



SECURING YOUR WORLD



USER MANUAL

NETWORK VIDEO RECORDER

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Getting Started

Hardware, first boot, and the startup wizard

Chapter 1 Product Overview & Hardware

This chapter introduces the physical interfaces of the OCTAVUE by GSD Group network video recorder (NVR), summarizes the default network and security settings you should review before installation, and illustrates a typical system connection.

1.1 Rear Panel

The rear panel provides the power, video output, network, storage, and peripheral connections used during installation. The following table describes each interface. The exact set of ports varies by model, so some items may not be present on the recorder you purchased.

No.	Item	Description
1	Power Switch	Turns the NVR on or off.
2	DC Power Input	Connects the included DC power adapter.
3	AUDIO Output	Audio output port; connect to an audio output device such as a speaker.
4	VGA Port	Connects a VGA monitor.
5	HDMI Port	Connects to an HDMI display device.
6	USB Port	Connects an external storage device for recording or backup.
7	Reset Hole	Located beneath the USB port. Press and hold for 10 seconds to restore the device to its default factory settings.
8	WAN Port	Connects to a router or network switch.
9	LAN Port	Network interface for connecting IP cameras. Connect only one camera per PoE port.
10	RESET Button	Press and hold for 10 seconds with a pin to restore the default settings.

11	E-SATA	Supports an E-SATA storage HDD for recording and backup.
12	Sensor / Alarm / RS-485 Terminals	SENSOR & G: connect external sensors. ALARM: relay output to external alarm devices. RS-485: connect a PTZ device, such as a speed dome camera.
13	Line In	Intercom and microphone connection interface.

TIP For reliable power delivery and camera detection, connect **only one IP camera per PoE port** on the LAN interface.

1.2 Before You Begin

Before installation, review the following key terms, default credentials, and network settings.

- **Terminology:** Throughout this manual, the terms "IP camera" and "network camera" are used interchangeably. A connected camera is referred to as a "channel."
- **Network settings (DHCP and default IP):** By default, the NVR is configured to obtain an IP address automatically from a DHCP server. If no DHCP server is active on the network, the NVR falls back to the static IP address 192.168.1.100.
- **ONVIF compatibility:** To simplify integration with third-party systems, ONVIF is enabled by default. The default ONVIF port is synchronized with the web port.
- **Port configuration:** The default web port is 80, the RTSP port is 554, and the HTTPS port is 443.
- **Initial login:** The default user name is **admin** (case-sensitive, all lowercase).

CAUTION There is no default password. On first login you must create a strong password by following the on-screen prompts. Store this password securely, as it cannot be recovered without resetting the device. See Section 4.2 for details.

1.3 Connection Diagram

The diagram below shows a typical NVR installation, including the connection of a speaker to the AUDIO output port, IP cameras to the LAN/PoE ports, and a monitor to the HDMI or VGA output.

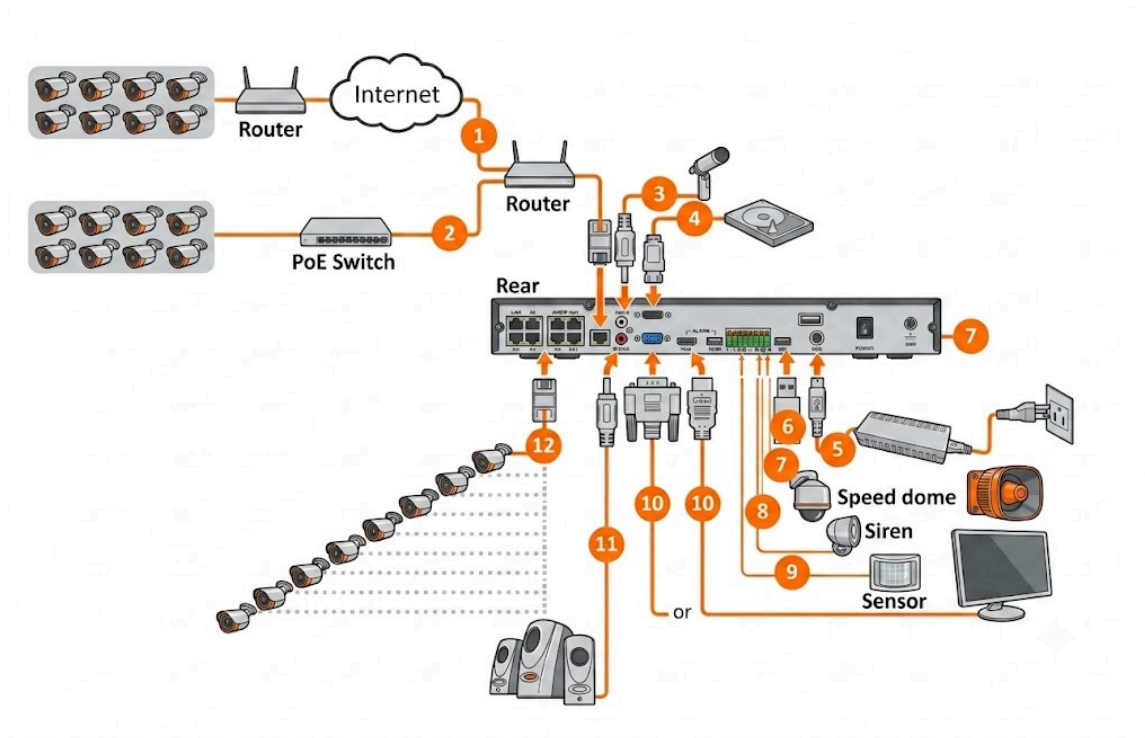


Figure 1-1. Typical system connection diagram

NOTE The diagram above is provided for reference only. The actual connections may differ depending on the NVR model you purchased.

Chapter 2 First Boot & Startup Wizard

The first time the OCTAVUE NVR is powered on, it guides you through a short series of setup screens: creating the administrator password, defining how that password can be recovered, logging in, and then completing the Startup Wizard to configure the recorder's core functions.

2.1 Initial Password Setup

When the recorder is started for the first time, you must set your own administrator password before the system can be used. This protects your privacy and prevents unauthorized access. Record the user name and password and store them in a secure location.

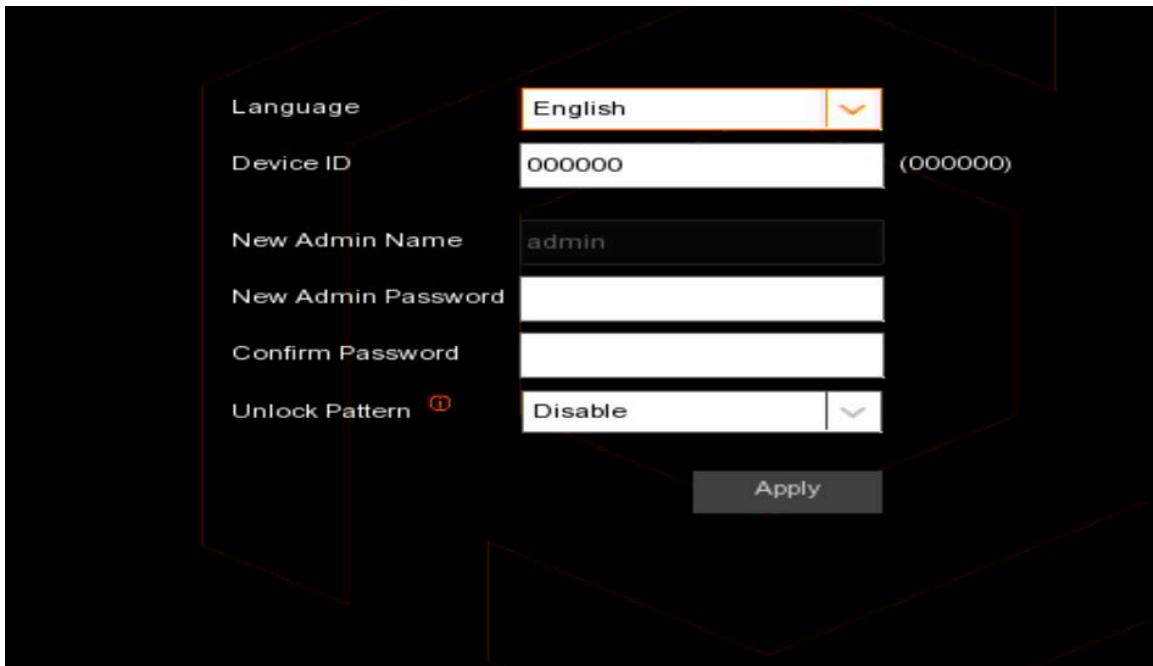


Figure 2-1. Initial password and language setup

Configure the following fields on this screen:

- **Language:** select an available on-screen display (OSD) language.
- **Device ID:** enter the device ID shown in parentheses. The default ID is 000000. If the recorder is not operated with a remote control, the default value can be left unchanged.
- **New Admin Password:** set the administrator password. The password must be 8 to 16 characters long and must include at least two of the following character types: uppercase letters, lowercase letters, numbers, or special characters.
- **Confirm Password:** re-enter the administrator password to confirm it.
- **Unlock Pattern:** optionally enable a pattern for quick access to the system. Select **Enable**, draw the pattern, and confirm it twice to complete setup of the pattern password.

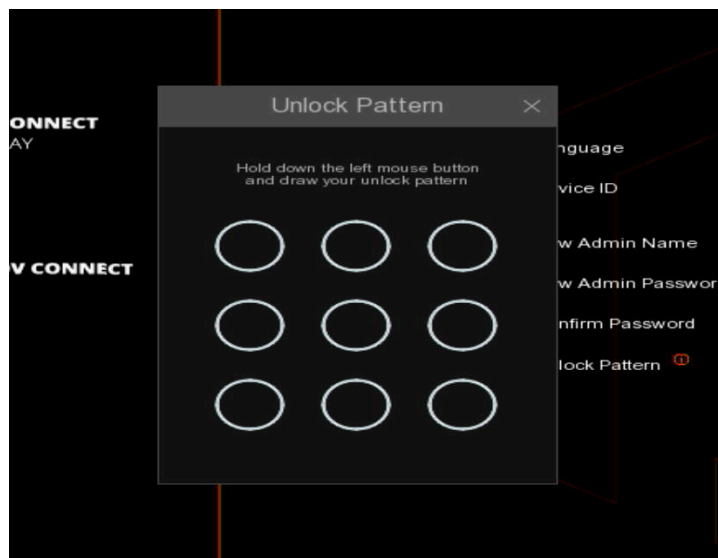


Figure 2-2. Camera activation password configuration

Camera Activation Password is used to activate connected cameras that have not yet been activated. When **Same as recorder's password** is not selected, you can define a separate activation password for the cameras. When it is selected, the recorder's login password is automatically applied as the camera activation password.

Click **Apply** to continue to the password reset settings and then to the login interface. Enter the device login password and click **Login** to enter the NVR system.

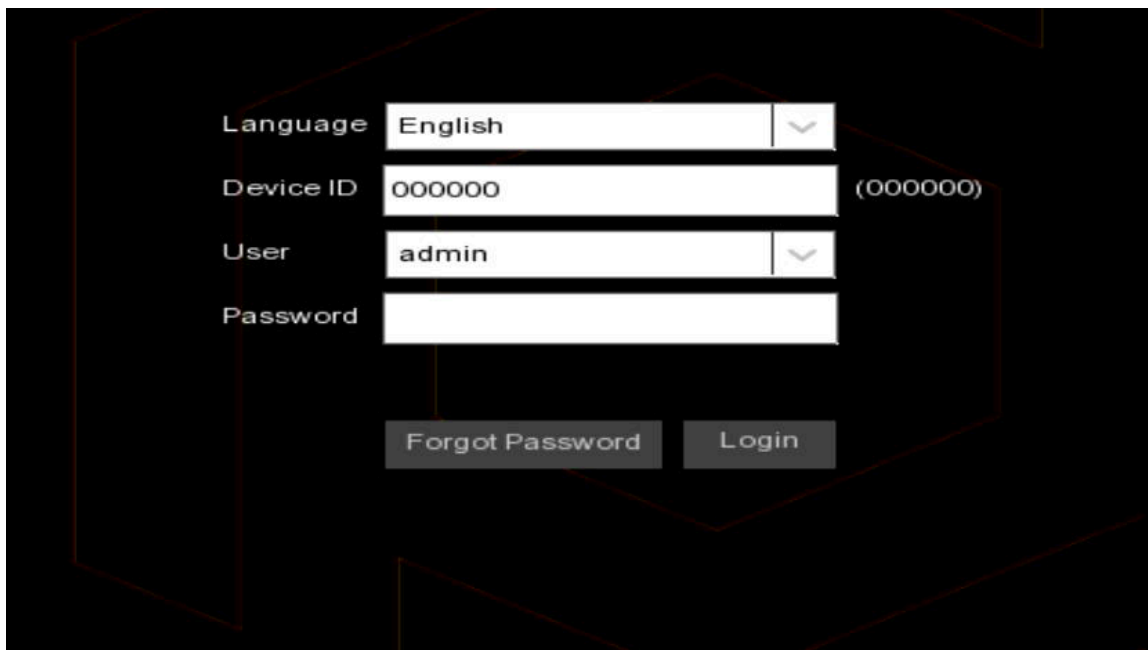
The image shows a login interface with a dark background and a red hexagonal pattern. It contains four input fields: 'Language' with a dropdown menu showing 'English', 'Device ID' with the text '000000' and '(000000)' to its right, 'User' with a dropdown menu showing 'admin', and 'Password' which is empty. Below these fields are two buttons: 'Forgot Password' and 'Login'.

Figure 2-3. Pattern unlock interface

When the system is locked, click **Pattern** to open the pattern unlock interface and unlock the device.

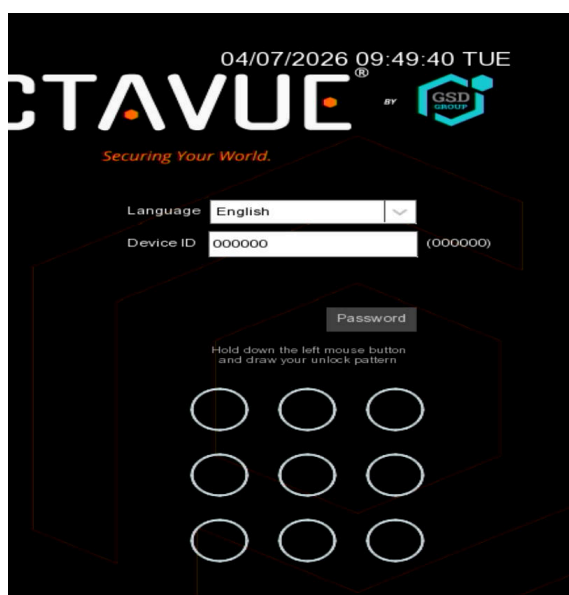
The image shows a lock screen with a dark background and a red hexagonal pattern. At the top, it displays the date and time '04/07/2026 09:49:40 TUE' and the logo 'CTAVUE® BY GSD GROUP'. Below the logo is the tagline 'Securing Your World.'. There are two input fields: 'Language' with a dropdown menu showing 'English' and 'Device ID' with the text '000000' and '(000000)' to its right. Below these fields is a 'Password' button. Under the button, it says 'Hold down the left mouse button and draw your unlock pattern'. At the bottom, there is a 3x3 grid of circles for drawing a pattern.

Figure 2-4. Forgot Password option on the lock screen

When the system is locked, if you have forgotten the password, click **Forgot Password** to reset it.

WARNING Entering an incorrect password five consecutive times locks the system interface for 3 minutes.

After the first login, the password reset settings page is displayed. Enable the reset method or methods you want and save the configuration. If you click **Cancel** without selecting any reset method, the password reset function is not enabled.

Password Recovery Settings

☒ **Security Questions**

Security Question 1: What is your father's middle name? ▼
 Answer: 1

Security Question 2: What is your mother's maiden name? ▼
 Answer: 1

Security Question 3: What's your head teacher's nickname in senior high ▼
 Answer: 1

☐ **Certificate of authorization** ⓘ Export

OK Cancel

Figure 2-5. Password reset methods

Three password reset methods are available:

- **Security Question Configuration:** allows the administrator password to be changed by answering security questions. After enabling it, select three questions from a list of 15 common questions and set an answer for each. Each answer may be up to 64 characters long.
- **Certificate of Authorization:** allows the administrator password to be changed using a key. After enabling it, click **Export** to download the key file and certificate.txt to a USB flash drive.
- **Super Code:** allows the administrator password to be changed using a super code. If this recovery method is enabled, resetting a forgotten password requires the recorder's MAC address and the current system date.

TIP Enable at least one recovery method and keep the exported key file or security-question answers in a safe place. Without a recovery method, a forgotten administrator password cannot be reset without assistance.

2.2 System Login

Once the password and password reset settings are complete, use the newly set password to log in to the recorder. If Unlock Pattern is enabled, draw the pattern you defined to quickly unlock the device.

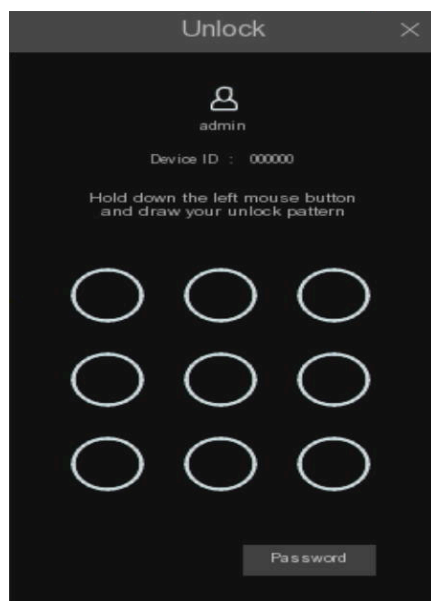


Figure 2-6. Pattern and password login interface

You can also click **Password** to switch to the password input interface. After entering the password, click **Unlock** to access the device.

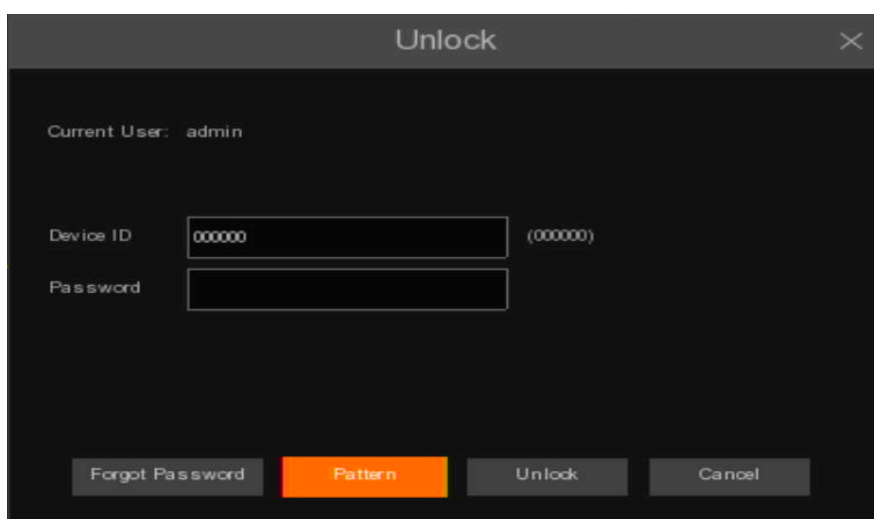


Figure 2-7. Password login interface

NOTE The system interface is locked for 3 minutes after five consecutive login attempts with an incorrect password.

2.3 Startup Wizard

The first time the device is used, the system opens the Startup Wizard, which lets you quickly configure the recorder's basic functions.

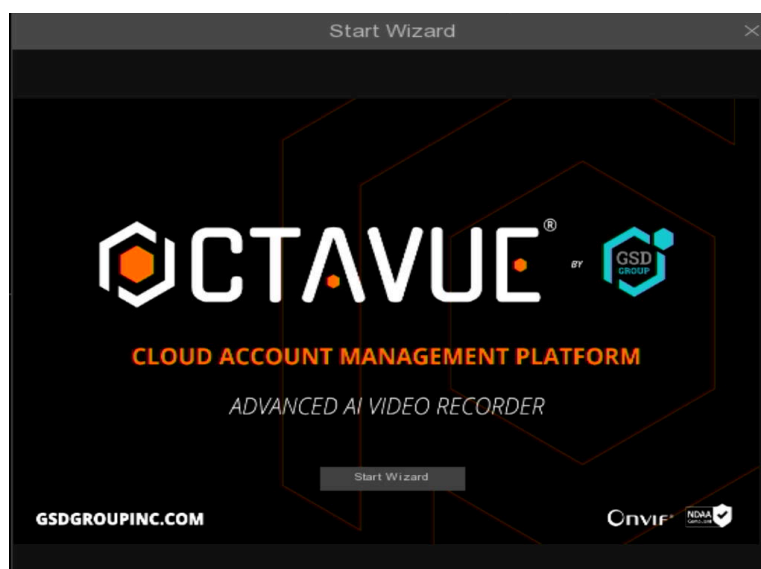


Figure 2-8. Startup Wizard welcome screen

2.3.1 Network Configuration

Figure 2-9. Network configuration

	Service	Protocol	Internal Port	External Port	UPnP Status	Mapping Strategy	UPnP
1	Http	TCP	00080	00080	Inactive	Auto	☐
2	RTSP	TCP	00554	00554	Inactive	Auto	☐
3	Https	TCP	00443	00443	Inactive	Auto	☐

Figure 2-10. Network parameters and port settings

If the network to which the device is connected has a DHCP server, select the **DHCP** check box and the server automatically assigns all network parameters to the device. Otherwise, set the following parameters manually:

- **IP Address:** the IPv4 address that identifies the NVR on the network. It consists of four groups of numbers between 0 and 255, separated by periods (for example, 192.168.001.100).

- **Subnet Mask:** defines the range of IPv4 addresses that can be used on the network. It also consists of four groups of numbers separated by periods (for example, 255.255.000.000).
- **Gateway:** the IPv4 gateway address of the network in which the device is located. The default is 192.168.001.001.
- **IPv6 Address:** the IPv6 address that identifies the NVR on the network. It consists of eight groups of numbers between 0 and FFFF, separated by colons (for example, ABCD:EF01:2345:6789:ABCD:EF01:2345:6789).
- **IPv6 Gateway:** the IPv6 gateway address of the network in which the device is located.
- **DNS 1 / DNS 2:** DNS 1 is the primary DNS server and DNS 2 is the standby DNS server. In most cases, entering the DNS 1 address is sufficient.

2.3.1.1 Ports

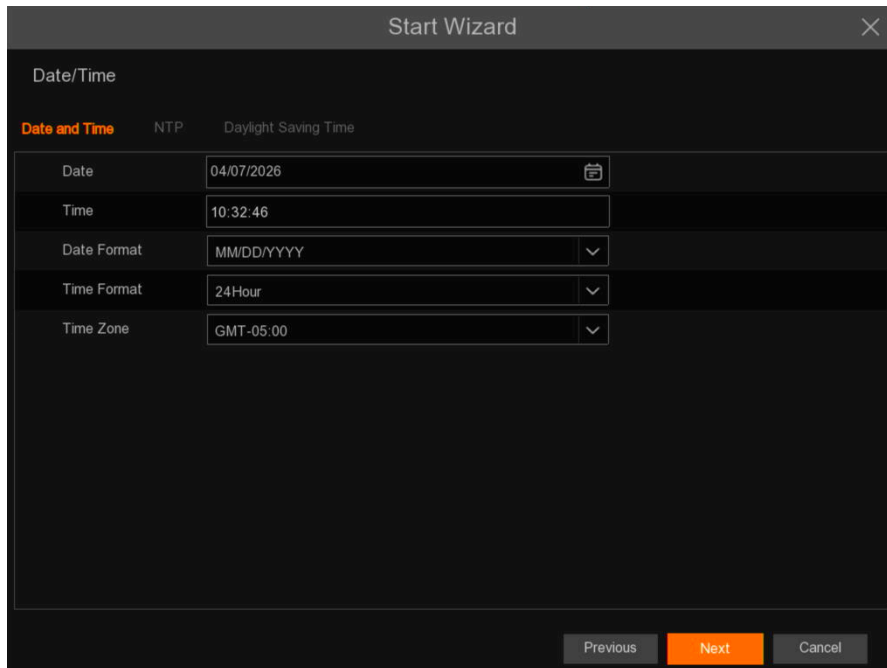
- **Web Port:** the port used by remote clients (such as the web client) to log in to the NVR. If the default port 80 is already used by another application, change it.
- **RTSP Port:** the port through which the NVR transfers live streams to other devices, such as a streaming media player.
- **HTTPS Port:** the web browsing port used primarily for HTTPS services. It provides encrypted transmission over a secure connection.

NOTE The Web port, RTSP port, and HTTPS port are integrated and share a single port. The default is 80.

- **UPnP (Universal Plug and Play):** enables NAT traversal rules for automatic port mapping, allowing external computers to access devices on the internal network and improving network efficiency. UPnP requires router support. Before enabling UPnP, configure the router and set the internal IP address, subnet mask, and gateway in the basic network configuration to match the router. If the router does not support UPnP, complete port forwarding manually on the router.
- **Mapping Strategy:** select **Manual** to edit the external ports (the ports on the router). Select **Auto** to randomly map an external port that differs from the internal port.
- **PPPoE:** a protocol that lets the NVR connect to the network directly through a DSL modem. Select the **Enable PPPoE** check box, then enter the PPPoE user name and password provided by your ISP.
- **Enable PPPoE:** enables or disables PPPoE. When enabled, the NVR restarts to activate the PPPoE settings.
- **PPPoE Network Card Select:** selects the LAN port used for the dial-up connection. This option is not displayed in Single Address mode.
- **User:** the PPPoE user name.
- **Password:** the PPPoE password.

2.3.2 Date / Time

This menu configures the date, time, date format, time format, time zone, NTP, and Daylight Saving Time parameters.



The 'Start Wizard' window shows the 'Date/Time' configuration page. It has three tabs: 'Date and Time' (selected), 'NTP', and 'Daylight Saving Time'. Below the tabs are five rows of configuration options:

Date	04/07/2026	
Time	10:32:46	
Date Format	MM/DD/YYYY	▼
Time Format	24Hour	▼
Time Zone	GMT-05:00	▼

At the bottom right are three buttons: 'Previous' (disabled), 'Next' (active), and 'Cancel' (disabled).

Figure 2-11. System date selection

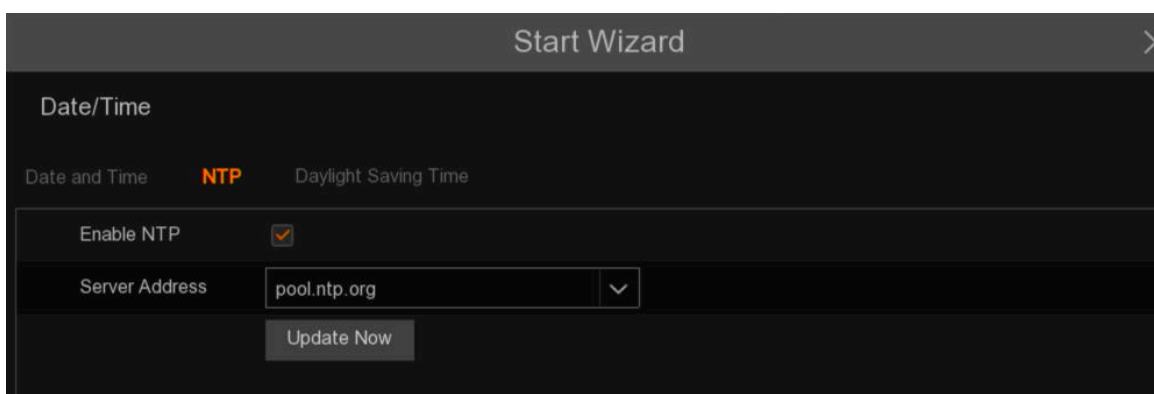


Figure 2-12. System time selection

- **Date:** click the calendar icon to set the current system date.
- **Time:** click to set the current system time.
- **Date Format:** select the preferred date display format from the drop-down menu.
- **Time Format:** select the preferred 24-hour or 12-hour time display format from the drop-down menu.
- **Time Zone:** set the correct time zone for your region.

2.3.2.1 NTP

When NTP is enabled, the device automatically synchronizes its date and time with the selected time server. To ensure correct operation, the device must have working network access.



The 'Start Wizard' window shows the 'NTP' configuration page. It has three tabs: 'Date and Time', 'NTP' (selected), and 'Daylight Saving Time'. Below the tabs are three rows of configuration options:

Enable NTP	☒
Server Address	pool.ntp.org ▼
Update Now	

Figure 2-13. NTP synchronization settings

Select the **NTP** check box and choose the NTP server.

NOTE The default time zone is GMT. NTP is enabled by default, with the server address set to pool.ntp.org.

2.3.2.2 DST (Daylight Saving Time)

Start Wizard

Date/Time

Date and Time

NTP

Daylight Saving Time

Enable DST

☒

Time Offset

1Hour

DST Mode

Week

Start Time

Mar.

The 2nd

SUN

02:00:00

End Time

Nov.

The 1st

SUN

02:00:00

Figure 2-14. Daylight Saving Time settings

- **DST:** select to enable Daylight Saving Time if it is observed in your region.
- **Time Offset:** select the amount of time to offset for DST.
- **Time Mode:** choose to set Daylight Saving Time by weeks or by days.
- **Start Time / End Time:** set the start and end times for Daylight Saving Time.

