

Universal Video Recorder

User Manual

Legal Information

About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons.

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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In The Event Of Any Conflicts Between This Manual And The Applicable Law, The Later Prevails.

Regulatory Information

FCC Information

Please take attention that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol Description	
<u>/</u> PDanger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
<u> </u>	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
Warning	Remind the matters to be noted in the operation, improper operation may lead to data loss or equipment damage.
Note Note	Provides additional information to emphasize or supplement important points of the main text.

Safety Instruction

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Firmly connect the plug to the power socket. Do not connect several devices to one power adapter. Power off the device before connecting and disconnecting accessories and peripherals.
- Shock hazard! Disconnect all power sources before maintenance.
- The equipment must be connected to an earthed mains socket-outlet.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- 1 Indicates hazardous live and the external wiring connected to the terminals requires installation by an instructed person.
- Never place the equipment in an unstable location. The equipment may fall, causing serious personal injury or death.
- Input voltage should meet the SELV (Safety Extra Low Voltage) and the LPS (Limited Power Source) according to the IEC62368.
- High touch current! Connect to earth before connecting to the power supply.
- If smoke, odor or noise rises from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- Use the device in conjunction with an UPS, and use factory-recommended HDD if possible.
- This product contains a coin/button cell battery. If the battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- This equipment is not suitable for use in locations where children are likely to be present.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions.
- Keep body parts away from fan blades and motors. Disconnect the power source during servicing.
- Keep body parts away from motors. Disconnect the power source during servicing.

Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- The device is designed for indoor use only. Install it in a well-ventilated, dust-free environment without liquids.
- Ensure the recorder is properly secured to a rack or shelf. Major shocks or jolts to the recorder as a result of dropping it may cause damage to the sensitive electronics within the recorder.
- The equipment shall not be exposed to dripping or splashing and that no objects filled with liquids shall be placed on the equipment, such as vases.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc. The openings shall never be blocked by placing the equipment on a bed, sofa, rug or other similar surfaces.
- For certain models, ensure correct wiring of the terminals for connection to an AC mains supply.
- For certain models, the equipment has been designed, when required, modified for connection to an IT power distribution system.
- dentifies the battery holder itself and identifies the positioning of the cell(s) inside the battery holder.
- + identifies the positive terminal(s) of equipment that is used with, or generates direct current. + identifies the negative terminal(s) of equipment that is used with, or generates direct current.
- Keep a minimum 200 mm (7.87 inches) distance around the equipment for sufficient ventilation.
- For certain models, ensure correct wiring of the terminals for connection to an AC mains supply.
- Use only power supplies listed in the user manual or user instructions.
- The USB port of the equipment is used for connecting to a mouse, keyboard, USB flash drive, or Wi-Fi dongle only.
- Use only power supplies listed in the user manual or user instructions.
- Do not touch the sharp edges or corners.

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Chapter 1 Overview of UVR

1.1 Front Panel

UVR Front Panel, as shown in Figure 1-1.

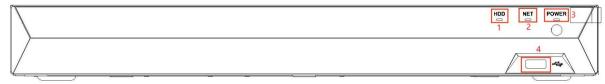


Figure 1-1 Front panel of UVR

No.	Function Description
1	Hard disk status light
2	Network status light
3	Power status light
4	USB interface

Table 1-1 Description of the front panel



Note

All the drawings above are for reference only.

1.2 Rear Panel

UVR Rear Panel, as shown in Figure 1-2, Figure 1-3, Figure 1-4.

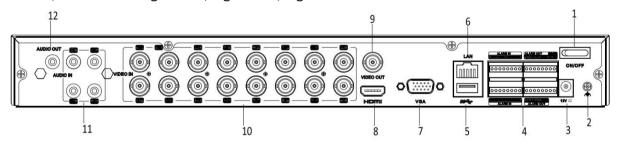


Figure 1-2 Rear panel of 16 Channels UVR

No.	Name	Description	
1	ON/OFF	Press the switch to turn on/off the video recorder.	
2	Ground	Used for grounding	
3	Power Input	DC12V power input.	
4	ALARM IN /OUT	Alarm inputs for connecting sensors; Alarm output, connect to alarm output device, horn or siren.	
5	USB	Connect USB storage device or USB mouse.	
6	LAN	Network port.	
7	VGA	Connect to monitor.	
8	HDMI	Connect to high definition display device.	
9	VIDEO OUT	CVBS interface.	

10	VIDEO IN	Connect to analog camera.
11	AUDIO IN	Audio input; connect to audio input device, like microphone, pickup, etc.
12	AUDIO OUT	Audio output; connect to sound box.

Table 1-2 Description of 16 Channels UVR' Rear Panel

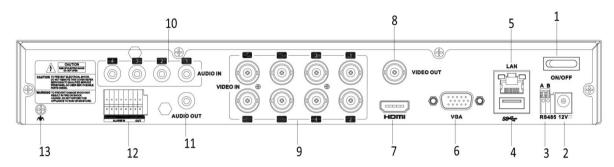


Figure 1-3 Rear panel of 8 Channels UVR

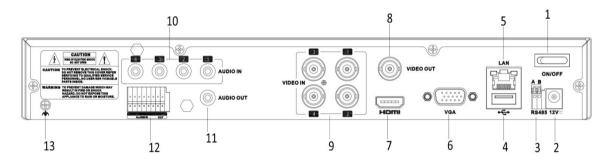


Figure 1-4 Rear panel of 4 Channels UVR

No.	Name	Description	
1	ON/OFF	Press the switch to turn on/off the video recorder.	
2	Power Input	DC12V power input.	
3	RS485 Input	For connection to analog dome machines	
4	USB	Connect USB storage device or USB mouse.	
5	LAN	Network port.	
6	VGA	Connect to monitor.	
7	HDMI	Connect to high definition display device.	
8	VIDEO OUT	CVBS interface.	
9	VIDEO IN	Connect to analog camera.	
10	AUDIO IN	Audio input; connect to audio input device, like microphone, pickup, etc.	
11	AUDIO OUT	Audio output; connect to sound box.	
12	ALARM IN /OUT	Alarm inputs for connecting sensors; Alarm output, connect to alarm output device, horn or siren.	
13	Ground	Used for grounding.	

Table 1-3 Description of 8&4 Channels Rear Panel

1.3 HDD Installation

Before installing Hard Disk (HDD), please make sure the power is disconnected from the UVR. To specify the capacity limit of the HDDs, please refer to UVR's specifications. UVR without Hard Disk still supports monitoring,

but no recording or playback. If you correctly install the Hard Disk, the HDD indicator will blink regularly when the UVR is on work.

Please turn off the power before the installation of HDDs. The pictures of the installation are only for reference.



Figure 1-5 Remove the cover



Figure 1-6 Fix the HDD



Figure 7 Connect the power and data cables

Figure 1-8 Install the cover and screws



Note

- •If user requires higher performance HDD, it is strongly recommended to use special hard drive for security and protection
- •Please do not take out hard drive when NVR is running!

1.4 Camera and Monitor Connection

Transmit signals of IP camera to UVR by the network cable, connect the AHD cameras to the BNC ports of the UVR and connect HDMI or VGA port for output.

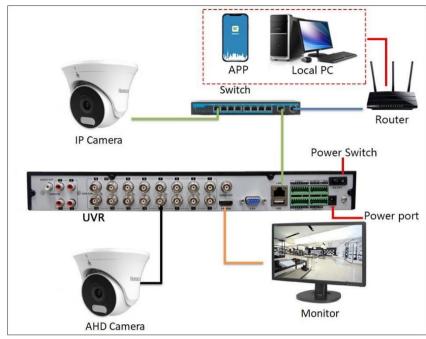


Figure 1-9 Device connection

1.5 Power Supply Connection

Please use attached power adapter to connect UVR. Before power on, make sure the cables on the video I/O ports and network port are well connected.

1.6 USB Mouse Operation

A regular 3-button (Left/Right/Scroll-wheel) USB mouse can also be used with this UVR. To use a USB mouse:

- 1. Plug the USB mouse into one of the USB interfaces on the front panel of the UVR.
- 2. The mouse should automatically be detected. If in a rare case that the mouse is not detected, the possible reason may be that the two devices are not compatible, please refer to the recommended device list from your provider.

Items	Action	Description
	Cinala Cliala	Live view: Select channel.
	Single-Click	Quick Menu: Select and enter.
	Double-Click	Live view: Switch between single-screen and multi-screen.
Left-Click		Live view: Drag channel
	Click and Drag	Playback: Time bar.
		Alarm: Select target area.
		Digital zoom-in: Drag and select target area.
Dight Click	Single Click	Live view: Right click menu
Right-Click	Single-Click	Menu: Exit current menu to the upper-level menu.
Left&Right-	At the same	Hold 5 seconds to change the device resolution to the
Click	time click	lowest.
Scroll-Wheel	Scrolling up	Menu: increase the value of the setting.

Scrolling down Menu: decrease the value of the setting.

Table 1-4 Key Functions of USB Mouse Operation

1.7 Input Method Description



Figure 1-10 Soft keyboard (1)



Figure 1-11 Soft keyboard (2)



Figure 1-12 Soft keyboard (3)

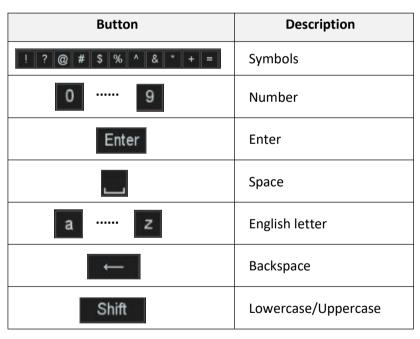


Table 1-5 Description of the Soft Keyboard Icons

Chapter 2 Startup

2.1 Starting Up and Shutting Down the UVR

Purpose

Proper startup and shutdown procedures are crucial to expanding the lifespan of the UVR.

Before you start

Check that the voltage of the extra power supply meets the UVR's requirement, and the ground connection is working properly.

Starting up the UVR

Steps:

- 1. Check the power supply is plugged into an electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device. The Power indicator LED on the front panel should be on, indicating the device gets the power supply.
- 2. Turn on the power switch on the rear panel if the device starts up for the first time or press the button on the front panel (Not required if not exists). The Power indicator LED should blink or be always on indicating that the unit begins to start up.
- 3. After the startup you will hear a beep, the Power indicator LED stays on. A splash screen with the status of the HDD appears on the monitor. The row of icons at the bottom of the screen shows the HDD status. 'X' means that the HDD is not installed or cannot be detected.

Shut down the UVR

Steps:

1. Move the mouse to the bottom of the interface then enter the Shutdown menu. Go to **Power** → **Shutdown**.

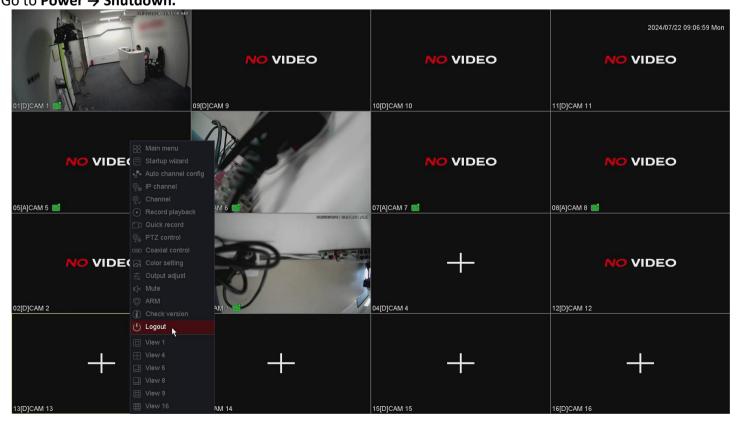


Figure 2-1 Power

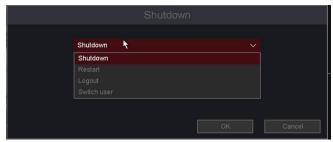


Figure 2-2 Shutdown Menu

2. Select Shutdown.

Restart the UVR

In the Shutdown menu, you can also restart the UVR.

Steps:

- 1. Go to Power.
- 2. Select Restart to restart the UVR.

2.2 Using the Startup Wizard

Steps:

1. By default, the Startup Wizard starts once the UVR has loaded.



Figure 2-3 Startup Wizard



Note

The Startup Wizard can guide you through some important settings of the UVR. If you don't want to us the Startup Wizard at that moment, click the Cancel button. You can also choose to use the Startup Wizar next time by leaving the 'Enable' checkbox checked.

2. Click **Next Step** button to enter the Modify administrator window.

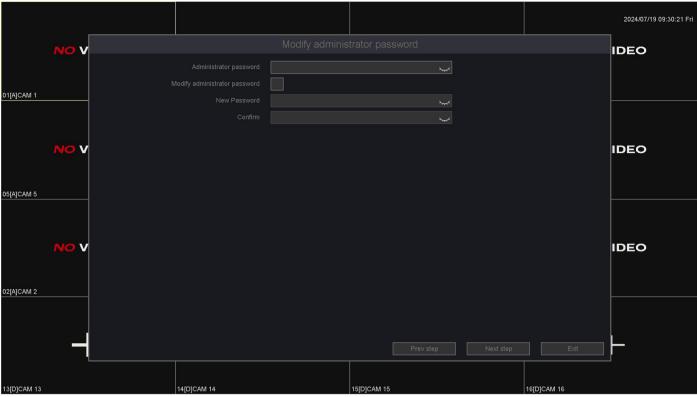


Figure 2-4 Modify administrator password

3. Click **Next Step** button to enter the general settings window.

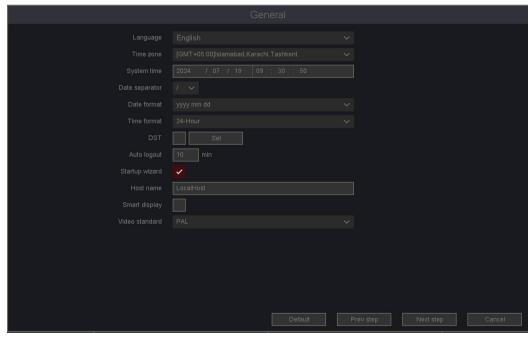


Figure 2-5 General

4. After the general settings, click **Next step** button which takes you to the **Control** setup wizard window.

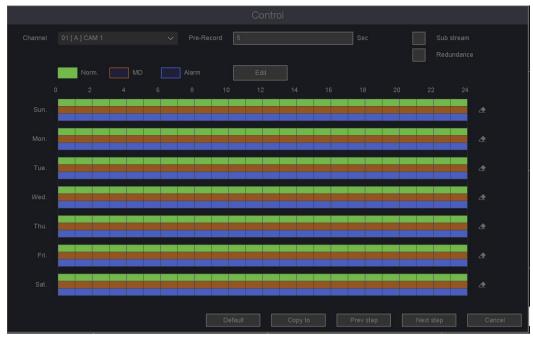


Figure 2-6 Record

5. After the Record settings, click **Next Step** which takes you to the HDD Management window.

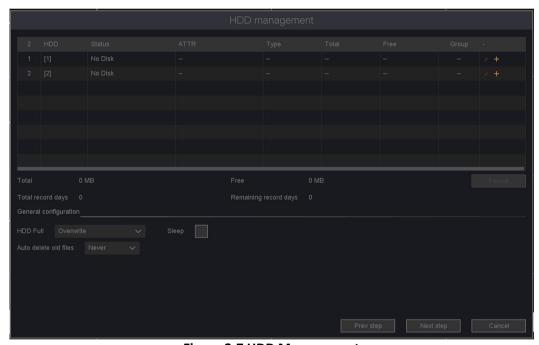


Figure 2-7 HDD Management

6. Click **Next step**. You will enter the Network setup wizard window.

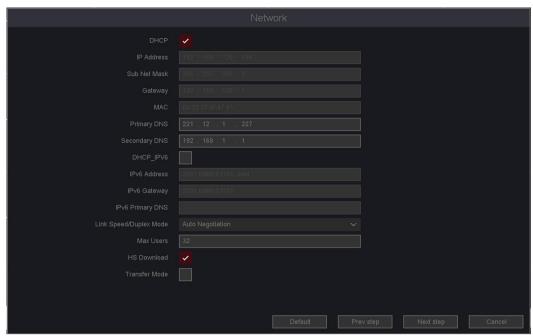


Figure 2-8 Network

7. Click **Next step** after you configured the network parameters, you then enter the cloud service setup wizard window.

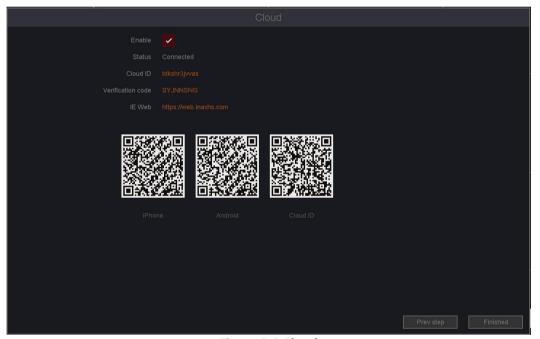


Figure 2-9 Cloud

8. Click Finished.

2.3 Login and Logout

2.3.1 Set Unlock Pattern

Admin users can use the unlock pattern to login. You can set the unlock pattern when the device is activated, another method is to go to **Main Menu** \rightarrow **System** \rightarrow **Security** \rightarrow **Account** to modify password.

Steps:

1. Press down the mouse and draw a pattern among the 9 dots on the screen. Release the mouse when the pattern is done.



Figure 2-10 Set Unlock Pattern



Note

- The pattern shall have at least 4 dots.
- Each dot can only be connected for once
- 2. Draw the same pattern again to confirm it. When the two patterns match, the pattern is configured successfully.

2.3.2 Log in via Unlock Pattern

If you set a pattern password, you can use it to log in when you enter any menu operation (it will also be used in the first step when you use the boot wizard after reboot).

Steps:

- 1. Click the menu you want.
- 2. Draw the pre-defined pattern to unlock to enter the menu operation.

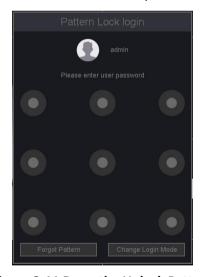


Figure 2-11 Draw the Unlock Pattern



Note

- If you have forgotten the pattern, you can click **Forgot Pattern** or **Switch Login mode** to log in via password.
- If you have drawn the wrong pattern more than 5 times, the system will lock your account for 30 minutes.

2.3.3 Log in via Password

If your video recorder has logged out, you must log in before accessing the menu and other functions. **Steps:**

1. Select User Name.

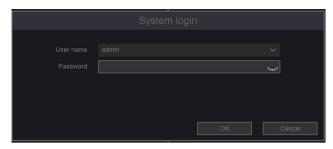


Figure 2-12 Login Interface

- 2. Input password.
- 3. Click OK.



Note

- If you forget the admin password, you can click **Forgot Password** to reset the password, please refer to **2.4.5 Reset Password** for details.
- If you enter the wrong password 5 times, the current user account will be locked for 30minutes.

2.3.4 User Logout

After logging out, the device stays at the preview page, and if you want to do anything other than watching previews, you need to enter log in again with the account name and password.

Steps:

1. Right click, go to Logout.

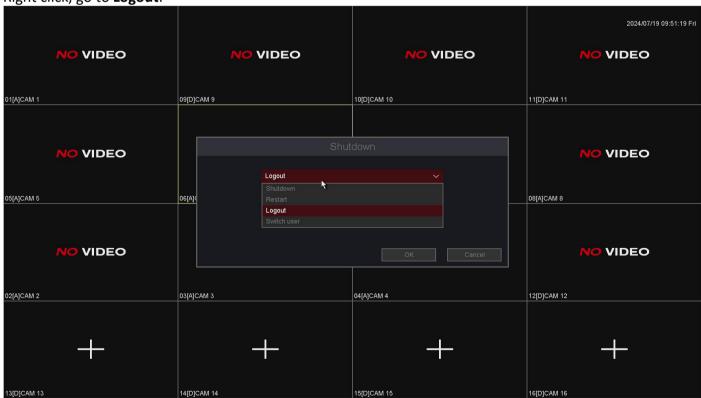


Figure 2-13 Logout



Note

After you have logged out of the system, the menu operation buttons on the screen would become invalic It is required to log in again to unlock the system.

2.4 Adding the Online IP Cameras

Power on a AHD camera, connect it to the BNC ports of the UVR, the video will display automatically. It is also possible to connect the camera from the local network, by configuring the network IP camera to the same IP range as the UVR.

