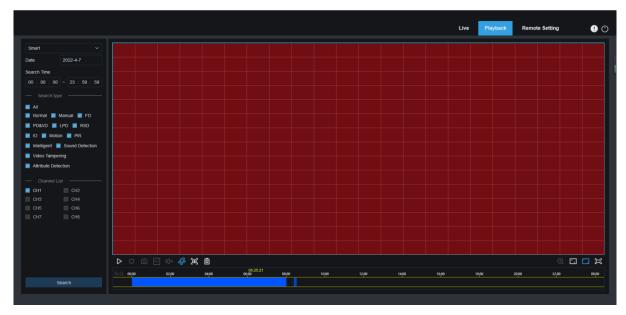
In this menu, you can view all the tags that have been added.



Please view 7.1.5 Tag Playback.

### 8.3.2.4 Smart playback

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

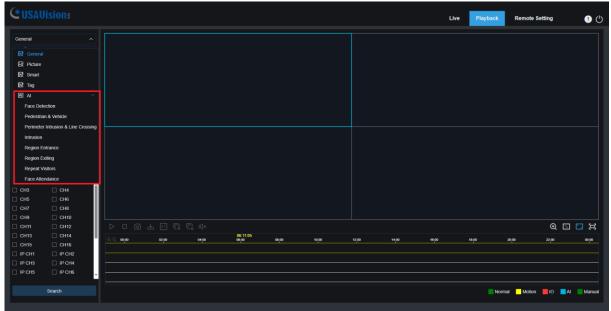




Click button to show smart set up area. Click button to select all area; click delete all selected area.

### 8.3.2.4 Al Playback

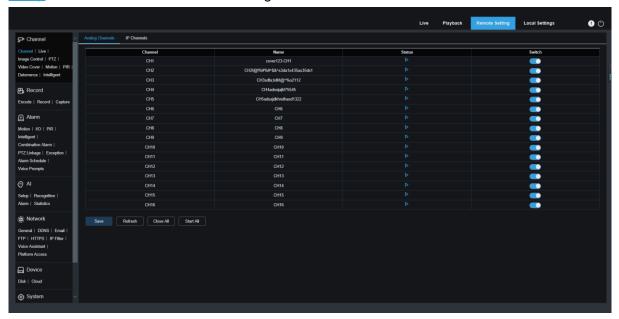
On <u>5.4 Al</u> set up Al alarm, you can search Al alarm events here. Search Face Detection, PD&VD, PID&LCD, Repeat Visitors, Face Attendance, Intrusion, Region Entrance / Exiting.





## 8.3.3 Remote Setting

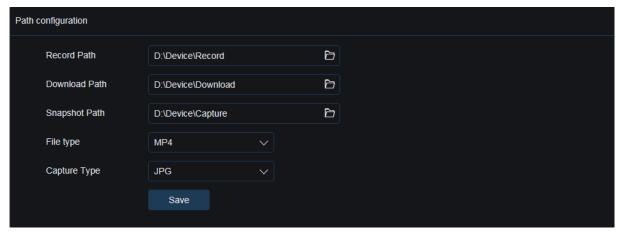
Here you can remotely configure the settings of the DVR. Please see "<u>Chapter 5 DVR System</u> <u>Setup</u>" for more details on the DVR settings.





### 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, see the UA-HD DVR HDD Compatibility Table <a href="here">here</a>.



### **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  $120\Omega$  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.