2.3.3 IP Camera

Start Wizard

IP Camera

☐ Automatic Camera Addition

	No.	IP Address/Hostname	Port	MAC Ad
☐	1	192.168.2.4	80	F4-70-0C-
☐	2	192.168.2.20	80	F4-70-0C-
☐	3	192.168.2.21	80	F4-70-0C-
☐	4	192.168.2.24	80	F4-70-0C-
☐	5	192.168.2.25	80	F4-70-0C-
☐	6	192.168.2.26	80	F4-70-0C-
☐	7	192.168.2.27	80	F4-70-0C-
☐	8	192.168.2.28	80	F4-70-0C-
☐	9	192.168.2.29	80	F4-70-0C-
☐	10	192.168.2.30	80	F4-70-0C-
☐	11	192.168.2.39	80	F4-70-0C-
☐	12	192.168.2.42	80	F4-70-0C-

Search

	Channel	Operation	State	IP Address/Hostname	Subne
☐	CH1				
☐	CH2				
☐	CH3				
☐	CH4				

Delete Camera

Previous

Next

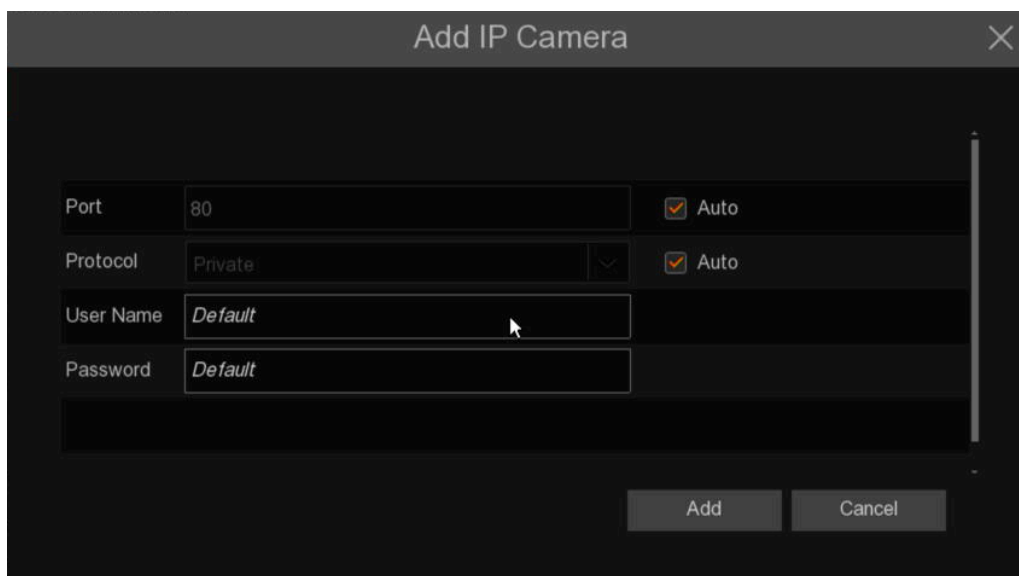
Cancel

Figure 2-15. Searching for IP cameras on the network



Figure 2-16. Entering camera credentials

Click **Search** to find IP cameras on the same network. Select the cameras you want to add, then click the **Add to NVR** icon and enter each camera's user name and password to add it.

A dark-themed dialog box titled "Add IP Camera" with a close button (X) in the top right corner. The dialog contains four input fields: "Port" with the value "80", "Protocol" with a dropdown menu showing "Private", "User Name" with the value "Default", and "Password" with the value "Default". To the right of the "Port" and "Protocol" fields are checkboxes, both of which are checked and labeled "Auto". At the bottom right of the dialog are two buttons: "Add" and "Cancel".

Port	80	☒ Auto
Protocol	Private	☒ Auto
User Name	Default	
Password	Default	

Figure 2-17. Camera authentication dialog

Enter the user name and password of the camera to add it.



Figure 2-18. Manual IP camera entry

Click the add icon to open the IP Camera Add menu, then manually enter the camera information or select a camera from the device list.

Add IP Camera
✕

No.	Edit	IP Address	Port	Activation State	Device Type	MAC Address	
1		192.168.2.20	80	Activated	GSD-NVRFNC4K-64NP-N	F4-70-0C-C0-5B-4B	
2		192.168.2.21	80	Activated	GSD-NVRFNC4K-256NP	F4-70-0C-C0-9A-C3	
3		192.168.2.24	80	Activated	FE360IP12MP	F4-70-0C-C0-E2-A6	V
4		192.168.2.25	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-54-61	V
5		192.168.2.26	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-55-2B	V
6		192.168.2.27	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-53-E2	V
7		192.168.2.28	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-54-A7	V
8		192.168.2.29	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-54-93	V
9		192.168.2.30	80	Activated	GSD-NVROV6K-32NP-N	F4-70-0C-C0-F3-A0	

IP Address/Hostname

Port

Protocol

Private

▼

Connection Mode

General

▼

User Name

Password

☐ Connect with default password

Channel Binding

CH1

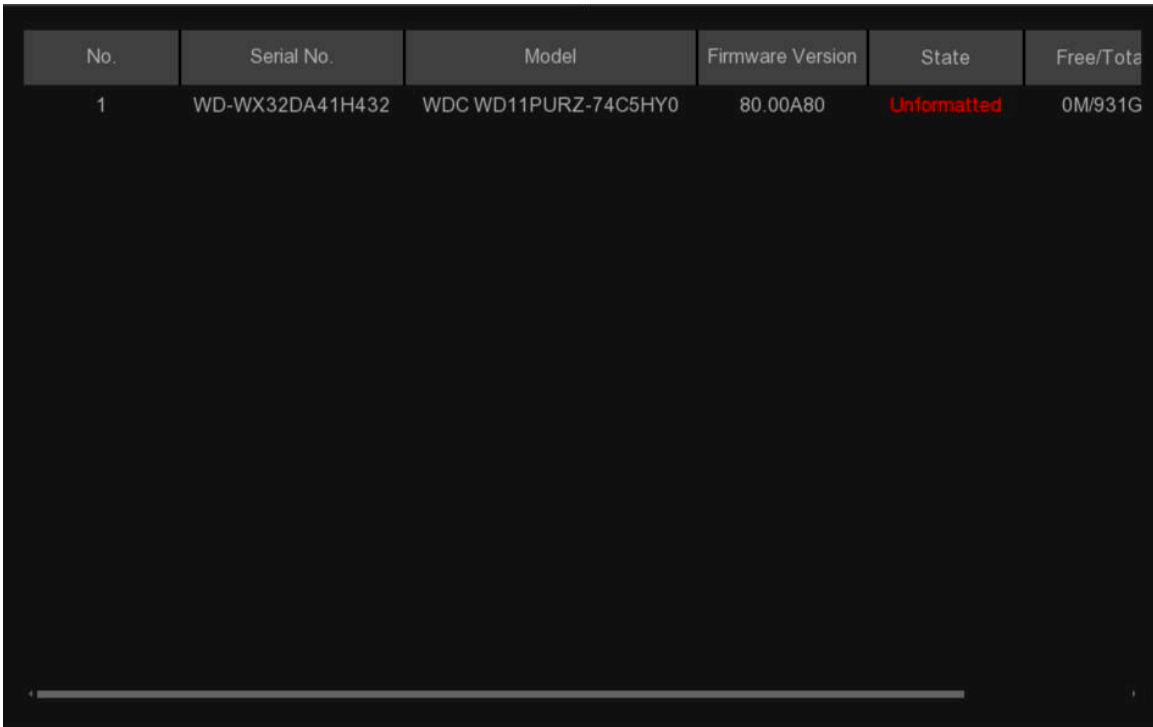
▼

Search
Default Password
Add
Cancel

Figure 2-19. IP camera parameters

- **IP Address / Domain:** the IP address or domain name of the IP camera.
- **Alias:** the name of the IP camera.
- **Port:** the port of the IP camera.
- **Protocol:** select the protocol to use for adding the camera.
- **User Name:** the user name of the IP camera.
- **Password:** the password of the IP camera.
- **Connect with default password:** when selected, the connection uses the previously set default password.
- **Channel Binding:** add the camera to a specified channel.
- **Camera Mode:** select the mode of the IP camera from the drop-down menu.

2.3.4 Disk



No.	Serial No.	Model	Firmware Version	State	Free/Total
1	WD-WX32DA41H432	WDC WD11PURZ-74C5HY0	80.00A80	Unformatted	0M/931G

Figure 2-20. Disk management and formatting

A drive must be formatted the first time it is installed in the NVR. Select the drive and click the **Format HDD** icon to format it.

- **Overwrite**: when the hard drive is full, this option overwrites the oldest recordings. For example, if you select the 7-day option, only the recordings from the past 7 days are retained. To prevent old recordings from being overwritten, select **Disable**.
- **Add NAS HDD**: adds a NAS disk.
- **Record On E-SATA**: if the NVR has an E-SATA port on the rear panel, enable this option to record video to an E-SATA HDD. This function is available only when an E-SATA HDD is already connected to the NVR.

CAUTION If overwrite is disabled, check the HDD status regularly to ensure the drive is not full, because recording stops when the HDD is full. Leaving the automatic overwrite option enabled is recommended to prevent the NVR from running out of storage.

2.3.5 Resolution

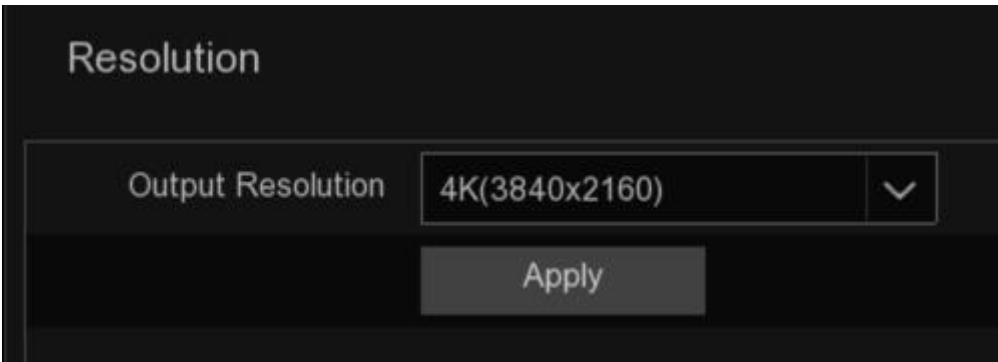


Figure 2-21. Output resolution selection

Choose an output resolution that matches your monitor. The NVR can automatically adjust the output resolution to the monitor's optimal resolution during startup. For a 4K HDMI monitor, you can select a maximum resolution of 4K (3840x2160). For a VGA monitor, do not select a resolution higher than 1080P (1920x1080).

2.3.6 P2P Information

This page displays the recorder's P2P connection information, including its unique P2P ID and a QR code. When the device is connected to the Internet, scan the QR code with the mobile app to add the recorder by its P2P ID and remotely monitor and manage it — no manual port forwarding or fixed public IP address is required.

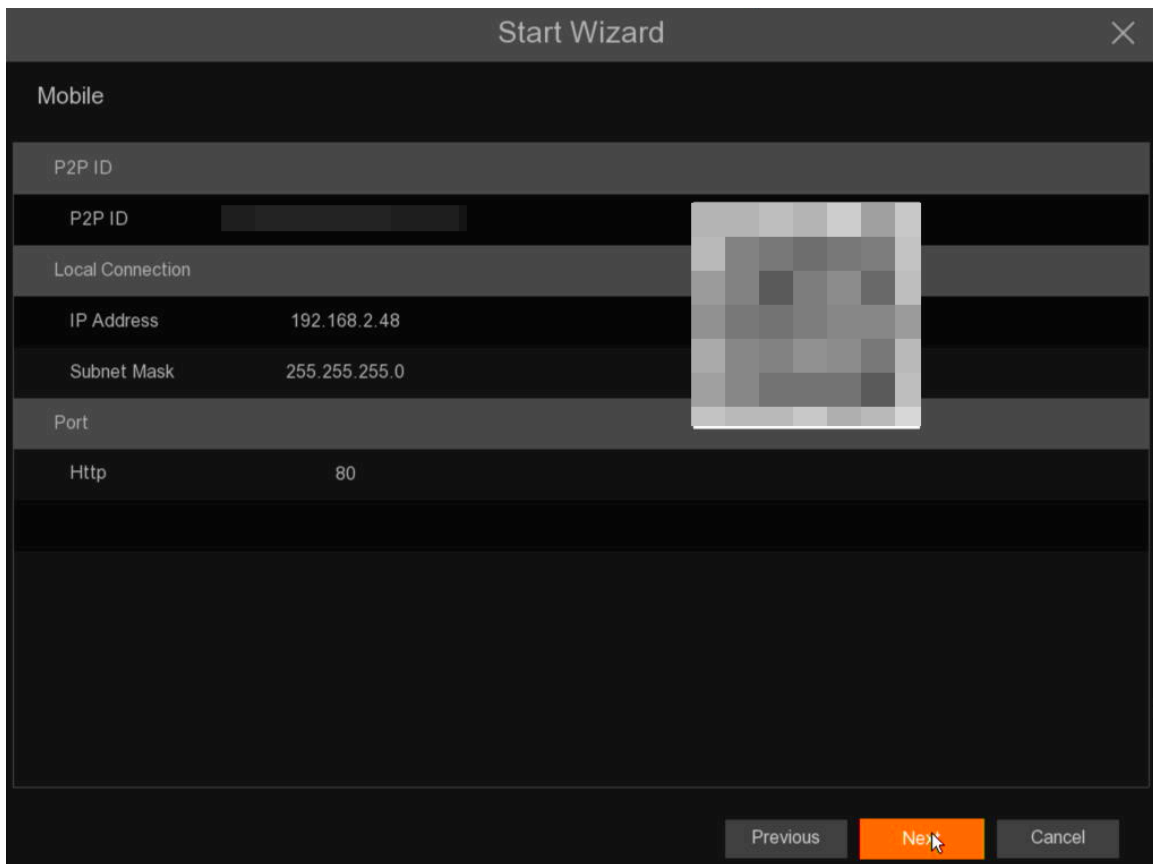


Figure 2-22. P2P ID and QR code for mobile access

2.3.7 Summary

This page displays a summary of the settings configured in the Startup Wizard and lets you complete the wizard. To prevent the wizard from appearing on the next system restart, select **Don't show the Start Wizard on next startup** and click **Finish** to save and exit.

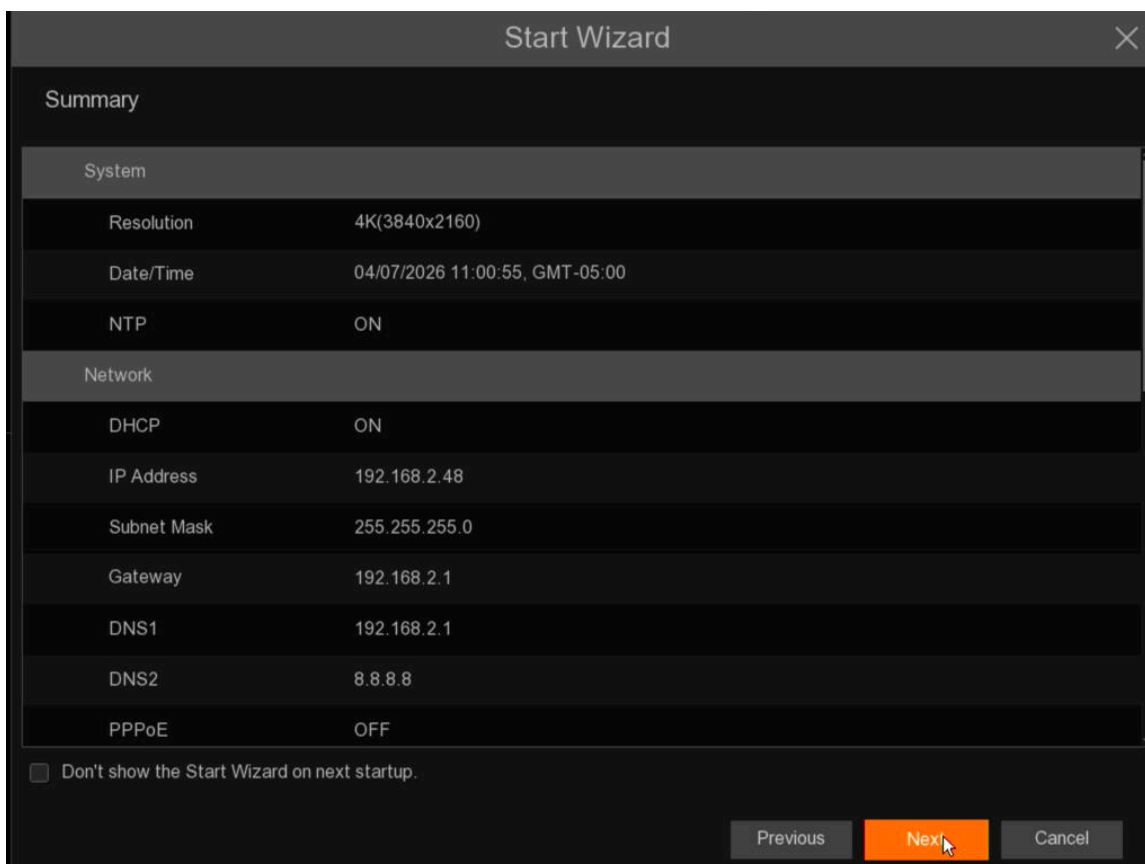


Figure 2-23. Startup Wizard summary

2.3.8 Cloud Service Configuration

The device supports 16-digit Cloud IDs and 18-digit Cloud IDs with region codes. Scan the QR code to add the device to the OvConnect mobile app.

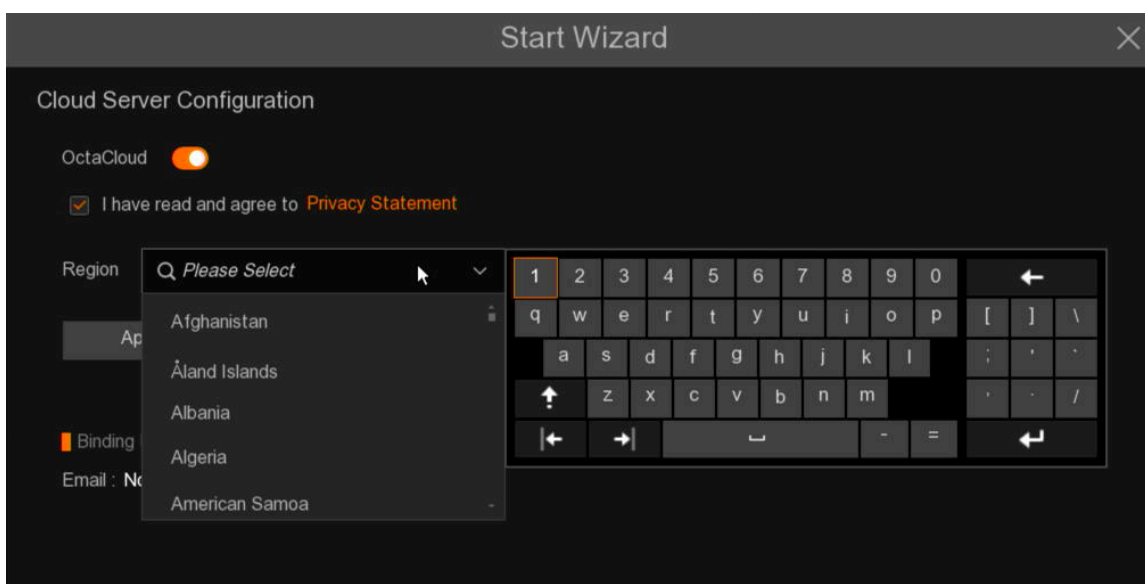


Figure 2-24. Cloud service configuration and QR code

For a device with a 16-digit ID, enable the cloud service and set the region to generate a dynamic QR code. Scan this QR code with the OvConnect app to add the device for management. Configure the following:

- **Cloud Server:** the cloud service switch.
- **Privacy Statement:** before enabling cloud services, read and agree to the privacy statement.

- **Region:** select the cloud service region. It must match the region registered with the OvConnect app. Region search is supported.
- **QR Code Display:** after the cloud service is enabled and the region is set, a dynamic QR code is generated automatically. The QR code is valid for 300 seconds and expires automatically afterward, requiring a new code. Scan the QR code with the OvConnect app to add the camera for management.

For a device with an 18-digit ID, scan the QR code shown under the Mobile section with the OvConnect app, enter the device password to connect, and add it to the app for management. Devices with a 16-digit Cloud ID also support this binding method, but the app client must be on the same local area network as the device.

- **Binding Information:** displays the device binding details.
- **Email:** the bound email address.
- **Unbind:** click to unbind the device from the OvConnect app account. After unbinding, the device appears offline and inaccessible in the app.

NOTE The cloud service function communicates with the cloud server, so the device must be connected to the Internet when this function is used.

Live View & Navigation

The real-time interface and on-screen controls

Chapter 3 Real-Time View Interface

The real-time view is the default working screen of the OCTAVUE NVR. It presents the live video of every connected channel and gives quick access to the recorder's most frequently used functions without opening the main menu.

3.1 Introduction to the Real-Time View Interface

After the recorder starts and a user logs in, the live view is displayed automatically. The screen is divided into a video area, a set of on-screen status indicators, and an operating toolbar. The layout of these regions is illustrated below.

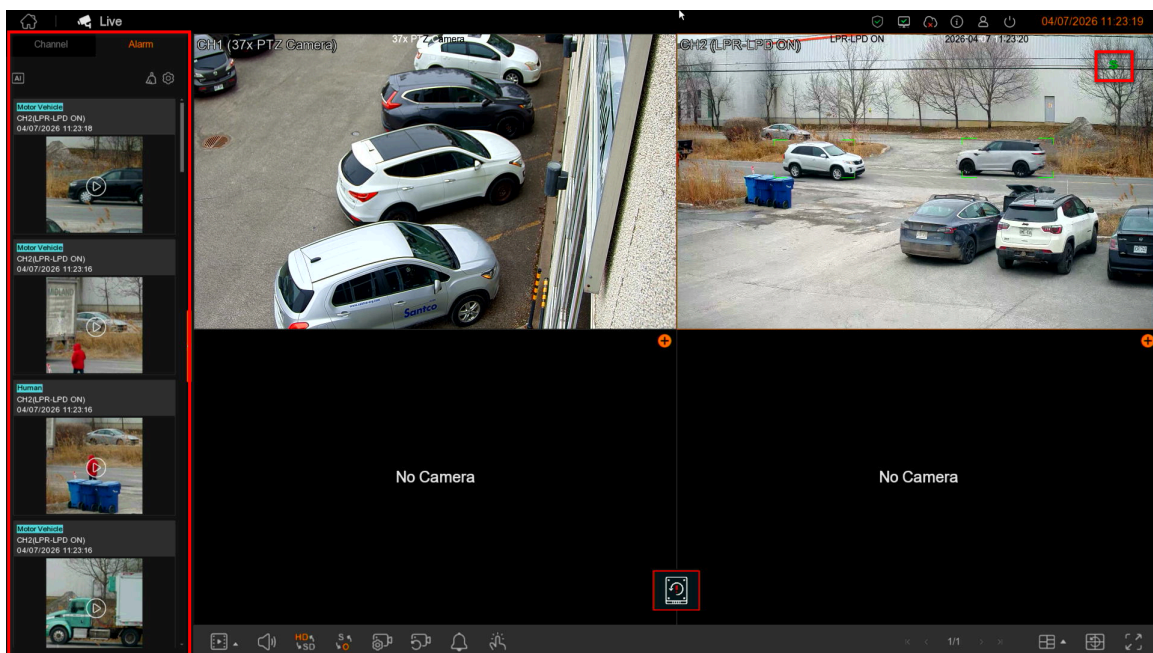


Figure 3-1. Overview of the real-time view interface.

The following regions are identified on the screen:

- **Status icon** — small icons overlaid on each channel window that report the current recording, event, and storage state of that channel.
- **System Date & Time** — the current system date and time, shown in a corner of the screen.
- **Channel name** — the title assigned to each channel, displayed within its video window.
- **Alarm Pop-up** — an on-screen notification that appears when a channel triggers an alarm event.
- **Task Bar** — the toolbar along the bottom of the screen that provides layout, playback, audio, and system controls.
- **Camera Quick Toolbar** — a floating shortcut bar shown when a connected channel is selected.

3.1.1 Channel Status Icons

Each channel window can display one or more status icons that summarize its current condition. The following indicators may appear:

-  Recording: the channel is currently being recorded.
-  Motion detection: motion has been detected within the channel's field of view.
-  Alarm event: an alarm or intelligent detection event has been triggered on the channel.
-  Video loss: the channel has lost its video signal.
-  HDD error: a fault has been detected on the installed hard disk.
-  No HDD: no hard disk is detected in the recorder.
-  HDD full: the hard disk is full (shown when overwrite is disabled).

3.1.2 On-Screen Prompt Messages

In addition to the status icons, a channel window may display a text prompt in place of live video when it cannot be brought online. The messages and their meanings are listed below.

Message	Meaning
Off-line	The analog camera is disconnected.
No Camera	No camera has been added to this channel.
Decoding Failed	The NVR does not support this IP camera's compression standard. Change the camera to the H.264 compression standard.
Insufficient Resource	The decoding resources required to preview the IP channels exceed the recorder's decoding capacity. When a channel uses MJPEG encoding, only one IP channel can be previewed; the remaining IP channels report insufficient resources.
Insufficient Bandwidth	The available bandwidth is insufficient, so the channel cannot be brought online.
Failed to connect to camera	A connection with the IP camera could not be established.
Incorrect user name or password	The user name or password for the IP camera is incorrect. Enter the correct credentials.
Privacy Mode	The IP camera has privacy mode enabled.

When a channel has no camera assigned, a shortcut is provided directly in the empty window. Click **Add Camera** to open the Quick Add menu and add an IP camera.



Figure 3-2. Click to open the Quick Add menu and add an IP camera to the channel.

For a channel that already has a camera, the channel parameters can be adjusted in place.



Figure 3-3. Click to edit the parameters of the current channel.

3.2 Camera Quick Toolbar

During live viewing, click a connected channel with the left mouse button to display the camera quick toolbar for that channel. The toolbar provides one-click access to the shortcuts described below.



Figure 3-4. The camera quick toolbar shown on a selected channel.

NOTE The set of shortcut buttons that appears may vary depending on the camera model and the features it supports.

-  Instant playback: replays the most recent footage of the selected channel.
-  Manual recording: starts or stops manual recording for the channel.
-  Snapshot: captures a still image from the live stream.
-  PTZ control: opens the pan, tilt, and zoom control panel (PTZ cameras only).
-  Digital zoom: magnifies a selected region of the image.
-  Image settings: adjusts brightness, contrast, saturation, and hue.
-  Stream switch: toggles the channel preview between the main stream and the sub stream.
-  Two-way audio: opens a two-way talk session with the camera.
-  Stream information: displays the real-time bit rate and stream parameters.
-  Smart detection: enables or displays intelligent AI detection overlays.
-  Face detection: displays faces detected on the channel.
-  Fisheye dewarping: selects a dewarping mode for fisheye cameras.
-  Focus: adjusts the lens focus on cameras with a motorized lens.
-  Preset: calls a configured PTZ preset position.
-  White light: turns the camera's white light on or off.
-  Siren: triggers the camera's built-in audible alarm.
-  Add camera: opens the Quick Add menu to add an IP camera to the channel.
-  Edit channel: opens the parameter editor for the current channel.
-  Full screen: expands the selected channel to fill the screen.
-  Close: hides the camera quick toolbar.

3.3 Taskbar

The taskbar runs along the bottom of the live-view screen and gathers the recorder's global preview controls, network status, and system shortcuts.

3.3.1 Preview Layout

Click the layout button to select a different screen layout for previewing channels.



Figure 3-5. The layout button on the taskbar. Click it to choose a different preview layout.



Figure 3-6. The layout menu, listing the preview layouts available on the recorder.



Figure 3-7. Common Layout: the standard split-screen arrangements provided by the system (2-, 4-, 6-, 8-window, and so on).

3.3.2 Custom View Settings

Click **Custom View Settings** to open the configuration page where preview layouts can be customized.

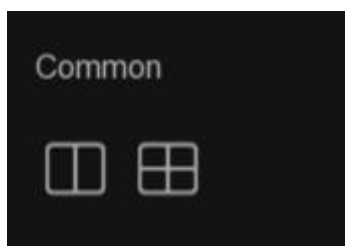


Figure 3-8. Custom View Settings: click to open the page for customizing preview views.



Figure 3-9. The custom view configuration page.

On the setup page, the following functions are available.

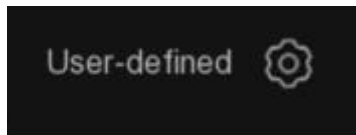


Figure 3-10. The custom view setup page and its editing controls.

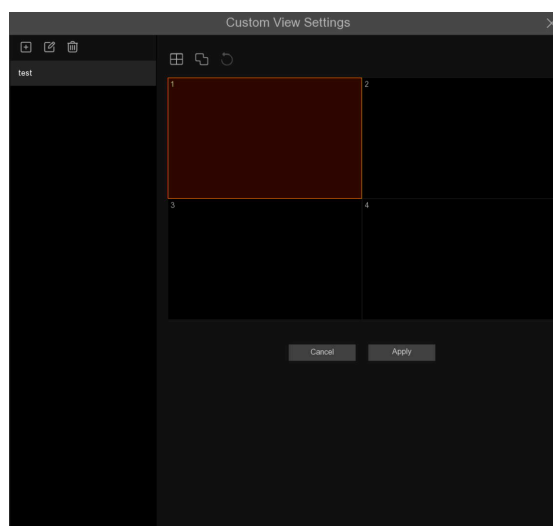


Figure 3-11. Detail of the custom-layout editing controls.

1. Add a custom layout: click to create a new custom layout, enter a name, and click **Apply**. The custom layout is then added.



Figure 3-12. Add a new custom layout.

1. Edit the custom layout name: click to rename the selected custom layout.



Figure 3-13. Edit the custom layout name.

1. Delete the custom layout.



Figure 3-14. Delete the selected custom layout.

1. Select the split-screen pattern to use as the basis for the custom layout.



Figure 3-15. Select a regular split-screen pattern for the custom layout.

1. Merge: drag the mouse across adjacent small windows and click to combine them into a single large window.



Figure 3-16. Merge the selected windows into one large window.

1. Cancel: after windows have been merged, click to undo the merge and restore the original small windows.



Figure 3-17. Cancel a merge and restore the original windows.

3.3.3 Preview and Playback Controls

The remaining taskbar controls manage playback, audio, stream, and display behavior across all channels.



Figure 3-18. Auto Cycle: click to preview the channels in sequence.



Figure 3-19. Quick playback: replays the video of all channels from the start of the current day. Click the lower-right triangle to start from the last 5s, 10s, 30s, 1 Min, or 5 Min.



Figure 3-20. Click to adjust the volume.



Figure 3-21. Click to switch all IP channels between the main stream and the sub stream for preview.



Figure 3-22. Click to switch between the original-scale display and the stretched display.



Figure 3-23. Click to switch between balanced and smooth preview modes.

NOTE Preview mode changes the preview video quality only, through the bit rate and frame rate. It does not affect the quality of the recorded video.

3.3.4 Network Status

An indicator on the taskbar reports the current network connection state.



Figure 3-24. No network connection is configured.



Figure 3-25. The network is disconnected.



Figure 3-26. The network connection is established successfully.

3.3.5 Alarm, Recording, and System Controls



Figure 3-27. Enable or disable the white light and alarms for all channels.



Figure 3-28. Start or stop manual recording and manual alarms.



Figure 3-29. View system information, channel information, recording information, and network status.



Figure 3-30. One-click restore of the channel positions in a multi-window preview.

3.3.6 Cloud and Arming Status

The taskbar also indicates whether cloud services are enabled and whether the recorder is armed.



Figure 3-31. Cloud services are not enabled on the NVR.



Figure 3-32. Cloud services are enabled on the NVR.



Figure 3-33. The NVR is in the arming state.



Figure 3-34. The NVR is in the disarming state.