Before you start:

Ensure the network connection is available and the details are correct. Thoroughly checks are recommended before moving on.

UVR supports switching various amount of analog channels to IP channels according to the model's capability.



Channels 1 to 4 are grouped together, and channels 5 to 8 are grouped together, and so on. For example, if you switch channel 2 from analog to IP channel, channels 1 to 4 will be switched to IP channels together.

Adding the IP Cameras

OPTION 1:

Steps:

- 1. Select the Main Menu → Channel → Channel Type.
- 2. Select 4 consecutive channels, click Apply.

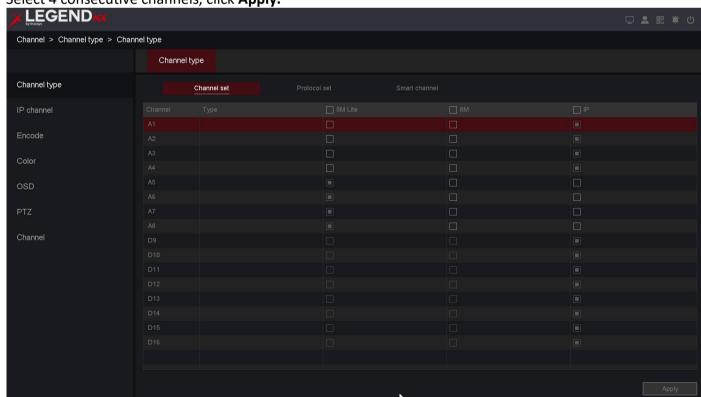


Figure 2-14 Select IP Channels



Note

- Open additional IP channels will turn off intelligent related functions!
- 3. Click **OK**, wait for the device to finish restarting.

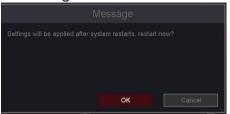


Figure 2-15 Click OK

- 4. Select the Main Menu → IP Channel → Channel Set.
- 5. Click the **Search** button below, the online cameras within same network segment will be detected and displayed in the camera list.

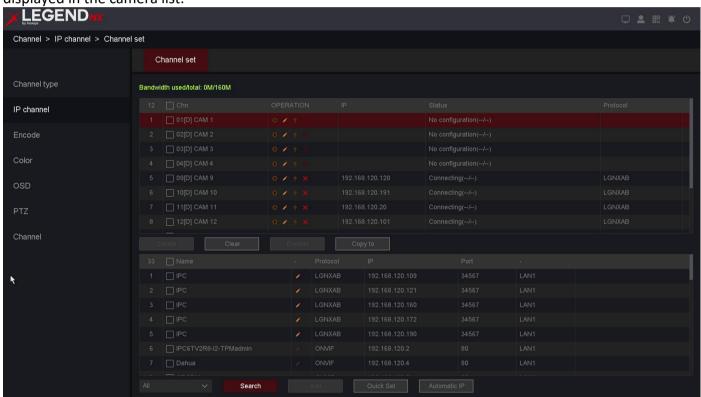


Figure 2-16 Search IP Cameras

6. Check the status of the camera, 'Connected' means connected, 'Connecting' means connecting, 'Identifying error' means the password is incorrect. All the status other than 'Connected' indicates there is a need to check the connection information again and ensure the camera can be connected normally.

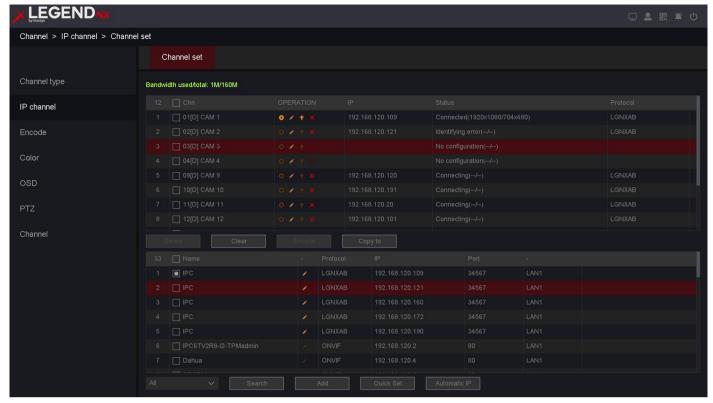


Figure 2-17 Check the status of the camera



- If the camera does not load in the selected position after double-clicking, try deleting the information of the connection by clicking the red 'X' and then double click the IP address to add here.
- Explanation of the icons:



OPTION 2:

Steps:

- 1. On the Channel Set interface, you can also click do open the Edit IP Camera (Custom) interface.
- 2. If the prompt password is wrong, please apply the correct user name and password; if it has been in the 'connecting' state, please modify the port or protocol.



Figure 2-18 Edit IP Camera (Custom) interface

2.5 Editing the connected IP cameras and Configuring

Customized Protocols

After adding of the IP cameras, the basic information of the camera will be listed on the page, you can configure the basic setting of the IP cameras.

Steps:

1. Click to edit the parameters; you can edit the IP address, User name, Password, Port and other parameters.

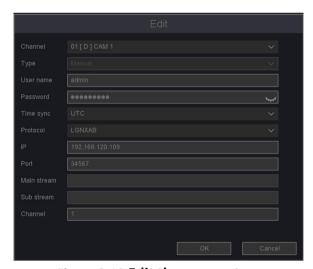


Figure 2-19 Edit the parameters

- 2. Click the drop-down box of Protocol, You can choose three protocols: LGNXAB, ONVIF,RTSP; LGNXAB is a private protocol, ONVIF and RTSP protocols are generally adapted by third-party cameras.
- 3. Click OK.

Chapter 3 Live View

3.1 Introduction of Live View

Live view shows you the video image getting from each camera in real-time. The UVR automatically enters Live View mode when powered on. It is also at the very top of the menu hierarchy, thus pressing the right click many times (depending on which menu you're on) brings you to the Live View mode.

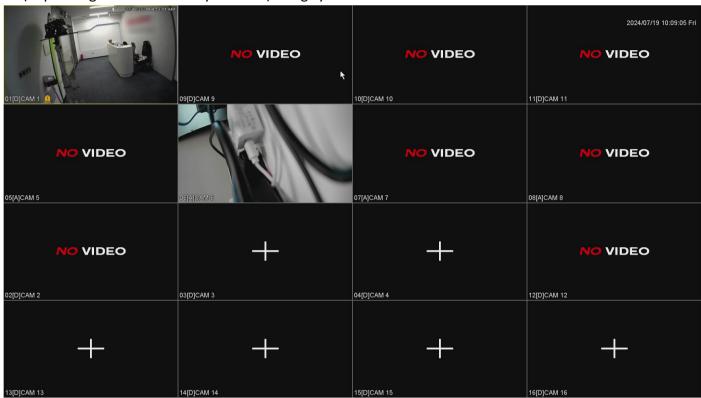


Figure 3-1 Live view

In the **Live view** mode, there are icons at the bottom left corner of the screen for each channel, showing the status of the record and alarm in the channel, so that you can know whether the channel is recorded, or whether there are alarms occur as soon as possible.

Icon	Items	Description
00	Recording state	Shown on channel preview when recording.
Am.	Alarm detect	Shown on channel preview when alar triggered.
8	Video lost	Shown on channel preview when video lost.
a	Camera lock No preview authority.	

Table 3-1 Live View Icons

Note

- On the live view screen, click Main Menu → Camera → Channel → Channel Set to enter the camera interface, click 'Search', the UVR automatically searches for network segment IPC, and then select the IPC and click 'Add'. You can refer to 2.5 Adding the Online IP Cameras.
- The number of IP camera channels may differ by its type.

3.2 Operations in Live View Mode

In live view mode, there are many functions provided. The functions are listed below.

- Single Screen: showing only one screen on the monitor.
- Multi-screen: showing multiple screens on the monitor simultaneously.
- Tour: the screen is auto switched to the next one. And you must set the dwell which screen on the configuration menu before enabling the tour.

3.3 Quick Setting Toolbar in Live View Mode

On the screen of each channel, there is a quick setting toolbar that shows when you move the cursor to the top of the image.



Figure 3-2 Quick Setting Toolbar in channel image

Button	Items	Description
6	Instant Replay	In the preview channel window interface within 1-30 minutes of video f playback.
\odot	Zoom	Displays the selected channel in full screen, Scroll the mouse wheel to zoom on the area where the mouse is clicked.
1884	Manual Record	Manually start/stop video recording.
0	Manual Snap	This channel the display resolution of the images that are captured in real time
10	Audio Preview	Turn on/off the audio for this channel.
•	Voice Intercom	Open-channel intercom functions.
Q	Channel Set	Quickly enter and locate a channel is channel management interface.
	Bitrate	Quickly check the bitrate of this channel when the mouse move to it.
4\$>	PTZ	Quickly enter PTZ control interface.

Table 3-2 Quick Setting Toolbar

In preview mode you can right click mouse to access the desktop shortcut menu, as shown bellow.

Icon	Items	Description
器	Main menu	The main menu includes playback, setting, maintain, backup and shutdown.
	Startup wizard	Please refer to the chapter 2.3 Using the Startup Wizard for more information.

₹•	Auto channel config	When you right click mouse and choose Auto Channel Config, it means that NVR will auto add the IP cameras which in the same LAN.
9	IP channel	it is a shortcut access to IP channel interface.
9,	Channel	it is a shortcut access to IP channel status interface.
\odot	Playback	it is a shortcut access to playback interface.
	Quick Record	You can check current channel status: "o" means it is not selected, "●"means it is selected.
9.	PTZ control	The functions include: PTZ direction control, speed, zoom, focus, iris, setup operation, patrol between spots, pattern, border, tour.
OSD	Coaxial control	Changing the HD analog camera's video output signal. Please refer to 3.3.1 Coaxial Control from UVR for detail.
	Color setting	it is a shortcut to settings ->Channel management ->Image color settings window.
***	Output adjust	it is a shortcut access to System-Display settings-Display interfaces.
	Mute	The speaker mute switch, Icon means speaker turns on, icon means speaker turns off.
0	Guard/Revocation of the guard	It will enable/disable all the alarm & event triggers quickly.
\bigcirc	Shutdown	Shutdown, restart system, logout menu user and switch user.
	View 1	Single screen preview.
	Multiple Views	Preview in four screens/six screens/eight screens /nine screens/sixteen screens according to your choice.
	Corridor Mode	Preview in three screens/four screens/five screens /seven screens /nine screens/ten screens/twelve screens/sixteen screens according to your choice.

Table 3-3 Right Click Menu

3.3.1 Coaxial Control from UVR

Steps:

- 1. Select the HD analog camera you want to change the setting of the video output signal in the preview interface.
- 2. Right-click and select **OSD Coaxial** control.



Figure 3-3 OSD Coaxial Control

- 3. UTC Control from UVR (U series Varifocal & Fixed Lens Cameras).
 - (1) Click the central **MENU** button by UI or press down on the joystick.
 - (2) Move the arrow to **VIDEO SETTING** and click the central MENU button.
 - (3) HD, navigate left & right to set TVI, CVI, CVBS, and AHD video output.
 - (4) Video Standard, navigate left & right to set 4MP or 5MP resolution (if Q-C series, navigate left & right to set 25fps or 30fps Video Frame Rate).
 - (5) Go to Reboot & Apply to apply the changes and reboot the camera.
- 4. UTC Control from UVR (Q series Varifocal & Fixed Lens Cameras).
 - (1) Click the central **MENU** button by UI or press down on the joystick.
 - (2) Move arrow to **FORMAT**, navigate left & right to set 25fps or 30fps Video Frame Rate.
 - (3) Move the arrow to VIDEO MODE, navigate left & right to set TVI, CVI, CVBS, and AHD video output.
 - (4) Click the central **MENU** button by UTC UI, and the camera restarts.

Chapter 4 Playback

4.1 GUI Introduction

Go to Playback.



Figure 4-1 Playback

• The functions of each block in the above figure are described as follows.

No.	Items	Description
1	Playback Type	UVR support six types playback mode 'Normal play', 'Event play',
		'Label play', 'Smart play', 'Time division play' and 'Normal play (Picture)'.
2	Display	The windows display videos.
3	Camera list	You can select the channels for playback in this area.
4	Date	Shows the date that have video files and marked blue.
5	Time of File	Shows the start time and the end time of files in HDD.
6	Time Line	Shows files playing course in this area.

Table 4-1 Area Functions Introduce of Playback

• The video playback timeline.



Figure 4-2 Timeline

- 1. Position the cursor on the timeline, drag the timeline to position to a certain time.
- 2. Period marked with blue bar contains video. Red bar indicates the video in the period is event video.
- 3. Click Timeline stretch / shorten at the bottom right of the timeline to zoom in/out of the timeline.



Note

The second line shows all the files of the channels you selected. And the first line shows the files of the channel you chose by mouse on the display area. The event files are marked red, normal files are marked blue, and the smart files are marked green.

• The Tool menu Description in playback Interface.

Button	Items	Description
√×	Mute	Switch of playback channel audio
×	Cut	Cut the interest video of playing channel
6	Snap	Snap a picture of playing channel
₼	Lock record	Lock the file in case over written in HDD
p	Default label	Default label, Label the file
=	File	File manager, Mange the cut file/locked file/labeled file
	Management	
\oplus	Zoom	Zoom, Zoom the playing channel

Table 4-2 The Tool menu Description

4.2 Normal Playback

Play back normal videos.

Steps:

- 1. Go to Playback.
- 2. Select a camera from the camera list.
- 3. Select a date on the calendar.



- The blue highlighting square at the calendar date indicates there are available videos. For example, means video is available, 10 means no video.
- If the recording file cannot be found, please confirm whether there is a recording plan configured, please refer to 6.4.2 Configure Recording Schedule for details.
- 4. Click the timeline for Playback.



Figure 4-3 Timeline

5. Video playback is controlled by the following buttons.

Button	Description	Button	Description
 	Slow down.		Prev frame.
◄	Backward play.		Start playback.
	Pause.		Stop play.
▶	Next frame.	>	Speed up.
==== ================================	Synchronous playback or asynchronous playback switching		Main and sub stream switching.
1 √ 30s	Backward 30S.		Forward 30S.
K N	Full screen.	X 1	Multi-speed playback.

Table 4-3 Playback Interface Description

6. For a recording of a time period, select the recording start time and recording end time you want under the calendar.

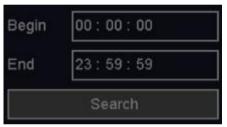


Figure 4-4 Select time

7. All the operations of these buttons to control the playback, you can refer to the previous table.

• Click ⋈ will cut all the files of the channels you're playing, you can check the files you cut in the ☐.

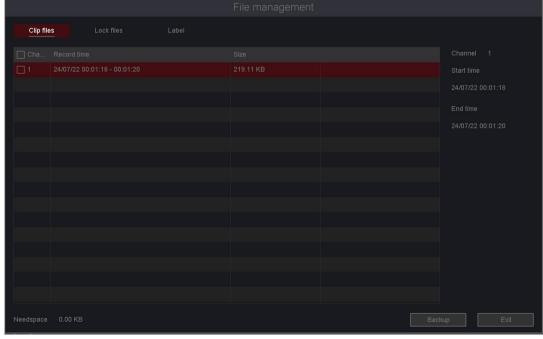


Figure 4-5 File Management

• Click will lock the file in case this file be covered by new file. You can check and backup the locked files in . And you can unlock the locked files in the Lock files.

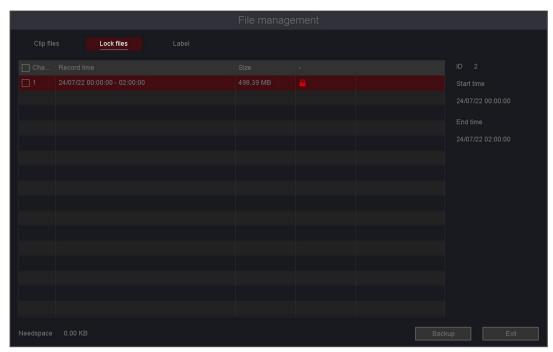


Figure 4-6 Lock files

● Click will mark the video as a default label, you can edit the label and check in the Label.

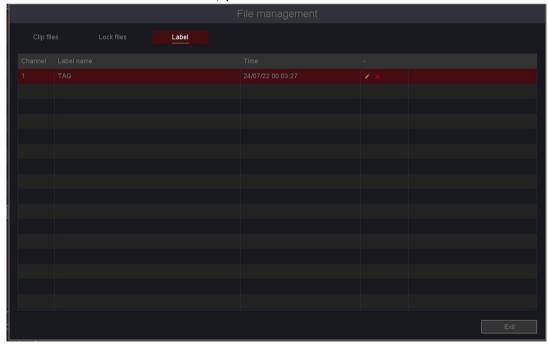


Figure 4-7 Label

4.3 Event Playback

When you select the event playback mode, the system will analyze and mark videos that contain the motion detection, line crossing detection, or intrusion detection information, etc.

Before You Start

- Ensure the camera has enabled the Motion detection, the Perimeter Protection, or the Diagnosis. You can enable it via the Main Menu → Normal Event or Smart Event → Motion Detection, Perimeter Protection or other.
- Ensure your video recorder has enabled **Record channel** in the setting of the **Trigger process**. You can enable it via **Main Menu** → **Normal Event** or **Smart Event** → **Motion Detection**, **Perimeter Protection** or other → **Trigger Process**.

Steps:

- 1. Go to Playback.
- 2. Click Event play.
- 3. Select a camera.
- 4. Set time period, then click **Search**.
- 5. Search results as shown in the figure 4-3-1, 'Source' means alarm channel and 'Channel' means record channel of linkage operations, 'Time' means when the alarm happened.

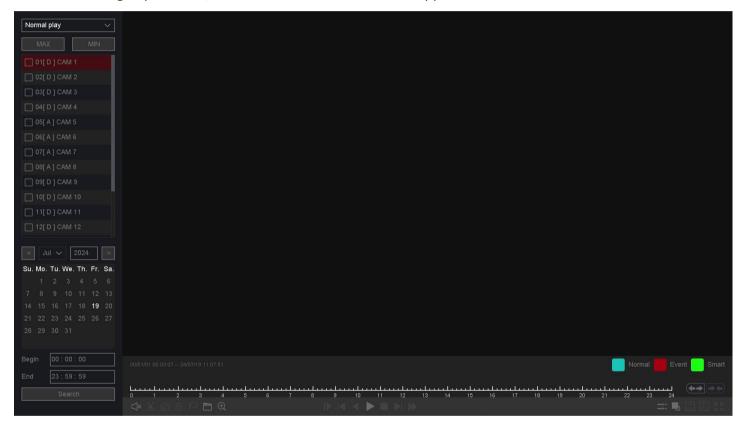


Figure 4-8 Event Playback

- 6. Click **Next** will shows all the alarm items, you can change the page to find the alarm item you want. And then you can set the play period before/after of the alarm time.
- 7. You can change the alarm types and channels by click **Return** back to the last interface. As for the operations of these buttons you can refer to the below table. But you can't use the 'Sync/Async', 'Main/Sub stream' button in event playback mode.

Button	Description	Button	Description
	Quickly go to the first page of even search results.		Quickly go to the last page of event search results.
	Go to the previous page of event search results.	E 8888-488	Quickly go to the last page of event search results.

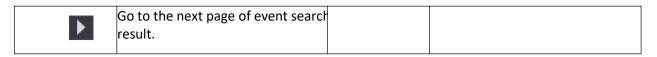


Table 4-4 Button Description of Event Search Results

4.4 Back up Clip

You can clip videos during playback. Video clips can be exported to the backup device (USB flash drive, etc.).

Before You Start

Connect a backup device to your video recorder.

Steps:

- 1. Start <u>play</u>back. Refer to *Chapter 4 Playback* for details.
- 2. Click at the start time you want.
- 3. Click **Stop cutting** at the end time you want.
- 4. You can check the files you cut in .
- 5. Select the videos to backup.
- 6. Click **Backup** into Record backup interface.
- 7. Select the backup device and folder.
- 8. Click **Start** to export the clip to backup device.

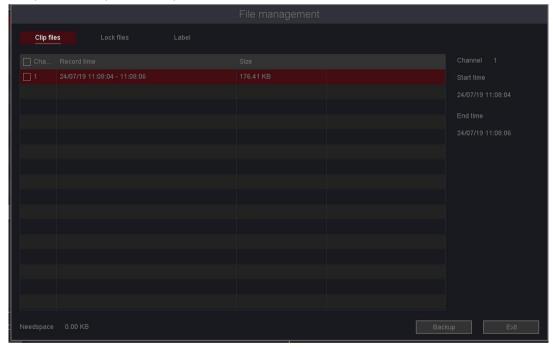


Figure 4-9 Record Backup

Chapter 5 Backup

You can Backup the video recording by exporting to the backup devices (USB flash drive, etc.).

Before You Start

Connect a backup device to your video recorder.

Steps:

1. Go to Backup and → General.

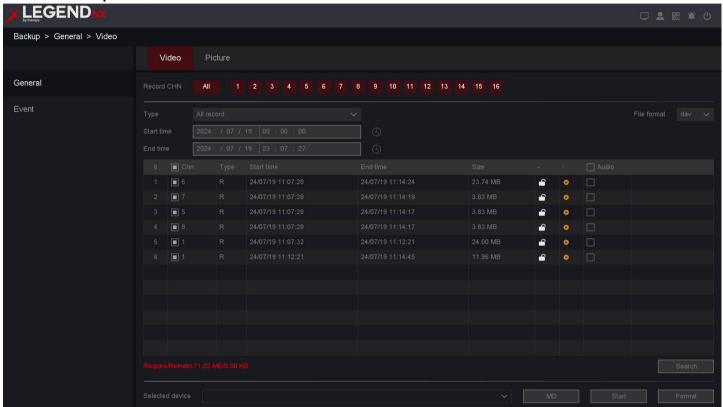


Figure 5-1 Search

- 2. Select a search type.
- 3. Set search conditions.
- 4. Click Search.
- 5. Click **l** to play the video.
- 6. Click do lock the file, Locked file will not be overwritten.
- 7. Select file(s).
- 8. Select the backup device and folder.
- 9. And click **Start** to export file(s) to backup device.



Note

If you can't find the backup device, you can re-plug and unplug it. If the backup fails, you can click the format button to format it first.

Chapter 6 Configuration (Common Mode)

Easy mode contains basic configurations.

6.1 System Settings

6.1.1 General Configuration

You can configure the language, Time Zone, System Time, Startup wizard, Device No., Host Name etc.

Steps:

1. Go to Main Menu → System → Basic.

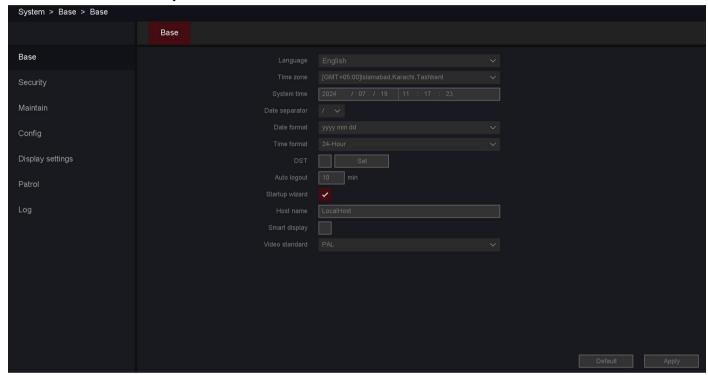


Figure 6-1 Basic Setting

2. Configure the parameters as your desire.

Time Format

The form of time display.

Auto Logout

Auto logout time, the device will not automatically log out when you set 0min, the maximum can be set to 60 minutes.

Startup wizard

The wizard will pop up after the device starts up.

Device No.

The number is required in the connection with remote control. Edit the serial number of video recorder. The device number ranges from 1 to 998.

Host Name

UVR's name.

Video Standard

Set video standard into NTSC or PAL.

3. Click Apply.

6.1.2 Account

Add User

There is a default account: Admin. The admin user name is **admin**. Admin has the permission to add, delete, and edit user.

Steps:

- 1. Go to Main Menu → System → Security → Account.
- 2. Click Add User and confirm your admin password.

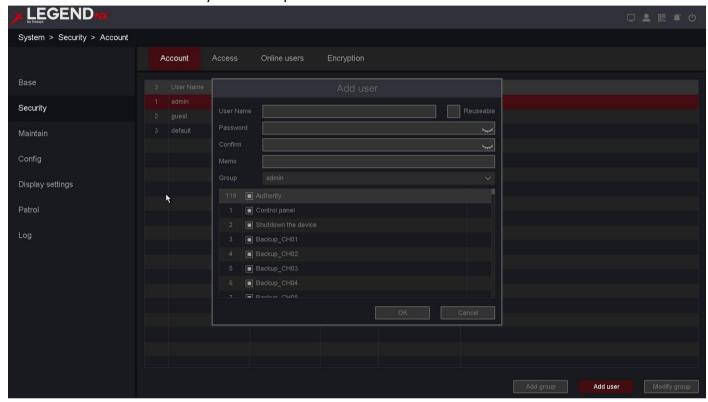


Figure 6-2 Add User

- 3. Enter User Name.
- 4. Enter the same password in **Password** and **Confirm**.



Note

We highly recommend you create a strong password of your own choosing (8-16characters allowed, including at least 2 of the following categories: upper case letters, lower case letters, digits, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

5. Click OK.

Click / k to edit/delete user.

Modify Password

You can modify your password when your password has been compromised.

Steps:

1. Click at the Account interface.

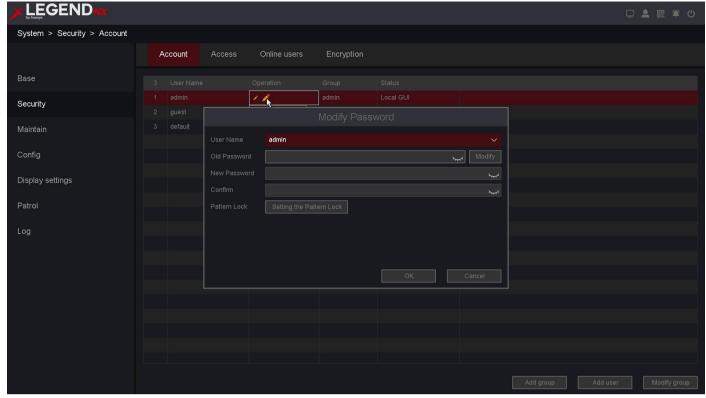


Figure 6-3 Modify Password

- 2. Enter the Old Password.
- 3. Enter the same new password in New Password and Confirm.
- 4. Click OK.
- 5. Optional: Admin can also set the Pattern Lock by click **Set the Unlock Pattern**.

6.2 Network Configuration

6.2.1 General - TCP/IP

You need to properly configure the network settings before operating the device over network. **Steps:**

1. Go to Main Menu → Network → Base → IP Setup.

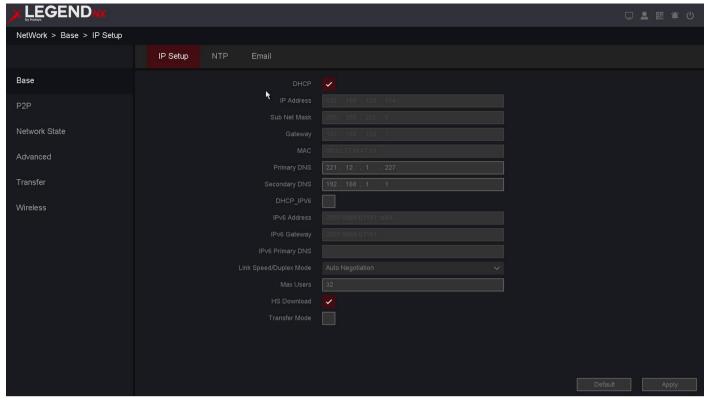


Figure 6-4 Network

2. Set network parameters.

DHCP

If the DHCP server is available, you can enable **DHCP** to automatically obtain an IP address and other network settings from that server.

Auto DNS

If DHCP is enabled, you can enable Auto DNS to automatically obtain Primary DNS and Secondary DNS.



Note

Auto obtain DNS function options, there will be differences between different models, subject to the specific model.

Manual IP

Manually configure your IP address, Such as:

IP Address: 192.168.1.100

Sub Net Mask: 255.255.255.0

Gateway 192.168.1.1

Please make sure that your IP address and the IP address of the camera are in the same LAN.

3. Click Apply.

6.2.2 P2P

We provide mobile apps and cloud services to access and manage your connected devices, allowing you to conveniently access your surveillance system remotely.

- 1. Go to Main Menu → Network → P2P.
- 2. Turn on Enable, your device will automatically perform P2P cloud registration connection.

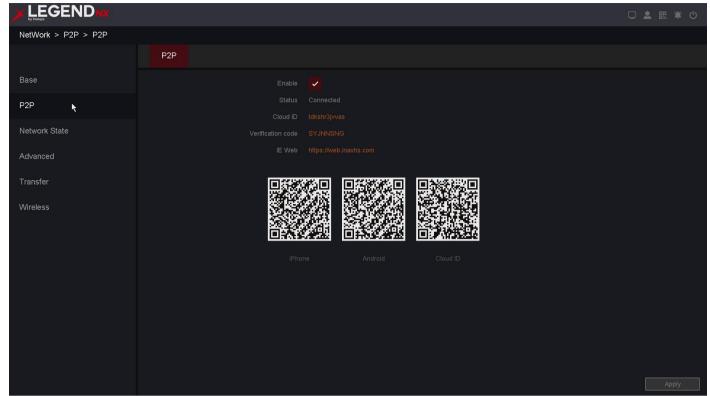


Figure 6-5 P2P interface

- 3. Your device will change from connecting to connected, which means your device has successfully registered with the P2P cloud.
- 4. Bind your device to the cloud account.
- 1) Scan the QR code with your smartphone to download the **APP** . You can also download from the **QR** code below.



Figure 6-6 Download

2) Use vEye Pro APP to scan the device QR code and bind the device.

- 1. Open the APP on the smart phone.
- 2. Tap 'Register' in the lower left corner of the login box, then register your credentials and then Login to the app creating an account allows user to connect multiple sites.
- 3. Open the 'Menu' by tapping the top left option.
- 4. Tap 'Devices' then the '+' in the top right to add device.
- 5. Allow the app access to the device's camera, now scan the QR code. From the start up wizard labelled

'Cloud ID'. This will enter the connection information to the device to the app.

- 6. Set a name for the device so the user can easily identify it from a list; the location of the installed device is a popular way to name connections.
- 7. Tap 'Save', then you will be able to 'Start Live View'.
- 8. Find the device you just added in the devices menu, click the play button in the triangle, and the default is to open the real-time preview of the sub-stream. Choosing sub stream over main will increase video display speeds and reduce mobile data usage.



- You can also direct your phone to the app download store.
- If the device has been bound with an account, you can click 'Unbind' to unbind it from the current account.
- If your device does not support manual unbinding, please contact relevant technical personnel.

6.2.3 Email

Set an email account to receive event notification.

Before You Start

- Ensure SMTP service is available for your email.
- Configure your network parameters. Refer to **6.2.1 General TCP/IP** for details.

Steps:

1. Go to Main Menu → Network → Base → Email.

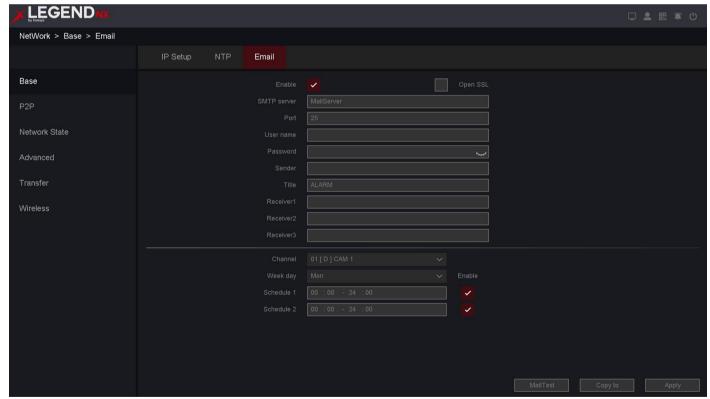


Figure 6-7 Email

2. Set email parameters

Enable

Check it to enable the server authentication feature.

SMTP Server

The address of the server providing SMTP service, such as 'smtp.163.com'.

The port used for the SMTP server, which can be obtained from the service provider.

User Name

User account of the email sender for SMTP server authentication.

Password

Email sender password for SMTP server authentication.

Sender

The sender name or the sender's email address.

Title

Title of the pushed message.

Receiver1-3

Fill in the receiver's email address. Up to 3 receivers are available.

Channel

Select the channel that needs to be pushed through the Email alarm.

Week day

Select the date to send the alarm by Email.

Schedule

Select the schedule that needs to be pushed by Email.

(Optional) Enable SSL if it is required by the SMTP server.

- 3. Click MailTest to send a test email and get a notification that a message was successfully sent.
- 4. Click Apply.



Mote

- For network cameras, the event images are directly sent as the email attachment. One network camera generally sends 3 pictures. Subject to the actual conditions.
- If Email always fails to connect, you can try to check whether the DNS service is configured correctly.

6.3 Camera Management

6.3.1 Network Camera

Add Network Camera by Quick Set

Add IP camera with default password or the package camera for this device;

Before You Start

- Ensure your network camera is on the same network segment with your video recorder.
- Ensure the network connection is valid and correct. Refer to 6.2.1 General TCP/IP for details.
- Make sure that the IP camera password has not been manually changed.

- 1. Go to Main Menu → Camera → Channel → Channel Type.
- 2. Select IP channels, click Apply.

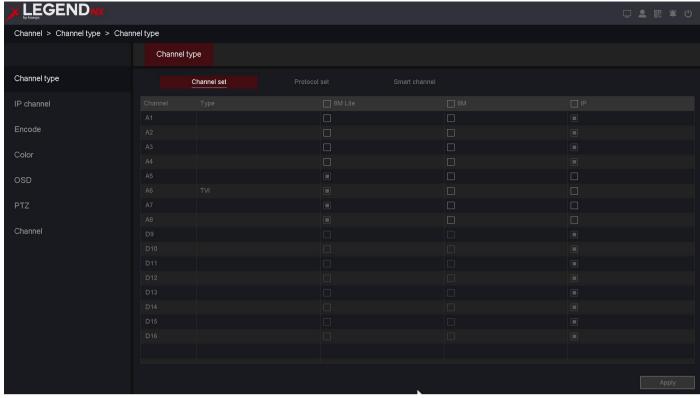


Figure 6-8 Select IP Channels

3. Click **OK**, wait for the device to finish restarting.



Figure 6-9 Click OK

- 4. Select the Main Menu → Channel → IP Channel → Channel Set.
- 5. Click the **Search** button below, the online cameras within same network segment will be detected and displayed in bottom half **Online Device List**.
- 6. Select multiple desired cameras you want to add, or select all cameras.
- 7. Click **Quick Set** to add the cameras (with the default login password) from the list.

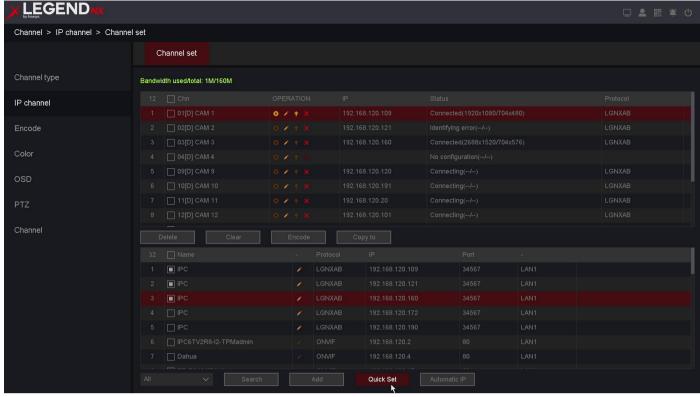


Figure 6-10 Channel Set Interface

8. The device you selected will be added quickly.



Note

If the camera is not added successfully, you can manually modify the user name, password, port, protocol or other.

Add Network Camera Manually

Before You Start

- Ensure your network camera is on the same network segment with your video recorder.
- Ensure the network connection is valid and correct.
- Ensure the network camera is activated.

- 1. Go to Main Menu → Channel → IP Channel → Channel Set.
- 2. Select the channel you want to add manually.
- 3. Click for that channel.
- 4. You can edit the IP Address, User name, Password, Port and other parameters.

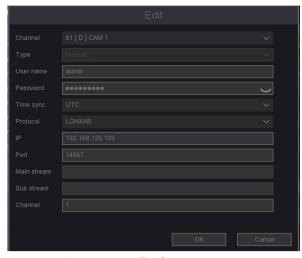


Figure 6-11 Edit the Parameters

- 5. Click the drop down box of Protocol, you can choose three protocols: LGNXAB, ONVIF, RTSP; LGNXAB is a private protocol, ONVIF and RTSP protocols are mainly connected to third-party cameras.
- 6. Edit the Channel. Default is 1.
- 7. Click **OK** to save and exit the editing interface.

Time sync

Time synchronization, the default is UTC synchronization, you can also choose to disable.

Port

Device connection port, LGNXAB is 34567, ONVIF is 80, RTSP is 554, and other ports are provided by the equipment manufacturer.

Channel

Device channel number, if the device you connect has multiple channels, please fill in the channel number you want to connect.

Previewing Video

The camera can be previewed directly through the preview button.

Before You Start

- Ensure your network camera is on the same network segment with your video recorder.
- Ensure the network connection is valid and correct.
- Ensure the camera's status is Connected, and like this (2880x1620/704x576) in brackets, not Steps:
- 1. Go to Main Menu \rightarrow Channel \rightarrow IP Channel \rightarrow Channel Set.
- 2. Click
- 3. The preview window is shown in the figure below.



Figure 6-12 Preview

Upgrade Network Camera

The Network camera can be remotely upgraded through the UVR.

Before You Start

- Ensure you have inserted the USB flash drive to the device, and it contains the network camera upgrade firmware.
- Ensure your network camera is on the same network segment with your video recorder.
- Ensure the network connection is valid and correct.

Steps:

- 1. Go to Main Menu → Channel → IP Channel → Channel Set.
- 2. Select the camera to be upgraded.
- 3. Click 1
- 4. Select your USB flash drive from the drop down box.
- 5. Select upgrade file and click Upgrade.
- 6. Click **OK** to start upgrading. The camera will restarted automatically after upgrade completed.



Figure 6-13 IPC upgrade

Delete Camera

The camera can be deleted through the delete button.

Before You Start

Ensure your network camera is needs to be deleted.

Steps:

- 1. Go to Main Menu \rightarrow Channel \rightarrow IP Channel \rightarrow Channel Set.
- 2. Click or select the camera and click **Delete**.

OSD

Configure OSD (On-Screen Display) settings for the camera, including date format, camera name, etc. **Steps:**

- 1. Go to Main Menu \rightarrow Channel \rightarrow OSD.
- 2. Select a camera.

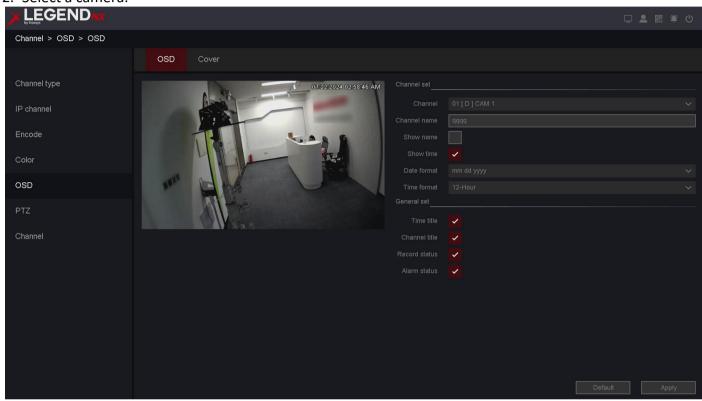


Figure 6-14 OSD

- 3. Set parameters as your desire.
- 4. The name and time can be chose to display or not, and can also be customized.
- 5. Click Apply.

6.3.2 Event

Motion Detection

Motion detection enables the video recorder to detect the moving objects in the monitored area and trigger alarms.