Figure 3-35. The combined-alarm message pop-up, displayed only after a combined alarm is triggered.



Figure 3-36. Click to switch the mouse between the main screen and the auxiliary screen (supported on some NVR models).

Chapter 4 System Menu & Session Control

4.1 System Menu

The system menu provides quick navigation between the principal working areas of the OCTAVUE NVR, along with the session controls used to lock, unlock, restart, and change the active operator.

From any system page, right-click to open the system menu. The menu lets you switch directly to the corresponding page of the recorder.

Figure 4-1. The system menu opened over the Live view

The available destinations are:

- **Live** — Preview the live video from the connected IP cameras and monitor the status of each channel.
- **Playback** — Review recorded video, including standard playback, slice playback, and playback of external files.
- **Search** — Locate recordings for playback, including event playback, picture playback, tag playback, and AI playback.
- **AI Scenario** — Access the AI scenario-based applications.
- **Configuration** — Open the configuration pages for every setting of the NVR system.

4.1.1 Locking and Unlocking the Screen

To protect system security, the NVR automatically locks the screen after a period of inactivity (one minute by default). While the interface is unlocked, click the taskbar to bring up the menu.



Figure 4-2. Screen lock control on the taskbar

Figure 4-3. Taskbar menu invoked in the unlocked state

Click the **Lock Screen** icon to lock the system immediately. When the system is locked, right-click to open the menu and display the unlock window, then enter your credentials to unlock the interface.



Figure 4-4. Unlock window displayed while the system is locked

TIP Adjust the automatic lock interval in the configuration pages to balance convenience against security for your deployment.

4.1.2 Shutdown and Reboot

Click the **Shutdown** button in the menu and select the action to perform. Click **Authenticate**; the system prompts for the administrator password before the requested action is carried out.

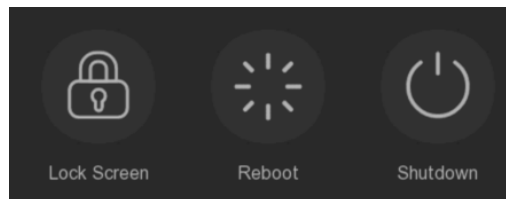


Figure 4-5. Shutdown menu with the authentication prompt

Select **Reboot System** and enter the administrator password. The recorder then restarts.

A dark gray dialog box with a black background. It contains two input fields: "User" with the text "admin" and "Password" which is empty. Below the fields are two buttons: "Authenticate" and "Cancel".

Figure 4-6. Reboot System confirmation

CAUTION Shutting down or rebooting the NVR interrupts all live viewing and recording. Confirm that no critical recording is in progress before you proceed.

4.1.3 Switching Users

Click the user entry in the taskbar to open the user switch menu. Select the user account you want to log in as, enter the corresponding password, and click **Switch User**. The system then switches to the selected user.



Figure 4-7. User switch menu

A dark-themed dialog box titled "Switch User". It contains three input fields: "Device ID" with the value "000000" and a suffix "(000000)", "User" with a dropdown menu showing "admin", and "Password" which is currently empty. At the bottom, there are two buttons: "Switch User" and "Cancel".

Figure 4-8. Entering the password for the selected user

Configuration

Channels, image, storage, alarms, events, network, and system settings

Chapter 5 Channels & Cameras

The configuration menu of the OCTAVUE NVR gathers the channel, recording, event, network, and system parameters in a single workspace. This chapter covers the channel-related pages: adding and managing IP cameras, configuring live preview, controlling PTZ (Pan/Tilt/Zoom) cameras, and defining privacy masks.

To open the configuration workspace, click **Menu** → **Configuration**.



Figure 5-1. Configuration workspace opened from the system menu

5.1 Channel

The **Channel** section lets you add and manage IP cameras, configure the real-time preview, adjust the image of each connected camera, define PTZ behavior, and set up motion detection.

5.1.1 IP Channel Management

5.1.1.1 IP Channels

The **IP Channels** page is where cameras are discovered on the local network and bound to recorder channels. Click **Add** to expand or collapse the device search window.

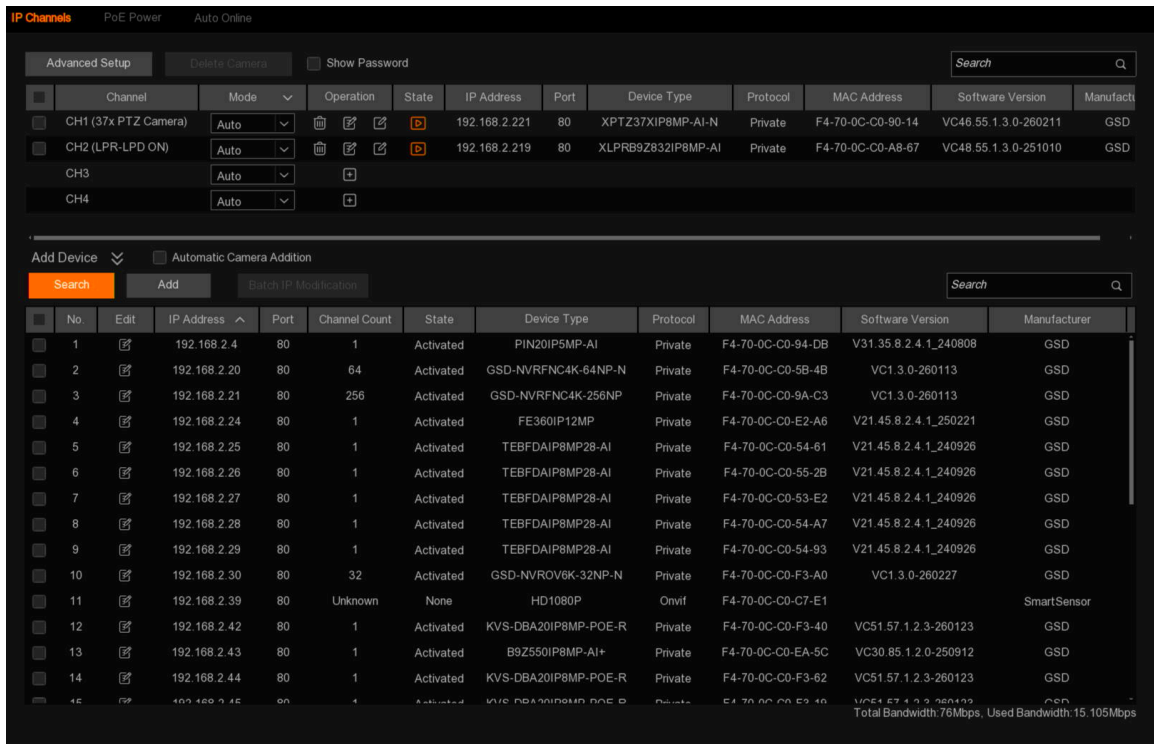


Figure 5-2. IP Channels page with the device search window

1. Click **Search** to scan for devices on the same LAN. The recorder lists every camera it discovers.
2. Select one or more cameras from the results, then click **Add** and enter the required information to complete the addition.
3. To reconfigure several cameras at once, select multiple devices and click **Batch IP Modification** to correct their addressing and modify the selected camera IPs in bulk.

Enable **Automatic Camera Addition** to have the recorder automatically add any camera on the LAN that has not yet been assigned to a channel.

Click **Advanced Setup** and enter the device password to open the advanced settings page, where the following operations are available.

Protocol	User Name	Password	
Private	admin	••••••••	☐ U
Onvif	admin	••••••••	☐
RTSP	admin	••••••~•	☐

Save Cancel

Figure 5-3. Advanced Setup page for IP channel management

- **Default Password** — Set the default password used to connect cameras through the Private, ONVIF, or RTSP protocol. The Private-protocol default password can also activate an unactivated camera. When **Use the Admin password as camera activation / connection password** is selected, the Private protocol activates and connects the camera using the recorder administrator password.
- **Modify Camera Password** — Change the password of an existing online camera.
- **Priority of PoE Channels** (supported on PoE-model recorders only) — Determines what happens when a camera is connected to a PoE port whose channel already has a manually added camera. See the priority options below.
- **Restore IP Channel Connection** — If online channels were removed by mistake, this option re-adds the original online cameras to all channels with a single action.
- **Export and Import Camera** — Export the added IP camera information as a backup for later reimport or for import into another recorder. The exported information does not include the connection passwords.

The PoE-channel priority behavior is as follows:

- **PoE channel is preferred** — If a camera was manually added to the channel, connecting a camera to the corresponding PoE port replaces the manually added camera with the PoE camera. If the option to remember your choice is left unchecked, this behavior applies once only.
- **Manual addition is preferred** — If a camera was manually added to the channel, connecting a camera to the corresponding PoE port does not replace the manually added camera. If the option to remember your choice is left unchecked, this behavior applies once only.
- If neither priority is enabled, connecting a camera to a PoE port whose channel already holds a manually added camera prompts you to confirm whether to replace the existing camera.

WARNING The **Restore IP Channel Connection** function does not take effect after the recorder has been reset through **Factory Defaults**.

To remove a camera, select the camera that has been added to the recorder and click **Delete**. To reveal a camera's stored connection password, select **Show Password** and enter the administrator password.

Click the **Search** icon to find online cameras on the LAN. Select the camera to add and enter the correct information to complete the addition.

Add IP Camera

No.	Edit	IP Address	Port	Activation State	Device Type	MAC Address	
1		192.168.2.4	80	Activated	PIN20IP5MP-AI	F4-70-0C-C0-94-DB	V
2		192.168.2.20	80	Activated	GSD-NVRFNC4K-64NP-N	F4-70-0C-C0-5B-4B	
3		192.168.2.21	80	Activated	GSD-NVRFNC4K-256NP	F4-70-0C-C0-9A-C3	
4		192.168.2.24	80	Activated	FE360IP12MP	F4-70-0C-C0-E2-A6	V
5		192.168.2.25	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-54-61	V
6		192.168.2.26	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-55-2B	V
7		192.168.2.27	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-53-E2	V
8		192.168.2.28	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-54-A7	V
9		192.168.2.29	80	Activated	TEBFDAIP8MP28-AI	F4-70-0C-C0-54-93	V

IP Address/Hostname

Port

80

Protocol

Private

Connection Mode

General

User Name

admin

Password

☐ Connect with default password

Channel Binding

CH3

Search

Default Password

Add

Cancel

Figure 5-4. Adding a camera through the search dialog

- **Protocol** — Select the camera protocol from the drop-down menu: Private, ONVIF, or RTSP.

Additional connection options define how the recorder reaches the camera.

Channel	CH2 (LPR-LPD ON)
IP Address/Hostname	192.168.2.219
Subnet Mask	255.255.255.000
Port	80
Protocol	Private
Connection Mode	General
User Name	admin
Password	••••••••
Mode	Auto

OK Cancel

Figure 5-5. Connection mode and stream address options

- **Connect Mode** — Select **General** to connect over the HTTP port, or **Security** to connect over the HTTPS port.
- **Mainstream URL** — Displayed when the RTSP protocol is selected. Enter the main-stream address used to connect to the IP camera.
- **Substream URL** — Displayed when the RTSP protocol is selected. Enter the sub-stream address used to connect to the IP camera.

NOTE If the camera does not support HTTPS, the recorder automatically switches to the HTTP port.

For PoE deployments, select the transmission mode that matches your cabling distance.

Figure 5-6. Selecting the PoE transmission mode

- **Mode** — Select **Auto** or **ePoE** from the drop-down menu. In **Auto** mode, a transmission bandwidth of 100Mbps supports a maximum distance of about 120 meters. In **ePoE** mode, the bandwidth is limited to 10Mbps to extend the distance to about 230 meters.
- **Camera Mode** — Select the camera mode: Auto, Normal, or Fisheye.

TIP To ensure transmission stability at extended distances, use Cat5E or Cat6 network cable.

5.1.1.2 PoE Power

The **PoE Power** page displays the power drawn by the IP cameras connected to the recorder through PoE, and lets you monitor the used and remaining PoE power in real time.



Figure 5-7. Real-time PoE power usage

- **Actual power usage** — The PoE power currently in use.
- **Remaining power usage** — The PoE power still available.

Use **Total Power** to set the total power budget. Click the associated button to open the prompt box, where the total power can be modified.



Figure 5-8. Setting the total PoE power budget

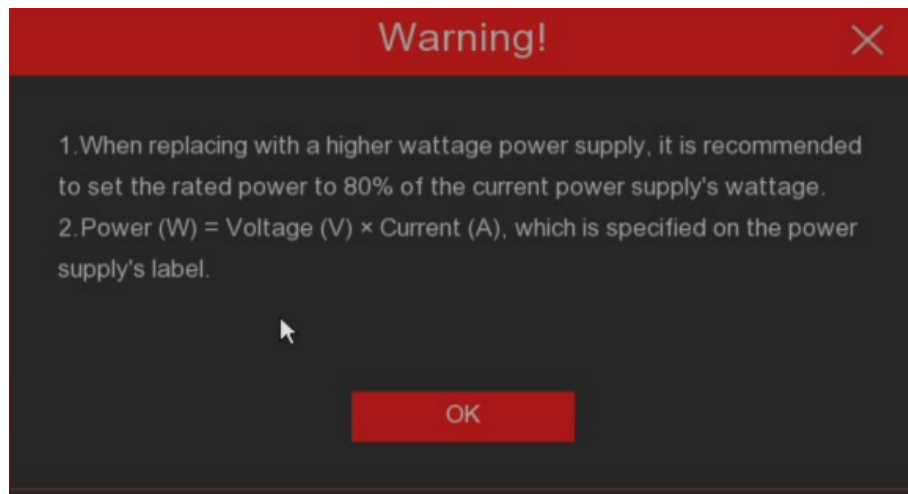


Figure 5-9. Total-power confirmation prompt

WARNING If a larger power supply is installed, set the remaining power to about 80% of the current supply so that the load stays within a reasonable range. Power is calculated as power (W) = voltage (V) × current (A); refer to the annotation on the power-supply label for the specific parameters.

NOTE A single PoE port can supply a maximum of 30W. If the connected device draws more power than the port can supply, the power will be insufficient and both the port and the camera will go offline.

5.1.1.3 PoE Channel Binding

This page controls whether channels are bound to cameras connected through PoE ports. When binding is enabled, a camera connected to a PoE port is automatically added to its channel. When binding is disabled, a camera connected to a PoE port is not added automatically; it can instead be added manually by entering its IP address or through the search function. PoE power delivery and network connectivity to the camera are unaffected in either case.

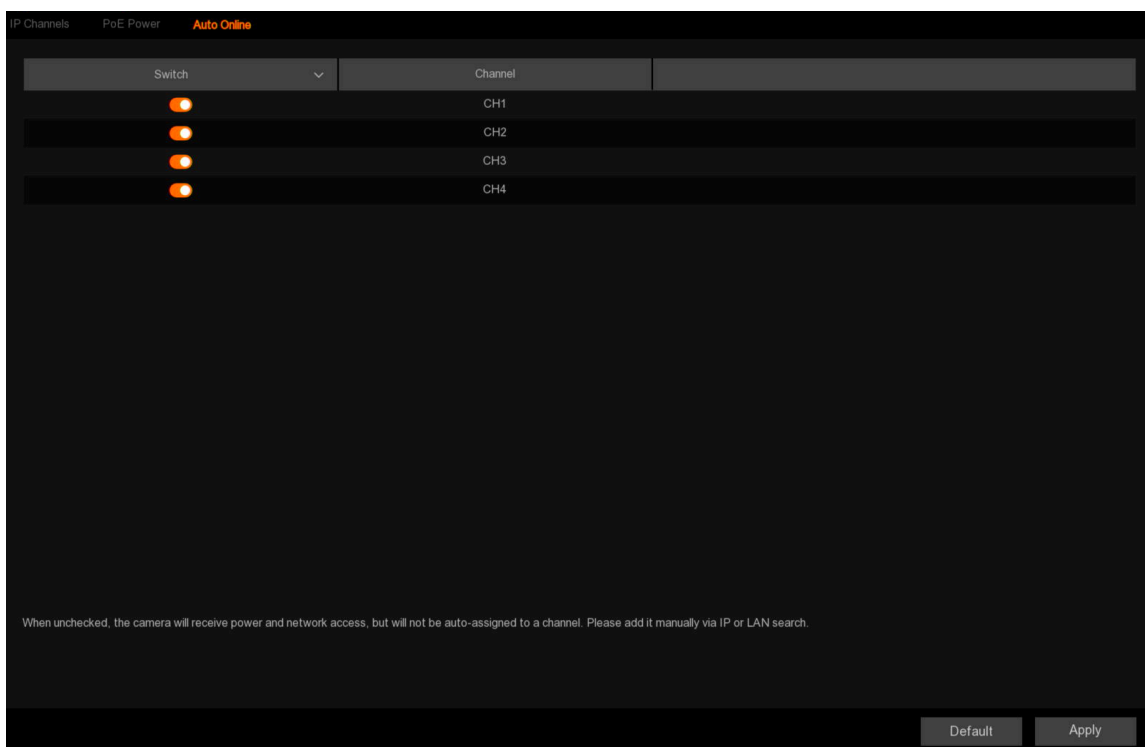


Figure 5-10. PoE channel binding configuration

5.1.2 Live Configuration

Configure the live preview parameters for each IP camera.

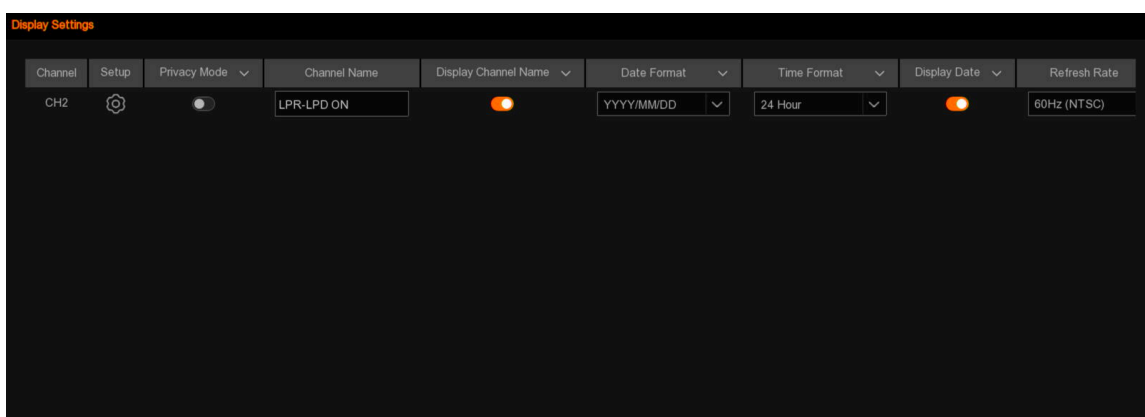


Figure 5-11. Live configuration page

- **Channel** — Displays the channel name.
- **Privacy Mode** — When privacy mode is enabled, no image is shown during preview or playback, and the settings page does not display a preview image.

Click the **Setup** icon to open the OSD settings page for the selected channel.



Figure 5-12. Setup icon for a channel

Figure 5-13. Channel OSD settings

- **Channel Name** — Set the name of the channel.
- **Date Format** — Set the date format shown in the IP camera OSD.
- **Time Format** — Set the time format shown in the IP camera OSD.
- **Refresh Rate** — Set the refresh rate of the IP camera.
- **Display Channel Name** — Show the channel name in the preview.
- **Display Date** — Show the camera time in the preview.

The page supports overlaying the date OSD, the time OSD, and, when the cross-counting function is enabled, the cross-counting statistics OSD on the image.

5.1.3 PTZ

The **PTZ** page configures the Pan/Tilt/Zoom settings for a High-Speed Dome camera.

Figure 5-14. PTZ configuration page

- **Channel** — The channel name.
- **Signal Type** — Select **Analog** if the PTZ camera is connected to the RS-485 port; otherwise select **Digital**.

- **Protocol** — Select the communication protocol between the PTZ camera and the recorder. If the camera supports the UTC (up-the-coax) function, select **COAX 1** or **COAX 2** to display the camera OSD menu or control the UTC PTZ function.
- **Baudrate** — The speed at which data is transmitted from the recorder to the PTZ camera. It must match the baud rate supported by the camera.
- **DataBit / StopBit** — Data between the recorder and the PTZ camera is sent in individual packets. The data bit sets the number of bits per packet (options: 8, 7, 6, 5); the stop bit signals the end of one packet and the start of the next (options: 1 or 2).
- **Parity** — Used for error checking. Refer to the PTZ camera documentation to configure this setting correctly.
- **Address** — Set the command address of the PTZ system. Each PTZ camera requires a unique address to function correctly.

The page also defines how the camera focuses and which status overlays appear in the preview.

- **Focus mode** — Choose one of three modes: **Auto** focuses automatically as the scene changes; **Semi-auto** (the default) focuses once after panning or zooming and does not refocus on scene changes; **Manual** focuses only when you use the focus buttons on the preview interface.
- **Zoom Status** — Shows the zoom level in the lower-left corner of the preview. You can choose whether it is displayed and for how long.
- **Pan & Tilt Status** — Shows the horizontal and vertical azimuth of the camera in the lower-left corner of the preview. You can choose whether it is displayed and for how long.
- **Preset Status** — Shows the preset-point number in the lower-left corner of the preview when a preset is called. You can choose whether it is displayed and for how long.
- **Min. Focus Distance** — When an object is closer to the lens than this distance, the lens does not focus on it and instead prioritizes objects farther away. For example, with a minimum focus distance of 6 meters, a baffle placed at 1.5 meters can block part of the field of view so that the camera focuses on the distant scene beyond 6 meters rather than the near view.

5.1.3.1 High-Speed Dome Control

Once the PTZ settings are configured, the PTZ functions can be used to control the High-Speed Dome camera.

Left-click a channel in the live preview to reveal the channel toolbar at the bottom of the window, then click the PTZ icon to open the PTZ control panel.



Figure 5-15. Opening the PTZ control panel from the channel toolbar

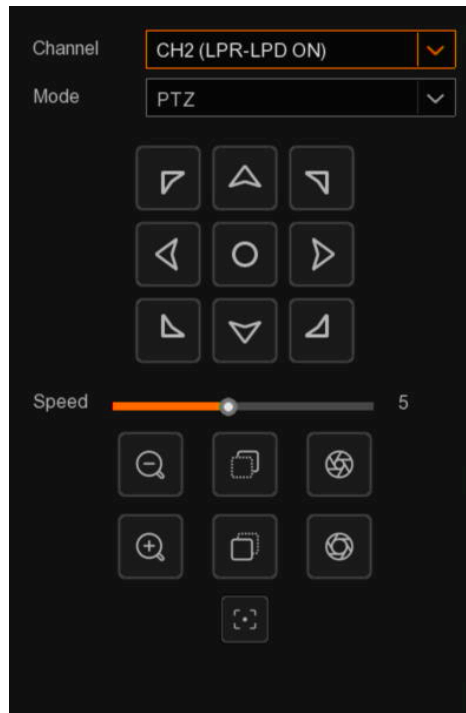


Figure 5-16. PTZ control panel

- **Channel** — Select the channel to control.
- **Mode** — Select the PTZ movement mode. Six modes are available: PTZ, Preset, Line Scan, Watch Mode, Tour, and Pattern Scan.
- **SPEED** — The PTZ speed slider is divided into gears 1–10. The higher the value, the faster the rotation.

Use the direction controls to steer the pan/tilt of the camera.



Figure 5-17. Eight-way direction control pad



Figure 5-18. Center control in the idle state



Figure 5-19. Center control during continuous rotation

- Click any of the eight directional arrows to move the pan/tilt slightly in the corresponding direction. Hold an arrow down for continuous rotation in that direction.
- Click the center button to start continuous horizontal rotation; the button changes to indicate the rotation is active. Click it again to stop.

The lens adjustment controls appear beside the direction pad. Each control is a pair of buttons that decrease or increase the corresponding lens parameter.

- **Zoom – / Zoom +** — Pull the lens in or out. Increasing the zoom enlarges the scene; decreasing it widens the field of view.
- **Focus – / Focus +** — Adjust the focal point manually to sharpen the subject at the required distance.
- **Aperture – / Aperture +** — Adjust the lens aperture (iris) to control the amount of light and the exposure of the image.

The panel also provides 3D positioning and one-touch operations.



Figure 5-20. 3D positioning control

Click the 3D positioning button to enable it; the icon turns blue. Click it again to stop. While 3D positioning is enabled you can:

- Left-click a point in the preview window to move that point to the center of the screen.
- Hold the left mouse button and drag to the right to draw a rectangle, then release; the camera moves the outlined area to the center and zooms in for a closer view.
- Hold the left mouse button and drag to the left to draw a rectangle, then release; the camera moves the outlined area to the center and zooms out for a wider view.



Figure 5-21. One-touch auto-focus button

Click the auto-focus button and the camera focuses automatically.



Figure 5-22. One-Click Reset button

Click **One-Click Reset** to clear all preset points and cruise paths on the camera.



Figure 5-23. One-Click Watch button

Click **One-Click Watch** to start a one-click watch. This function depends on the camera model; refer to the actual interface.

The remaining modes are selected from the **Mode** drop-down list and configured directly beneath the preview.

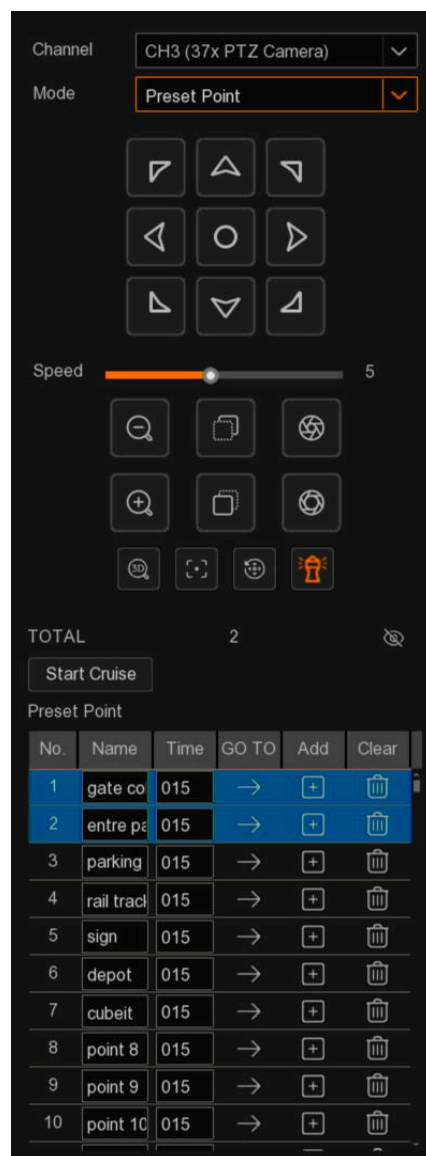


Figure 5-24. Preset mode controls

Preset mode saves camera positions for quick recall. Use the direction keys to move the dome to the position you want to save, then add a preset point; the preset appears below the preview. Configured presets are shown in a dark color and unconfigured presets in gray. Selecting a stored preset rotates the camera to that position by the shortest path. You can rename a preset, set its cruise dwell time, delete it, or click **Start Cruise** to begin cruising.

NOTE Up to 255 preset points are supported.

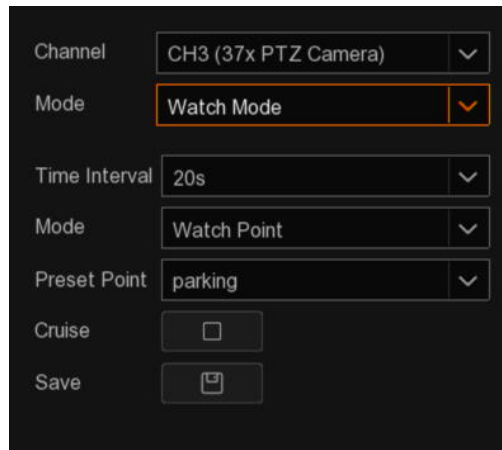


Figure 5-25. Watch Mode controls

Watch Mode causes the dome to perform a preset action automatically once no control signal has been received for the configured waiting time. Set the **Time Interval** (the wait between the last operation and the resumption of the watch action) and select the **Mode**: Default Cruise, Preset Points Cruise, Line Scan, Track Cruise, or Pattern Scan. Click to start the cruise.

NOTE Only one watch point can be defined.

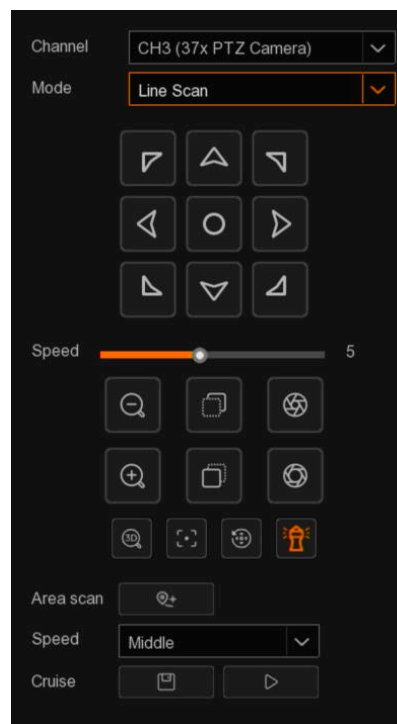


Figure 5-26. Line Scan controls

Line Scan makes the camera pan horizontally between position A and position B. Click to record the start location, move the PTZ, then click to record the stop location. Select the scan **Speed** — Low, Medium, or High — and start the scan; the device then cruises at a constant speed between the start and stop positions.

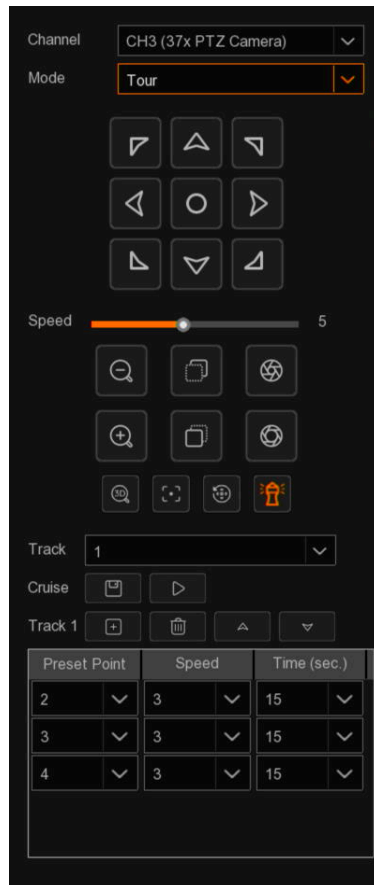


Figure 5-27. Tour Cruise controls

Tour Cruise lets you configure up to four automatic cruise tracks built from selected preset points. Configure several preset points first, select the **Track** path, then add or remove preset points and reorder them up or down. Click to start the cruise; the device then moves through the preset points in the order added.