Steps:

1. Go to Main Menu → Event → Detect → Motion .

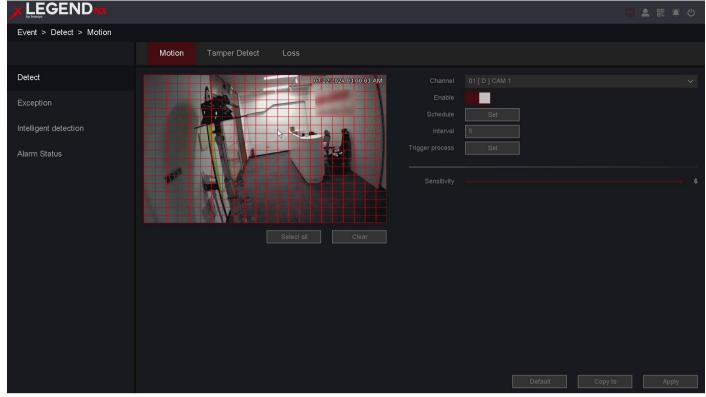


Figure 6-15 Motion Detection

- 2. Select a camera.
- 3. Turn on Enable.
- 4. Set the motion detection area.

Click **Clear** or hold down the left mouse button to clear or draw areas. The first area is set as full screen by default.

Click **Select all** to set the motion detection area as full screen. You can drag on the preview window to draw motion detection areas.

- 5. Adjust **Sensitivity**. Sensitivity allows you to calibrate how easily movement could trigger the alarm. A higher value results in the more readily to triggers motion detection.
- 6. Optional: Set **Target Detection** as **Human Shape Filter** or **Vehicle Shape Filter** to discard alarms which are not triggered by human body or vehicle. Only certain camera models support this function.



Note

If setting target Detection as Human Shape Filter or Vehicle Shape Filter to discard alarms which are not triggered by human body or vehicle, it is described as SMD.

- 7. Set the arming **Schedule**. Refer to **6.3.3 Configure Arming Schedule** below for details.
- 8. Set the **Trigger process**. Refer to 6.3.4 Configure Alarm Trigger Process below for details.
- 9. Click Apply.

Line Crossing

Line crossing detection detects people, vehicles, and objects crossing a set virtual line. The detection direction can be set as bidirectional, from A to B or from B to A.

Steps:

1. Go to Main Menu → Event → Intelligent Detection → Line Crossing.

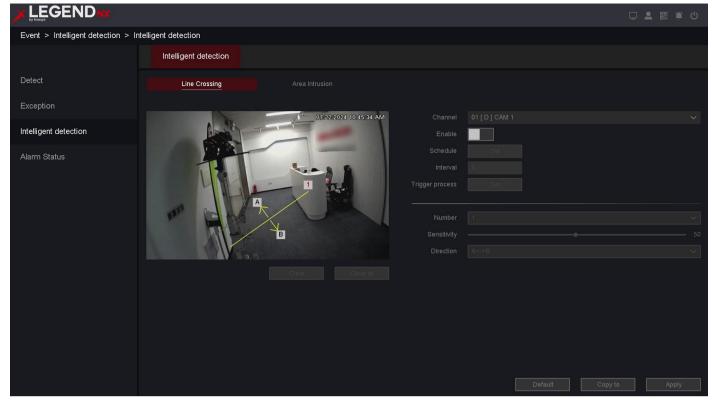


Figure 6-16 Line Crossing

- 2. Select a camera.
- 3. Turn on Enable.
- 4. Set line crossing detection rules and detection line.
- 1) Select the **Number** to set **Arming line**. Up to 4 arming lines can be set.

Click Clear or set two points in the preview window to clear or draw a line.

2) Select **Direction** as **A<->B**, **A->B**, or **B->A**.

A<->B

The arrow on the A and B side shows. An object crossing a configured line in both directions can be detected and trigger alarms.

A->B

Only an object crossing the configured line from the A side to the B side can be detected.

B->A

Only an object crossing the configured line from the B side to the A side can be detected.

- 3) Set **Sensitivity**. The higher the value is, the easier the detection alarm will be triggered.
- 5. Set the arming **Schedule**. Refer to *6.3.3 Configure Arming Schedule* below for details.
- 6. Set the Trigger process. Refer to 6.3.4 Configure Alarm Trigger Process below for details.
- 7. Click Apply.

Area Intrusion

Area Intrusion detects people, vehicles, or objects that enter and loiter in a pre-defined virtual region. **Steps:**

1. Go to Main Menu → Event → Intelligent Detection → Area Intrusion.

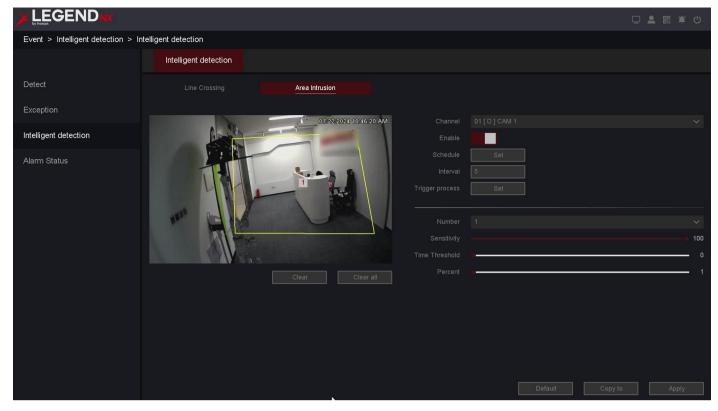


Figure 6-17 Area Intrusion

- 2. Select a camera.
- 3. Turn on Enable.
- 4. Set detection rules and detection areas.
- 1) Select the **Number** to set **Arming Area**. Up to 4 arming areas are selectable.
- Click Clear or set four points in the preview window to clear or draw a quadrilateral detection region.
- 2) Set **Sensitivity**. The size of the object that can trigger the alarm. The higher the value is, the easier the detection alarm can be triggered. Range from 1-100.
- 5. Set the arming **Schedule**. Refer to **6.3.3 Configure Arming Schedule** below for details.
- 6. Set the Trigger process. Refer to 6.3.4 Configure Alarm Trigger Process below for details.
- 7. Click Apply.



Note

Click clear all to delete all alarm areas, you can also click clear to delete individual areas.

6.3.3 Configure Alarm Trigger Process

Alarm Trigger process will be activated when an alarm or exception occurs.

Steps:

1. Click Trigger Process.

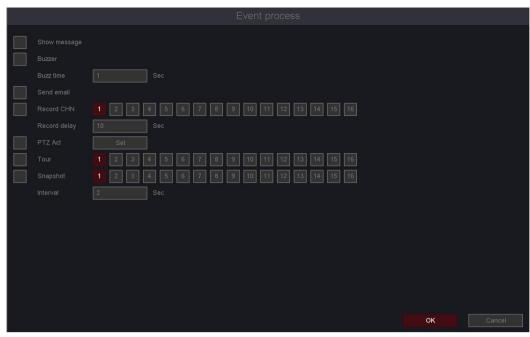


Figure 6-18 Trigger process

2. Set Buzzer, Send Email, Record Channel etc.

Alarm Out

It will trigger the alarm out devices when an alarm is triggered.

Buzzer & Buzz time

It will trigger a buzzer beep when an alarm is triggered.

Send Email

It will send an email with alarm information when an alarm is triggered.

Record Channel

It triggers the alarm recording for that channel when an alarm is triggered, and associate the recording for viewing.

Record Delay

The length of recording after the alarm ends.

PTZ Action

It will trigger PTZ actions (e.g., call Preset/Tour/Pattern) when smart events occur.

Tour

When the alarm is triggered, it will patrol the screens you have chosen.

Snapshot

It saves the alarm picture for that channel when an alarm is triggered.

Interval

The interval time of the continuous picture capturing when the alarm lasts.

3. Click OK.



Note

- For certain network cameras, you can set the alarm linkage action as audio alarm or light alarm.
- Ensure your camera supports audio and light alarm linkage.
- Ensure the audio output and volume are properly configured.
- If you require to set audio and light parameters, please log into the network cameravia web browser to configure them.

Chapter 7 Maintain

7.1 System

1. Go to Main menu → System → Maintain → System.

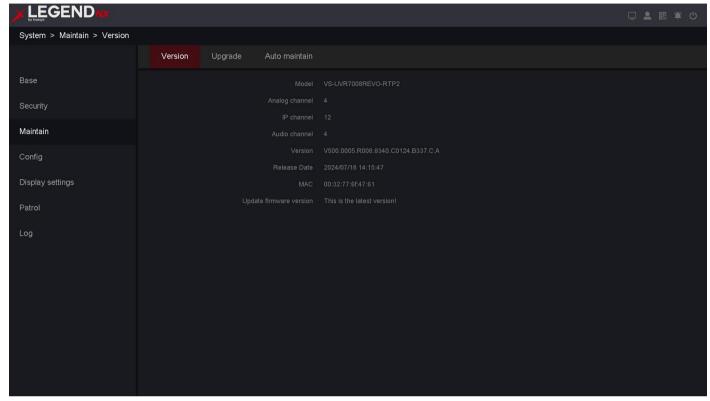


Figure 7-1 System

2. In this page, you can see the version information of the device.

Analog/IP/Audio Channel

Number of the analog/IP/audio channel.

Alarm Input/Out

Number of the alarm input/out channel supported by the device..

Version

Version Information

Release Date

The release date of firmware.

MAC

The MAC address of the device.

Update firmware version

Update firmware version information.

- 3. The system will automatically detect whether there is the latest firmware.
- 4. If there is a new firmware, click Upgrade.
- 1) Select your USB flash drive from the drop down box of Device name.
- 2) Select the correct upgrade firmware.
- 3) Click Upgrade.
- 4) Click **OK**, your device will reboot automatically after the upgrade is complete completed.

Note

Do not shutdown or turn off the power during upgrade.

7.2 Record

On this page you can check all the channels record status, open or stop; stream type, video or mixture (video and audio); frame/bite rate of channels stream; main/sub resolution of IP channel; and whether open the redundancy function or not.

Before You Start

Please make sure whether you have configured the recording Schedule.

Steps:

1. Go to Main menu → Storage → Record.

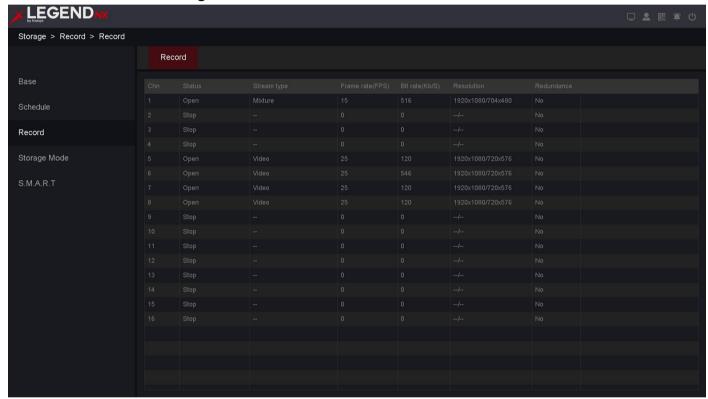


Figure 7-2 Record

7.3 Hard Disk Operation

The device provides the HDD detection function such as the adopting of the S.M.A.R.T. and the Bad Sector Detection technique. The S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) is a monitoring system for HDD to detect and report on various indicators of reliability in the hopes of anticipating failures.

Before You Start

Install at least an HDD to your video recorder.

- 1. Go to Main menu → Storage → S.M.A.R.T.
- 2. Select the HDD you want to detect.
- 3. Select the self-test types as Short Test or Expanded Test.

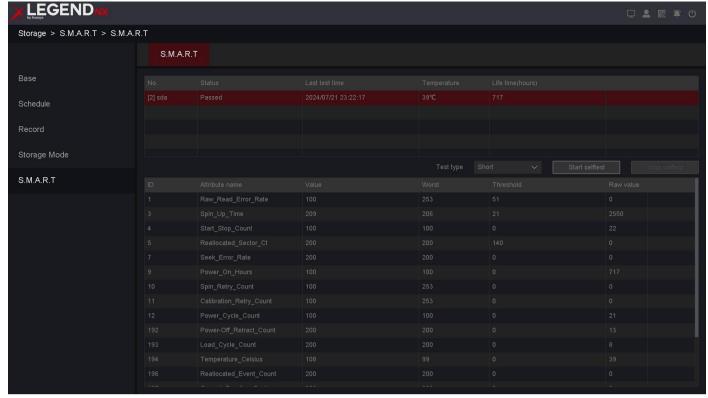


Figure 7-3 Hard Disk Operation

- 4. Click **Start Selftest** to start the S.M.A.R.T. HDD self-evaluation.
- 5. If the HDD is normal you can see the Status is Passed, and you can also pause or cancel the detection.

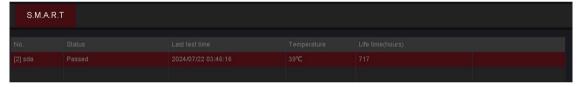


Figure 7-4 Check Status

7.4 Network

You can view the current status parameters of all your LANs in this screen.

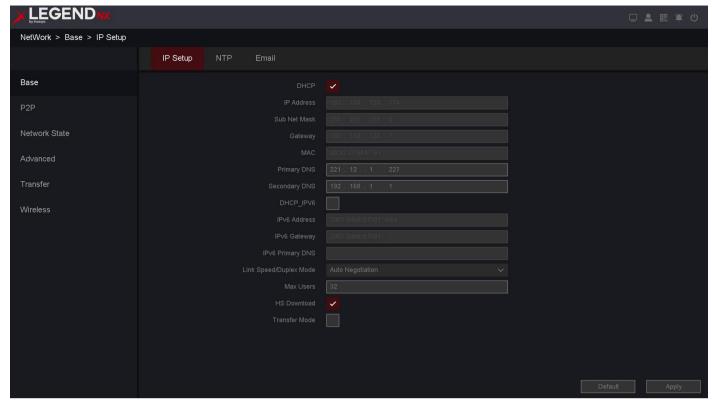


Figure 7-5 Network

7.5 Management

Steps:

1. Go to Main menu → System → Config → Default.

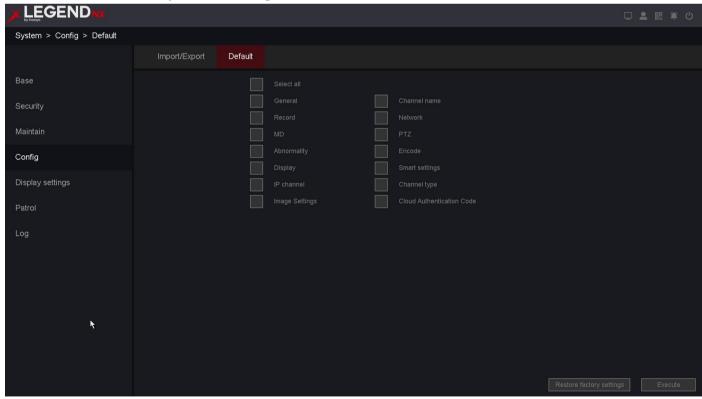


Figure 7-6 Default

2. Select the restoring type.

Simple Restore

- Choose the function item, General/Channel Name/Record/Network/MD/Alarm/ Abnormality/PTZ/Display/Display/Channel Type/Smart Settings/ Image Settings/ Cloud Authentication Code /Restore Inactivated Status.
- Click **Execute**, the items you have chosen will restore to defaults.
- Optional: you can also check **Select all**, all the items restore default.

Factory Defaults

Click **Restore factory settings**, restore all parameters to the factory default settings.

3. If you performed the restore, the device will reboot automatically.

7.6 Log

The operation, alarm, exception and information of video recorder can be stored in logs, which can be viewed and exported at any time.

Steps:

1. Go to Main menu → System → Log.

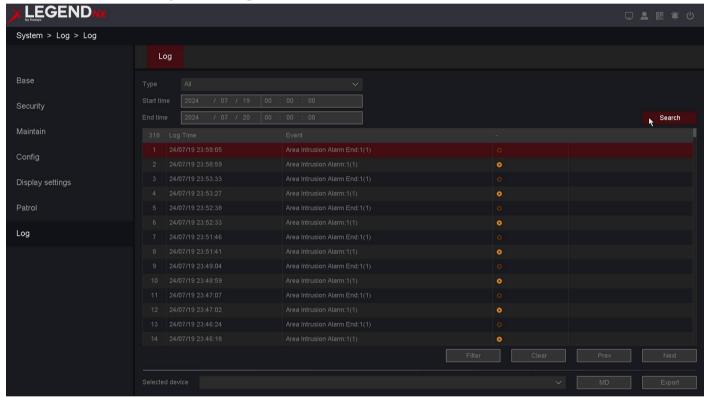


Figure 7-7 Log

- 2. Select the Type of Log.
- 3. Select the time period of the log you want.
- 4. Click Search.

Type

Search type include 'System', 'Config', 'Storage', 'Alarm', 'Record', 'Account', 'Clear' and 'Playback.

Start time/End time

Set the time you want to search.

Search

After setting the period and search type, click Searh, and device can save up to 4096 logs.

Prev/Next

It can show 1000 logs in one page, and you can check on more by click Prev/Next.

Filter

On this page you can chose whether cover the log after it's full, and decide which type operation log you want to save.

MD

Detect the USB device.

Export

Export the operations log into the USB flash disk.

7.7 User

On the online user interface, you can see online connected users. If there are unknown users, you can disconnect them or shielding the connected user in a time that you set.

1. Go to Main menu → System → Security → Online users.

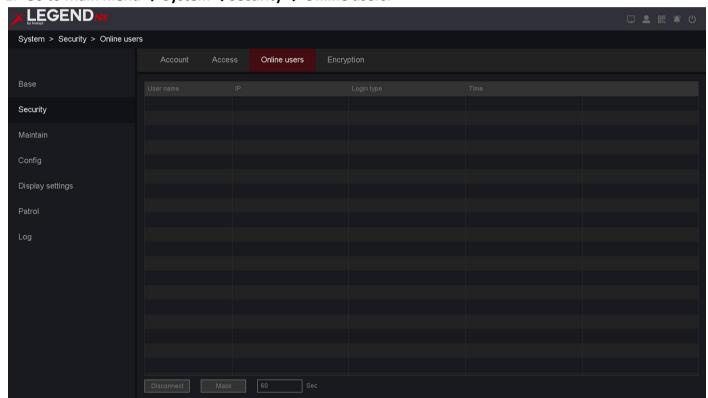


Figure 7-8 User

User Name

Remote device login this UVR device account.

ΙP

User remote access devices IP Address.

Login Type

Remote connection type.

Time

The login time of online user.

Disconnect

Disconnect the connected user, and disconnected users will reconnect automatically in a while.

Block

Shielding the connected user in a time that you set, and remote user will reconnect in that time.

7.7.1Storage

Initialize HDD

A newly installed hard disk drive (HDD) must be initialized before it can be used to save videos and information.

Before You Start

Install at least an HDD to your video recorder. For detailed steps, refer to 1.3 HDD Installation.

Steps:

1. Go to Main Menu → Storage → Base.

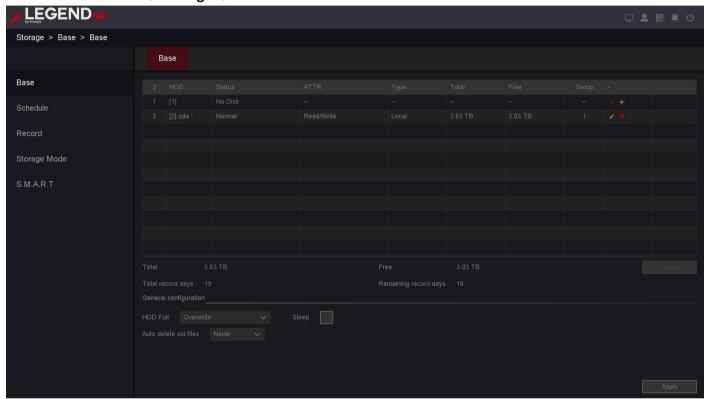


Figure 6-4-1-1 HDD Management

- 2. Select an HDD.
- 3. Click Format.
- 4. Click **OK** to continue.



Note

To repair an HDD that fails to function as a database. Please operate under the help of professional technical support.

HDD Management

This page displays your device's installed hard drive number, the hard disk status, the hard disk Attributes, the type of hard drive, the total/free capacity, as well as belonging to a group, edit button and delete button.

HDD

Shows HDD serial number, '[1] sda' or '[2] sdb'.

Status

Shows the status of HDD, 'Unformatted' or 'Normal' or 'No Disk'.

ATTR

HDD have three type of ATTR, 'Read/Write', 'Read only' and 'Redundant'.

Type

Shows HDD connection type.