TIP After adding preset points to a track, click the cruise button to save the track path before leaving the page.

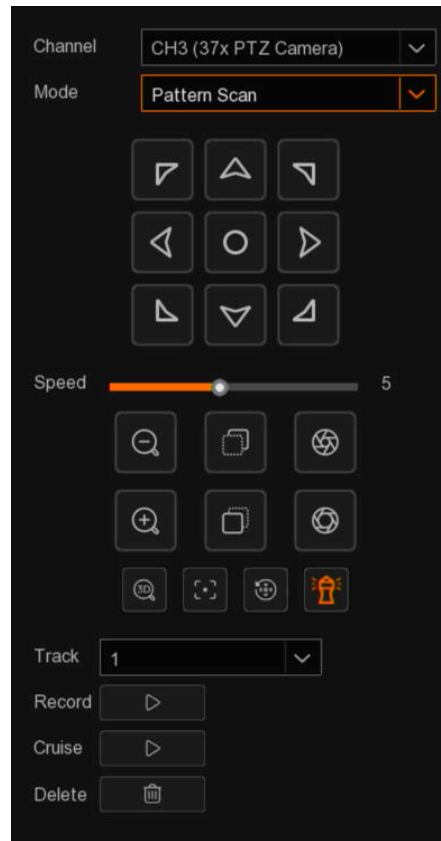


Figure 5-28. Pattern Scan controls

Pattern Scan records a custom path — including horizontal and vertical movement and zoom operations — and replays it on demand. Up to four pattern-scan paths can be saved, each with its own save option. Select the **Track** path, click **Record** and perform any PTZ operations, then stop recording. Playing the pattern cruises the camera along the previously recorded route and movements.

5.1.3.2 PTZ Schedule

Click **Task Schedule** to configure the High-Speed Dome task schedule. The dome can then perform different cruise tasks automatically during different time periods. This function is supported on High-Speed Dome cameras only.

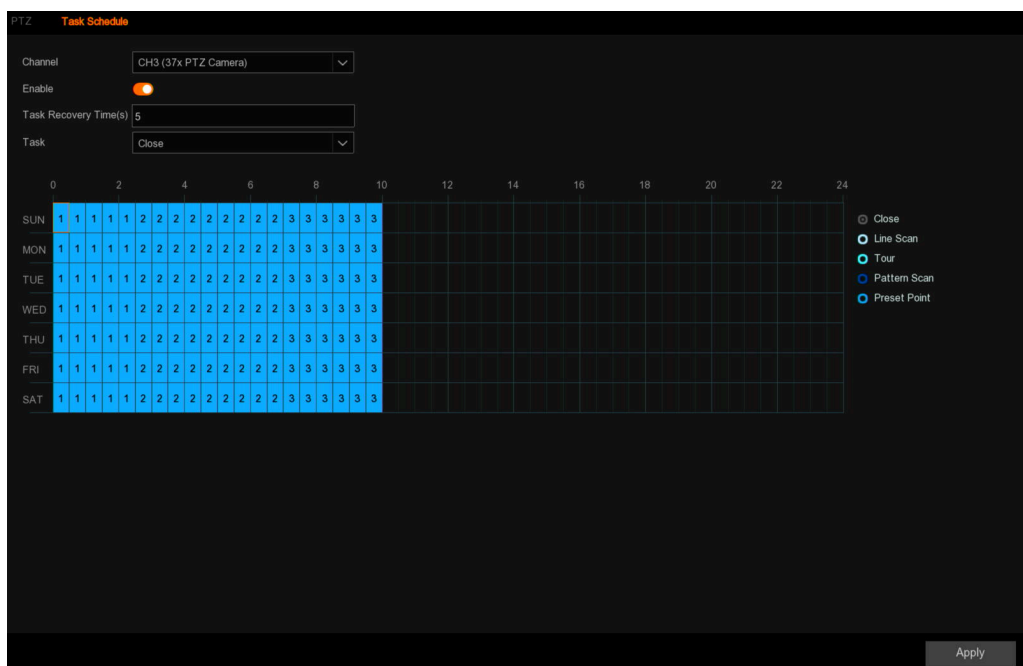


Figure 5-29. PTZ task schedule configuration

- **Enable** — Enable or disable the task schedule. If the number of cruises reaches the limit, a prompt appears to the right of the switch.
- **Tasks Recovery Times (s)** — When a manual operation interrupts a scheduled cruise task, the dome automatically resumes the scheduled task after this recovery time elapses.
- **Task** — The task type. Available types are Closed, Line Scan, Track Cruise, Pattern Scan, and Preset Points. Track Cruise and Pattern Scan each support four different paths, and the Preset Points task can use preset numbers 1 to 8.

NOTE The task schedule takes priority over Watch Mode.

5.1.4 Video Cover

The **Video Cover** feature masks specific areas of the image. You can create multiple privacy areas of any size and position. Each area appears as a yellow box; click the edge of a box and drag it to resize the privacy area.

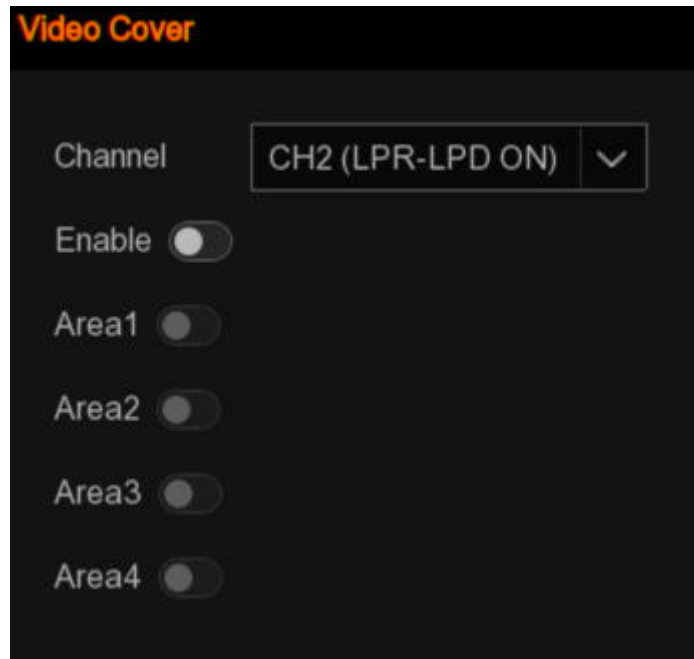


Figure 5-30. Video Cover configuration with a privacy area

- **Enable Video Cover** — Enable or disable the feature. When enabled, the defined privacy areas are covered and hidden from both preview and playback.
- **Polygon** — Multiple privacy areas can be placed in the image, and each area can be moved and stretched.

Click **Apply** to save the settings and put them into effect.

NOTE Once Video Cover is configured, the areas covered by the privacy masks are not visible during preview or playback.

Chapter 6 Image & Encoding

This chapter describes how to tune the live image of each IP camera and how to configure the recording and network transmission streams of the OCTAVUE by GSD Group network video recorder (NVR). It covers image control, record and encode settings, the main, sub, and third streams, audio, and scheduled image capture.

6.1 Image Control

The **Image Control** menu is used to adjust the image parameters of each connected IP camera, including illumination, color, exposure, and lens correction.

Open the image control list to view every channel and its assigned camera. The **Channel** column shows the name of each channel.

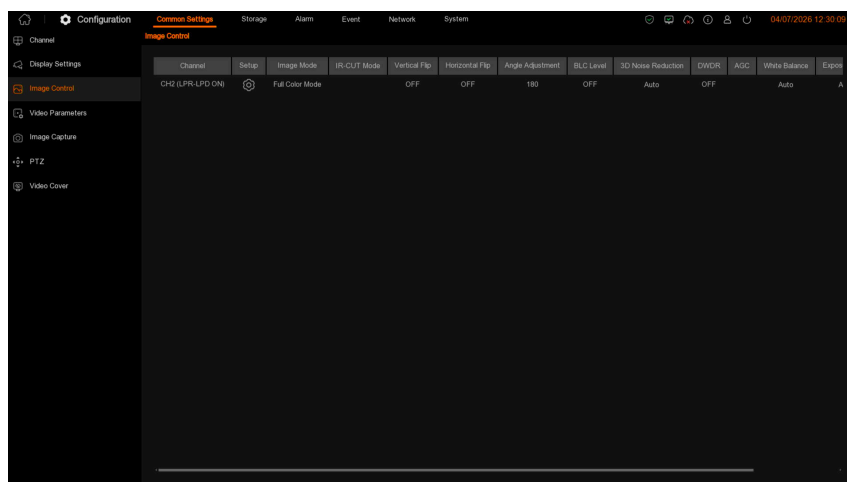


Figure 6-1. Image Control channel list

Use the **Channel** selector to choose the camera you want to configure, then click **Setup** to open its settings page.



Figure 6-2. Selecting a channel to configure

The settings page presents all adjustable image parameters for the selected channel. The available options depend on the capabilities of the connected camera.

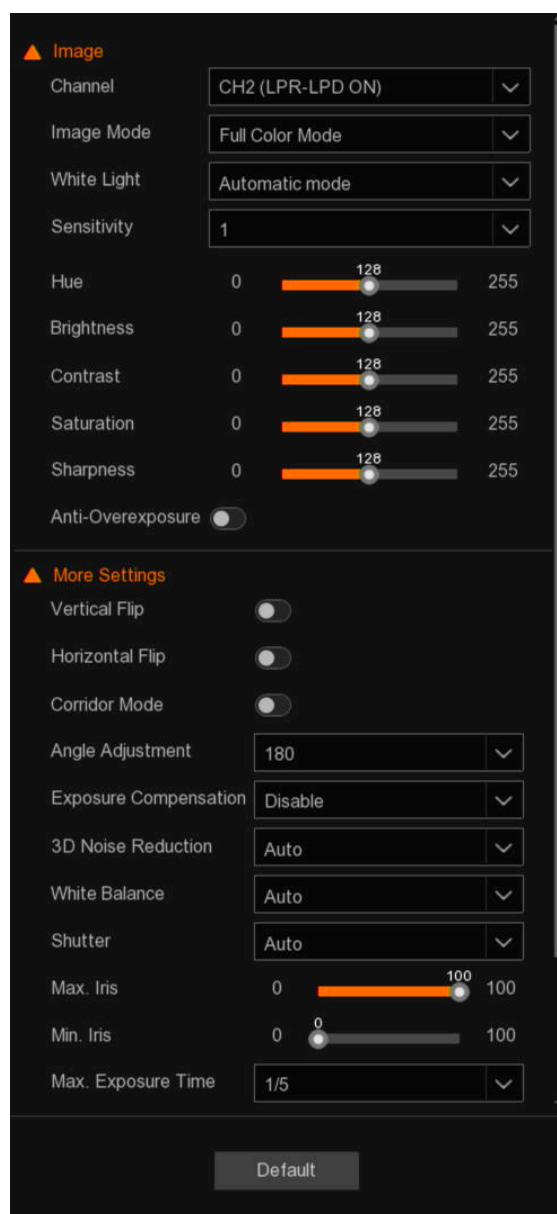


Figure 6-3. Image parameter settings page

6.1.1 Illumination and Night Vision

- **Channel:** Select the channel that you want to configure.
- **Image Mode:** Sets the camera image mode. Three modes are available. In **Full Color Mode**, the warm light turns on when the surrounding illumination is insufficient. In **Day / Night Mode**, the IR light provides supplementary lighting when illumination is insufficient and turns off when illumination is sufficient. In **Smart Illumination**, an alarm event triggers the warm light on when illumination is insufficient, and the light turns off when the alarm ends.
- **White Light:** In Full Color mode, sets the behavior of the camera's warm supplementary light. Four modes are available: **Automatic**, where the camera adjusts the warm-light intensity according to the ambient illumination; **Manual**, which uses a fixed brightness value; **Schedule**, which switches the supplementary light on and off according to a schedule; and **OFF**, which disables the warm light.
- **Sensitivity:** Sets how sensitively the camera perceives the surrounding light, from level 0 to 3. A higher value makes the camera more sensitive.
- **Light Distance:** In Manual mode, adjusts the brightness of the white supplementary light, from 0 to 100. A higher value produces greater brightness.

- **IR-Cut Mode:** In Day / Night Mode, sets how the camera switches its IR-cut filter. Five modes are available: **Auto / GPIO Auto**, which switches between color and black-and-white automatically based on image and photosensitive judgment; **Day / Color Mode**, which forces color mode with no black-and-white switching; **Night / Black White Mode**, which forces black-and-white mode with no color switching; **Image File / Image Control**, which controls the color-to-black transition through the image; and **Schedule**, which switches between color and black-and-white according to a schedule. When using Schedule, set the start and end times for entering night vision.
- **IR-LED Control:** Sets the behavior of the camera's IR light during night vision. Three modes are available: **SmartIR**, which dynamically controls the supplementary-light intensity based on the focal length and whether the image is overexposed; **Manual**, which fills at the set IR-light brightness; and **OFF**, which disables the IR light.
- **Low Beam Light:** Manually adjusts the brightness of the first group of IR lights, from 0 to 100. At 0 the IR light is off; at 100 it is at maximum brightness.
- **High Beam Light:** If the camera supports it, manually adjusts the brightness of the second group of IR lights, from 0 to 100. At 0 the IR light is off; at 100 it is at maximum brightness.

6.1.2 Color and Sharpness

- **Hue:** Adjusts the image tone.
- **Brightness:** Adjusts the image brightness.
- **Contrast:** Adjusts the image contrast ratio.
- **Saturation:** Adjusts the image saturation.
- **Sharpness:** Adjusts the image sharpness.
- **Anti-Overexposure:** Enables the image anti-overexposure function.

6.1.3 Orientation and Lens

- **Image Vertical Flip:** Flips the image upside down.
- **Image Horizontal Flip:** Mirrors the image horizontally.
- **Corridor Mode:** Optimizes the camera's vertical viewing angle for monitoring long, narrow scenes such as hallways or corridors. Enable this mode when the camera is aimed along a corridor.
- **Image Angle Adjustment:** Sets the flip angle of the image.
- **Lens Distortion Correction:** Corrects lens distortion on cameras that support it, such as ultra-wide-angle cameras.
- **FoV Adjustment:** After lens distortion correction is enabled, sets the correction level from 0 to 5.

6.1.4 Exposure and Enhancement

- **Exposure Compensation:** Sets the exposure compensation. Four modes are available.
- **WDR:** Wide dynamic range, in which the picture is uniformly balanced so that both bright and dark areas can be clearly distinguished. Some models provide DWDR instead.
- **HLC:** Highlight compensation, which makes objects in highlighted areas clearer. Applicable to some models.
- **Back Light:** Backlight compensation, which makes objects in dark areas clearer.
- **Disable:** The image is not optimized for backlight.
- **3D Noise Reduction:** Reduces image noise for a clearer picture. Three modes are available: **Automatic**, where the camera applies noise-reduction algorithms automatically; **Manual**, which applies noise reduction according to a manually set coefficient; and **OFF**, which disables noise reduction.
- **White Balance:** Two modes are available: **Automatic**, which adjusts the white balance using the program's default parameters; and **Manual**, which manually sets the red, green, and blue gain to synthesize white light.
- **Shutter:** Sets the shutter exposure length. Two modes are available: **Automatic**, where the program selects an appropriate exposure time based on the current Exposure Time value; and **Manual**, which uses the configured Exposure Time value.

- **Exposure Time:** Sets the exposure time used together with the Shutter setting. In Manual shutter mode, this value fixes the shutter speed. In Auto shutter mode, this value sets the slowest shutter-speed limit, and the camera automatically selects the most suitable speed between this limit and the fastest speed supported by the system. For example, when set to 1/30, the shutter speed adjusts automatically within the range of 1/30 to 1/20000 for optimal exposure.
- **AGC:** Adjusts the Automatic Gain Control level to boost sensor gain in low light, ensuring proper exposure and preventing underexposure. Manual adjustment is supported on some models.
- **Defog Mode:** Optimizes visibility in foggy conditions on cameras that support it. Three modes are available: **Automatic**, where the camera judges the defogging effect automatically; **Manual**, which defogs according to manually set values; and **OFF**, which disables the defog function.

TIP Click **Default** to restore all image parameters to their factory settings if an adjustment produces an undesirable result.

6.2 Record and Encode Settings

This menu configures the image parameters used for recording video and for network transmission.

The **main stream** determines the quality of the recorded video stored on the HDD. The **sub stream** determines the preview quality delivered over remote access, such as web clients and CMS software. The **third (mobile) stream** determines the preview quality when viewing over remote access from a mobile device. This menu also controls the audio switch of the connected camera, the input and output volume, and the audio type.

6.2.1 Recording Settings

This menu configures the parameters that govern how the system records each channel.

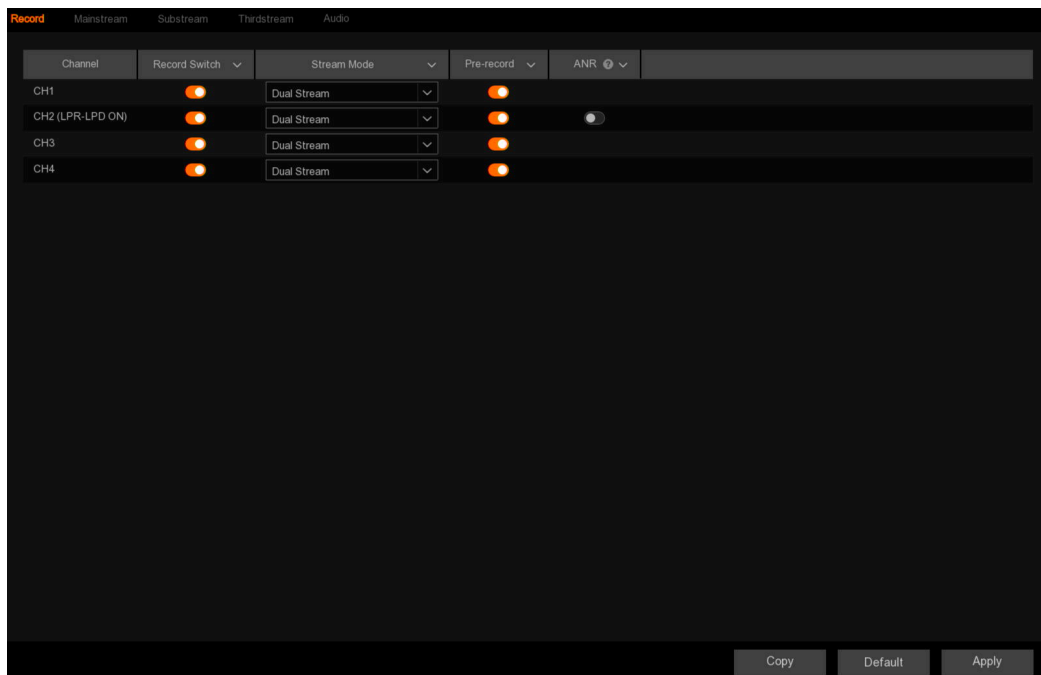


Figure 6-4. Recording settings

- **Switch:** Select to enable recording on this channel.
- **Stream Mode:** Selects the recording type. If **Dual Stream** is selected, the system records both the main stream and the sub stream. If **Main Stream** is selected, the system records only the main-stream video.
- **PreRecord:** Allows the NVR to capture video for several seconds before an event occurs. It is recommended to keep this option enabled.

- **ANR (Automatic Network Replenishment):** Normally, video is stored on the NVR while the network connection between the NVR and the cameras is working. With ANR enabled, a camera begins recording continuously to its SD card if the connection is lost, and transfers those recordings back to the NVR's storage once the network is restored. It is recommended to enable ANR if your camera supports this feature. Only the main stream is recorded.

NOTE ANR requires a camera equipped with a local SD card. Only the main stream is replenished after the network connection is restored.

6.2.2 Main Stream

The main stream defines the encoding parameters of the high-quality video recorded to the HDD.

Channel	Resolution	Frame Rate	Encoding Format	Encoding Mode	Config Mode	Bitrate	Audio	I Frame Interval
CH2 (LPR-LPD ON)	3840 x 2160	30	H.265	CBR	User-defined	10348	☒	10
CH3 (Marketing Office)	1920 x 1080	30	H.265	CBR	Predefined	4096	☒	60
CH4 (Camera)	1920 x 1080	30	H.265	CBR	Predefined	4096	☒	60

Total Bandwidth: 76Mbps, Used Bandwidth: 21.105Mbps

Default Apply

Figure 6-5. Main stream encoding parameters

- **Resolution:** Determines the main-stream recording resolution. Higher values offer greater detail. The default resolution is auto-selected by the NVR.
- **Frame Rate:** Sets the number of frames recorded per second for the main stream.
- **Encoding Format:** Lists the codecs supported by the connected camera. H.265 compresses information more efficiently for better video quality at a given bandwidth, and H.265+ offers even greater compression. H.264 requires higher bandwidth and offers less efficient compression, while H.264+ provides additional compression compared to H.264. Only some devices support H.264+ and H.265+.
- **Encoding Mode:** Select a constant bit rate (CBR) for simple scenes, such as a plain gray wall, or a variable bit rate (VBR) for more complex scenes, such as a busy street.
- **Video Quality:** Available only for VBR. Selects the recording quality from options such as Lowest, Lower, Low, Medium, Higher, and Highest.
- **Config Mode:** Select **User-defined** to set the bitrate manually, or **Predefined** to choose from predefined bitrates.
- **Bitrate:** Determines the data-transfer rate used for video recording. Higher bitrates produce better-quality recordings but require more bandwidth. Adjust the value incrementally until you are satisfied with the image quality.

- **Audio:** Enables or disables audio recording if the camera supports it. To record audio, also enable audio streaming in the Audio section.
- **I Frame Interval:** Sets the interval between I frames (keyframes) in the camera's stream. I frames are full frames, while the other frames (P frames or B frames) are encoded from the differences relative to preceding frames. A shorter interval can improve video quality but may increase bandwidth usage.
- **ETR:** Event Trigger Recording adjusts the codec stream parameters depending on whether an alarm is present, ensuring that crucial events such as motion detection or alarm activation are captured with optimal quality and efficiency.

6.2.3 Sub Stream

The sub stream defines the encoding parameters of the lower-bandwidth video used for remote preview.

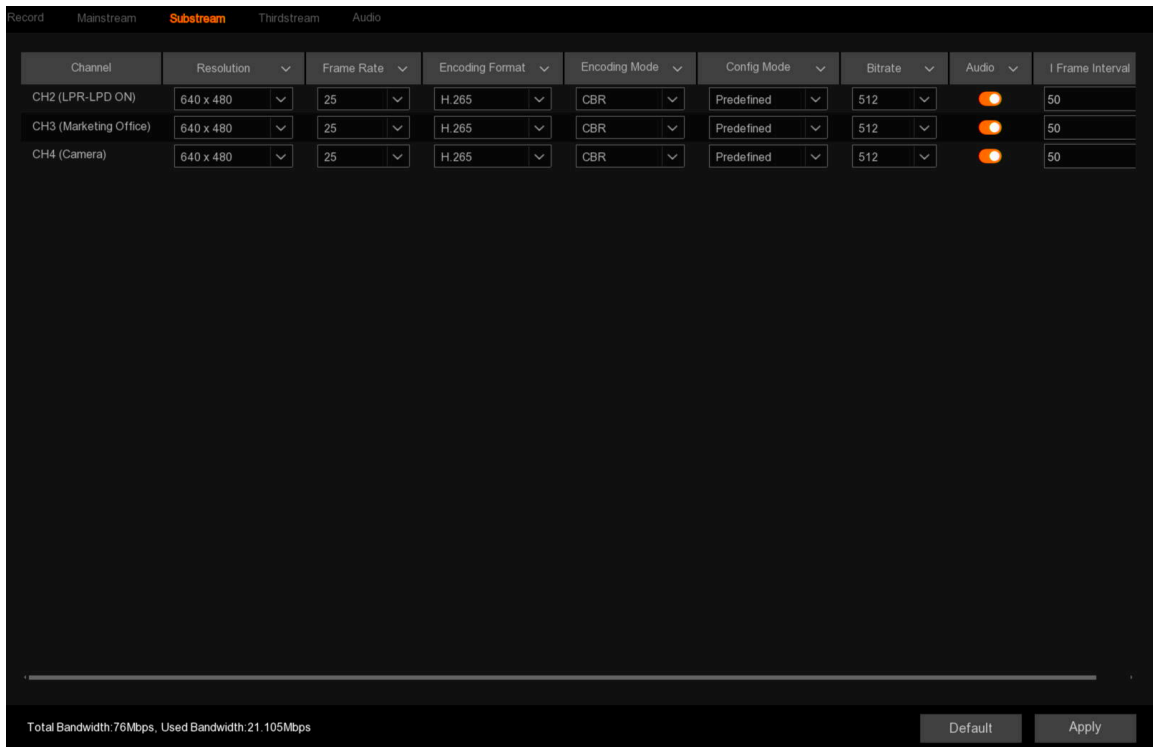


Figure 6-6. Sub stream encoding parameters

- **Resolution:** Determines the sub-stream recording resolution. Higher values offer greater detail. The default resolution is auto-selected by the NVR.
- **Frame Rate:** Specifies the number of frames recorded per second. The default frame rate is auto-selected by the NVR.
- **Encoding Format:** Lists the channel encoding types supported: H.264, H.265, H.264+, H.265+, and MJPEG.
- **Encoding Mode:** Select a constant bit rate (CBR) for simple scenes, such as a plain gray wall, or a variable bit rate (VBR) for more complex scenes, such as a busy street.
- **Video Quality:** Available only for VBR. Selects the recording quality from options such as Lowest, Lower, Low, Medium, Higher, and Highest.
- **Config Mode:** Select **User-defined** to set the bitrate manually, or **Predefined** to choose from predefined bitrates.
- **Bitrate:** Determines the data-transfer rate used for video recording. Higher bitrates produce better-quality recordings but require more bandwidth. Adjust the value incrementally until you are satisfied with the image quality.
- **Audio:** Enables or disables audio recording if the camera supports it. To record audio, also enable audio streaming in the Audio section.

- **I Frame Interval:** Sets the interval between I frames (keyframes) in the camera's stream. I frames are full frames, while the other frames (P frames or B frames) are encoded from the differences relative to preceding frames. A shorter interval can improve video quality but may increase bandwidth usage.

WARNING When MJPEG encoding is enabled on one IP camera, other IP cameras may display a resource-shortage warning during preview, and only one channel of MJPEG encoding is displayed at a time.

6.2.4 Third Stream

The third stream defines the encoding parameters of the lightweight video used for preview on mobile devices.

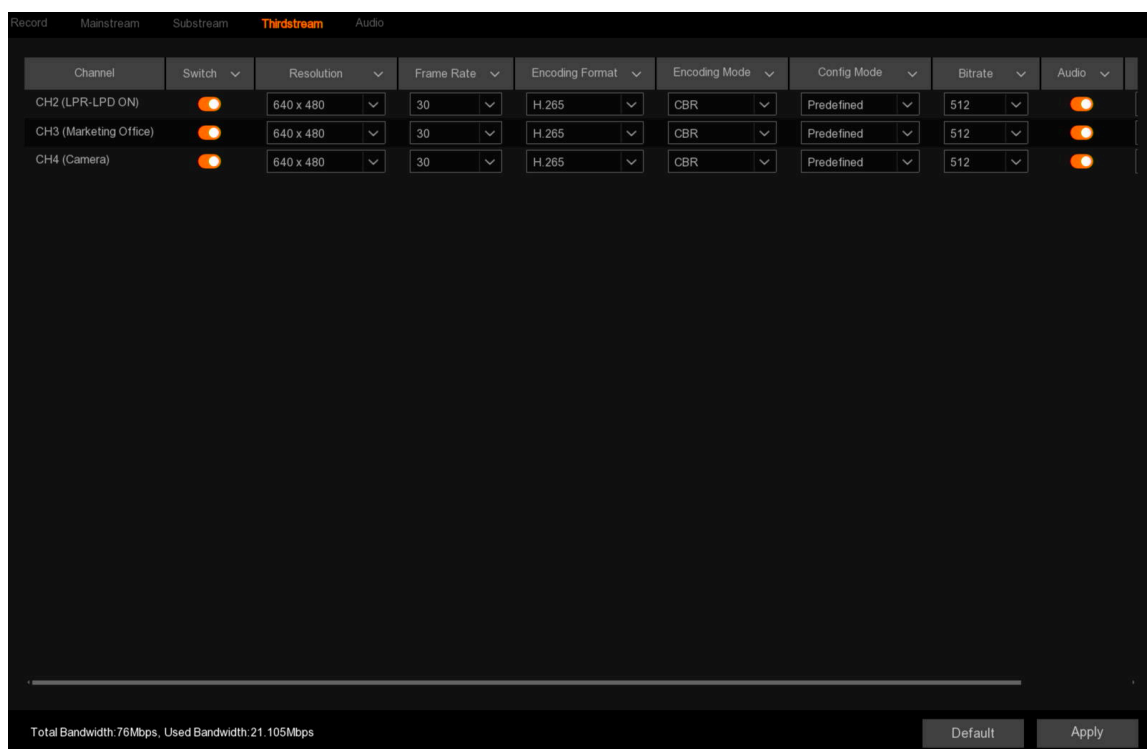


Figure 6-7. Third stream encoding parameters

- **Switch:** Enables or disables the third stream.
- **Resolution:** Determines the third-stream recording resolution. Higher values offer greater detail. The default resolution is auto-selected by the NVR.
- **Frame Rate:** Specifies the number of frames recorded per second. The default frame rate is auto-selected by the NVR.
- **Encoding Format:** Lists the codecs supported by the connected camera. H.265 compresses information more efficiently for better video quality at a given bandwidth, and H.265+ offers even greater compression. H.264 requires higher bandwidth and offers less efficient compression, while H.264+ provides additional compression compared to H.264. Only some devices support H.264+ and H.265+.
- **Encoding Mode:** Select a constant bit rate (CBR) for simple scenes, such as a plain gray wall, or a variable bit rate (VBR) for more complex scenes, such as a busy street.
- **Video Quality:** Available only for VBR. Selects the recording quality from options such as Lowest, Lower, Low, Medium, Higher, and Highest.
- **Config Mode:** Select **User-defined** to set the bitrate manually, or **Predefined** to choose from predefined bitrates.
- **Bitrate:** Determines the data-transfer rate used for video recording. Higher bitrates produce better-quality recordings but require more bandwidth. Adjust the value incrementally until you are satisfied with the image quality.

- **Audio:** Enables or disables audio recording if the camera supports it. To record audio, also enable audio streaming in the Audio section.
- **I Frame Interval:** Sets the interval between I frames (keyframes) in the camera's stream. I frames are full frames, while the other frames (P frames or B frames) are encoded from the differences relative to preceding frames. A shorter interval can improve video quality but may increase bandwidth usage.

6.2.5 Audio

If the camera includes a built-in microphone or an external audio input device, you can activate the audio stream, adjust the input and output volume, and select the audio encoding type.

Channel	Audio Input Type	Audio Encoding	Input Volume	Output Volume
CH2 (LPR-LPD ON)	Mic By Camera	G711U	7	7
CH3 (Marketing Office)		G711A	7	
CH4 (Camera)		G711A	7	

Figure 6-8. Audio settings

- **Enable:** Select to enable or disable audio.
- **Audio Input Type:** Defines the audio input source. Select **Mic By Camera** to use the camera microphone input, or **Line In** to use the camera audio line-in.
- **Output Volume:** Adjusts the camera's output audio level.
- **Input Volume:** Adjusts the camera's input audio level.
- **Audio Encoding:** Selects the camera's audio encoding format.
- **Sampling Rate:** Sets the camera's sampling rate to either 8000 or 16000. The 16000 rate is supported only when connecting cameras that support it.

6.3 Image Capture

You can enable and schedule the NVR to capture snapshots during normal recording periods or whenever an event is triggered.

This function helps you rapidly identify alarm incidents, and the captured snapshots can also be used to create time-lapse video.

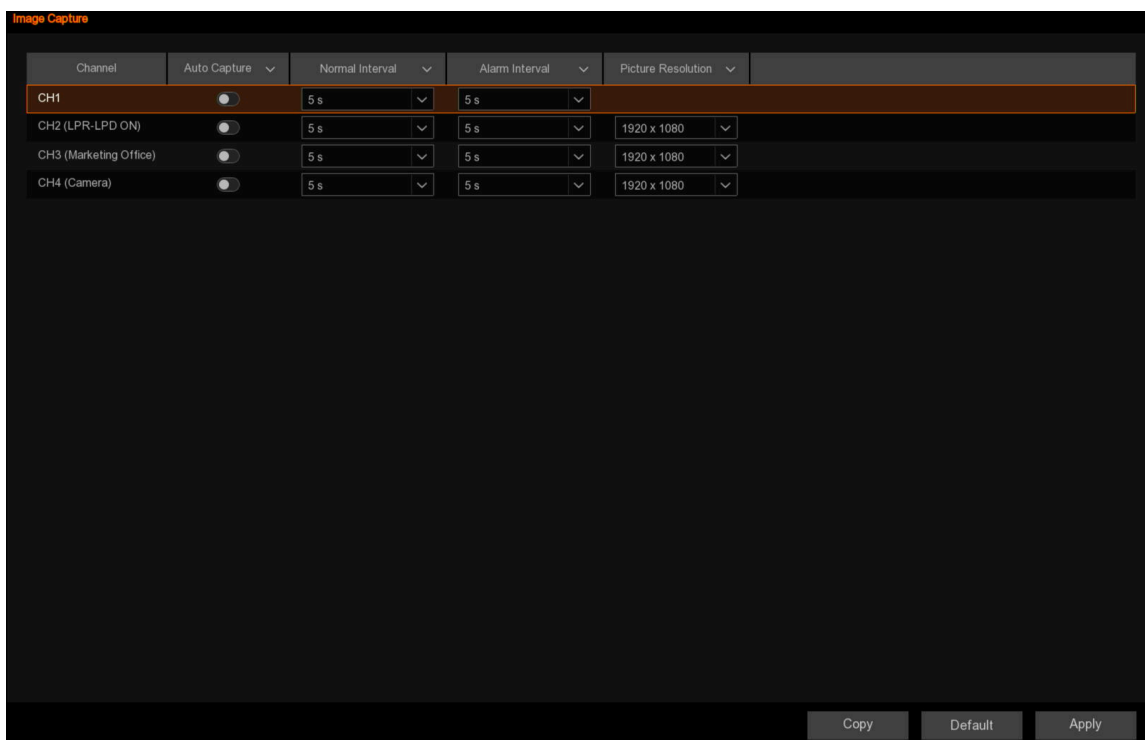


Figure 6-9. Image capture settings

- **Auto Capture:** Enables or disables snapshot capture for this channel.
- **Normal Interval:** The time interval between snapshots during regular recording periods.
- **Alarm Interval:** The time interval between snapshots when events such as motion detection or an I/O alarm occur.
- **Capture Resolution:** The resolution at which the channel captures snapshots.

Chapter 7 Storage & Disks

This chapter explains how to configure recording and capture schedules, manage internal and network hard disks, organize disks into groups, and monitor disk health with S.M.A.R.T. on the OCTAVUE by GSD Group network video recorder (NVR).

7.1 Schedule

The schedule menus determine when the NVR records video and captures images, and which recording mode applies to each channel and time period.

7.1.1 Record Schedule

Use this menu to define when the NVR records and to set the recording mode for each channel. A recording schedule can combine **Normal** (continuous) recording, **Motion** recording, and **I/O** (alarm) recording across the hours of the day. To set a recording mode, click the corresponding mode button and drag the cursor across the timeline to mark the desired area, or add the period manually in **List** form.

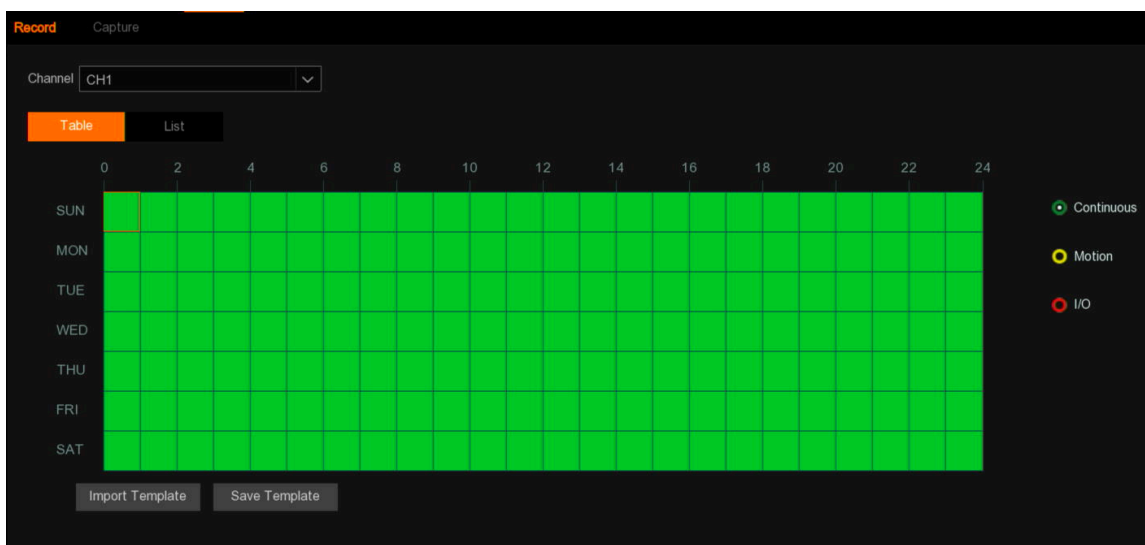


Figure 7-1. Record schedule configuration in table form

The following options are available on the record schedule page:

- **Channel:** Select the channel whose recording parameters you want to configure.
- **Continuous:** The time periods during which normal (continuous) recording is active for the current channel.
- **Motion:** The time periods during which motion-detection recording is active for the current channel.
- **I/O:** The time periods during which I/O alarm recording is active for the current channel.
- **No Record:** Time slots shown in black on the table indicate periods for which no recording is scheduled.

NOTE A recording schedule applies to a single channel only. To apply the same schedule to other channels, click **Copy** to use the replication feature. Click **Save Template** to store the settings for later reuse.

The schedule can be displayed and edited in either table or list form.

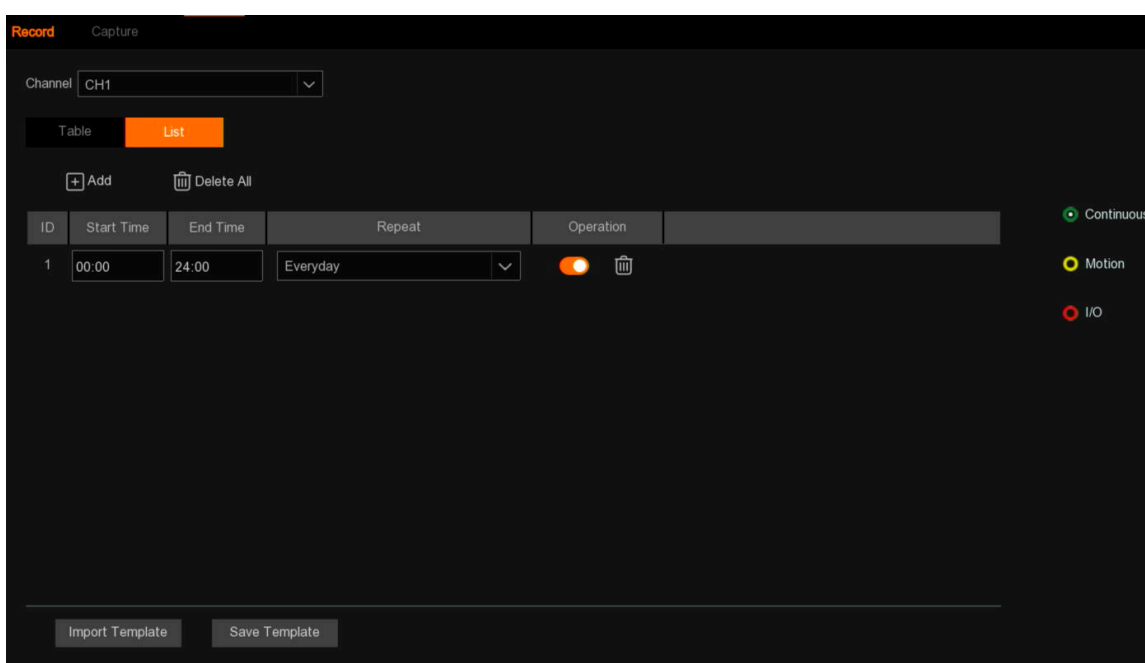


Figure 7-2. Record schedule configuration in list form

- **Table / List:** Switch between the two views of the schedule. In **Table** form, drag or tick the corresponding time period in the grid to set the schedule. In **List** form, add rules manually and enter the start and end times.

- **Add:** Add a schedule rule.
- **Delete All:** Delete all schedule rules.
- **Start Time:** Set the start time of the schedule rule.
- **End Time:** Set the end time of the schedule rule.
- **Repeat:** Set the days on which the schedule rule takes effect.

NOTE Up to 8 time periods can be configured. Time periods may not overlap or contain one another.

- **Import Template:** Import a custom or system-default schedule template.
- **Edit:** Edit a schedule template. You can modify the template name and its specific schedule rules.
- **Delete:** Delete a schedule template.
- **Save Template:** Save the current schedule rules as a custom template that can be imported on other schedule setting pages.

NOTE The system provides **7x24** and **5x24** schedule templates by default. These built-in templates cannot be edited or deleted.

7.1.2 Capture Schedule

The capture schedule defines when the NVR automatically captures still images for each channel. It is configured in the same way as the record schedule.

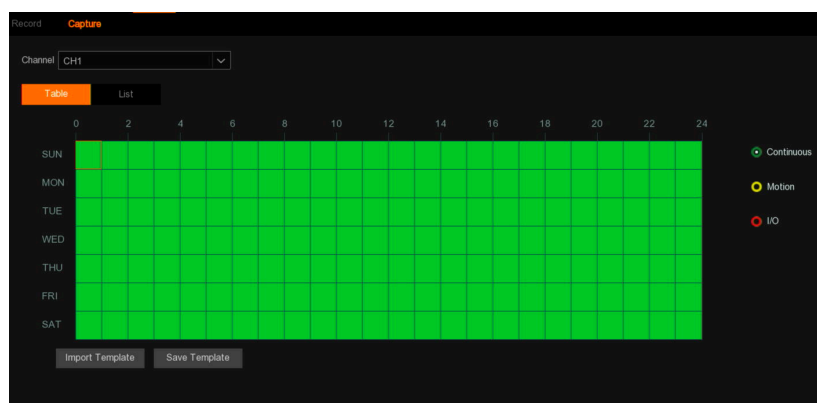


Figure 7-3. Capture schedule configuration

- **Channel:** Select the channel whose automatic capture parameters you want to configure.
- **Normal:** The time periods during which normal (continuous) capture is active for the current channel.
- **Motion:** The time periods during which motion-detection capture is active for the current channel.
- **I/O:** The time periods during which I/O alarm capture is active for the current channel.
- **No Record:** Time slots shown in black on the table indicate periods for which no capture is scheduled. For detailed settings, refer to the Record Schedule section.

7.2 Hard Disk

This menu is used to manage and configure the internal and external hard disk drives of the NVR, including formatting disks, configuring recording parameters, and running disk tests.

NOTE On models that support four or more hard disk bays, a **Slot No.** column is displayed. The value corresponds to the physical SATA slot number of the hardware.

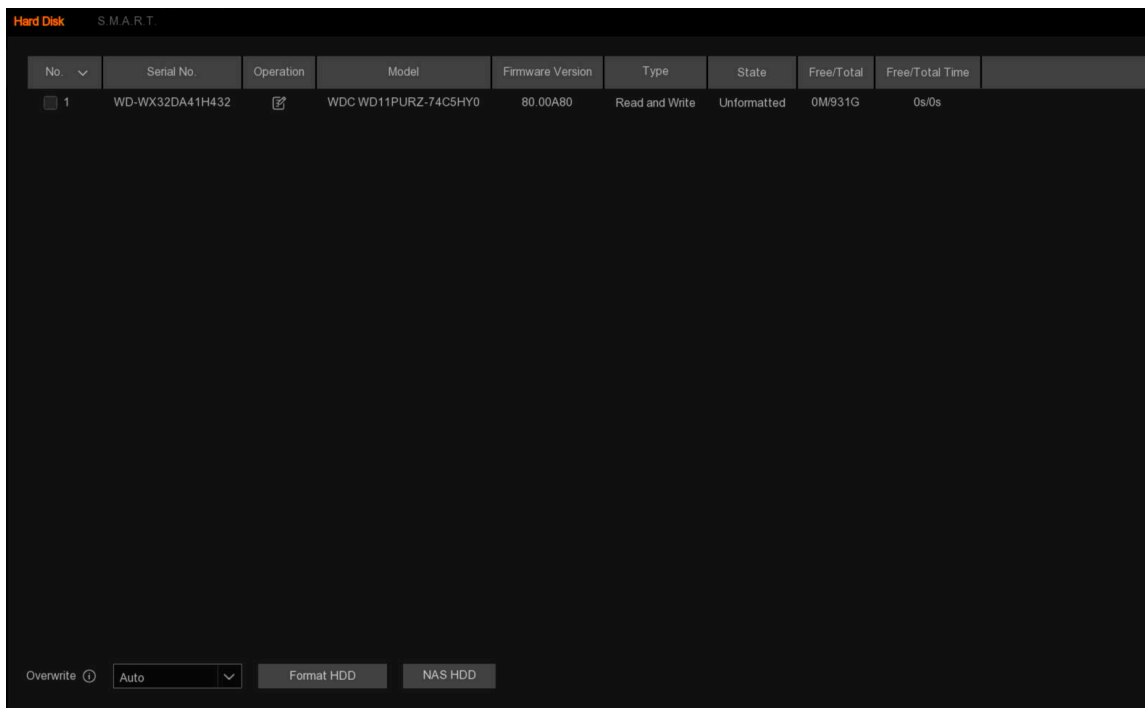


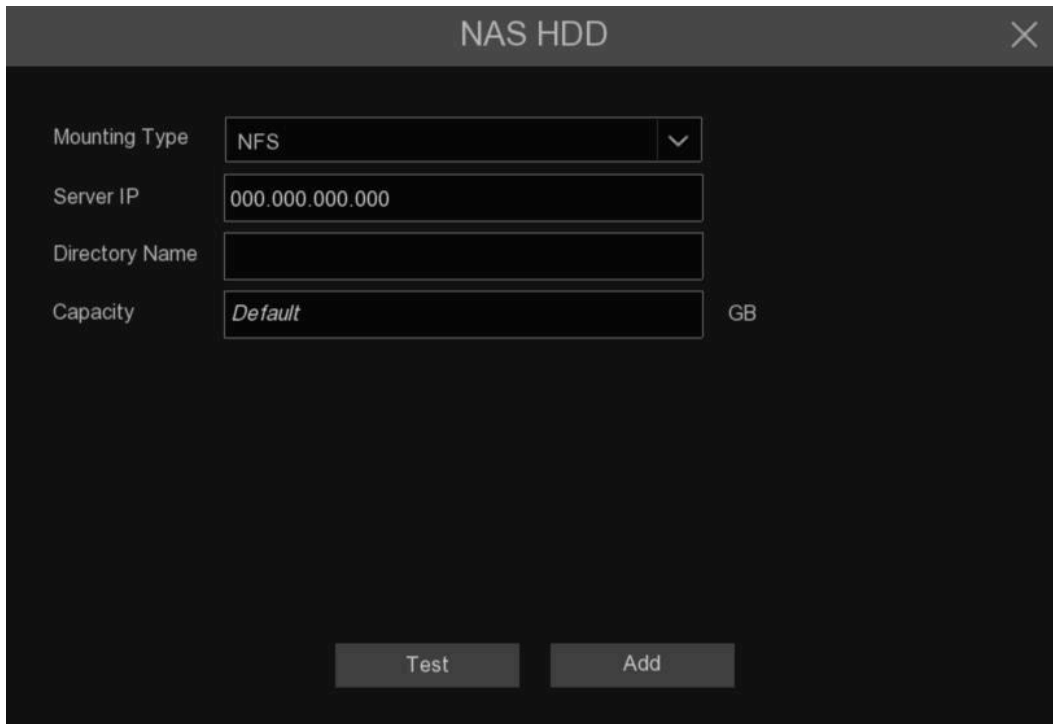
Figure 7-4. Hard disk management page

- **Format HDD:** Select the hard disk to be formatted, click **Format HDD**, and confirm the password in the pop-up dialog to perform the formatting operation.
- **NAS HDD:** Configure a network hard disk for recording and capture storage. Before use, create a storage partition on the network hard disk and ensure the NVR can connect to it over the network.

CAUTION Formatting a hard disk permanently erases all data stored on it. Back up any recordings you need before proceeding.

NOTE The AI database, the license plate database, and video prompt files are stored on the local HDD only.

When you add a network hard disk, configure the following NAS parameters:



The image shows a 'NAS HDD' configuration window with a dark background. It contains four input fields: 'Mounting Type' with a dropdown menu set to 'NFS', 'Server IP' with the text '000.000.000.000', 'Directory Name' which is empty, and 'Capacity' with the text 'Default' and a 'GB' unit label to its right. At the bottom of the window are two buttons: 'Test' and 'Add'.

Figure 7-5. Network hard disk (NAS) configuration

- **Mounting Type:** Choose the mounting protocol, either **NFS** or **SMB/CIFS**. If you select SMB/CIFS, you must also enter the NAS account name and password.
- **User Name:** Enter the NAS account name. This field is unavailable in NFS mode.
- **Server IP:** Enter the IP address of the NAS storage.
- **Password:** Enter the NAS password. This field is unavailable in NFS mode.
- **Directory Name:** Enter the directory in which the recording data will be saved.
- **Disk Size:** Set the capacity allocated to the NAS storage.
- **Test:** Test the connection to the NAS storage.
- **Add NAS HDD:** Add the configured NAS storage.
- **Overwrite:** Instructs the NVR to overwrite the oldest video files as the hard disk becomes full. You can also specify the number of days for which recordings are retained before being overwritten; for example, selecting 7 days keeps only the last seven days of recordings on the HDD. To prevent old recordings from being overwritten, set this option to **OFF**.
- **Record on ESATA:** Displayed only when the NVR has an E-SATA port on the rear panel and an E-SATA HDD is connected. This option allows video to be recorded to the external E-SATA HDD to expand storage capacity. When E-SATA recording is enabled, the E-SATA backup function is disabled.

WARNING If you set **Overwrite** to **OFF**, check the HDD status regularly to ensure it does not become full, because recording stops once the disk is full. Leaving the **Auto** selection enabled is recommended, as it prevents the NVR from running out of storage space.

If the NVR supports multiple hard disks and more than one disk is installed, an edit button appears next to each disk. Click it to edit the disk properties.



Figure 7-6. Hard disk list with edit button

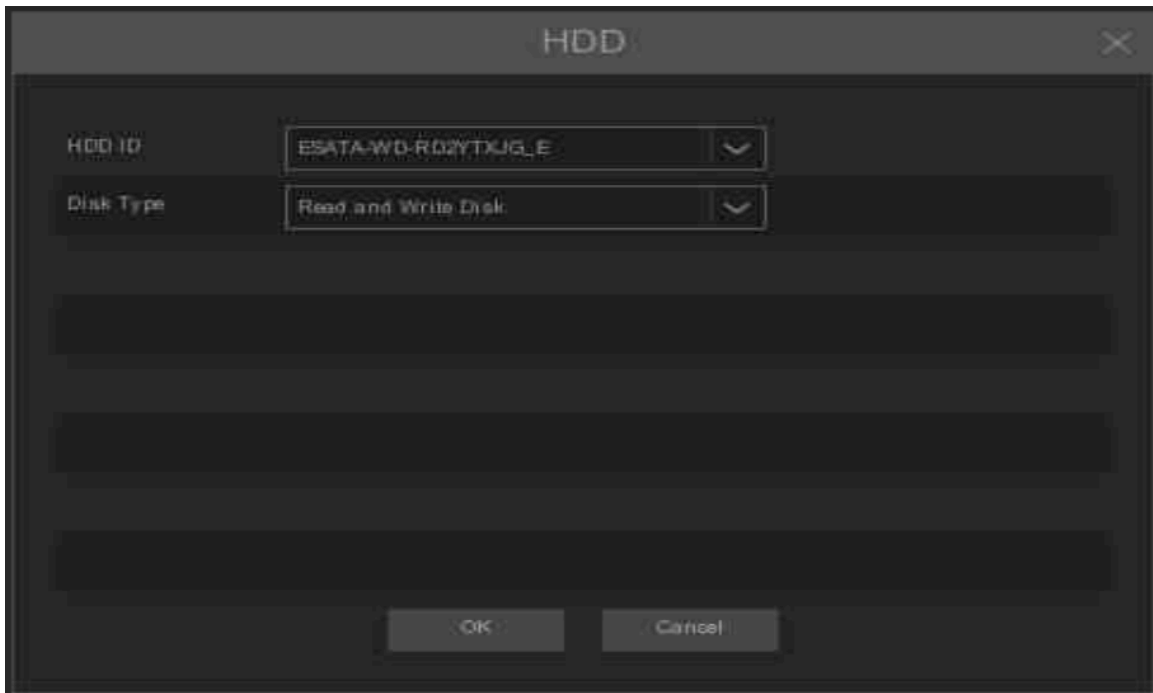


Figure 7-7. Editing hard disk type and disk group

The following disk properties can be edited:

- **Disk Type:** Set the hard disk to **Read Write**, **Read Only**, or **Redundant**.
- **Read Write** is the normal state for saving and playing back recordings. If all installed disks are set to Read Write, the NVR writes recordings to them sequentially.
- **Read Only** prevents important video from being overwritten during cyclic recording. New recordings cannot be saved to a read-only disk, but existing recordings can still be searched and played back.
- **Redundant** disks store a duplicate copy of the recordings saved to the Read Write disk(s). When a redundant disk is configured, the system writes recordings in parallel to both the Read Write disk and the redundant disk, protecting against disk failure.
- **Disk Group:** Assign the disk to a disk group for recording.

NOTE Redundant disks support saving the mainstream recording only. After the disk type is changed, disks may be unmounted and go offline temporarily; wait until they are mounted again. On NVRs with more than 32 channels, only the **Read Write** and **Read Only** types are available.

7.3 Disk Group

This menu appears when the NVR supports multiple hard disks and more than one disk is installed. The disk group function lets you assign different cameras to different hard disks for recording, which reduces the load on any single disk and extends disk life. For example, you can record channels 1-16 to one disk group and channels 17-32 to another.

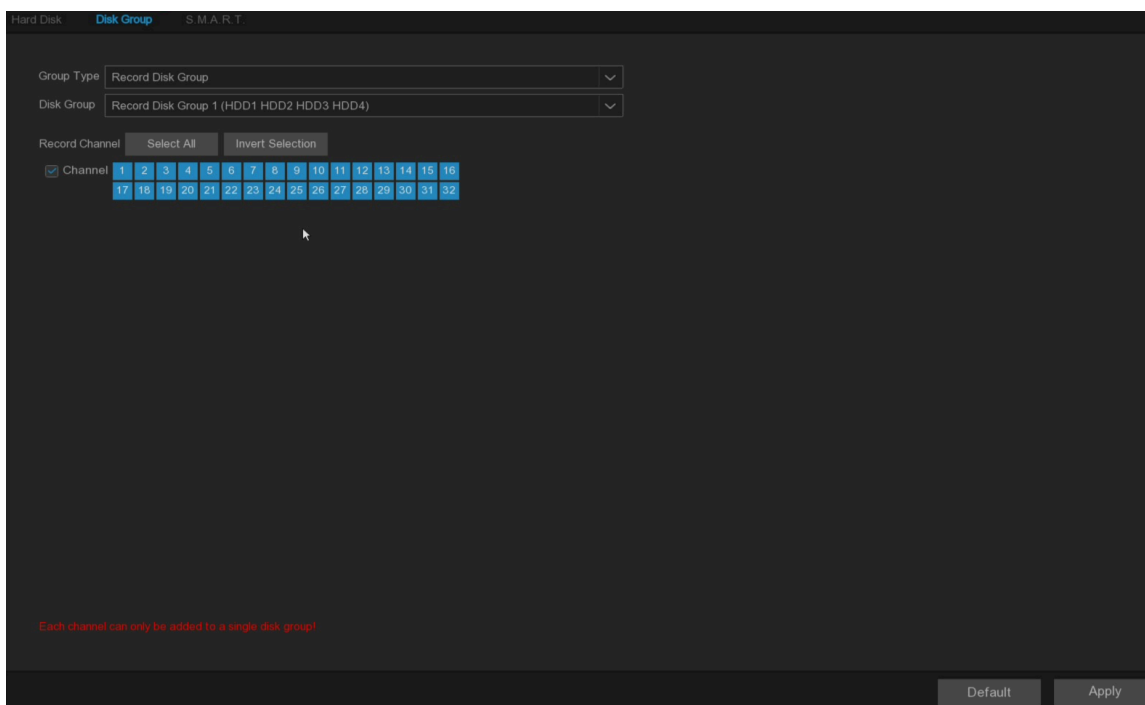


Figure 7-8. Selecting the disk type and disk group for a disk



Figure 7-9. Disk group configuration page

To configure a disk group, follow these steps:

1. On the disk list page, click the edit button of the hard disk you want to configure, then select its **Disk Type** and **Disk Group**.
2. Return to the **Disk Group** page and choose a **Disk Group Type**. If all disks are set to Read Write mode, only **Record Disk Group** is available. If one or more disks are set to Redundant mode, **Redundant Disk Group** also becomes available.
3. Choose the **Disk Group**.
4. Select the **Record Channel**. This determines which cameras are recorded and saved to the hard disk(s) in the selected group.
5. Click **Apply** to save your settings.

WARNING When a single disk group is configured with more than 32 video channels, video loss may occur because of hard disk read/write performance limits. Configuring no more than 32 video channels per disk group is recommended.

7.4 S.M.A.R.T.

The S.M.A.R.T. function detects and evaluates the operating status of an in-use hard disk, so that risks can be identified early and data loss caused by disk failure can be avoided.

Hard Disk
S.M.A.R.T.

HDD ID:
WD-WX32DA41H432

Self-test Type:
Short

Self-test State:
Not detected

TEMP(°C):
44

Utility Time(d):
3

Whole Evaluation:
Passed

Test

S.M.A.R.T. Info:

ID	Item	Status	Flags	Value	Worst	Threshold	Raw Value
0x1	Raw Read Error Rate	OK	2f	100	253	51	0
0x3	Spin Up Time	OK	27	177	176	21	2150
0x4	Start/Stop Count	OK	32	100	100	0	14
0x5	Reallocated Sector Count	OK	33	200	200	140	0
0x7	Seek Error Rate	OK	2e	100	253	0	0
0x9	Power-On Hours Count	OK	32	100	100	0	79
0xa	Spinup Retry Count	OK	32	100	253	0	0
0xb	Calibration Retry Count	OK	32	100	253	0	0
0xc	Power Cycle Count	OK	32	100	100	0	9
0xc0	Power-Off Retract Count	OK	32	200	200	0	5
0xc1	Load/Unload Cycle Count	OK	32	200	200	0	8
0xc2	HDA Temperature	OK	22	99	99	0	44
0xc4	Reallocation Count	OK	32	200	200	0	0
0xc5	Current Pending Sector Count	OK	32	200	200	0	0
0xc6	Offline Scan Uncorrectable Count	OK	30	100	253	0	0
0xc7	UDMA CRC Error Rate	OK	32	200	200	0	0
0xc8	Write Error Rate	OK	8	100	253	0	0

Figure 7-10. S.M.A.R.T. self-check page

Three self-check types are available:

- **Short:** Verifies the major components of the hard disk, such as the read/write heads, electronics, and internal memory.
- **Long:** A longer test that verifies the above components and also performs a surface scan to reveal problematic areas and force the relocation of bad sectors.
- **Conveyance:** A very quick test that verifies that the mechanical parts of the hard disk are working.

NOTE The NVR continues to operate normally while a S.M.A.R.T. test is running.

CAUTION If a S.M.A.R.T. error is detected on a hard disk, recorded data is at risk of being lost. Replacing the disk with a new one is strongly recommended.

Chapter 8 Alarms & Exceptions

The **Alarm** menu lets you define how the OCTAVUE NVR responds when an alarm signal is generated. For each alarm source you can enable the input, assign a schedule, and configure a set of linkage actions that the system performs automatically when the alarm is triggered.

8.1 I/O Alarm

I/O alarm configuration is divided into two pages: **Alarm Input**, which governs the external sensors wired to the recorder, and **Alarm Output**, which governs the external devices the recorder drives in response.

8.1.1 Alarm Input

This page displays every I/O alarm input source, shows whether each source is enabled, and lets you configure the linkage actions that follow an alarm trigger.