Total

The size of the HDD total capacity.

Free

Shows HDD remaining capacity size.

Group

Shows which group the HDD belonged.

Delete

Uninstall HDD.

Add

Add the HDD from uninstall state.

Format

Format the HDD manually.

Steps:

1. Click HDD the **Edit** button, interface shows as below.

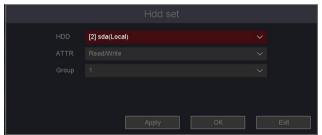


Figure 6-4-1-2 Edit

- 2. Configure the other parameters as your desire.
- 3. Click OK.

Advanced

In this page you can set the full strategy of hard disk, 'Stop record' or 'Overwrite'.

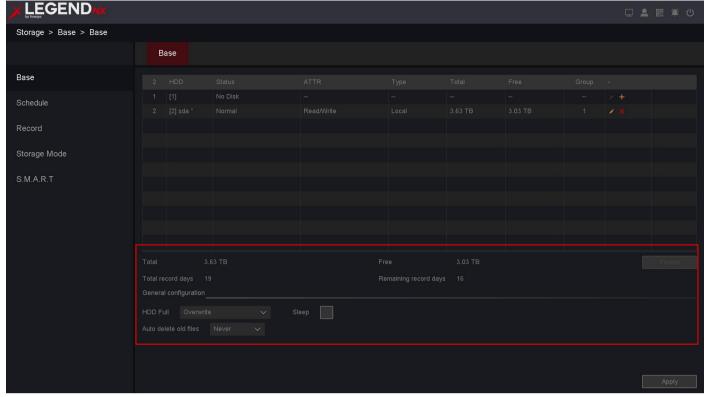


Figure 9-6-2-5 Advanced

HDD Full

- Stop record: When the HDD is full, video recorder will stop writing.
- Overwrite: When hard drive is full, video record will continue to write new files by deleting the oldest files.

Auto-Delete Old Files

Support two mode of strategy, 'never' and 'Custom'. In the 'Custom' mode you can set auto-delete time from 1-30 days before.

Sleep Mode

HDDs which are free of working for a long time will turn into sleep status.

7.7.2Configure Recording Schedule

Configure the schedule for the record by configuring the related parameters, Video recorder will automatically start/stop recording according to the configured schedule. And before these operations, please make sure that the HDD has already been installed and formatted. If not, please install the HDD and initialize it. For detailed information, please refer to **6.4.1 Storage**.

Configure Recording

Steps:

1. Go to Main Menu → Storage → Schedule.

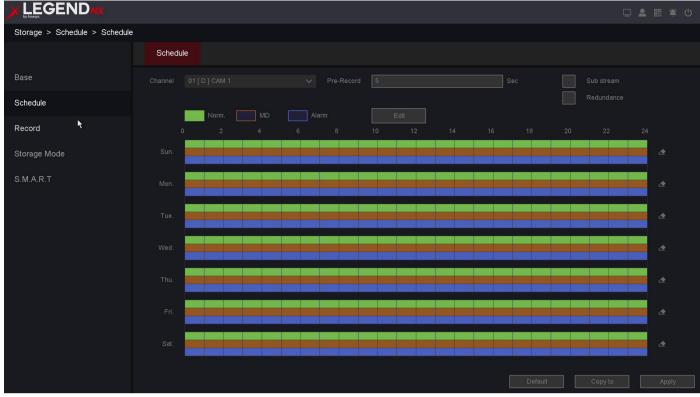


Figure 6-4-2-1 Schedule

- 2. Select the channel.
- 3. Set the Pre-Record.

The time to be pre-record on the created videos. Range from 0-30 seconds.

4. Select main stream recording or sub stream recording.

Some devices with less than 16 channels can support dual stream recording.

- 5. Set recording schedule.
- 6. Click Apply.



- Redundancy: The record will be backed up in redundant HDD, if there is redundant HDD device installed in the system.
- If there are several channels to be set with pre-record function, the pre-record time will be less than 30 seconds (the maximum value), because pre-record function will consume the system resources and it will adjust the time length to support many channels at the same time.

Edit Schedule

OPTION 1:

You can click the button Edit to enter the edit screen and set the schedule of the record.



Figure 6-4-2-2 Edit Schedule

Week Day

The day to set the schedule, from Sunday to Saturday.

Schedule 1-6

The time slot for the record, you can set 6 time slots during one day.

Norm

The type of the record, record as normal video.

MD

The type of the record, records triggered by all cameras side audio and video detection events.

Alarm

The type of the record, record the video when the external alarm input device is triggered and network alarms.

Steps:

- 1. Click Edit.
- 2. Select the Week Day which from Sunday to Saturday.
- 3. Set the time period you want to record.
- 4. Check Alarm, MD or Norm for the type of recording you want.
- 5. Click OK.



Note

You can check the All to select all the week day and set the schedule at the same time, or check several of them. If Norm, MD and Alarm are checked at the same time, it will record as a priority like: Alarm > MD > Norm. That means if the three types of detection occurred at the same time, the type of the record will be set as Alarm video.

OPTION 2:

You can also edit the schedule on the configuration graph screen, as shown below.

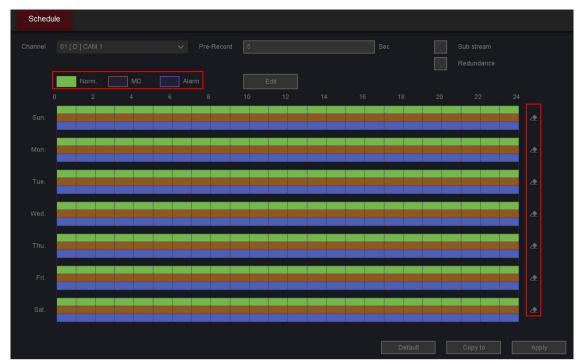


Figure 6-4-2-3 Edit Schedule

Steps:

- 1. Select any one of Norm, MD, and Alarm in the upper left corner.
- 2. Hold down the left mouse button and move on the corresponding bar.
- 3. If we check the Norm, and Hold down the left mouse button to move on the corresponding bar, we will be able to edit the green part of the bar. The first Holding down is selected, the second Holding down is deleted, and so on.
- 4. Click do to clear the setting of the bar at once.
- 5. After all the settings finished, click **Apply**.
- 6. Optional: You can copy the current channel setting to other channels by clicking the button **Copy to**.



Figure 6-4-2-4 Copy to



Note

By clicking the button **Default**, you can reset all the settings.

Configure MD Recording

You can configure the recording triggered by the Motion Detection, Perimeter Protection, Behavior Analysis, Face Detection, Video Diagnosis and Audio Detection.

Steps:

- 1. Select any MD in the upper left corner
- 2. Hold down the left mouse button and move on the yellow corresponding bar, check or clear.
- 3. Optional: Click do to clear the setting of the bar at once.
- 4. After all the settings finished, click **Apply** to activate all the settings.
- 5. Optional: You can copy the current channel setting to other channels by clicking the button **Copy to**.

Configure Alarm Recording

You can configure the recording triggered by the Alarm I/O, System Alert.

- 1. Select any Alarm in the upper left corner.
- 2. Hold down the left mouse button and move on the blue corresponding bar, check or clear.
- 3. Optional: Click do to clear the setting of the bar at once.
- 4. After all the settings finished, click Apply to activate all the settings.
- 5. Optional: You can copy the current channel setting to other channels by clicking **Copy to**.

Chapter 8 Alarm Center

When events occur, you can view their details in Alarm Center.

8.1 Alarm Center

Every alarm event occurs, you will see it here.

Steps:

1. Go to Main menu → Event → Alarm Status.

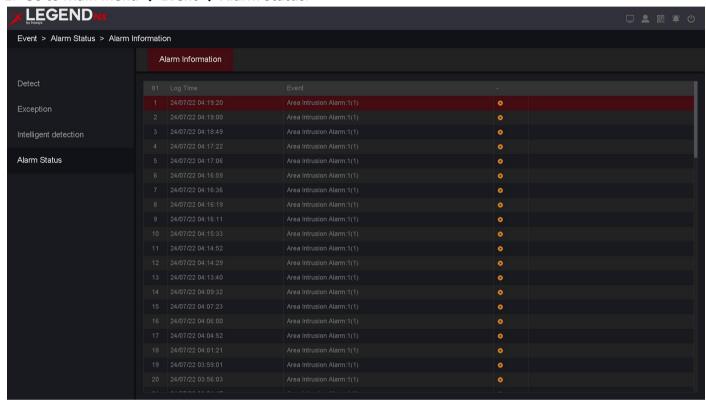


Figure 8-1Alarm Center

Alert

System type abnormal alarm message.

Basic Event

General Event Alarm Messages.

Smart Event

Intelligent event alarm messages.

One-key Disarming

Cancel or turn on all event alarms with one click.

Set

Here you can set which specific events to display alarm messages.

Item	Description
Alert	NO Writable Disk, Disk Error, Disk Full, Network Disconnect, IP Conflict
Basic Event	Motion Detection, Video Cover, Video Lost, Camera I/O, Blurred Detection, Scene Change Detection, Audio Exception Detection

Smart Event	Line Crossing, Area Intrusion, Region Entrance, Region Exiting, Fast
	Moving, Unattended Object, Object Missing, Face Detection, Loitering Detection, Parking Detection, People Gather

Table 8-1Event classification

Chapter 9 Configuration (Advanced Mode)

9.1 System Settings

9.1.1 General Configuration

Basic Setting

You can configure the Language, Time Zone, System Time, Time Format, DST, Auto logout, Startup wizard, Device No., Host Name and Preview Strategy.

Steps:

- 1. Go to Main Menu → System → Base → Base.
- 2. Configure the parameters as your desire, please refer to 6.1.1 General Configuration for details.

DST Setting

DST (Daylight Saving Time) refers to the period of the year when clocks are moved one period ahead. In some areas worldwide, this has the effect of creating more sunlit hours in the evening during months when the weather is the warmest.

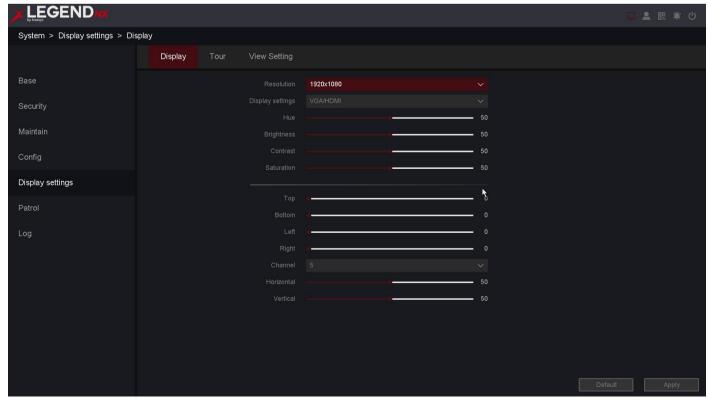


Figure 9-1 DST Setting

9.1.2 View Setting

Display

1. Go to Main Menu → System Setting → Display Settings → Display.



Resolution

Select the appropriate resolution of menu output.

Tour

In this part you can set screens for monitoring patrol.

1. Go to Main Menu → System Setting → Display Settings → Tour.

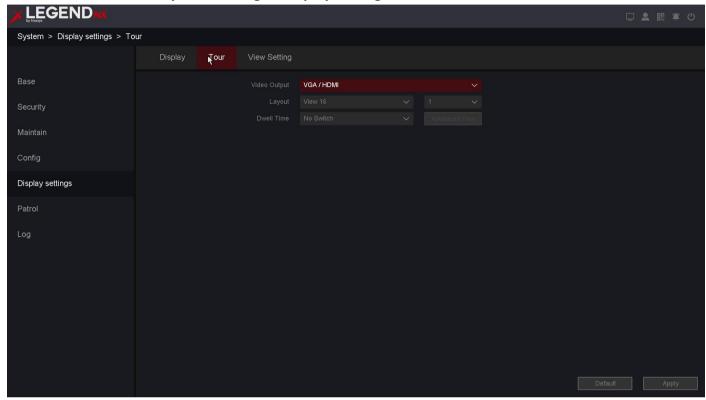


Figure 9-3 Tour

Video Output

Set the video output mode of VGA/HDMI or CVBS.

Layout

The channel quantity and channel group for preview, for example there's a 16ch UVR, and choose View 6-1, the preview interface will show channel 1-6; if choose View 6-2, the preview interface will show channel 7-12, etc.

Dwell Time

The time in seconds to dwell between switching of channels when enabling auto-switch in Live View.

2. Click **Apply** after the setting is complete.

View settings

In this pare you can set the patrol screen of the monitor.

1. Go to Main menu → System settings → View setting → View settings.

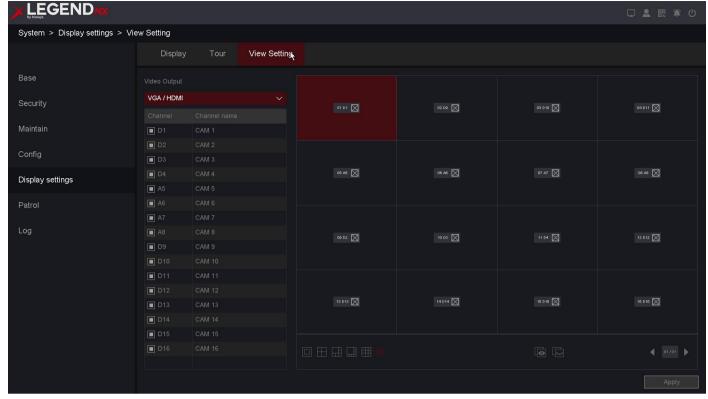


Figure 9-4View Settings

- 2. Click a window to select it, and then double-click a camera name in the channel list you would like to display.
- 3. You can also click to display the configured channels corresponding to each screen and click to cancel the display of configured channels on the screen. Click or to go to the previous or next page.
- 4. Click Apply.

9.1.3 Account

Steps:

1. Go to Main menu → System → Security → Account.

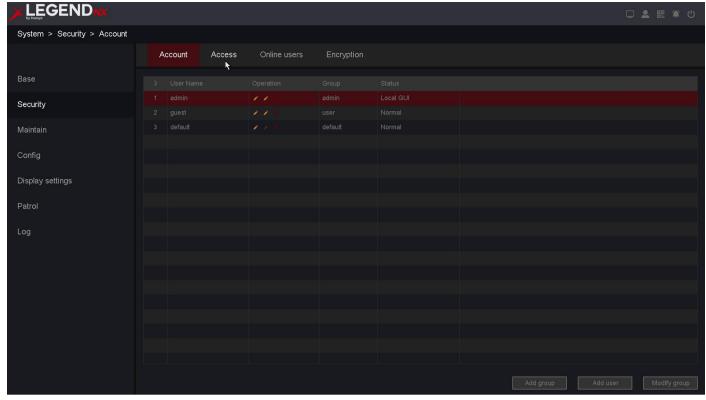


Figure 9-5 Account

Add Group

Add a user group and set the permission. There are many different permissions: Control panel, Shutdown the device, Backup, Local replay, Monitor and so on.

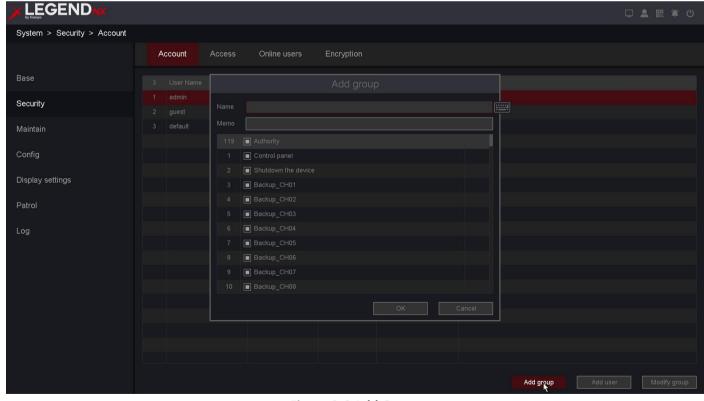


Figure 9-6 Add Group

Modify Group

Modify the existing groups' attribute, configure the parameters as your desire.

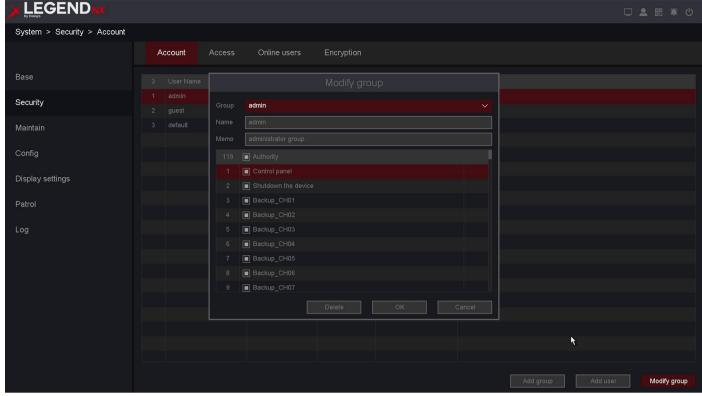


Figure 9-7 Modify Group

Add user & Modify User & Modify password & Password Recovery Settings. Please refer to 6.1.2 Account.



- The character length of name is 64 bytes at most for the users and users' group. Legal characters include: letter and number, other characters are forbidden.
- The user management includes: group/user. One user should belong to one group.

9.2 Network

9.2.1 IP Address

TCP/IP must be properly configured before you can operate video recorder over network. This page you can set the device IP Address, gateway, DNS as well as view MAC Address. If the UVR has two Ethernet ports, you can connect with two net segments and set one for default Route.

- 1. Go to Main Menu → Network → IP Address → TCP/IP.
- 2. For general settings, please refer to **6.2.1 General TCP/IP** for details.
- 3. Configure other network parameters as your desire.

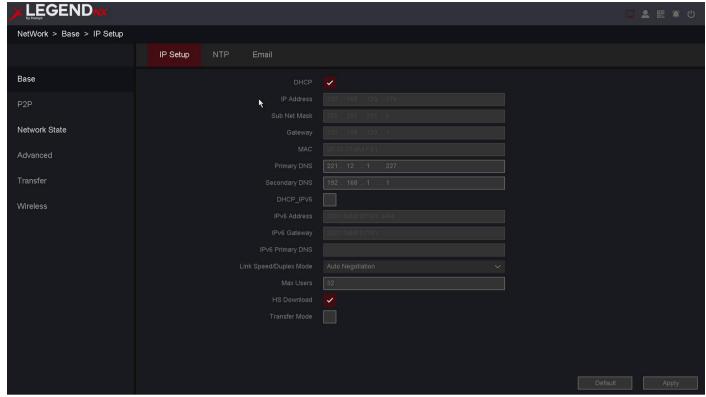


Figure 9-8 TCP/IP

DHCP

If the DHCP server is available, you can check **Enable DHCP** to automatically obtain an IP address and other network settings from that server.

MAC

The physical address of UVR.

DNS setup

You can check **Enable Auto DNS** to automatically obtain a DNS .Domain Name Server, it translates the domain name into IP address, it contains primary DNS and secondary DNS.

Link Speed/Duplex Mode

There are a total of these modes to choose from 10Mbps/Half Duplex, 10Mbps/Full Duplex, 100Mbps/Half Duplex, 100Mbps/Full Duplex and Auto Negotiation.

Max Users

The maximum number of simultaneously accessing users to the UVR is 32 by default.

HS Download

Download at a high speed on the network side.

Transfer Mode

There are three modes: Quality preferred, Fluency preferred and Adaptive. The code stream will adjust itself according to the setup, adaptive is the tradeoff between the image quality preferred and fluency preferred, fluency preferred and adaptive are valid only when the sub-stream is turned on, otherwise, quality preferred is valid.

4. Click Apply.

9.2.2 Platform Access

P₂P

Go to Main Menu \rightarrow Network \rightarrow Base \rightarrow P2P. Refer to 6.2.2 P2P for details.

Email

Go to Main Menu → Network → Base → Email. Refer to 6.2.3 Email for details.

9.2.3 Advanced

FTP

You can upload the record file onto an FTP server by configuring the FTP settings. It allows you to upload the record file by the record type and record time.

Before You Start

First, you need to confirm that your FTP server is running normally and can upload files.

Steps:

- 1. Go to Main Menu → Network → Advanced→ FTP.
- 2. Configure each parameter of the FTP service.