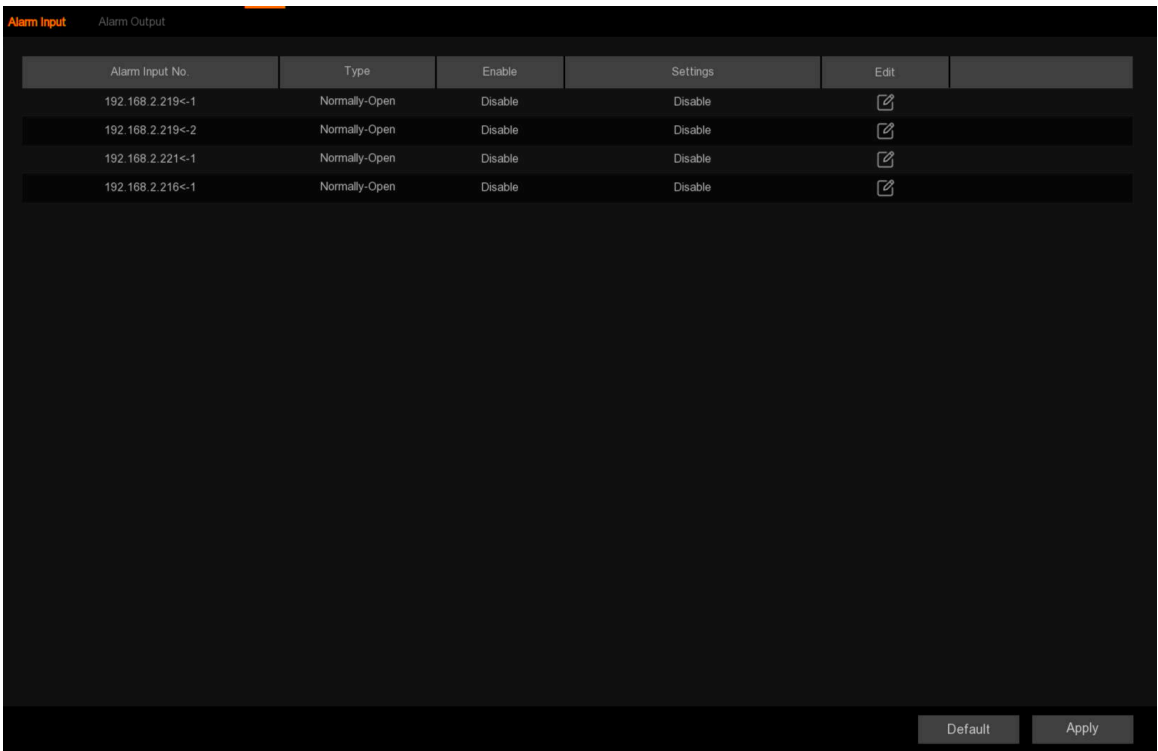


Figure 8-1. I/O alarm input source list

Click the **Edit** button beside a source to open its configuration page.



Figure 8-2. Selecting an alarm input source

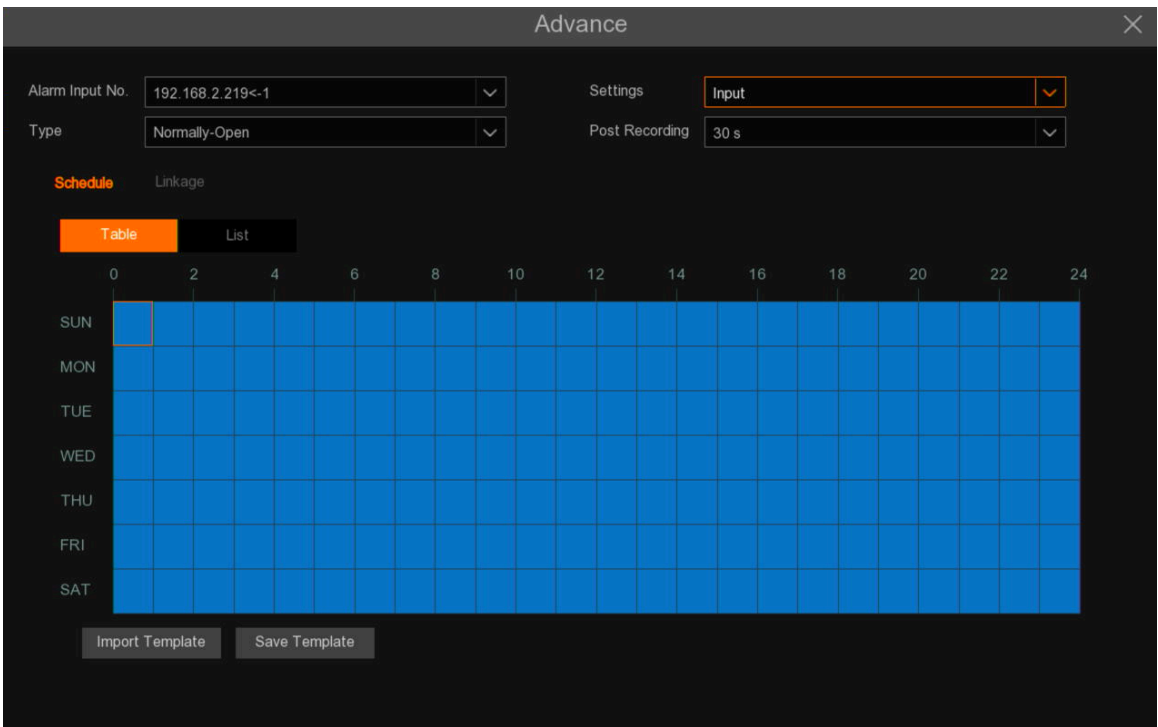


Figure 8-3. Alarm input configuration page

Configure the following parameters on the alarm input page:

- **Alarm Input No.** — Select the I/O alarm input source to configure.
- **Type** — Select **Normal-Open** or **Normal-Close** to match the type of the connected sensor.
- **Settings** — Enable or disable the selected input source. Choose **Disable** to leave the source inactive, or **Input** to enable it and configure its schedule and alarm linkage.
- **Post Recording** — Set how long the NVR continues recording after the event ends.
- **Schedule** — Define the active time periods for the current I/O alarm input source. For details on the schedule grid, refer to the **Record Schedule** section.
- **Linkage** — Configure the actions the system performs when the alarm is triggered.

The available linkage actions are:

- **Buzzer** — Sound the device buzzer for 10 seconds when the I/O alarm occurs.



Figure 8-4. Alarm linkage options

- **Show Message** — Display an alarm icon on the affected channel in the live preview when the I/O alarm occurs.
- **Email** — Send an email notification when the I/O alarm occurs.
- **Event Push Platform** — Push event alert information to third-party service platforms following an I/O alarm. This option is selected by default. For detailed configuration, refer to the **Event Push Platform** section.
- **Voice Prompts** — Broadcast a voice announcement when the I/O alarm occurs. Refer to the **Voice Prompts** section.
- **Notification** — Push custom alerts to third-party service platforms following an I/O alarm. This setting must be configured through the web client; refer to the **Custom Alert Push Settings** section.
- **Trigger Alarm Output** — Activate a linked alarm output when the I/O alarm occurs.
- **Trigger Channel Record** — Select the channels to record when the I/O alarm occurs.
- **PTZ Linkage** — Move a linked PTZ camera when the I/O alarm occurs. Only high-speed domes that support this feature can be linked.
- **Preset** — Link a preset point and set its dwell time. When the alarm occurs, the PTZ camera rotates to the configured preset point.
- **Tour** — Link a tour. When the alarm occurs, the PTZ camera follows the configured tour track.
- **Pattern Scan** — Link a pattern scan. When the alarm occurs, the PTZ camera runs the configured pattern.
- **Disarming** — Only **Local <-1** is supported. When enabled, **Local <-1** controls whether one-key disarming is applied. For detailed disarming parameters, refer to the **Disarming** section.

8.1.2 Alarm Output

When an event alarm is triggered and linked to an alarm output, use this page to configure the execution schedule and duration of that output.

Alarm Input		Alarm Output	
Alarm Output No.	Latch Time	Edit	
192.168.2.219->1	5 s		
192.168.2.219->2	5 s		
192.168.2.221->1	5 s		
192.168.2.216->1	5 s		

Figure 8-5. Alarm output source list

Click the **Edit** button beside a source to open its configuration page.

Advance

Alarm Output No.

192.168.2.219->1

▼

Latch Time

5 s

▼

Alarm Status

Close

Schedule

Table

List

0

2

4

6

8

10

12

14

16

18

20

22

24

SUN

MON

TUE

WED

THU

FRI

SAT

Import Template

Save Template

Trigger

Default

Copy

Apply

Figure 8-6. Alarm output configuration page

- **Alarm Output No.** — Select the alarm output source to configure.
- **Latch Time** — Set the duration of the alarm output signal.
- **Alarm Status** — Display the current I/O alarm output status.
- **Schedule** — Define the active time periods for the current alarm output source. Refer to the **Record Schedule** section.
- **Trigger** — Trigger a manual alarm. Click the button to open or close the I/O alarm output.

8.2 Exception

This menu configures the alarm linkage that the NVR performs when a system exception event occurs.

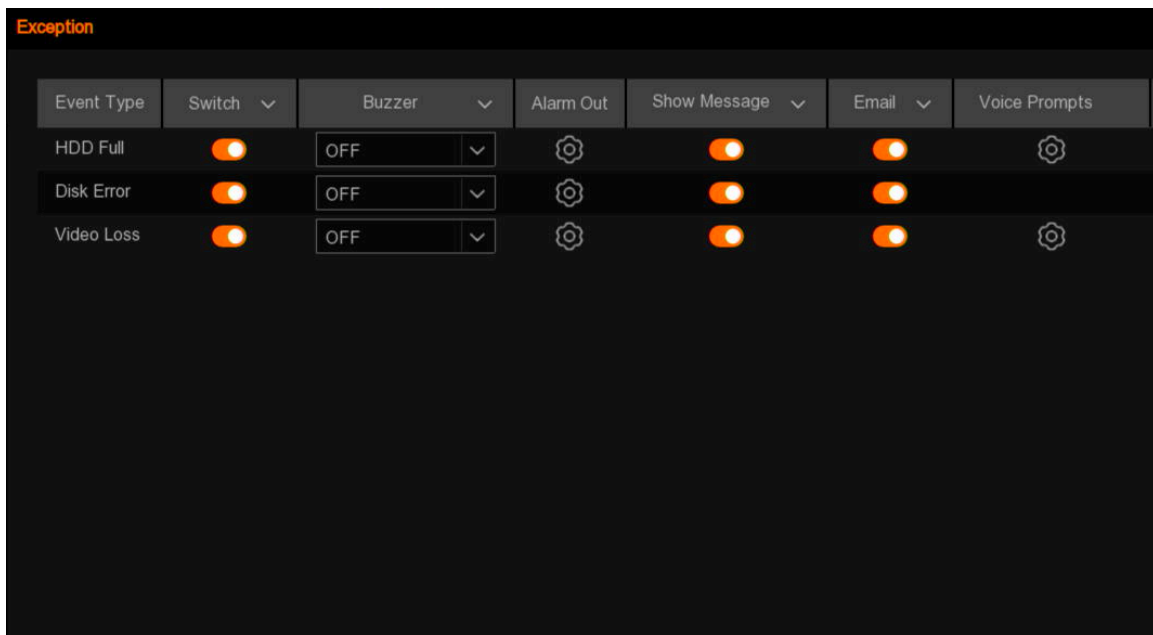


Figure 8-7. Exception handling page

The NVR detects three types of exception event:

- **HDD Full** — The hard disk is full.
- **Disk Error** — A hard-disk error has occurred, either during writing or because the disk is not initialized.
- **Video Loss** — The video signal has been lost because the channel was deleted or the camera is not connected correctly.

For each exception type, configure the following:

- **Switch** — Enable or disable the exception alarm.
- **Buzzer** — Sound the NVR buzzer for a preset duration when the event is triggered. Use the drop-down menu to select the duration.
- **Alarm Out** — If the NVR or IP camera supports external alarm output devices, send an alert to those devices.
- **Show Message** — Display an alarm icon or prompt on the live preview interface when the event alarm occurs.
- **Email** — Send an email notification when the event alarm occurs.
- **Voice Prompts** — Broadcast a voice announcement when the event alarm occurs. Refer to the **Voice Prompts** section.

8.3 Combined Alarm

This menu lets you define an alarm that is triggered only when a specified combination of individual alarm events occurs.

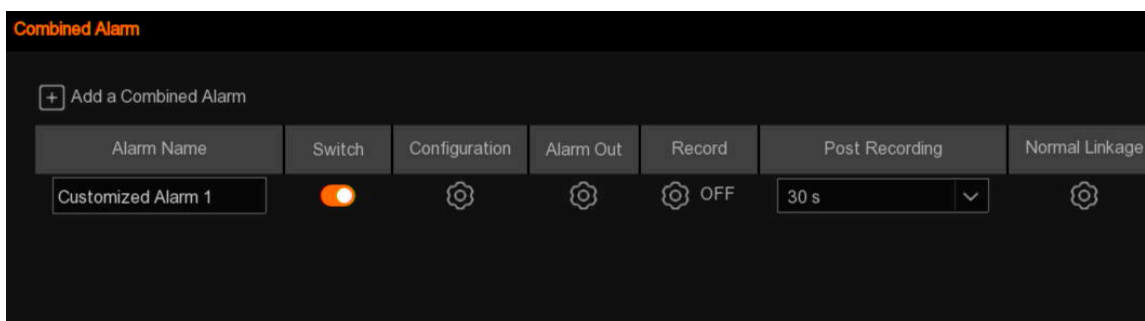


Figure 8-8. Combined alarm list



Figure 8-9. Combined alarm settings

- **Add Combined Alarm** — Add a new combined alarm group. Up to 15 groups are supported.
- **Alarm Name** — Set the name of the combined alarm.
- **Switch** — Select to enable the combined alarm.
- **Alarm Out** — Activate a linked alarm output when the combined alarm occurs.
- **Record** — Select the channels to record when the combined alarm occurs.
- **Post Recording** — Set how long the NVR continues recording after the combined alarm occurs.
- **Delete** — Delete the combined alarm group.

Under **Normal Linkage**, configure the routine actions performed when the combined alarm occurs:

- **Buzzer** — Sound the NVR buzzer for a preset duration when the event is triggered. Use the drop-down menu to select the duration.
- **Email** — Send an email notification when the combined alarm occurs.
- **Event Push Platform** — Push event alert information to third-party service platforms. This option is selected by default. For detailed configuration, refer to the **Event Push Platform** section.
- **Voice Prompts** — If a speaker is connected to the NVR, play a customized voice alert when the event is triggered. Refer to the **Voice Prompts** section for adding custom voice files.
- **Pop-Up** — Automatically display a prompt window when the combined alarm occurs.
- **Don't show later** — Select this option to suppress the automatic pop-up when the combined alarm is triggered.
- **Duration** — Set how long the pop-up prompt remains on screen.

NOTE If the mouse pointer is inside the display area, the pop-up display time pauses until the pointer moves out of the area.

Combined Alarm

Combined Alarm Name:

Customized Alarm 1

Time:

04/07/2026 15:07:45

☐ Don't show later

Duration

5s

⌵

⏮ < 1 /6 > ⏭

Figure 8-10. Combined alarm entry with configuration option

Click **Configuration** to open the configuration page of the combined alarm.

Combined Alarm Configuration

+ Add

No.	Alarm Type	Alarm Source	Delete
1	Motion Detection	CH3 (37x PTZ Camera)	
2	Motion Detection	CH2 (LPR-LPD ON)	

Condition Description:

Motion Detection

and

Motion Detection

Cancel

Apply

Figure 8-11. Combined alarm event list



Figure 8-12. Selecting a combined alarm event type

- **Add** — Add a new combined alarm event.
- **Alarm Type** — Select the alarm event type.
- **Alarm Source** — Select a channel that supports the selected event type.
- **Delete** — Delete the combined alarm event.

WARNING If an added combined alarm event is not enabled, a red prompt appears after you click **Apply**. Click the settings button to open the setup page for that alarm event and enable it.

8.4 Disarming

The one-key disarming function, combined with a schedule, lets you suppress alarm linkage behaviors for detected alarm events during specific time periods.

NOTE Exception alarm and combined alarm linkage are not governed by disarming. Enabling or disabling one-key disarming does not synchronize the disarming switch on this page. One-key disarming has the highest priority: while

it is enabled, the per-page disarming switch configuration is ignored so that the one-key disarming command takes effect immediately. For related details, refer to the **Alarm Input** section.

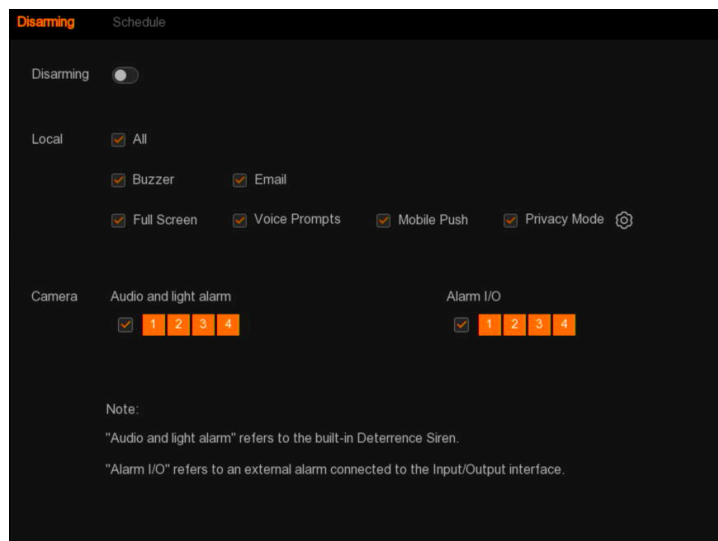


Figure 8-13. Disarming page — Local linkage types

- **Disarming** — Enable or disable the one-key disarming function.
- **Local** — The NVR local alarm linkage type.
- **All** — Select or clear all linkage types at once.

When one-key disarming is enabled, the following local linkages can be suppressed:

- **Buzzer** — Disable the buzzer when an alarm is triggered.
- **Alarm Out** — Disable external alarm output when an alarm is triggered.
- **Show Message** — Prevent alarm messages from appearing on the preview page when a detection event is triggered.
- **Email** — Prevent the NVR from automatically sending emails when an alarm is triggered.
- **Full Screen** — Prevent channels configured for full-screen mode from entering full-screen on the preview when an alarm is triggered.
- **Voice Prompts** — Disable voice prompts on channels configured for them when an alarm is triggered.
- **Mobile Push** — Prevent the device from pushing alarm information to the mobile apps (RXCam View and OvConnect) when an alarm is triggered.



Figure 8-14. Disarming page — Camera linkage types

The camera alarm linkage types that disarming can suppress are:

- **Privacy Mode** — When disarming is enabled, clicking **Privacy Mode** disables privacy mode on the configured channel.
- **Camera** — The camera alarm linkage type.
- **Audio and Light Alarm** — When disarming is enabled, cameras that support red and blue lights, white light, or a siren will not respond with those alerts when an alarm is triggered.
- **Alarm I/O** — When disarming is enabled, the I/O alarm input and output of a camera that supports them will not take effect.
- **Schedule** — Configure the time periods during which disarming is enabled. For details on the schedule grid, refer to the **Record Schedule** section.

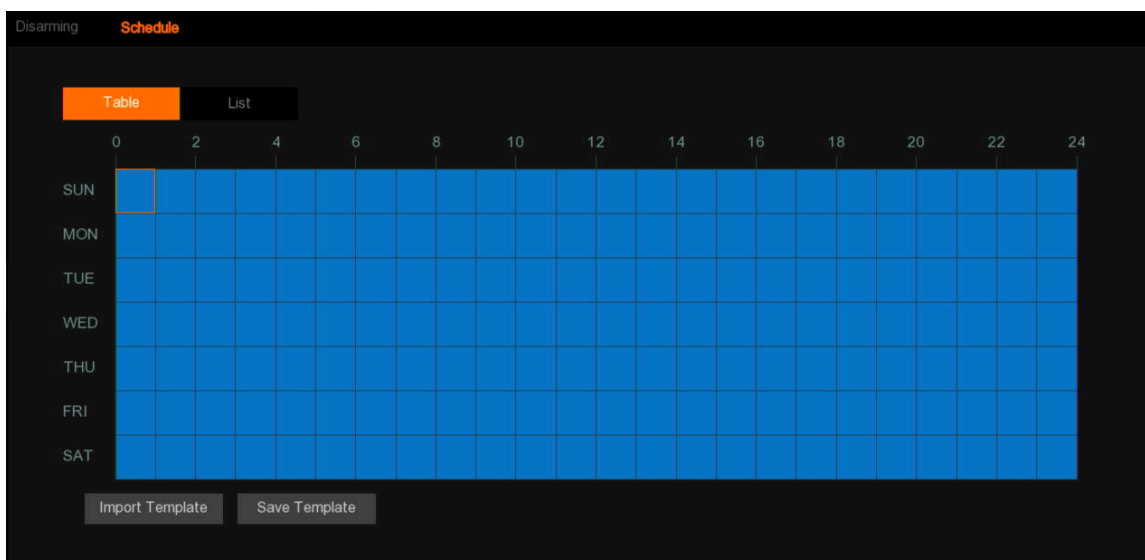


Figure 8-15. Disarming schedule configuration

Chapter 9 Deterrence & Voice

9.1 Voice Prompts

The voice prompt function links the OCTAVUE NVR to an alarm and voice broadcast device so that, when an alarm is triggered, the recorder can automatically or manually play the audio associated with an on-site "intrusion" event.

9.1.1 Voice File Management

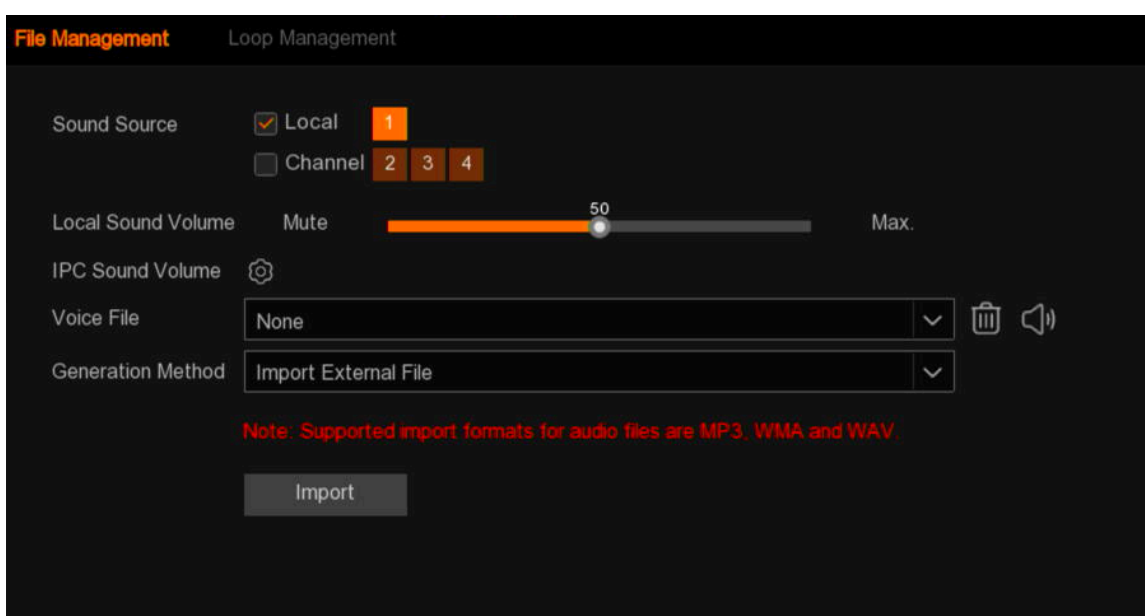


Figure 9-1. Voice file management page

Click **Import** to add an audio file to the recorder. Two import methods are supported:

- **Import External File** — Local import. The recorder accepts audio files in MP3, WMA, and WAV formats.

- **Text-to-Speech (Internet)** — Web server translation. Enter the text to be converted, and the recorder sends it to the network server, which returns a synthesized audio file. The generated file is saved automatically to the local hard disk. The text entry box accepts a maximum of 200 bytes.

NOTE Audio files imported for the face database and the license plate database are limited to 1 to 500 KB each. Audio files for all other purposes are limited to 1 to 5 MB each.

Once imported, an audio file becomes available for selection in the **Voice File** list. Voice prompts can be broadcast through two channels, **Local** and **IP channels**.



Figure 9-2. Voice prompt broadcast and volume settings

- **Local Audio Volume** — Adjusts the output volume of the prompts played from the NVR itself.
- **IPC Sound Volume** — Sets the output volume of the prompts played from the camera channel.
- **Local** — Local broadcast. When this mode is selected, an audio output device must be connected to the recorder.
- **Channel** — IP camera broadcast. This mode requires that the camera firmware provides a voice broadcast function and that the camera supports audio output.

Voice prompts can be scheduled by time period. Each alarm type supports up to 12 time periods, and the start and end times of any two periods must not overlap.

Figure 9-3. Voice prompt configuration based on face recognition

Voice prompts can also be configured for face recognition. In this mode, the system correlates the alarm signal from face recognition with the voice broadcast device and automatically plays the associated audio to the on-site "intrusion" subject.

NOTE Audio imported under face recognition can be associated only with the allow list and block list; it cannot be used for other alarm types.

9.1.2 Loop Management



Figure 9-4. Loop management page

After you select an audio file and define its time period, the selected file is played repeatedly. Loop broadcast can be configured for up to 12 time periods.

- **Voice File** — The audio file to be played on a loop for the selected time period.
- **Local** — Local broadcast. When this mode is selected, an audio output device must be connected to the recorder.
- **Channel** — Network camera broadcast. This mode requires that the camera firmware provides a voice broadcast function and that the camera supports audio output.

9.2 Deterrence

The deterrence menu configures the warning light, the red-and-blue light, and the alarm deterrent parameters for each camera channel. The connected camera must support deterrence.

9.2.1 White Light and Warning Light

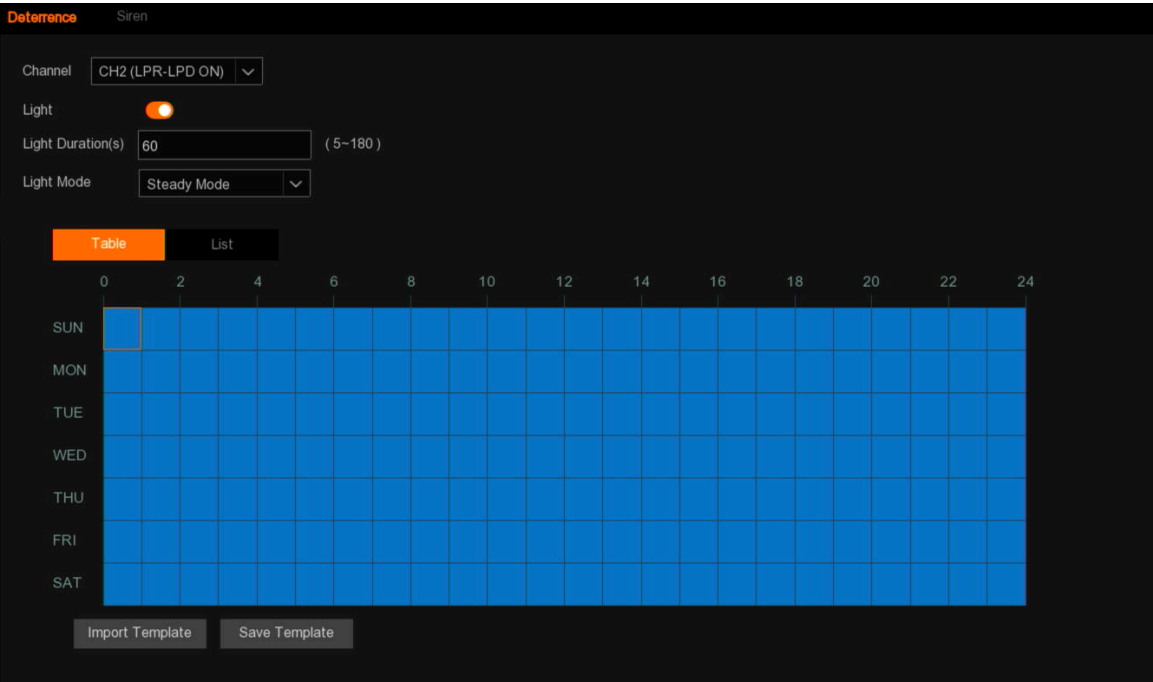


Figure 9-5. White light and warning light settings

- **Channel** — Selects the camera channel to configure.
- **Light** — Enables or disables the white light.
- **Light Duration (s)** — Sets how long the white light stays on.
- **Light Mode** — Sets the white light behavior. **Steady Mode** and **Flashing Mode** are supported.
- **Flashing Frequency** — Sets the flashing rate of the warning light. High, medium, and low levels are available.
- **Warning Light** — Enables or disables the red-and-blue light deterrent.
- **Warning Light Duration (s)** — Sets how long the red-and-blue light stays on.
- **Schedule** — Defines when the white light and the red-and-blue light are active. Configure the schedule as described in Record Schedule.

9.2.2 Siren

If the camera connected to the recorder has a built-in speaker, you can set the parameters that govern the alarm sound.

Figure 9-6. Siren settings

- **Channel** — Selects the camera channel to configure.
- **Enable** — Turns the siren function on or off.
- **Siren Type** — Selects the siren audio file. The available options depend on the camera model. Some models allow only the built-in system alarm audio, while others allow up to three custom audio files. To use a custom file, select **User-defined** and upload the prepared audio file from a USB drive.
- **File Name** — When **Siren Type** is set to **User-defined**, enter the file name and click the **Import** button on the right to select the custom audio file from the U-disk.
- **Siren Level** — Sets the siren volume, from 1 to 10. A higher level produces a louder sound.
- **Siren Duration (s)** — Sets the siren duration. Adjustable from 5 to 180 seconds.
- **Schedule** — If the IP camera is connected to the NVR through the HTTP port, click **Schedule** to open the setting page. Configure the schedule as described in Record Schedule.

WARNING Custom siren files must use the PCM or WAV format. The sampling rate must not exceed 8000 Hz, and the file size must not exceed 256 KB. Files that exceed these limits cannot be imported.

TIP Once a custom audio file is selected, a **Delete** button appears to its right, allowing you to remove the current file.

Chapter 10 Events & AI Detection

The OCTAVUE NVR combines conventional event triggers with a suite of on-board AI video-analytics detectors. Each detection type can be enabled per channel, tuned with its own parameters, assigned an arming schedule, and linked to one or more alarm responses. This chapter describes every detection type in turn, followed by the shared Schedule and Alarm Linkage settings that apply to all events.

10.1 Event Settings

The event list provides a single point of entry to every detection type supported by the connected channels. To locate a specific camera quickly, type its channel name into the search box at the top of the page. The filter control further narrows the list to show only the channels on which a given event type is currently enabled.