FTP setting

Divided into video FTP and pictures FTP, you can set up your server IP, port, user name, password, directory, file length, and there is the Anonymous option, and FTP Setting whether the testing successful.

Channel setting

You can select the channel to transmit, set up on weekday, as well as the time period.

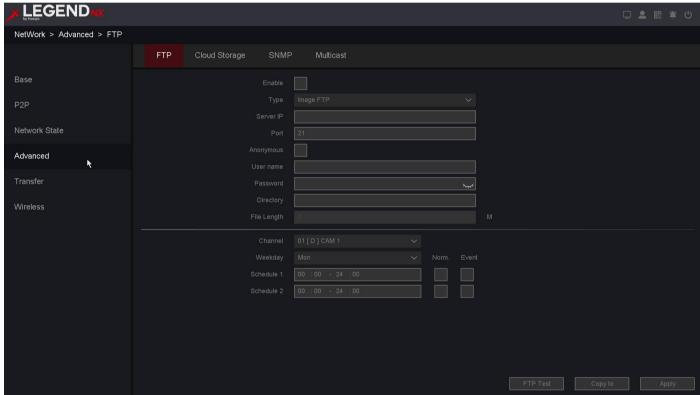


Figure 9-9 FTP



Note

- After finishing the setting, you can click the button FTP Test to try to verify the FTP service is available, and Copy To button is used to copy the configuration of current channel to other channels. Click the button Apply to activate the configuration.
- The password of some FTP servers is a special authorization code, which needs to be subject to the FTP server provider.

Cloud Storage

As a new feature our devices support uploading video & picture to the Cloud Storage. The Cloud Storage allows our users to take video stored on their hard drives and upload to either Google Drive or Drop Box. Pricing is all based on the costs on which Google Drive or Drop Box charge when signing up. A hard drive

must be installed within the DVR/UVR for Cloud Storage to work, but The Cloud Storage will upload the video and picture to the cloud automatically after you set this function correctly.

Before You Start

Please make sure you have registered for Google drive and Drop box accounts.

Steps:

1. Go to Main menu → Network → Advanced → Cloud Storage.

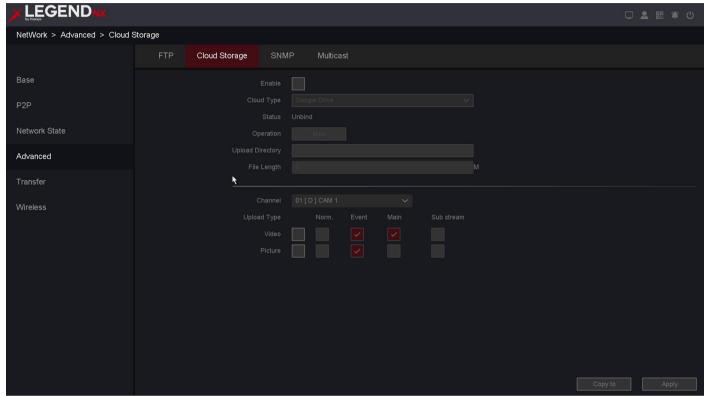


Figure 9-10 Cloud Storage

Cloud Type

Support two kinds of cloud type 'Google Drive' and 'Dropbox'.

Upload directly

You can set the path of your account folder on your device.

File length

Set the video length that will upload to the cloud.

Channel

Choose the channel which you want upload files. Also you can choose different channels to set different upload plant.

Upload type

Including 'Norm' 'Event' 'Main' 'Sub stream' four kinds of upload type.

Video

In 'Norm' type device will keep upload the video file all the time as long as recording keep going. In 'Event' type device will only upload video files as plan that you set in alarm trigger process. 'Main' and 'Sub stream' means you can choose which the record file type you want to upload.

Picture

Same as the video configuration. It has 'Norm' and 'Even' type of upload.

- 2. Turn on Enable.
- 3. Select cloud type.
- 4. Click Bind.
- 5. A window will open and load a Verification Code as well as a QR Scan box.

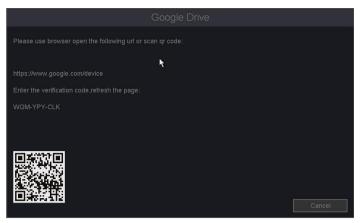


Figure 9-11 Google Drive

- 6. Use your mobile phone to scan the QR code, or use your computer to log in to the address in the prompt box.
- 7. Follow steps of inputting the verification code, signing into your account, and 'Allowing'.

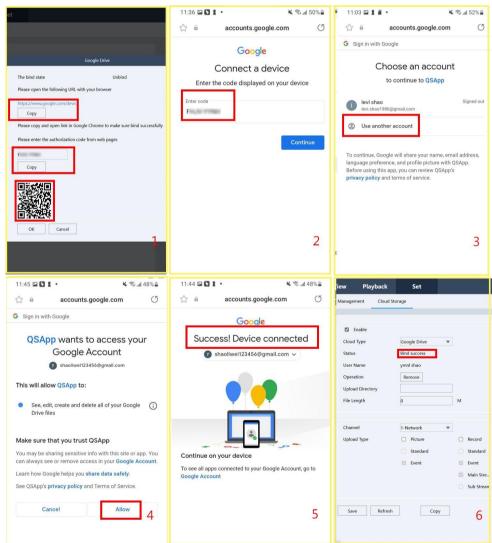


Figure 9-12 Mobile Operation Example

- 8. Once you fill in/Allow your information to your Google Drive or Drop Box you will see a 'Bind Success', at that point you can hit 'Logout' to close window.
- 9. The Status line will then read 'bind Your Login Name.'
- 10. Under 'Upload Directory' you will make a file name of your choice. This file path will automatically appear within the Google Drive or Drop Box directory.

11. Click Apply.

SNMP

SNMP (Simple Network Management Protocol) is an Internet-standard protocol for collecting and organizing information about managed devices on IP networks and for modifying that information to change device behavior.

Steps:

- 1. Go to Main Menu → Network → Advanced → SNMP.
- 2. There are 3 versions in SNMP.

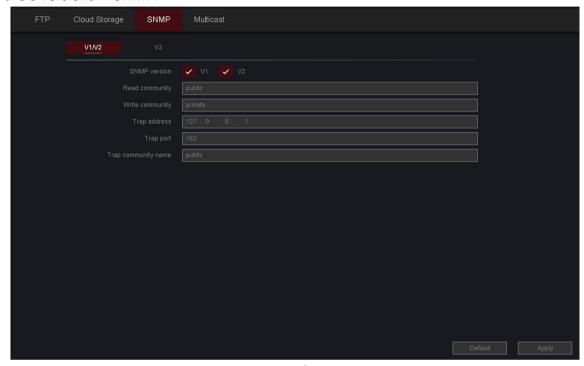


Figure 9-13 V1/V2 Version

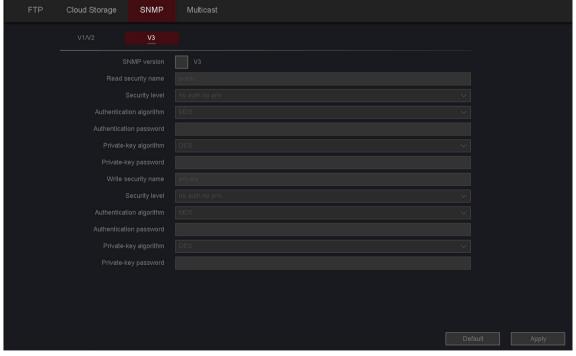


Figure 9-14 V3 Version

3. Tick the protocol as your desire.

4. Click **Apply** to save.

Multicast

In computer networking, multicast (one-to-many or many-to-many distribution) is group communication where information is addressed to a group of destination computers simultaneously.

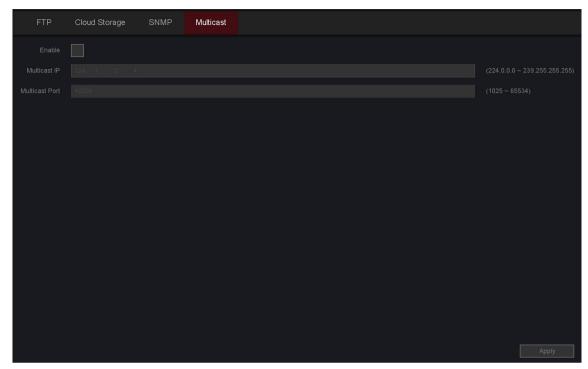


Figure 9-15 V3 Multicast

9.2.4 Transfer

UPNP

UPNP is a networking standard that uses protocols on the Internet to allow electronic devices connected to a network to detect and identify each other.

Before You Start

If you want to use UPNP function, Enable the UPNP™ function of your router, when the device network working mode is multi-address, the default device route should be on the same network segment as the LAN IP address of the router.

Steps:

1. Go to Main Menu → Network → Transfer → UPNP.

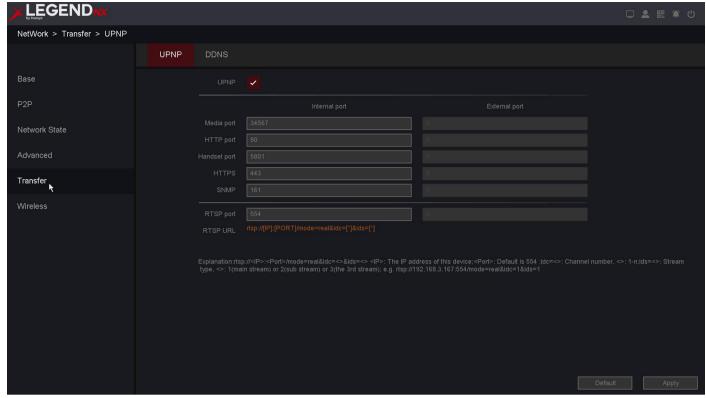


Figure 9-16 UPNP

- 2. Turn on UPNP.
- 3. Set up Media Port, HTTP Port, Handset Port, HTTPS and SNMP as your desire. (If you are not sure, do not modify it, it may conflict with other ports of the system).



- RTSP Port: The RTSP (Real Time Streaming Protocol) is a network control protocol designed for use in entertainment and communications systems to control streaming media servers. Enter the RTSP port in the text field of RTSP Port. The default RTSP port is 554, and you can change it according to different requirements.
- The value of the RTSP port No. should be 554 or between 1024 and 65535, while the value of the other ports should be between 1 and 65535 and the value must be different from each other. If multiple devices are configured for the UPNP™ settings under the same router, the value of the port No. for each device should be unique.

4. Click Apply.

DDNS

DDNS is a service that can be used to automatically update DNS records if client PCs get their IP settings from a DHCP Server. If DDNS function is enabled on UVR, you can access the UVR by domain name provided by Internet Service Provider (ISP) provider.

Before You Start

Register Oray DDNS, CN99 DDNS, DynDNS and NO-IP services with your ISP.

- 1. Go to Main Menu→ Network → Advanced → DDNS.
- 2. Turn on Enable.
- 3. Select a DDNS type.
- 4. Enter parameters including Domain Name, User Name and Password etc.

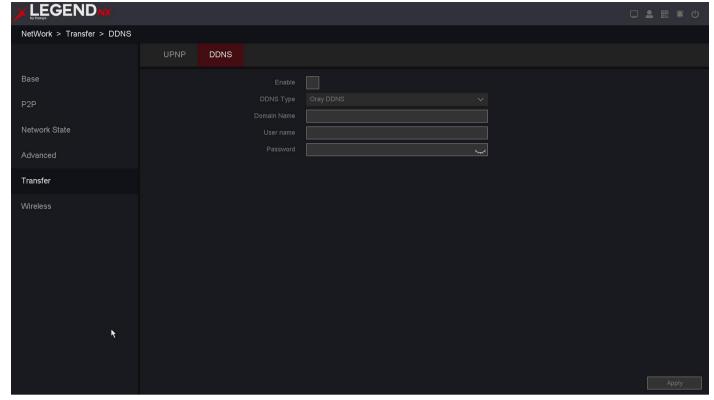


Figure 9-17 DDNS

DDNS Type

ISP of DDNS, including Oray DDNS, CN99 DDNS, DynDNS DDNS and NO-IP DDNS. This option can be customized according to the requirement of users.

Domain Name

Fill in the domain name provided by ISP.

User Name/Password

Fill in the username and password input correspond to the domain name.

5. Click Apply.

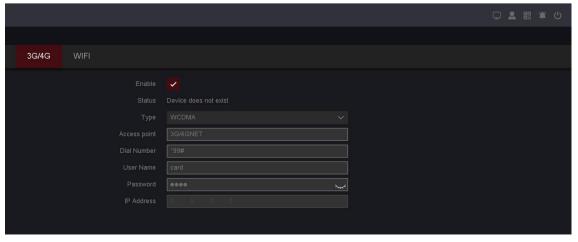
9.2.5 Wireless

3G/4G

Before You Start

Please insert the 3G/4G module into the UVR first.

- 1. Go to Main Menu → Network → Wireless → 3G/4G.
- 2. Turn on Enable.



- 3. Configure the parameters as your desire.
- 4. Click Apply.

WIFI

After successful configuration, UVR can connect to the LAN through the mean of wireless.

Before You Start

Please insert the WIFI module into the NVR first.

Steps:

- 1. Go to Main Menu → Network → Wireless → WIFI.
- 2. Click Search.

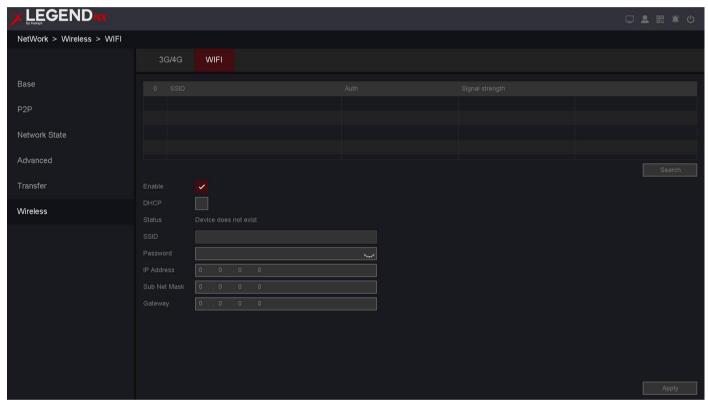


Figure 9-19 WIFI

- 3. Turn on Enable.
- 4. Turn on DHCP.
- 5. Enter the wireless Password.
- 6. Click Apply.
- 7. After a successful connection, the **Status** will change to **Connected**.
- 8. Optional, you can go to **Main menu** → **Channel** → **IP channel** to add camera, please refer to **7.1.1 IP Channel** for detail.



Note

Local network segment and WIFI network segment cannot be same! You can go to **Main menu** → **network** → **Lan** to Confirm the IP address of the local network.

9.3 Camera

9.3.1 Channel

Channel Type

Please refer to 2.5 Adding the Online IP Cameras for details.

Channel Set

Please refer to 6.3.1 Network Camera for details.

Encode

By configuring the encode parameters you can define the parameters which affect the image quality, such as the Compression type, Resolution, Frame Rate, Bit Rate Type, Quality, etc.

The UVR support Dual Stream Encode, we can set the main stream encode and sub stream encode on this screen.

Before You Start

Please make sure you already have an IPC whose connection status is **Connected**.

- 1. Go to Main Menu → IP Channel → Encode.
- 2. You can also go to Main Menu → Channel → IP Channel → Channel Set → Encode.

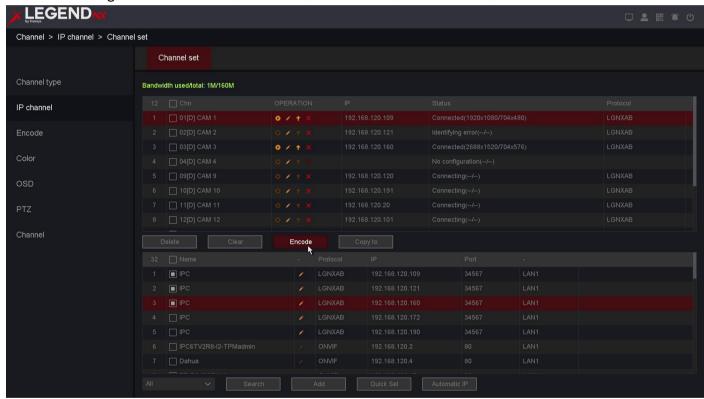


Figure 9-20 Channel

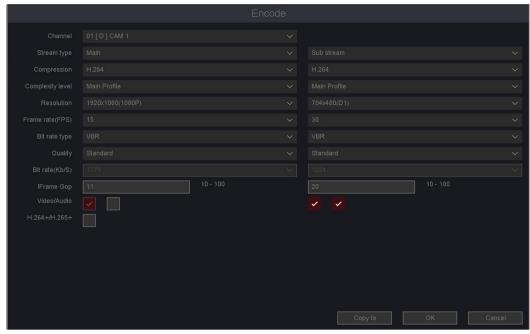


Figure 9-21 Encode config

3. Configure the parameters as your desire.

Channel

Select the channel to configure.

Stream Type

Main Stream/Sub Stream/Event Stream/Mobile Stream.

Compression

H.265, this is the compression protocol for encoding. It also supports H.264 IP cameras.

Complexity level

Base Profile/Main Profile/High Profile.

Resolution

The resolution of the encoding record.

Frame Rate (FPS)

The number of frames per second in the encoding video.

Bit Rate Type

CBR/VBR.

Quality

Lowest/Low/Standard/Good/Better/Best.

Bit Rate (Kb/S)

Value of the Bandwidth.

Stream Range

The bitrate range of this channel.

Iframe

I-frame setting, range from 10-100.

Video/Audio

To encode the Video and Audio in the record files. The video in mainstream is always enabled.

H264+/H265+

Enable smart encode technology, all the record file can reduce the HDD space maximum 80%-90% in static view.

4. Optional: You can also use the function of **Copy to**. The parameters for all channels can be quickly set.



Figure 9-22 Copy to



Note

If you want to use the **Copy to** function, it is recommended to use it under the same model of cameras.

5. Click **OK**.

PTZ

This chapter is to show you how to set the actions which you want the PTZ Camera to respond when corresponding alarm occurred.

Before You Start

Please make sure that the presets, patrols and patterns should be supported by PTZ protocols.

Steps:

1. Go to Main Menu → Channel → PTZ.

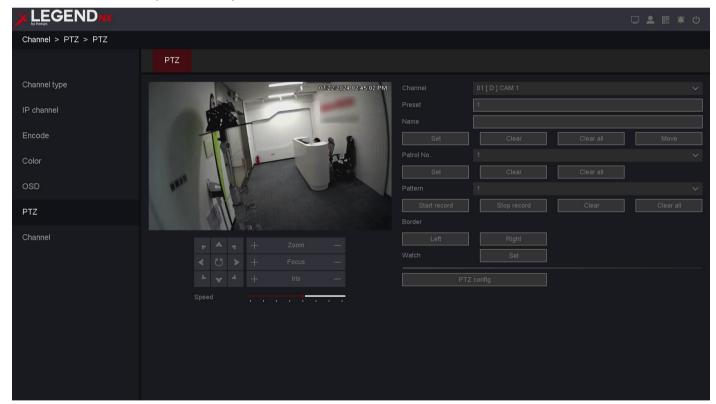


Figure 9-23 PTZ

- 2. Select the channel to configure.
- 3. Configure the parameters as your desire.

Channel

Select the channel to configure.

Preset

This feature enables the camera to point to a specified position such as a window when an event takes place. You can set up to 255 preset points.

Name

The name of the preset point will be displayed in the upper left corner of the screen after the call.

Patrol No.

Patrols can be set to move the PTZ to different key points and have it stay there for a set duration before moving on to the next key point. The key points are corresponding to the presets. You can set up 4 cruise lines, each cruise line includes preset points and the time stayed in the preset point and cruising speed.

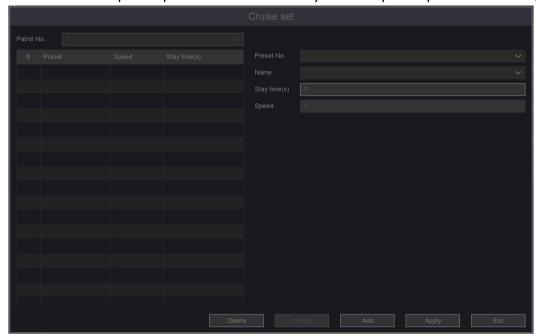


Figure 9-24 Cruise set

Pattern

Patterns can be set by recording the movement of the PTZ. You can call the pattern to make the PTZ movement according to the predefined path.

Border

Linear boundaries Including Left and right boundaries.

Watch



Figure 9-25 Watch

Waiting time(s)

The waiting time after the watchdog enable application takes effect, in seconds, the value can be set to any value between 5 and 720.

Watch mode

There are multiple scanning modes, include Auto Pan, Patrol scan, Pattern scan, PreSet, Area scanning Watch mode No.

The number corresponding to the selected scan mode.

Auto Track

According to the dynamic objects to detect tracking, as long as there are dynamic objects, it will follow the

movement, tracking time: [0s -300s].

Focus Type

It is the autofocus adapted to IPC.

PTZ Config

Mainly through the RS485 port to control the head.

Items	Function Description
	Direction button and the auto-cycle button
	Zoom+, Zoom-
Focus 🛱	Focus+, Focus-
O Iris O	Iris+, Iris-
1 1 1 1 1 1	The speed of the PTZ movement

Table 9-1 PTZ Config

9.3.2 Encode

Encode

Please refer to 10.3.1 Channel for details.

9.3.3 Image Parameters

Image

Our camera has completed the default configuration before leaving the factory, which can meet the needs of ordinary applications, if you have higher requirements. Cameras support image adjustment such as Brightness, Contrast, Saturation, Hue and Sharpness. Some high-end Cameras support advanced Settings such as Image adjust, Exposure, Backlight, White balance, Day/Night setting, etc. In this chapter you can configure the Camera to improve the image and make a better view experience.

Before You Start

Please make sure you already have an IPC whose connection status is Connected.

Steps:

1. Go to Main Menu → Channel → Color.

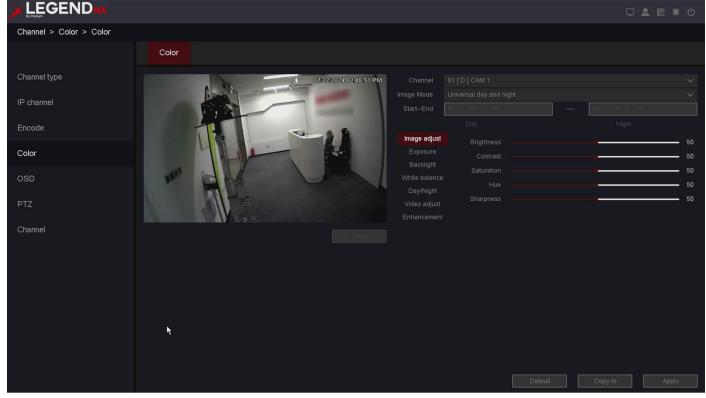


Figure 9-26 Image

2. Configure the parameters as your desire.

Channel

Select the channel to configure.

Image Mode

The image mode for specific period of the configuration, there are Auto/Scheduled for options. Auto mode keeps the image settings for 24h, and Scheduled mode supports 2 period settings (Day period & Night period). You can set independent image settings for different period.

Start-End

Set the image mode as Manual, then enter the starting time and ending time for Day period or Night period.

3. Set the camera parameters on this screen if the camera compatible with the UVR.

Functions	Description	Functions	Description
Image adjust	Brightness: 0-100 Contrast: 0-100 Saturation: 0-100 Hue: 0-100 Sharpness: 0-100	Day/Night	Auto/Color On/Color Off Switch Type: IR Synchronous Switch Filter Time: from 0-120 seconds Smart IR: Manual/Close/Auto
Exposure	Auto: Set exposure time automatically Manual: Set exposure time by selecting exact value	Video adjust	Image: Close/Up down/Left right/Centre Rotate: Off/90/180/270
Backlight	DWDR: Close, DWDR, WDR(if IPC supports) Limit: Set the degree of DWDR or WDR Back Light Comp: When DWDR is Close, BLC function can be activated as Off,HLC, BLC	Enhancement	NR Level: 0-6 Defog: Close/Auto/Manual Smart light: close/manual/auto

	Auto: Set white balance automatically	
White balance Manual: Set white balance by		
	selecting exact value of Red Gain	
	and Blue Gain	

Table 9-2 Set IP Camera parameters

Image adjust

Customize the image parameters including the brightness, contrast, and saturation for the live view and recording effect.

Exposure

Set the camera exposure time (1/10000 to 1/3 sec). A larger exposure value results in a brighter image.

Backlight

Set the camera's wide dynamic range (0 to 100). When the surrounding illumination and the object have large differences in brightness, you should set the WDR value.

White Balance

When there is a color cast, you can compensate by strengthening the corresponding complementary.

Day/Night

The camera can be set to day, night, or auto switch mode according to the surrounding illumination conditions.

Video Adjust

You can rotate the orientation and angle of the image.

Enhancement

For optimized image contrast enhancement

OSD

You can configure the OSD (On-screen Display) settings for the camera, including Channel Name, Date/Time format, Record status, Alarm status, etc. You can also refer to *6.3.1 Network Camera-OSD*.

Before You Start

Please make sure you already have an IPC whose connection status is **Connected**.

- 1. Go to Main Menu \rightarrow Channel \rightarrow OSD.
- 2. Select a camera.

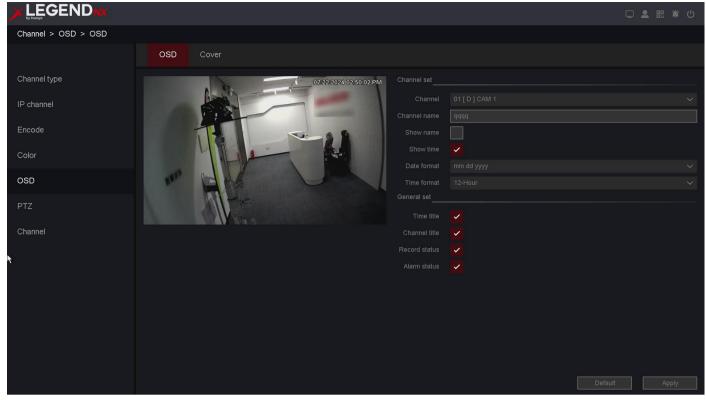


Figure 9-27 OSD

- 3. Set parameters as your desire.
- 4. The name and time can be chose to display or not, and can also be customized.
- 5. Click Apply.

The settings are divided into two parts: channel settings and general settings. The channel setting is to configure the IPC and analog channel, and the general setting is to set the UVR local display.

For the Channel Setting:

Channel

Select the channel to configure.

Channel Name

The name of the channel to be set.

Show Name, Show Time

Enable the information of channel name and time on the screen.

Date Format, Time Format

Set the format of the date and time.

For the general set:

Channel Title

Enable/disable the display of the channel title on the monitor screen.

Record Status, Alarm Status

Enable/disable the display of the record status and alarm status on the screen.

Cover

The Cover function can effectively block the sensitive areas in the monitoring screen, it supports covering 4 areas at the same time.

Before You Start

Please confirm the area you need to cover in advance.

Steps:

1. Go to Main Menu \rightarrow Channel \rightarrow OSD \rightarrow Cover.

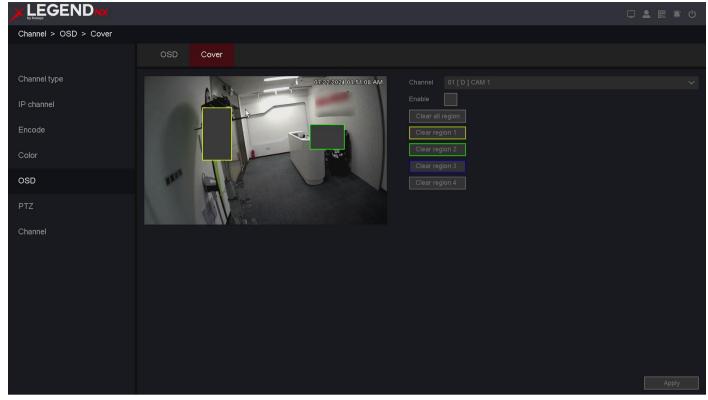


Figure 10-28 Privacy Mask

- 2. Select the camera you want to draw the cover area.
- 3. Set two opposite corners of a square in the preview window to draw a quadrilateral cover region1.
- 4. The same operation draws region 2-4.
- 5. Turn on Enable.
- 6. Click Apply.



Note

Up to 4 privacy mask areas can be configured. The size of each area can be adjusted.

9.4 Normal Event

9.4.1 Motion Detection

Motion Detection

Motion detection enables the video recorder to detect the moving objects in the monitored area and trigger alarms. Please Refer to 6.3.2 - Event.

9.4.2 Video Lost

Detect video loss of a camera and take alarm response actions.

Before You Start

Please make sure whether your IPC supports this function.

Steps:

1. Go to Main menu \rightarrow Event \rightarrow Detect \rightarrow Loss.

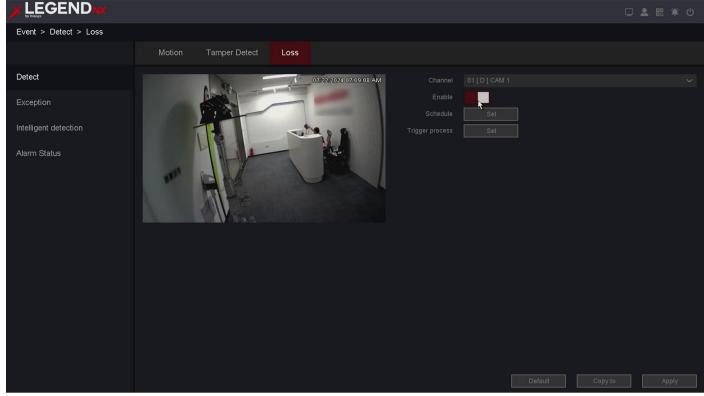


Figure 9-29 Video lost

- 2. Set Channel.
- 3. Turn on Enable.
- 4. Set the arming **Schedule**. Refer to **6.4.2 Configure Arming Schedule** for details.
- 5. Set the **Trigger process**. Refer to **6.3.3 Configure Alarm Trigger Process** for details.
- 6. Click Apply.

9.4.3 Exception

Exception settings refer to the handling action of various exceptions, including No Writable Disk, Disk Error, Disk Full, Network Disconnect, IP Conflict and S.M.A.R.T.

No writable disk

If all HDD are set to only read, this exception will be triggered. It supports these methods to remind the user about the exception: Show Message, Buzzer, Send Email and Alarm Out.

Disk Error

If writing HDD error or DHH is unformatted, this exception will be triggered. It supports these methods to remind the user about the exception: Show Message and Buzzer.

Disk Full

You can set minimum percentage of hard disk space. The handling actions of this exception are Show Message, Buzzer, Send Email and Alarm Out.

Network Disconnect

If network is disconnected, this exception will be triggered. It supports these methods to remind the user about the exception: Show Message, Buzzer and Alarm out.

IP Conflict

Contain If IP conflict with other device at the same network, exception will be triggered. It supports these methods to remind the user about the exception: Show Message, Buzzer and Alarm out.

S.M.A.R.T

This exception is about HDD health detection. It will be triggered when the HDD of device have some problems and not work under good condition. It supports these methods to remind the user about the exception: Show Message and Buzzer.

Steps:

1. Go to Main Menu → Event → Exception.

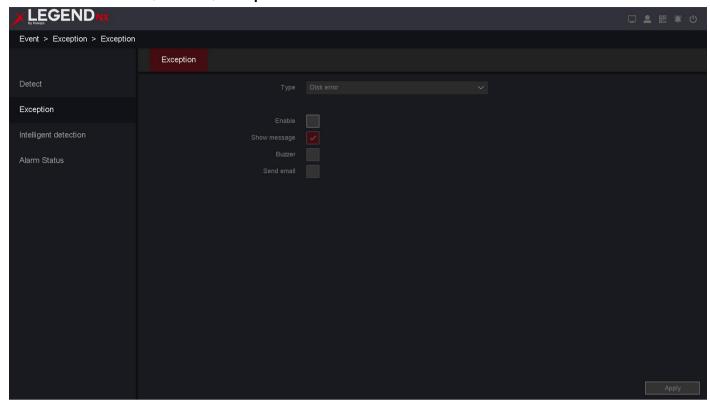


Figure 9-30-1 Alert

- 2. Select Type.
- 3. Turn on Enable.
- 4. Configure the other parameters as your desire. When the set events occur, you will receive hints in **Alarm Status.**
- 5. Click Apply.

9.5 Smart Event

Line Crossing & Area Intrusion

Line Crossing & Area Intrusion, if setting Target Detection as Human Shape Filter or Vehicle Shape Filter to discard alarms which are not triggered by human body or vehicle. They are described as Perimeter Protection, referred to as PP. Only certain camera models support these function. Please refer to *6.3.2 Event.*

9.6 Storage

9.6.1 Schedule

Schedule

Go to Main Menu → Storage → Schedule → Schedule.

It is the Recording schedule, Please refer to 6.4.2 Configure Recording Schedule.

9.6.2 HDD Management

If it is the first time you use your HDD, please initialize it after it is installed. Please refer to 6.4.1 Storage.

Storage Mode

Multiple HDDs can be managed in groups. Video from specified channels can be recorded into a particular HDD group through HDD settings. You can also switch the hard disk's storage mode, including the 'group', 'quotas (Capacity)', and 'Quota (Time)'.

Before You Start

Install at least one HDD to your video recorder.

- 1. Go to Main Menu → Storage → Storage Mode.
- 2. Select Mode as Group.
- 3. Select a group number.
- 4. Select channels to record on the HDD group.

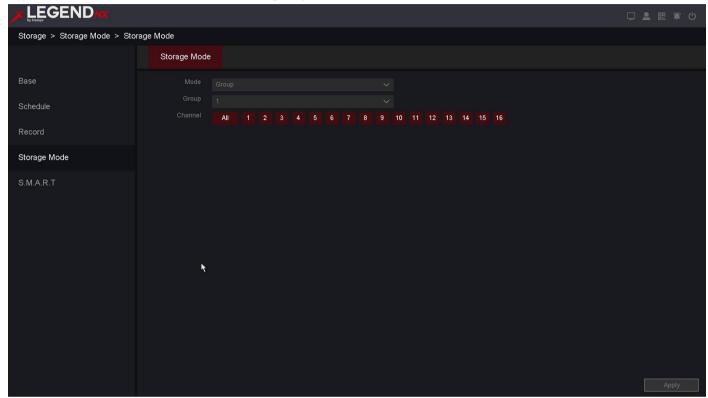


Figure 9-31 Group

- 5. Click Apply.
- 6. Restart the video recorder to activate the new storage mode settings.
- 7. After restart, go to Main Menu → Storage → Base.
- 8. Click **Edit** of desired HDD to set the group.
- 9. Select a group number for the current HDD.

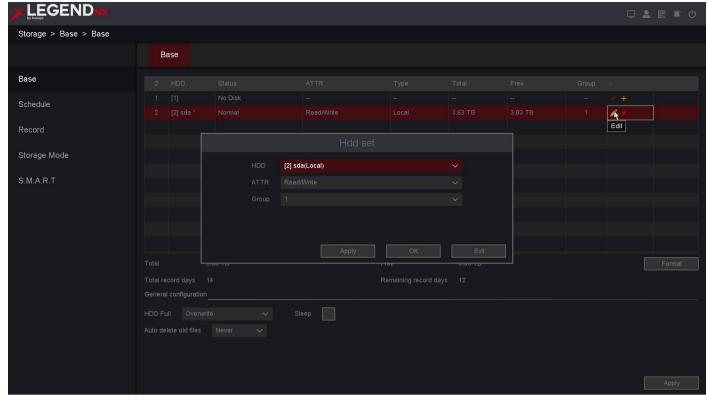


Figure 9-32 Hdd Set

10. Click OK.



Note

You can set 16 groups under group mode, and each channel is independent of each group. If the channel does not belong to any group, none video file will be saved, and if the channel belongs to more than one group, the channel will use the space of these group one by one until all the group are full.

Configure HDD Quota (Capacity)

Each camera can be configured with an allocated Quota (Capacity) for storing videos.

- 1. Go to Main Menu → Storage → Storage Mode .
- 2. Select Mode as Quota (Capacity).
- 3. Select a camera to set quota in **Channel**.
- 4. Enter the Record capacity in Record quota (GB) and Picture quota (GB).

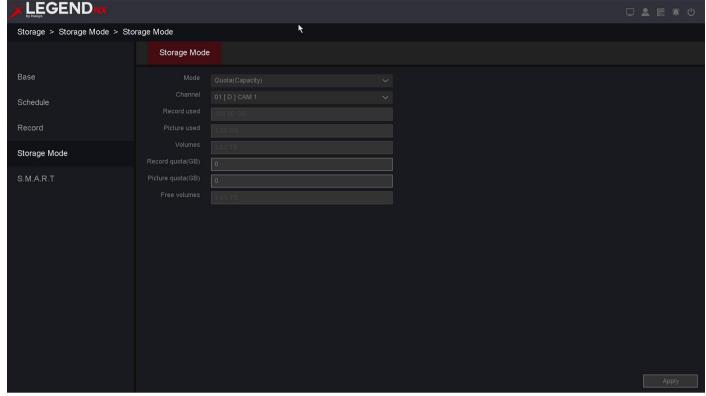


Figure 9-33 Quota

- 5. Click Apply.
- 6. Click **OK** to the video recorder to activate the new settings.



Note

When the quota capacity is set to 0, all cameras will use the total capacity of HDD for videos and pictures. Every time you change the storage mode, you need to restart the UVR device.

Record used

Shows the video files space that the channel you chose have used in real-time.

Picture used

Shows the pictures space that the channel you chose have used in real-time.

Volumes

Total capacity of all hard drives.

Record Quota

You can manually set the quota size of channel video.

Picture quota

You can manually set the quota size of channel picture.

Free volumes

Shows the free space minus the space you have set on other channels.



Note

About the operation mechanism of capacity quota (It needs to be set to allow overwriting when the hard disk video is full).

- The video recording is given priority. If the hard disk capacity is left, the video recording will continue. The highest priority is to ensure that there are as many videos as possible.
- After the recording is full, the BLOCK of the channel with the earliest end time exceeding the quota will be overwritten first.
- Until the capacity quota is allocated, then look for the block with the earliest end time within the quota to be overwritten.

Configure HDD Quota (Time)

Each camera can be configured with an allocated Quota (Time) for storing videos.

Steps:

- 1. Go to Main Menu → Storage → HDD Manage → Mode Settings.
- 2. Select Mode as Quota (Time).
- 3. Select a camera to set quota in **Channel**.
- 4. Enter the Record Day in Record Quota (Day).

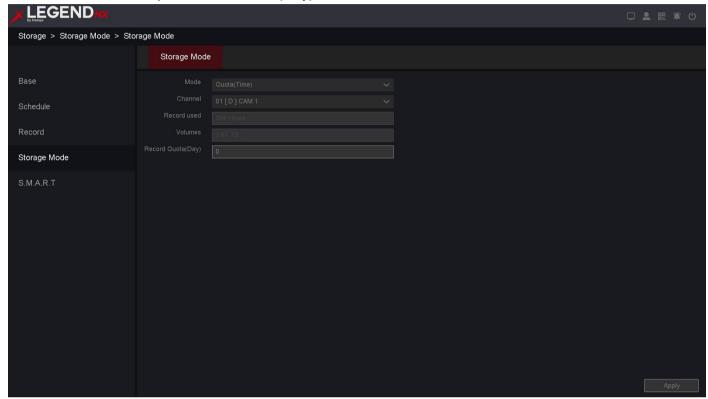


Figure 9-34 Quota

- 5. Click Apply.
- 6. Click **OK** to the video recorder to activate the new settings.



Note

When the Record Quota (Day) is set to 0, all cameras will use the total capacity of HDD for videos and pictures. Every time you change the storage mode, you need to restart the UVR device.

Record used

Shows the video files space that the channel you chose has used in real-time.

Volumes

Total capacity of all hard drives.

Record Quota (Day)

Set a time for a channel from 0-60 days, and the new video files will not cover the old files in this period.



Note

About the time quota operation mechanism (It needs to be set to allow overwriting when the hard disk video is full).

- The video recording is given priority. If the hard disk capacity is left, the video recording will continue. The highest priority is to ensure that there are as many videos as possible.
- After the recording is full, the BLOCK of the channel with the earliest end time exceeding the time

quota will be overwritten first.