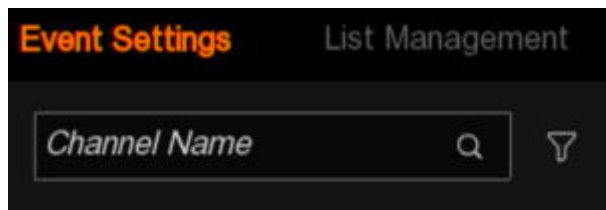


Figure 10-1. Event settings overview, with the channel search box and event-type filter.

NOTE The availability of each AI detection type depends on the model and firmware of the IP camera connected to the channel. Detectors that a camera does not support are hidden or shown as unavailable.

10.2 Face Detection

Face Detection captures and analyses human faces that appear within the camera's field of view. Use this page to configure the capture behaviour, detection geometry, and image-quality parameters.

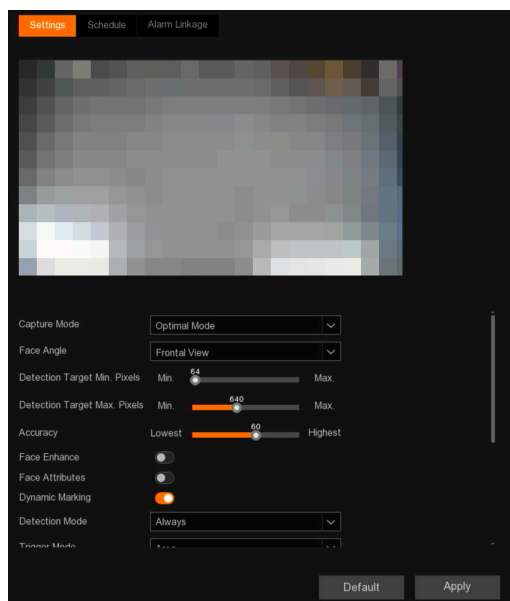


Figure 10-2. Face Detection configuration page.

- **Capture Mode** — selects how snapshots are pushed. **Optimal Mode** selects the best-quality image from the moment a face appears until it disappears and pushes that single frame; **Real-Time Mode** pushes one snapshot when the face appears and another when it disappears; **Interval Mode** pushes a user-defined number of snapshots at a user-defined interval.
- **Snapshot Qty** — in Interval Mode, the number of snapshots pushed for each detected target.
- **Capture Interval** — in Interval Mode, the frequency at which snapshots of a target are pushed.
- **Face Angle** — sets the range of face orientations to detect: **Front View** detects only frontal, forward-facing faces; **Multi-Angle** detects faces at multiple angles; **User-Defined** lets you set custom roll, pitch, and yaw ranges.
- **Roll Angle** — in User-Defined mode, the permitted range of face rotation.
- **Pitch Angle** — in User-Defined mode, the permitted range of vertical face tilt.
- **Yaw Angle** — in User-Defined mode, the permitted range of horizontal face pan.
- **Picture Quality** — sets the captured image quality from 1 (lowest) to 100 (highest).
- **Frontal View / Multi-Angle** — restores the angle settings for the frontal and multi-angle modes to their defaults.
- **Detection Target Min. Pixels** — the minimum bounding-box size; a face must be larger than this pixel value to be recognized.
- **Detection Target Max. Pixels** — the maximum bounding-box size; a face must be smaller than this pixel value to be recognized.
- **Sensitivity** — detection sensitivity from 1 to 100. Higher values make the detector trigger more readily.
- **Face Enhance** — improves recognition of moving faces; may reduce overall picture quality.
- **Face Attributes** — when enabled, the system records facial characteristics such as whether the person is wearing a mask or glasses, which can later be used as search filters.
- **Bounding Box** — when enabled, a green box is drawn around each detected target in the live image to aid identification.
- **Detection Mode** — determines how targets are found. **Hybrid Mode** detects both stationary and moving targets; **Motion Mode** detects moving targets only, ignoring stationary elements.
- **Trigger Mode** — selects the rule geometry: **Rectangular** (area) or **Line** (crossing).
- **Detection Area** — under the Rectangular rule, defines the monitored area. **Full Screen** covers the entire field of view; **User-Defined** covers only the drawn area.
- **Rule Number** — selects the rule to edit. Up to 4 detection rule areas are supported.
- **Rule Switch** — enables or disables the rule currently selected by Rule Number.
- **Rule Type** — under the Line rule, draw a line in the preview and set the crossing direction (A→B or B→A). A face crossing the line in the configured direction is detected. This mode suits scenarios that monitor targets crossing a defined path or boundary.

NOTE Face Attributes is supported on selected models only. Because of algorithm and hardware limitations, recognized facial attributes may not always be accurate.

10.3 Pedestrian & Vehicle Detection

Pedestrian & Vehicle Detection identifies people and vehicles in the scene and can capture their attributes. Use this page to configure capture behaviour, target types, and the detection area.

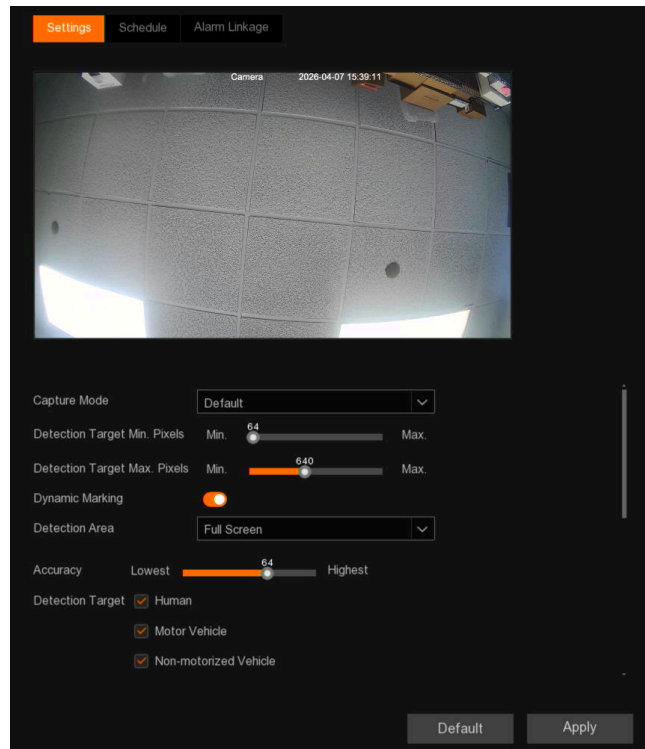


Figure 10-3. Pedestrian & Vehicle Detection configuration page.

- **Capture Mode** — **Default Mode** selects and pushes the highest-quality image from when a person or vehicle appears until it disappears; **Real-Time Mode** pushes once on appearance and again on disappearance; **Interval Mode** uses a custom push count and interval.
- **Snap Qty** — in Interval Mode, the number of snapshots pushed for each detected target.
- **Capture Interval** — in Interval Mode, the frequency at which snapshots of a target are pushed.
- **Detection Target Min. Pixels** — the minimum bounding-box size; a person or vehicle must be larger than this value to be identified.
- **Detection Target Max. Pixels** — the maximum bounding-box size; a person or vehicle must be smaller than this value to be identified.
- **Pedestrian Attributes** — captures pedestrian images and records attributes such as upper- and lower-garment colour, gender, age, hat, eyewear, sleeve length, backpack, and direction of travel.
- **Vehicle Attributes** — captures motor-vehicle images and records attributes such as colour, make, and type.
- **Sensitivity** — detection sensitivity from 1 to 100. Higher values make the detector trigger more readily.
- **Detection Target** — the object types to detect: **Pedestrian**, **Motor Vehicle**, and **Non-Motorized Vehicle**.
- **Detection Mode** — **Hybrid** detects both stationary and moving targets; **Dynamic** detects moving targets only.
- **Bounding Box** — when enabled, a green box is drawn around each detected target in the live image.
- **Detection Area** — **Full Screen** covers the entire field of view; **User-Defined** covers only the drawn area.
- **Rule Number** — selects the rule to edit. Up to 4 detection rule zones are supported, and each zone may use distinct detection targets.
- **Rule Switch** — enables or disables the rule currently selected by Rule Number.

10.4 Multi-Target-Type Recognition

Multi-Target-Type Recognition analyses the video stream in real time using built-in AI algorithms and can identify several different categories of target in the frame simultaneously.

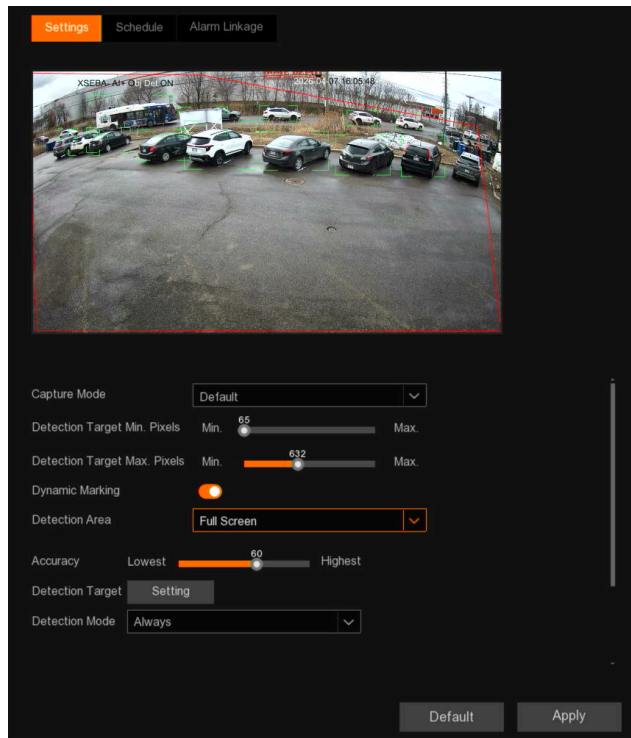


Figure 10-4. Multi-Target-Type Recognition configuration page.

- **Multi-Target-Type Recognition** — the master switch for universal object detection.
- **Capture Mode** — **Optimal Mode** selects and pushes the highest-quality image captured during the target's appearance; **Real-Time Mode** pushes once when the target appears and again when it disappears; **Interval Mode** uses a custom push timing and interval.
- **Snapshot Qty** — in Interval Mode, the number of images pushed for each target.
- **Capture Interval** — in Interval Mode, the frequency at which target notifications are pushed.
- **Detect Target Min. Pixels** — the minimum bounding-box size; a target must be larger than this value to be recognized.
- **Detect Target Max. Pixels** — the maximum bounding-box size; a target must be smaller than this value to be recognized.
- **Sensitivity** — higher sensitivity improves detection but increases the rate of false positives.
- **Detection Mode** — governs target behaviour within the monitored zone: **Always** detects all targets in the frame; **Moving Only** filters out stationary targets.
- **Bounding Box** — displays detection boxes around targets and toggles the on-screen rule lines.
- **Detection Target** — the categories to identify, including pedestrians, vehicles, animals, public facilities, transport vehicles, sports equipment, and kitchenware.
- **Detection Area** — **Full Screen** monitors the entire field of view; **User-Defined** monitors only the drawn zones.
- **Rule Number** — selects the detection rule. Up to 4 rules are supported, and each zone may use a distinct detection type (for example, Zone 1 detects people and vehicles while Zone 2 detects animals).
- **Rule Switch** — enables or disables the rule currently selected by Rule Number.

Rule line configuration. When using the custom detection area, each zone may be drawn as a polygon of 3 to 8 sides. Use **Add** to insert a default rule into the configured area, **Draw** to draw a rule manually, **Remove** to delete the selected rule, and **Remove All** to delete every rule in the area.

10.5 License Plate Detection

License Plate Detection uses video analytics to detect and recognize the plates of vehicles passing through the camera's field of view. Use this page to configure the recognition parameters and capture behaviour.

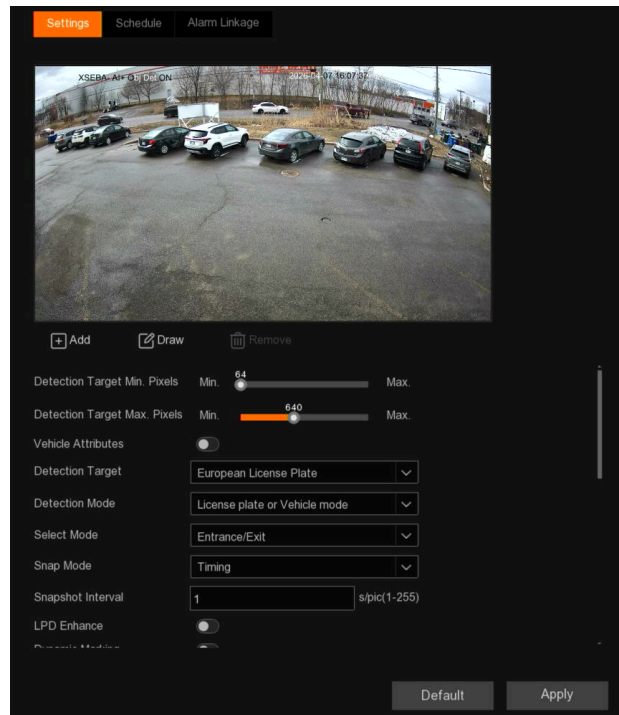


Figure 10-5. License Plate Detection configuration page.

- **Detect Target Min. Pixels** — the minimum bounding-box size; a plate must be larger than this value to be recognized.
- **Detect Target Max. Pixels** — the maximum bounding-box size; a plate must be smaller than this value to be recognized.
- **Vehicle Attributes** — captures motor-vehicle images and records attributes such as colour, make, and type.
- **Detection Target** — selects the plate region, for example **European License Plate** or **American License Plate**.
- **Snap Mode** — the capture method, which applies different techniques according to the selected application mode.
- **Select Mode** — the application mode; choosing the mode that matches the installation location improves capture accuracy. Three modes are available:
 - **Entrance/Exit** — barrier-gate scenarios, supporting **Entry** (alert and capture when a vehicle enters and crosses the detection line), **Exit** (alert and capture on leaving), and **Timing** (capture at a set interval while the vehicle is in the zone).
 - **City Street** — urban-street scenarios, supporting **Entry**, **Exit**, and **Line Crossing** (alert and capture when a vehicle or plate crosses the detection line).
 - **Alarm Input** — IO-triggered mode; requires an external sensor to drive capture.
- **Capture Vehicle Image** — when enabled, the system captures and transmits a silhouette image of the vehicle whenever an alarm is triggered but the plate cannot be recognized. When disabled, no silhouette is captured in that case.
- **Bounding Box** — when enabled, a green box is drawn around each detected target in the live image.
- **LPD Enhance** — enhances the plate region to improve the clarity and readability of plates, helping the recognition algorithm read the characters accurately.

NOTE In **Entrance/Exit** and **City Street** modes you must position the detection line in the image; plates are captured when they touch the line. In **Alarm Input** mode no detection line is required — plates within the detection area are captured while the alarm-input signal is active.

NOTE Enabling **LPD Enhance** automatically switches the image control page to Day/Night mode and sets IR-CUT Mode to Image mode, hiding the Exposure Compensation, Shutter, and Exposure Time controls.

10.6 Intrusion

Intrusion detection determines whether an object enters a defined restricted area in the video. It is useful for monitoring restricted areas and detecting unauthorized entry or trespassing in locations such as warehouses, construction sites, and other secured premises. Support depends on the camera model in use.

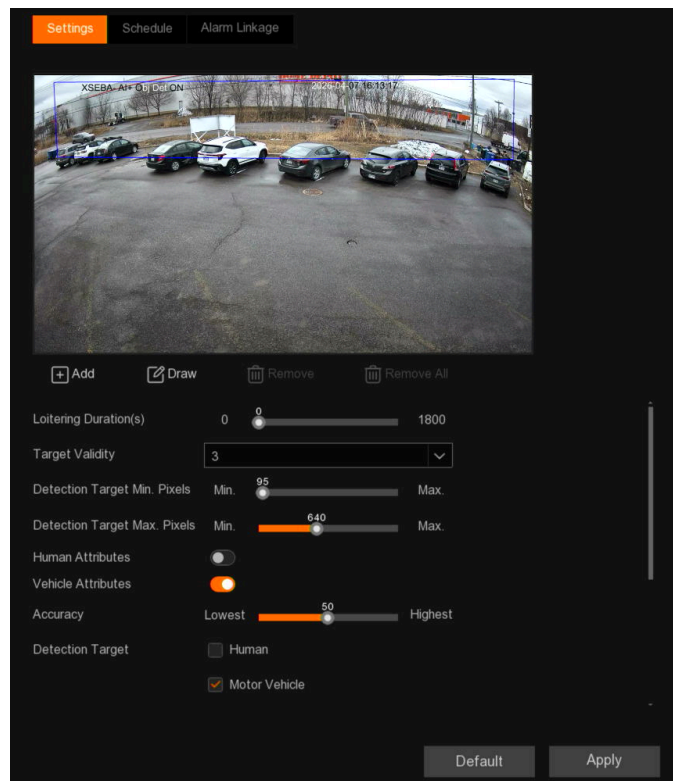


Figure 10-6. Intrusion detection configuration page.

- **Loitering Duration** — the time, in seconds, that an object must remain in the alert area before an alarm is raised. For example, a value of 5 triggers the alarm after the target has been in the area for 5 seconds. The maximum is 10 seconds.
- **Target Validity** — the target-confidence level, expressed as the similarity between the target and the configured detection type. An alarm is raised only when this similarity is met or exceeded. Levels run from 1 to 4, where 1 is the highest confidence: 1 $\approx$ 80%, 2 $\approx$ 60%, 3 $\approx$ 40%, and 4 $\approx$ 20%.
- **Detection Target Min. Pixels** — the minimum bounding-box size; a target must be larger than this value to be recognized.
- **Detection Target Max. Pixels** — the maximum bounding-box size; a target must be smaller than this value to be recognized.
- **Pedestrian Attributes** — captures pedestrian images and records attributes such as garment colour, gender, age, hat, eyewear, sleeve length, backpack, and direction.
- **Vehicle Attributes** — captures motor-vehicle images and records attributes such as colour, make, and type.
- **Sensitivity** — the trigger sensitivity for intrusion detection. Higher values make the alarm trigger more readily.
- **Detection Target** — the target type to detect: **Pedestrian** (intruding people only), **Motor Vehicle** (motor vehicles only), **Non-Motorized** (non-motorized vehicles only), or no target type selected, in which case all moving targets are detected.
- **Rule Number** — selects the rule to edit. In the preview, left-click to draw the detection area as a closed polygon, then click **Save** to store it. Use **Remove** to delete the selected area and **Remove All** to delete every area.
- **Rule Switch** — when enabled, the configured detection area takes effect.

- **Bounding Box** — when enabled, the target detection box is shown in the live image.

10.7 Enter/Exit Region

Region detection monitors a defined alert area and links an alarm response according to whether a target enters or leaves the area. Enter Region and Exit Region share the same parameters; the only difference is the triggering event.

10.7.1 Enter Region

Enter Region detection determines whether a target enters the configured alert area and links an alarm according to the result.

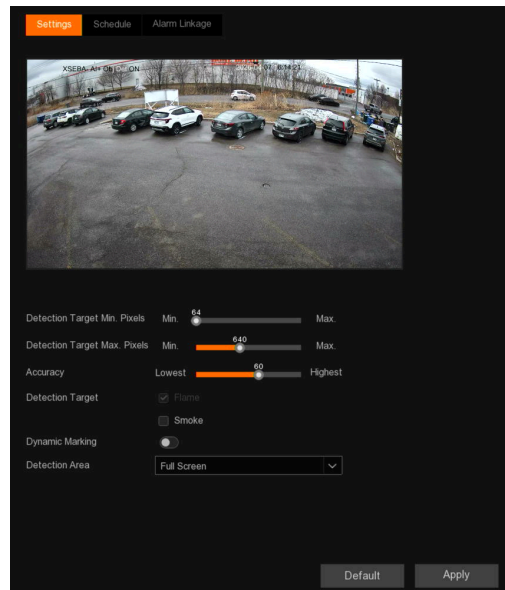


Figure 10-7. Enter Region detection configuration page.

- **Target Validity** — the target-confidence level (target-to-type similarity). An alarm is raised only when the similarity is met or exceeded. Levels 1 to 4, where 1 is highest: 1 $\approx$ 80%, 2 $\approx$ 60%, 3 $\approx$ 40%, 4 $\approx$ 20%.
- **Detect Target Min. Pixels** — the minimum bounding-box size; a target must be larger than this value to be identified.
- **Detect Target Max. Pixels** — the maximum bounding-box size; a target must be smaller than this value to be identified.
- **Pedestrian Attributes** — captures pedestrian images and records attributes such as garment colour, gender, age, hat, eyewear, sleeve length, backpack, and direction.
- **Vehicle Attributes** — captures motor-vehicle images and records attributes such as colour, make, and type.
- **Sensitivity** — the trigger sensitivity for region detection. Higher values make the alarm trigger more readily.
- **Detection Target** — the target type: **Pedestrian**, **Motor Vehicle**, **Non-Motorized Vehicle**, or none (in which case all moving targets are detected).
- **Rule Number** — selects the rule to edit. In the preview, left-click to draw the detection area as a closed polygon, then click **Save**. Use **Remove** and **Remove All** to clear areas.
- **Rule Switch** — when enabled, the configured detection area takes effect.
- **Bounding Box** — when enabled, the target detection box is shown in the live image.

10.7.2 Exit Region

Exit Region detection determines whether a target leaves the configured alert area and links an alarm according to the result. Its parameters are identical to those of Enter Region.

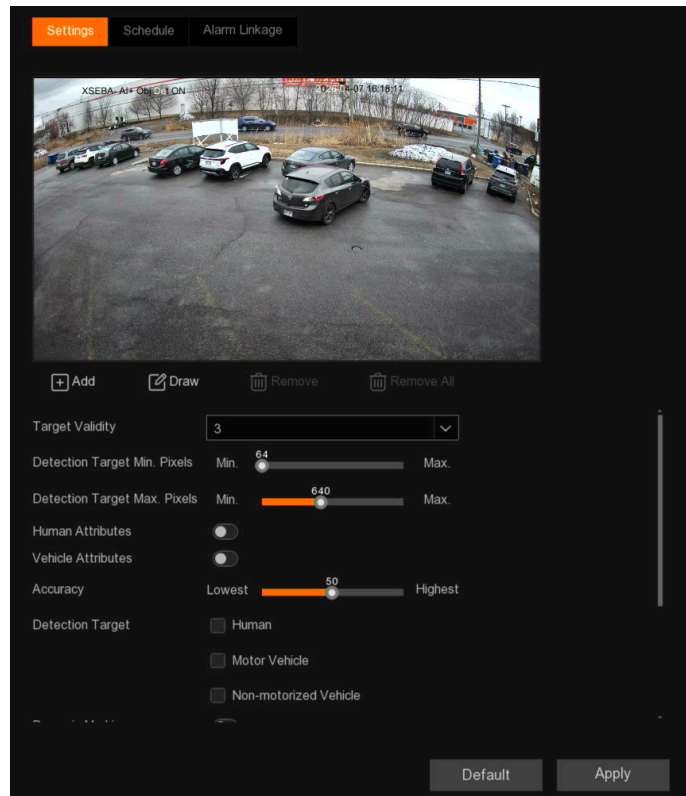


Figure 10-8. Exit Region detection configuration page.

10.8 Line Crossing

Line Crossing detection identifies people, vehicles, or other objects that cross a predefined virtual line and can trigger a configured response.

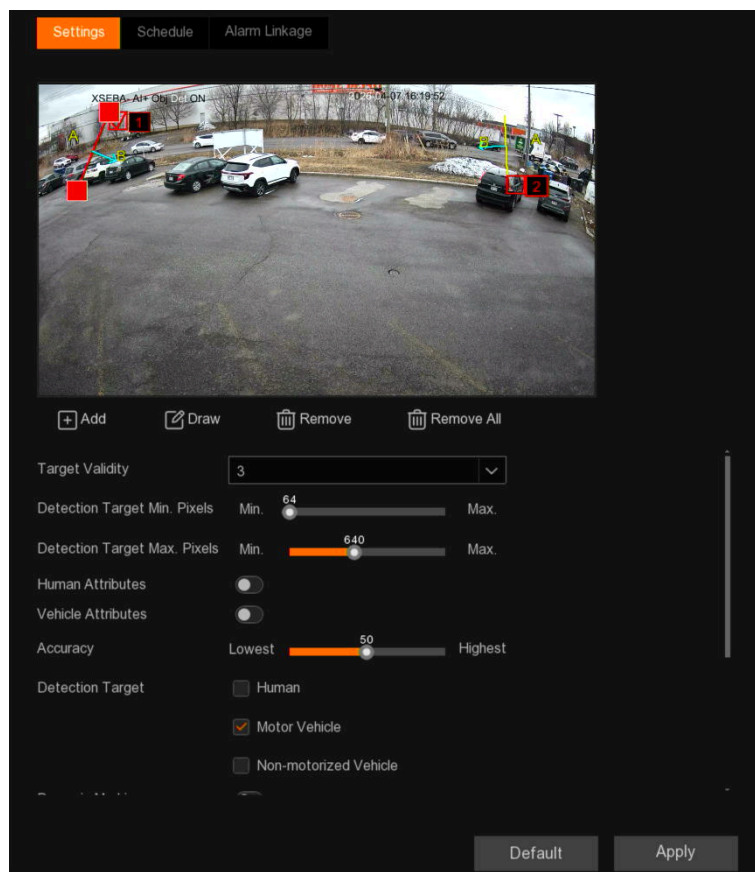


Figure 10-9. Line Crossing detection configuration page.

- **Target Validity** — the target-confidence level (target-to-type similarity). An alarm is raised only when the similarity is met or exceeded. Levels 1 to 4, where 1 is highest: 1 $\approx$ 80%, 2 $\approx$ 60%, 3 $\approx$ 40%, 4 $\approx$ 20%.
- **Detect Target Min. Pixels** — the minimum bounding-box size; a target must be larger than this value to be identified.
- **Detect Target Max. Pixels** — the maximum bounding-box size; a target must be smaller than this value to be identified.
- **Pedestrian Attributes** — captures pedestrian images and records attributes such as garment colour, gender, age, hat, eyewear, sleeve length, backpack, and direction.
- **Vehicle Attributes** — captures motor-vehicle images and records attributes such as colour, make, and type.
- **Sensitivity** — the trigger sensitivity for line crossing. Higher values make the alarm trigger more readily.
- **Detection Target** — the target type: **Pedestrian**, **Motor Vehicle**, **Non-Motorized Vehicle**, or none (in which case all moving targets are detected).
- **Rule Number** — selects the rule to edit. In the preview, left-click to draw the detection line, then click **Save**. Use **Remove** to delete the selected line and **Remove All** to delete every line.
- **Rule Switch** — when enabled, the configured detection line takes effect.
- **Rule Type** — the crossing direction: **A→B** detects movement from side A to side B only; **B→A** detects movement from side B to side A only; **A↔B** detects movement in either direction.
- **Bounding Box** — when enabled, the target detection box is shown in the live image.

WARNING Do not place the detection line too close to the edge of the image, or a target may pass the camera without triggering the alarm. Do not make the line too short, or a crossing target may fail to trigger the alarm.

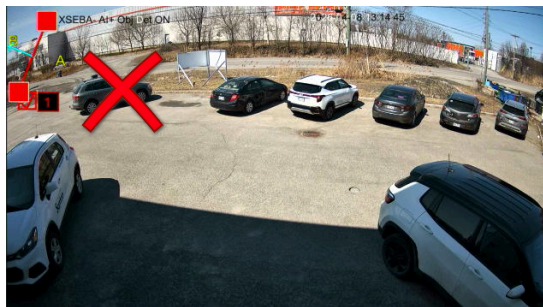


Figure 10-10. Example of a correctly positioned crossing line within the scene.



Figure 10-11. Example of crossing-direction rule configuration.

10.9 Object Detection

Object Detection identifies items left behind or removed within a defined area — for example luggage, a wallet, or dangerous goods — and can trigger a configured response.

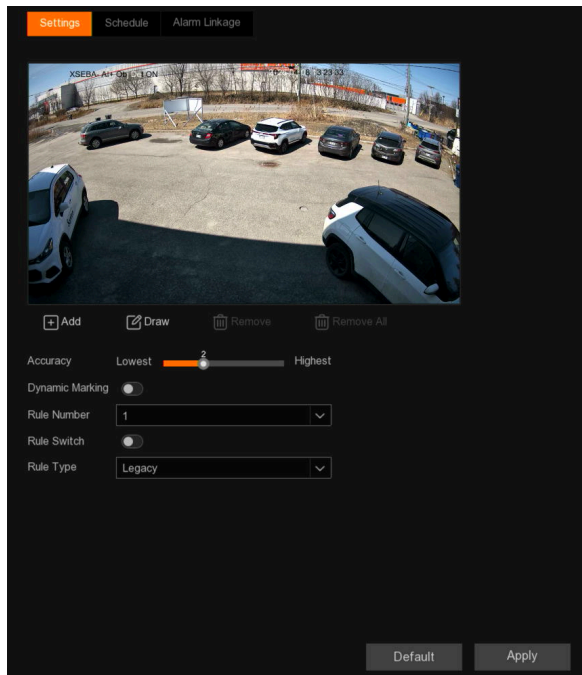


Figure 10-12. Object Detection configuration page.

- **Sensitivity** — range 1 to 4, default 2. Higher sensitivity makes left or removed objects more likely to be detected but increases false detections while reducing missed detections. The default value is recommended.
- **Rule Number** — selects the rule to edit. In the preview, left-click to draw the detection area as a closed polygon, then click **Save**. Use **Remove** and **Remove All** to clear areas.
- **Rule Switch** — when enabled, the configured detection area takes effect.
- **Bounding Box** — when enabled, the target detection box is shown in the live image.
- **Rule Type** — **Legacy** detects only objects left in the area; **Lost** detects only objects removed from the area; **Legacy & Loss** detects both.

Click four points in the image to draw the virtual area. The area must be a convex polygon; concave polygons are not saved.

NOTE The detection area should be at least as large as the object being detected. The detected object must not be obscured.

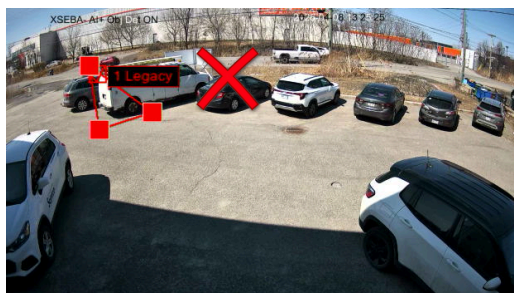


Figure 10-13. Drawing a convex detection area for object detection.

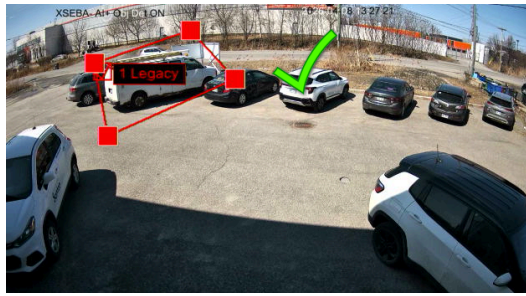


Figure 10-14. Object-detection result showing a highlighted left/removed item.