- Until the BLOCK of the channel exceeding the time quota is covered by the recordings of the remaining channels within the time quota, the time quota mechanism of the channel will take effect.
- Because the video stream changes dynamically, under the time quota mechanism, to make the time quota mechanism of this channel take effect, you can set the time quota of another channel as large as possible.

9.7 Backup

9.7.1 Backup

You can Backup the video recording .It can be exported to the backup device (USB flash drive, etc.), Please refer *Chapter 5 Backup*.

9.8 Playback

9.8.1 Normal Playback & Event Playback

Right click and select the 'Playback' to enter the playback interface and you can also click on the playback button in the below the preview screen to enter the playback interface. The Normal Playback & Event Playback please refer to **4.2 Normal Playback & 4.3 Event Playback.**

9.8.2 Label Play

Select the 'Label Play' enters the label playback mode.

Before You Start

Please confirm that you have added the Default label during normal playback and there are already the records of the label you made in File management as shown below. You can also refer to **4.2 Normal Playback.**

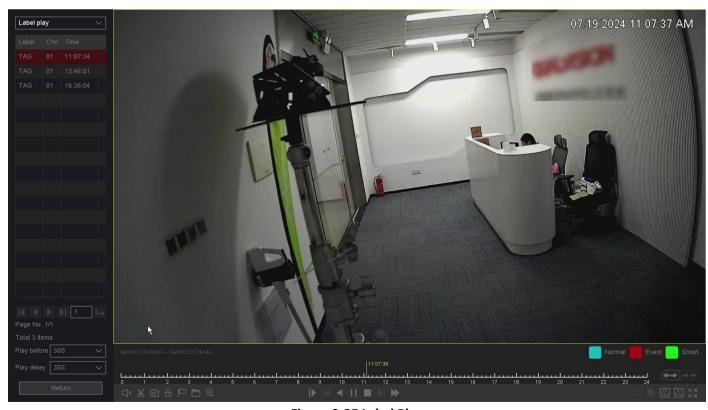


Figure 9-35 Label Play

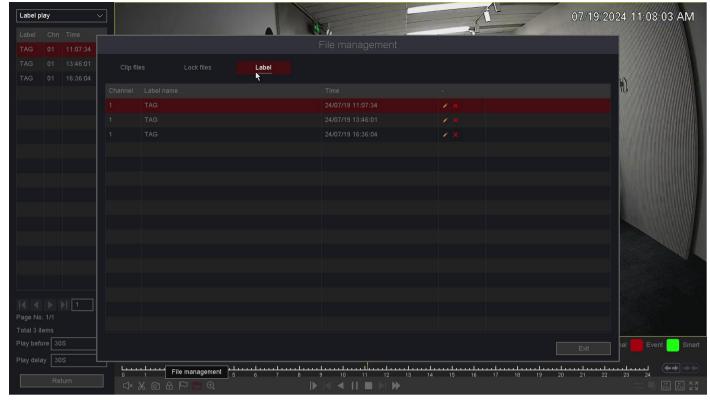


Figure 9-36 Backup and Retrieval

Steps:

- 1. Go to Playback.
- 2. Select the Label play.
- 3. Select the channels as your desire, set time period.
- 4. Click Search.
- 5. The search results as shown in the figure above.
- 6. Click a label in the label list for label playback as your desire.
- 7. Click the return button back to the last interface to change the search channels.

Label

The label's name that you can edit in file manage.

Channel

The channel you tagged.

Time

The time that was playing when you tag.

The left and right arrows

You can change the page to find the label items you want.

Play before and Play delay

You can set the play period before/after of the label time.



Note

As for the operations of these buttons you can refer to *Table 4-2-1 Playback Interface Description*. But you can't use the 'Sync/Async', 'Main/Sub stream', 'Frame Control' button in label playback mode.

9.8.3 Smart Play

Select the 'Smart Play' enters the Smart playback mode.

Before You Start

Please make sure that your device has enabled Perimeter Protection such as Motion Detection, Line Crossing, Area Intrusion, etc., and the alarm videos has been generated.

Icon	Description	lcon	Description
\	Draw Line	KN	Motion Full Screen
	Draw Quadrilateral		Clear All
	Motion Draw Rectangle		

Table 9-3 Description

Draw Line

Steps:

- 1. Go to Playback.
- 2. Select the Smart Play.
- 3. Select the channel and the record time as your desire.
- 4. Click Play or Click the blue timeline.
- 5. Click to draw a line on the video interface.
- 6. Click **Setting** you can specify some setting for playback like 'Skip Non-Focus Video' and specify the playback speed for Non-Concerned Video and Attention-Video, also you can specify the time before and after the events from 0 to 600 seconds, as shown below.



Figure 9-37 Draw Line

7. Click **Search** then the result will be shown below, video with line crossing will be marked color 'green', and the video will be played by the setting as you made at step 6.

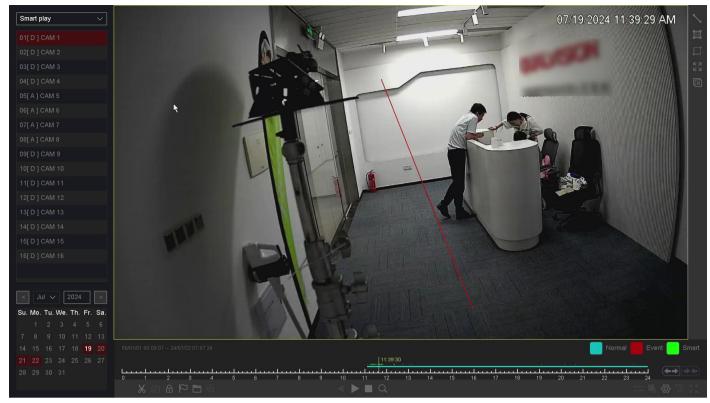


Figure 9-38 Search Results

Draw Quadrilateral

- 1. Go to Playback.
- 2. Select the Smart Play.
- 3. Select the channel and the record time as your desire.
- 4. Click Play or Click the blue timeline.
- 5. Click to draw a quadrilateral on the video interface.
- 6. Click **Setting** to configure the parameters as your desire.
- 7. Click **Search** then the result will be shown below, video with Area Intrusion will be marked color 'green', and the video will be played by the setting as you made at step 6.

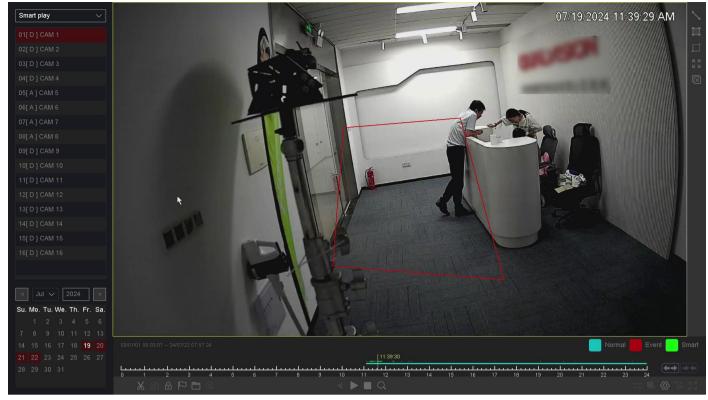


Figure 9-39 Draw Quadrilateral

Motion Draw Rectangle

- 1. Go to Playback.
- 2. Select the Smart Play.
- 3. Select the channel and the record time as your desire.
- 4. Click Play or Click the blue timeline.
- 5. Click draw an area on the video interface.
- 6. Click **Setting** to configure the parameters as your desire.
- 7. Click **Search** then the result will be shown below, video with Motion will be marked color 'green', and the video will be played by the setting as you made at step 6.

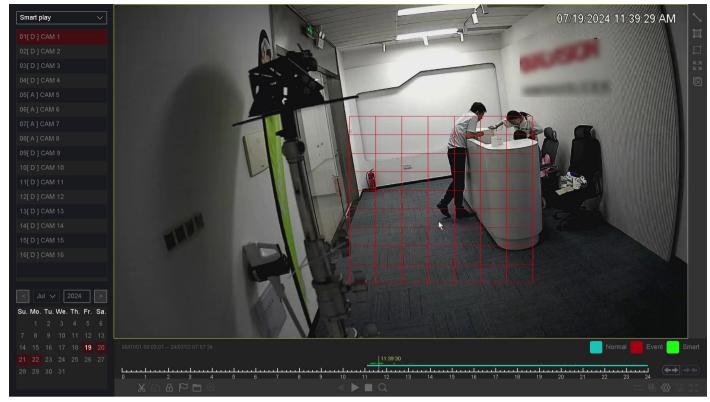


Figure 9-40 Motion Draw Rectangle

Motion Full Screen

- 1. Go to Playback.
- 2. Select the Smart Play.
- 3. Select the channel and the record time as your desire.
- 4. Click Play or Click the blue timeline.
- 5. Click to draw an area on the video interface.
- 6. Click **Setting** button to configure the parameters as your desire.
- 7. Click **Search** button then the result will be shown below, video with Motion will be marked color 'green', and the video will be played by the setting as you made at step 6.



Figure 9-41 Motion Full Screen

9.8.4 Time Division play

Select the 'Time Division play' enters this mode, on this page, you can play the recordings by time period, and distribute the 24-hour recordings evenly according to the number of windows you choose, from 1-16 windows. For example, if you chose the windows number is 4, the files of the date you chose will be divided into 4 parts.

Before You Start

Please make sure that your camera channel has recorded.

1. Go to Playback.

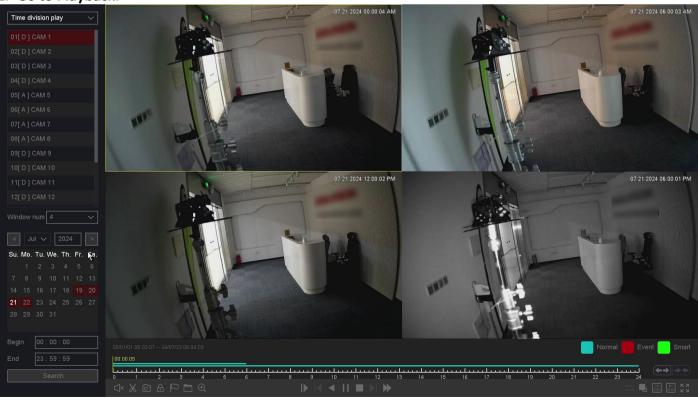


Figure 9-42 Time Division play

- 2. Select the Time Division play.
- 3. Select the channel as your desire.
- 4. Select division windows number and the record time.
- 5. Click Search.
- 6. Select the corresponding window to quickly play the video period you want.



Note

If the division windows number you choose is too large, your device will not be able to play back all the windows due to the limitation of the decoding capability of the device. Please try reducing the division windows number.

9.8.5 Normal Play (Picture)

On this page, you can play back the video as picture.

Before You Start

Please make sure that the channel you choose already has pictures generated by manual capture or Perimeter Protection alarm.

- 1. Go to Playback.
- 2. Select Normal Play (Picture).

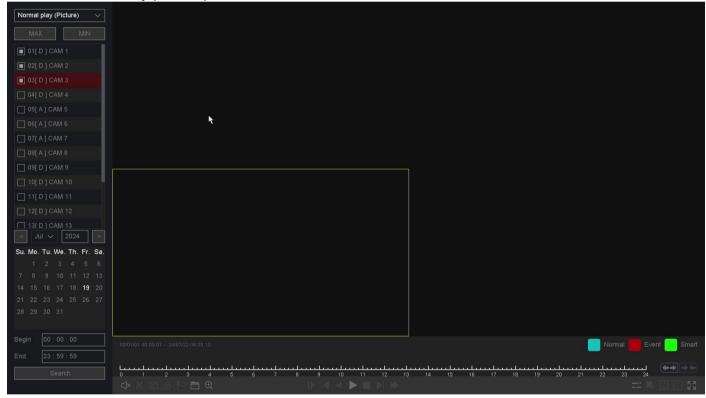


Figure 9-43 Normal Play (Picture)

- 3. Select the channel as your desire.
- 4. Select the time period you want to play back.
- 5. Click Search.
- 6. As for the button of control playback including 'Backup and Retrieval', 'Zoom', 'Prev frame', 'Start playback/Pause', 'Stop', 'Next frame', 'Sync/ Async', 'Full screen', 'Slow down', 'Speed up', and 'Time-line Stretch', 'Time-line Shorten'.



Note

You can stop playback by right click and exit the playback interface by keep right click.

Chapter 10 Web Operation

10.1 Introduction

You can get access to the video recorder via web browser.

You may use one of the following listed web browsers: Internet Explorer 6.0 to 11.0, Apple Safari, Mozilla Firefox, and Google Chrome. The supported resolutions include 1024×768 and above.

10.2 Login

You shall acknowledge that the use of the product with Internet access might be under network security risks. For avoidance of any network attacks and information leakage, please strengthen your own protection. If the product does not work properly, please contact with your dealer or the nearest service center.

Steps:

1. Open web browser, input the IP address of the video recorder and then press Enter.



Note

If you have changed HTTP port, enter *http://IP address:HTTP port* in address bar. E.g., *http://192.168.1.10:81*.

2. Select language, enter **User Name** and **Password**, click **Login**.

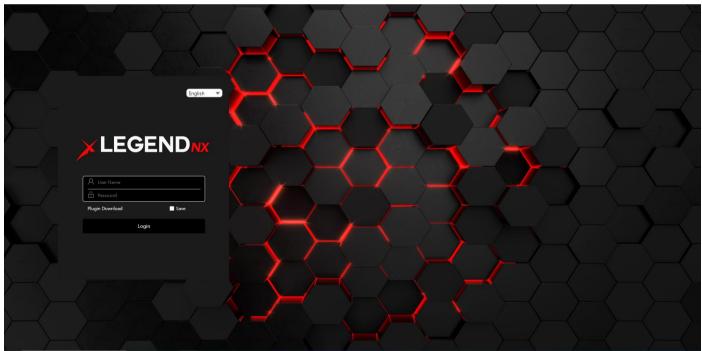


Figure 10-1 Login

3. Follow the installation prompts to install the plug-in.



Note

• If you log in without installing the plugin, you will still be prompted to install the plugin, Please Follow the installation prompts to install the plug-in. Otherwise you will not be able to use it normally.

• You may have to close the web browser to finish the installation of the plug-in.

10.3 Preview

After login, you will enter the preview interface.

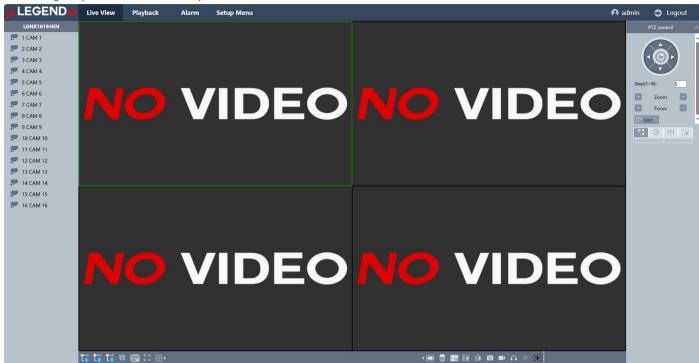


Figure 10-2 Live View

10.4 Playback

Click Playback to enter playback interface.

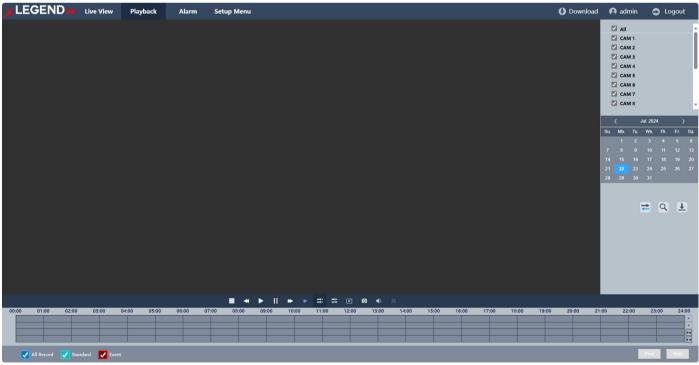


Figure 10-3 Playback

10.5 Set

Click **Set Menu** to enter configuration interface.

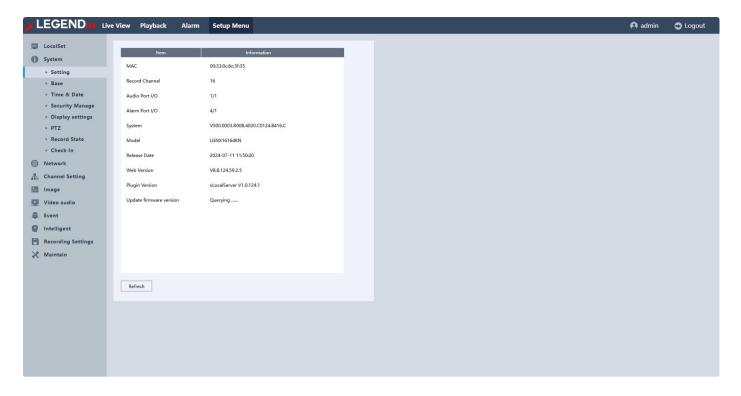


Figure 10-4 Configuration

10.6 Log

- 1. Go to **Set Menu** → **Maintain** → **Log**.
- 2. Set the search conditions.
- 3. Click Search.

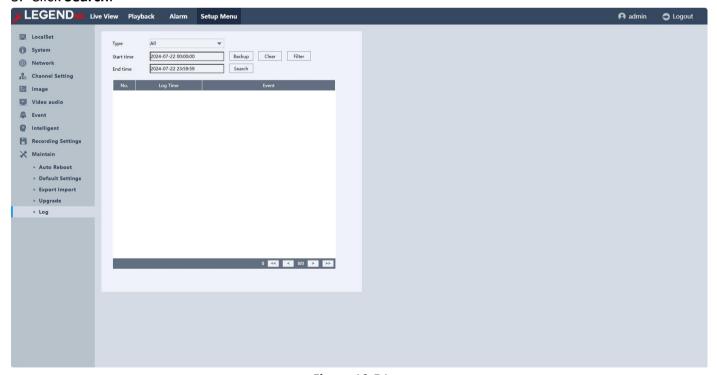


Figure 10-5 Log

Chapter 11 Appendix

11.1 Glossary

DVR

Acronym for Digital Video Recorder. A DVR is device that is able to accept video signals from analog cameras, compress the signal and store it on its hard drives.

NVR

Acronym for Network Video Recorder. A NVR can be a PC-based or embedded system used for centralized management and storage for IP cameras, IP Domes and other DVRs.

UVR

Acronym for Universal Video Recorder. A UVR can be a PC-based or embedded system used for centralized management and storage for analog cameras, IP Domes and IP cameras.

Dual-Stream

Dual-stream is a technology used to record high resolution video locally while transmitting a lower resolution stream over the network. The two streams are generated by the DVR, with the main stream having a maximum resolution of 4K and the sub-stream having a maximum resolution of 720p.

HDD

Acronym for Hard Disk Drive. A storage medium which stores digitally encoded data on platters with magnetic surfaces.

DHCP

Dynamic Host Configuration Protocol (DHCP) is a network application protocol used by devices (DHCP clients) to obtain configuration information for operation in an Internet Protocol network.

HTTP

Acronym for Hypertext Transfer Protocol. A protocol to transfer hypertext request and information between servers and browsers over a network.

P₂P

P2P, in full peer-to-peer, type of computer network often used for the distribution of digital media files. In a peer-to-peer (P2P) network, each computer acts as both a server and a client—supplying and receiving files—with bandwidth and processing distributed among all members of the network.

DDNS

Dynamic DNS is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system using the Internet Protocol Suite, to notify a domain name server to change, in real time (ad-hoc) the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.

NTP

Acronym for Network Time Protocol. A protocol designed to synchronize the clocks of computers over a network.

NTSC

Acronym for National Television System Committee. NTSC is an analog television standard used in such countries as the Universal States and Japan. Each frame of an NTSC signal contains 525 scan lines at 60Hz.

PAL

Acronym for Phase Alternating Line. PAL is also another video standard used in broadcast televisions systems in large parts of the world. PAL signal contains 625 scan lines at 50Hz.

DT7

Acronym for Pan, Tilt, Zoom. PTZ cameras are motor driven systems that allow the camera to pan left and right, tilt up and down and zoom in and out.

USB

Acronym for Universal Serial Bus. USB is a plug-and-play serial bus standard to interface devices to a host computer.