10.10 Fire & Smoke Detection

Fire & Smoke Detection analyses the real-time video stream with image-recognition algorithms to monitor for flames or smoke within designated areas and issues alerts accordingly.

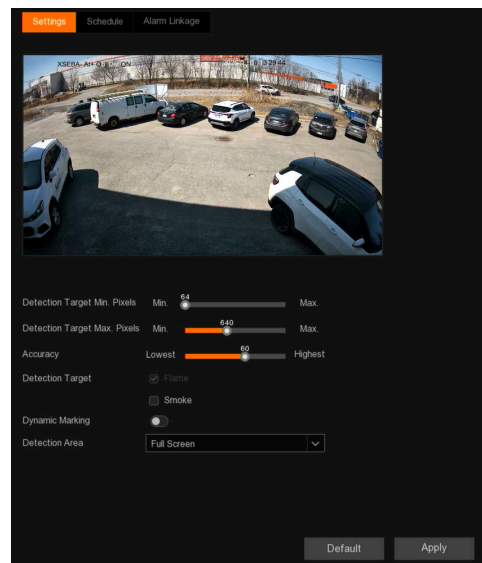


Figure 10-15. Fire & Smoke Detection configuration page.

- **Fire & Smoke Detection** — the master switch for the detector.
- **Detection Target Min. Pixels** — the minimum bounding-box size; a target must be larger than this value to be recognized.
- **Detection Target Max. Pixels** — the maximum bounding-box size; a target must be smaller than this value to be recognized.
- **Sensitivity** — higher sensitivity increases responsiveness to flames and smoke but may raise the false-alarm rate.
- **Detection Target** — the target type: **Flame** (open flames) and **Smoke** (smoke).
- **Detection Area** — **Full Screen** monitors the entire field of view; **User-Defined** monitors only the drawn detection box.

Rule configuration area. Configure, modify, and display rules here; detection areas of 3 to 8 sides are supported. Use **Add** to insert a default rule, **Draw** to draw a rule manually, and **Remove** to delete the selected rule.

10.11 Cross Counting

Cross Counting compiles statistics for people, motor vehicles, non-motorized vehicles, or moving objects that cross a detection line.

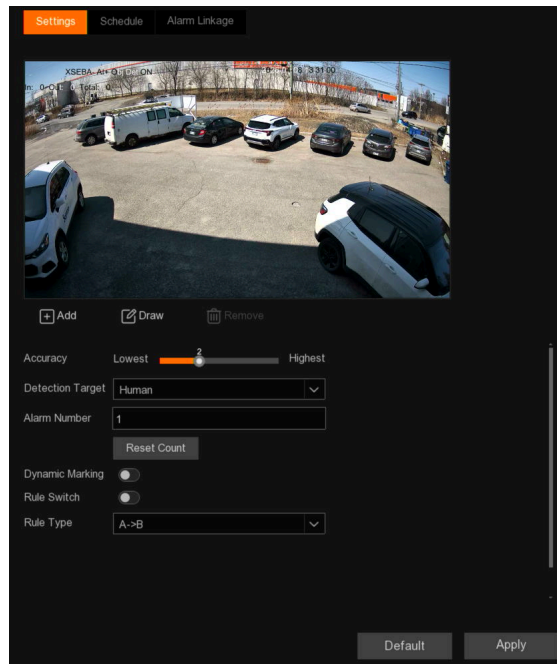


Figure 10-16. Cross Counting configuration page.

- **Sensitivity** — range 1 to 4, default 2. Higher sensitivity triggers detection more readily.
- **Detection Target** — the counting target type: **Motion** (any moving object crossing the line), **Pedestrian**, **Motor Vehicle**, or **Non-Motorized Vehicle**.
- **Alarm Number** — the alarm threshold. The alarm count is calculated as (crossings in) – (crossings out); the alarm is raised when the count reaches this value.
- **Reset Count** — clears the current count and restarts counting.
- **Rule Switch** — when enabled, the configured detection line takes effect.
- **Rule Type** — **A→B** counts people or objects moving from side A to side B; **B→A** counts movement from side B to side A.
- **Bounding Box** — when enabled, the target detection box is shown in the live image.

Click **Add** to insert a detection line or **Draw** to draw one manually. To adjust a line, click the red box on it so the line turns red, then hold the left mouse button to move it or drag an endpoint to change its length or position. To delete a line, click the red box on it and then click **Remove**.

WARNING Keep the detection line away from the edge of the image, place it where the target can actually reach it, and do not make it too short — otherwise crossings may fail to trigger the alarm.

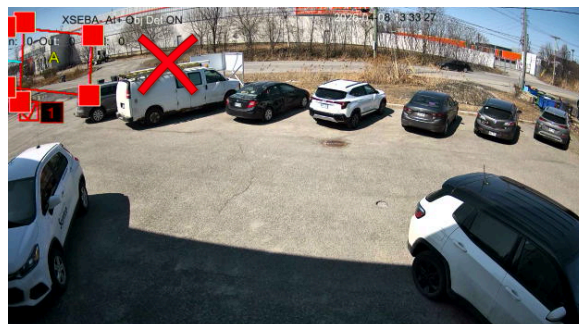


Figure 10-17. Cross Counting line placement within the scene.

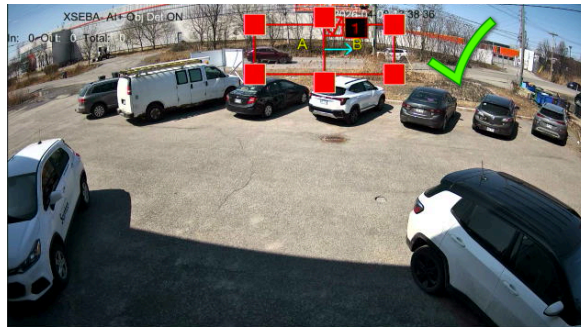


Figure 10-18. Cross Counting statistics display.

10.12 Heat Map

The Heat Map presents visitor activity across the scene as a colour-graded overlay, highlighting the areas that attract the most movement or dwell time.

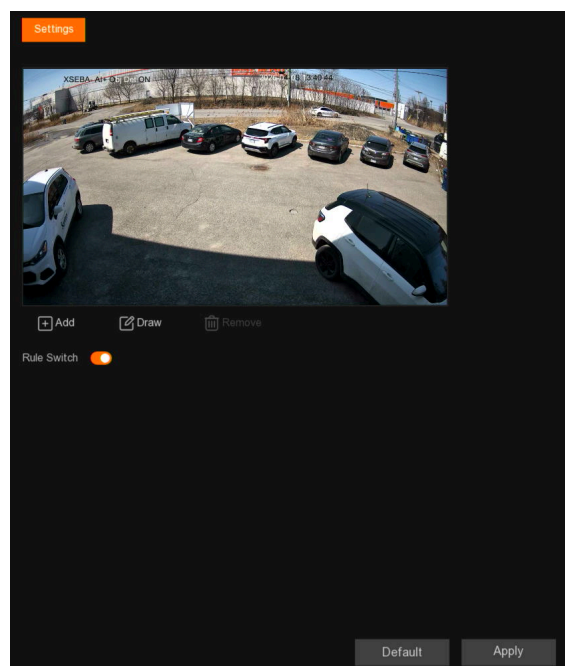


Figure 10-19. Heat Map configuration page.

- **Rule Switch** — enables or disables the detection area.
- **Add** — adds a default detection region.
- **Draw** — draws the detection area manually.
- **Remove** — select a detection area box and click Remove to delete it.

10.13 Crowd Density

Crowd Density detection monitors the gathering of people in a defined area to help maintain orderly conditions.

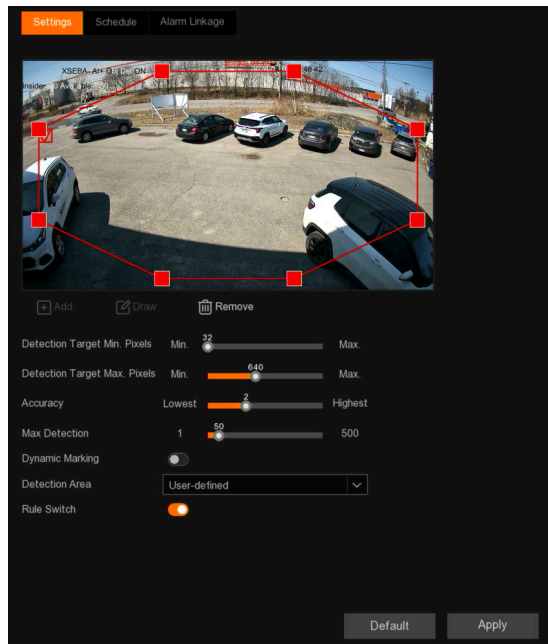


Figure 10-20. Crowd Density configuration page.

- **Detect Target Min. Pixels** — the minimum bounding-box size; a person must be larger than this value to be identified.
- **Detect Target Max. Pixels** — the maximum bounding-box size; a person must be smaller than this value to be identified.
- **Sensitivity** — range 1 to 4. Higher sensitivity triggers detection more readily.
- **Max Detection** — when the number of people in the area exceeds this maximum, the crowd-density alarm is raised.
- **Bounding Box** — when enabled, the target detection box is shown in the live image.
- **Detection Area** — **Full Screen** for full-screen detection or **User-Defined** for a custom area.
- **Rule Switch** — enables or disables the detection area.

10.14 Queue Length

Queue Length detection reports the state of a queue, including its length and how long it remains stalled.

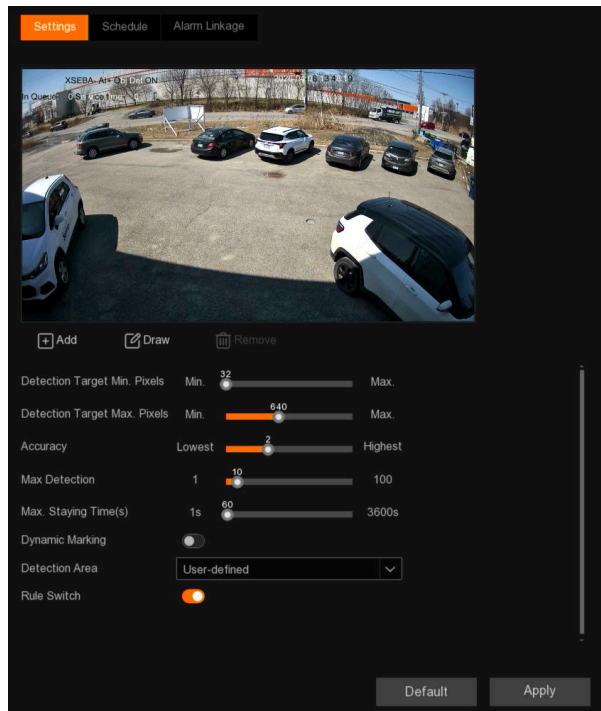


Figure 10-21. Queue Length configuration page.

- **Detect Target Min. Pixels** — the minimum bounding-box size; a person must be larger than this value to be identified.
- **Detect Target Max. Pixels** — the maximum bounding-box size; a person must be smaller than this value to be identified.
- **Sensitivity** — range 1 to 4. Higher sensitivity triggers detection more readily.
- **Max Detection** — when the number of people in the area exceeds this maximum, the queue-length alarm is raised.
- **Max. Staying Time** — when the queue's stall time exceeds this value, the queue-length alarm is raised.
- **Bounding Box** — when enabled, the target detection box is shown in the live image.
- **Detection Area** — **Full Screen** for full-screen detection or **User-Defined** for a custom area.
- **Rule Switch** — enables or disables the detection area.

10.15 Special Sound

Special Sound detection recognizes specific acoustic events picked up by the camera's microphone and raises an alarm when a selected sound type is detected.

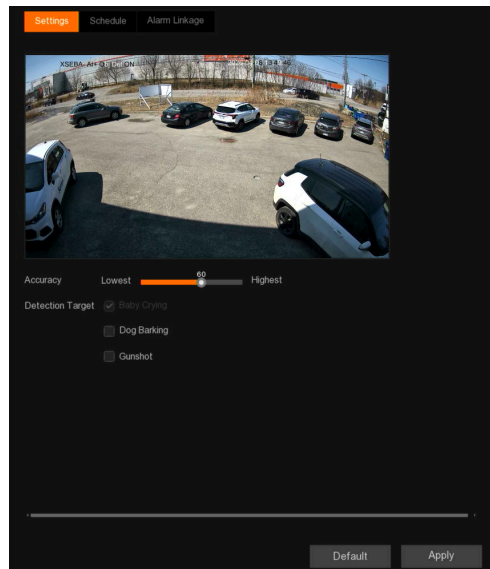


Figure 10-22. Special Sound detection configuration page.

- **Sensitivity** — higher sensitivity makes the detector trigger more readily.
- **Detection Target** — the sound types to detect: **Baby Crying**, **Dog Barking**, and **Gunshot**. Select each type to enable its detection.

10.16 Motion Detection

Motion Detection raises an alarm when a moving target appears in the image. Use this page to configure the detection sensitivity and the analysis method.

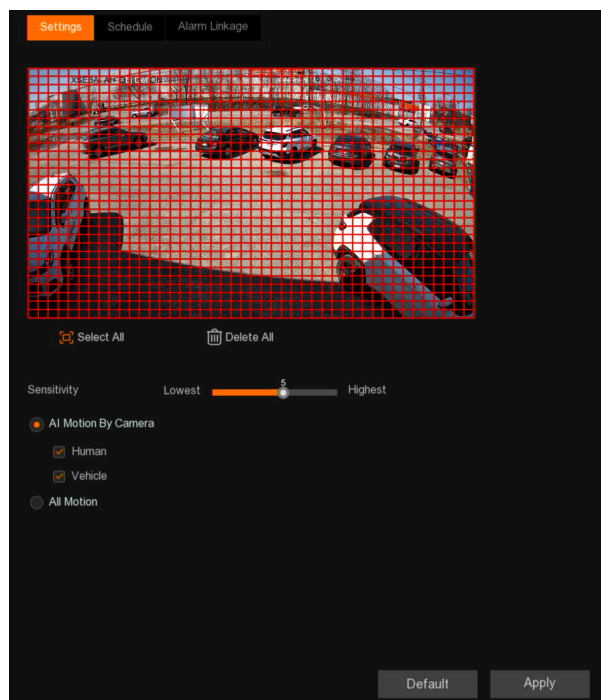


Figure 10-23. Motion Detection configuration page.

- **Sensitivity** — the sensitivity level. Higher values extend the effective detection distance.
- **AI Motion By Recorder** — suitable for cameras without on-board intelligent motion detection; offers Pedestrian or Vehicle detection types. (Not supported on some NVR models.)
- **AI Motion By Camera** — suitable for network cameras with on-board intelligent motion detection; offers Pedestrian, Vehicle, or Animal detection types. (Animal detection is supported on some cameras only.)

- **All Motion** — detects movement from any object and triggers a motion alarm for all moving objects.
- **Pedestrian Tracking** — enables human-shape tracking. When active, the device automatically follows the target on a human-shape motion trigger. (Requires cameras that support human-shape tracking.)

10.17 Sound Detection

Sound Detection raises an alarm when the audio input changes in a way that matches the configured detection thresholds.

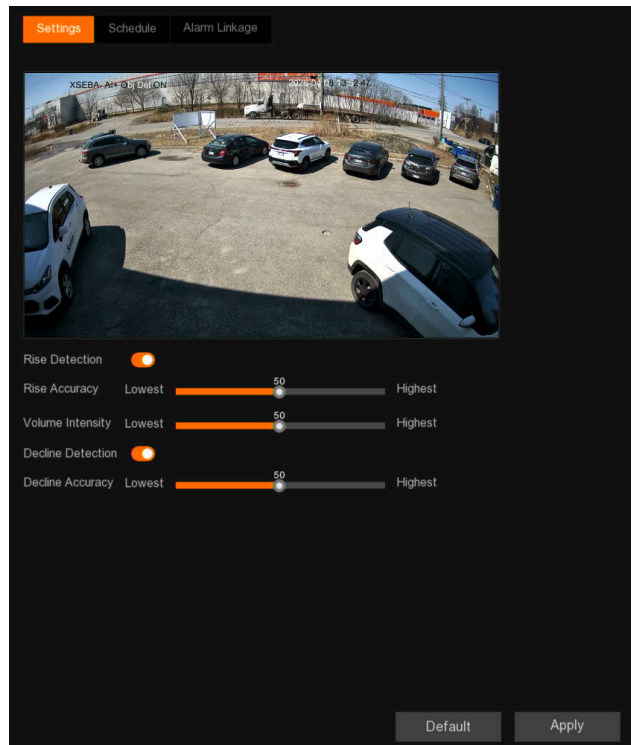


Figure 10-24. Sound Detection configuration page.

- **Sound Detection** — enables or disables audio detection.
- **Rise** — the volume-surge switch. When enabled, the alarm triggers only on a sudden increase in volume.
- **Rise Sensitivity** — sensitivity to rising sound levels, from 1 to 100. Higher values increase sensitivity to surges.
- **Sound Intensity** — the sound threshold, from 1 to 100. A higher threshold requires a louder sound to trigger the surge alarm.
- **Decline** — the volume-drop switch. When enabled, the alarm triggers only on a sudden decrease in volume.
- **Decline Sensitivity** — sensitivity to falling sound levels, from 1 to 100. Higher values increase sensitivity to drops.

10.18 Video Tampering

Video Tampering detection determines whether the monitored image has been obscured and can trigger a configured response when the alarm is raised.

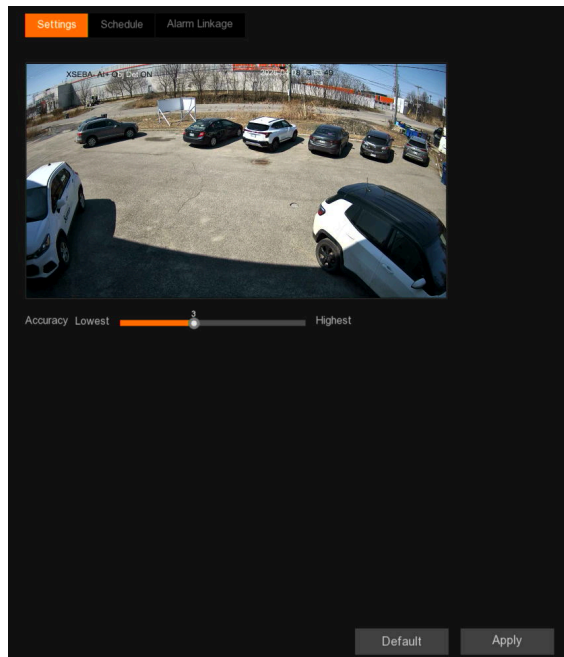


Figure 10-25. Video Tampering configuration page.

- **Sensitivity** — range 1 to 6, default 4. Higher sensitivity makes the alarm trigger more readily.

10.19 Schedule

Configure the arming time period for each event. For details on defining time periods, refer to the video schedule described in the Recording chapter.

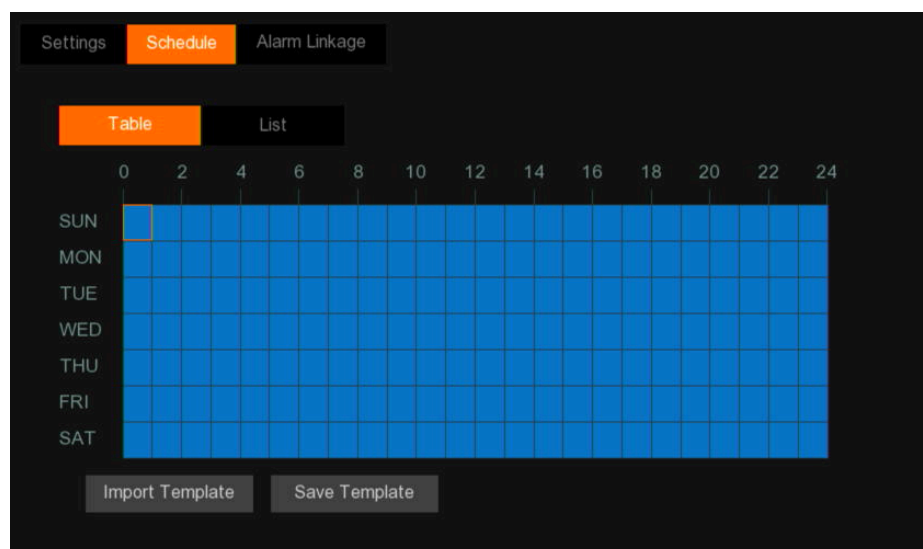


Figure 10-26. Event arming schedule.

NOTE The arming schedule is not available for the Heat Map. Motion detection on the camera channel is not supported under the ONVIF protocol.

10.20 Alarm Linkage

After configuring the trigger for an event, define the linkage actions the NVR performs when that event's alarm occurs.

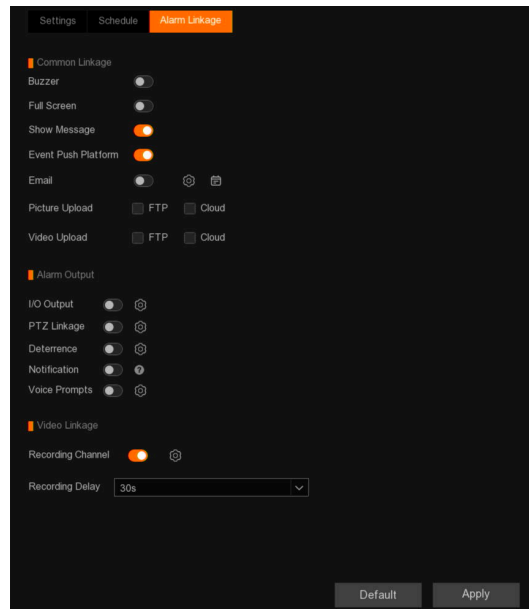


Figure 10-27. Alarm linkage configuration page.

- **Buzzer** — sets whether the device beeps when the event alarm occurs; the beep lasts 10 seconds.
- **Full Screen** — sets whether the channel is shown full-screen in the preview when the event alarm occurs.
- **Show Message** — sets whether an alarm icon appears on the live-preview channel when the event alarm occurs.
- **Event Push Platform** — sets whether event alerts are pushed to third-party service platforms. Selected by default; refer to the Event Push Platform settings for details.
- **Email** — sets whether an email is sent when the event alarm occurs. Use the setting and schedule buttons on the right to configure the message parameters; refer to the mail configuration settings for details.
- **Picture Upload** — sets whether the alarm snapshot is uploaded to the configured FTP server and cloud-storage server.
- **Video Upload** — sets whether the alarm video is uploaded to the configured FTP server and cloud-storage server.
- **I/O Output** — sets whether an alarm output is asserted when the event alarm occurs. Use the setting button on the right to configure the alarm-output source.
- **PTZ Linkage** — sets whether a PTZ action is performed when the event alarm occurs. Use the setting button on the right to configure the linkage. (Requires a supported high-speed dome.) Options include:
 - **Preset** — links a preset point; the PTZ rotates to the configured preset and dwells for the set time when the alarm occurs.
 - **Tour** — links a configured track cruise; the PTZ follows the set track when the alarm occurs.
 - **Pattern Scan** — links a configured pattern scan; the PTZ follows the set pattern when the alarm occurs.
- **Deterrence / Warning Light** — sets whether the camera's warm light and red/blue strobe activate on alarm. Use the setting button on the right to configure the deterrence parameters; refer to the Warm Light and Red/Blue Light settings.
- **Siren** — sets whether the camera's alarm sound is linked on alarm. Use the setting button on the right to configure the siren parameters; refer to the Siren settings for details.
- **Notification** — sets whether custom alerts are pushed to third-party service platforms. This must be configured in the web client; refer to the Custom Alert Push settings for details.
- **Voice Prompts** — sets whether a voice broadcast is played when the event alarm occurs; refer to the Voice Prompts settings.
- **Recording Channel** — selects the channels to record when the event alarm occurs.
- **Recording Delay** — sets how long recording continues after the event alarm occurs.

If the camera connected to the channel is an older version, click **PTZ Linkage** to configure the PTZ device for alarm linkage as follows:

1. Click **PTZ Linkage** to open the settings page.
2. Enable the switch and select the event.
3. Enable the PTZ entry switch, then select the PTZ device and preset point.
4. When the event alarm is triggered, the PTZ device moves to the corresponding preset point according to the configuration.

Chapter 11 Recognition Lists & Statistics

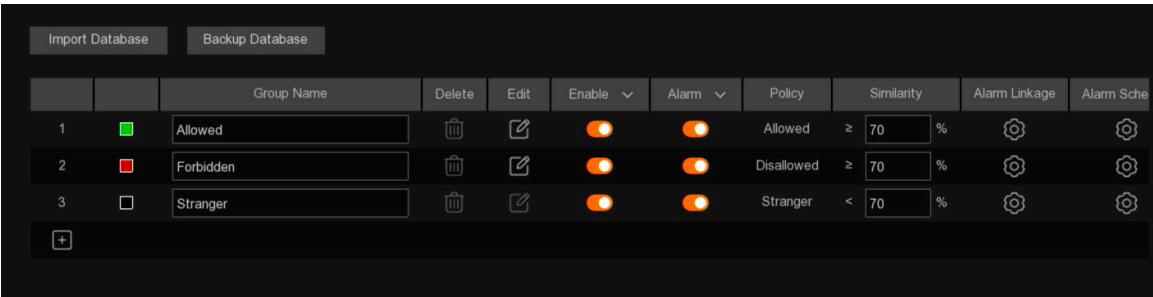
The OCTAVUE NVR maintains recognition databases for face and license-plate comparison, analyzes how frequently individuals appear in monitored areas, and consolidates detection events into statistical reports. This chapter describes how to manage these lists, configure the recognition model, and generate the associated statistics.

11.1 List Management

List management lets you build and maintain the comparison databases used by the recorder's recognition features, and to link successful or failed comparisons to alarm actions.

11.1.1 Face Recognition Management

On this page you configure the face database and the alarm linkage applied when a face is compared against a group.



		Group Name	Delete	Edit	Enable	Alarm	Policy	Similarity	Alarm Linkage	Alarm Schedule
1	☒	Allowed			☒	☒	Allowed	≥ 70 %		
2	☒	Forbidden			☒	☒	Disallowed	≥ 70 %		
3	☐	Stranger			☒	☒	Stranger	< 70 %		

Figure 11-1. Face recognition management page

The database maintenance controls are:

- **Import Database** — Import previously exported face data into the recorder.
- **Backup Database** — Export the face database to a U-disk.
- **Update Face Attributes** — Regenerate the stored face features. When the face-feature model is switched, or after images or face groups are imported, the features extracted by the camera during recognition may no longer match the features held in the face library. When this mismatch is detected, the recorder prompts you to update the face attributes; click **Update Face Attributes** to begin, as shown below.

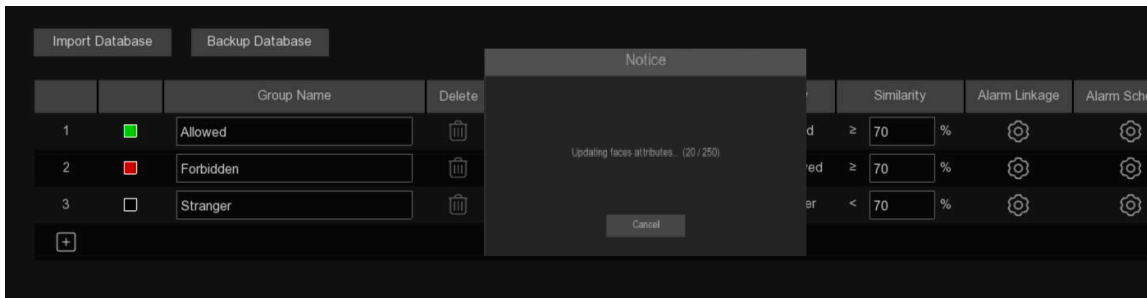


Figure 11-2. Update face attributes prompt

Clicking **Cancel** during an update prompts you to either continue or stop. Any faces that were not updated remain queued and are processed the next time you run the update.



Figure 11-3. Face group list



Figure 11-4. Face group controls

Use the add and delete controls to create a new face group or remove an existing one. The three default face groups cannot be deleted.

- **Enable** — Turn the face group on or off.
- **Edit** — Open the edit page for the selected face group.

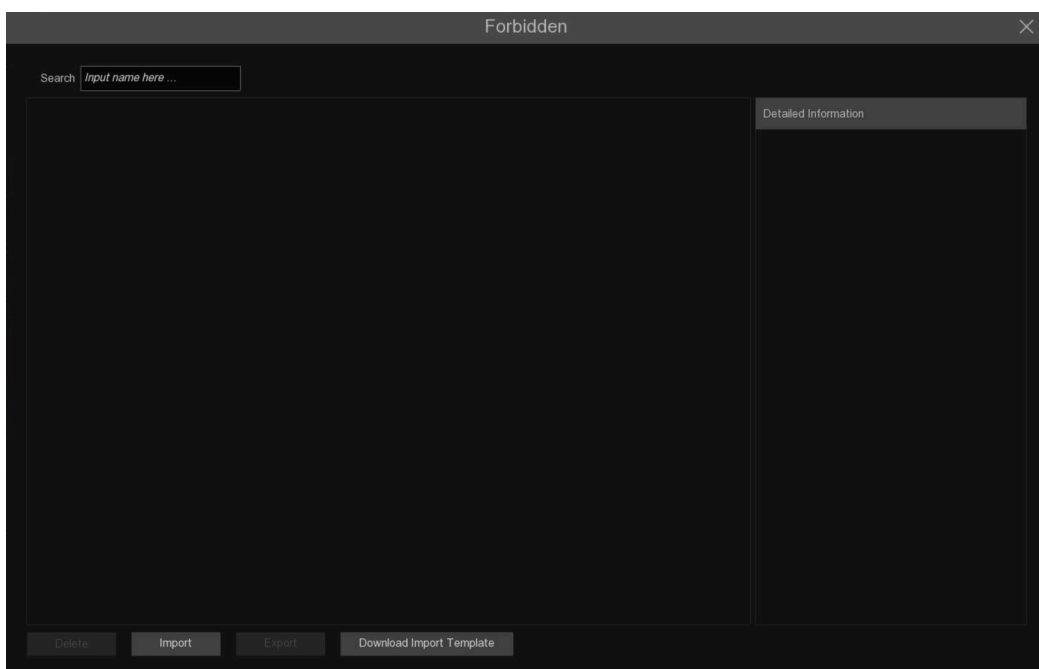


Figure 11-5. Importing faces from a local storage device

Click **Import** and select **Local Storage Device** to open the local face-import page.

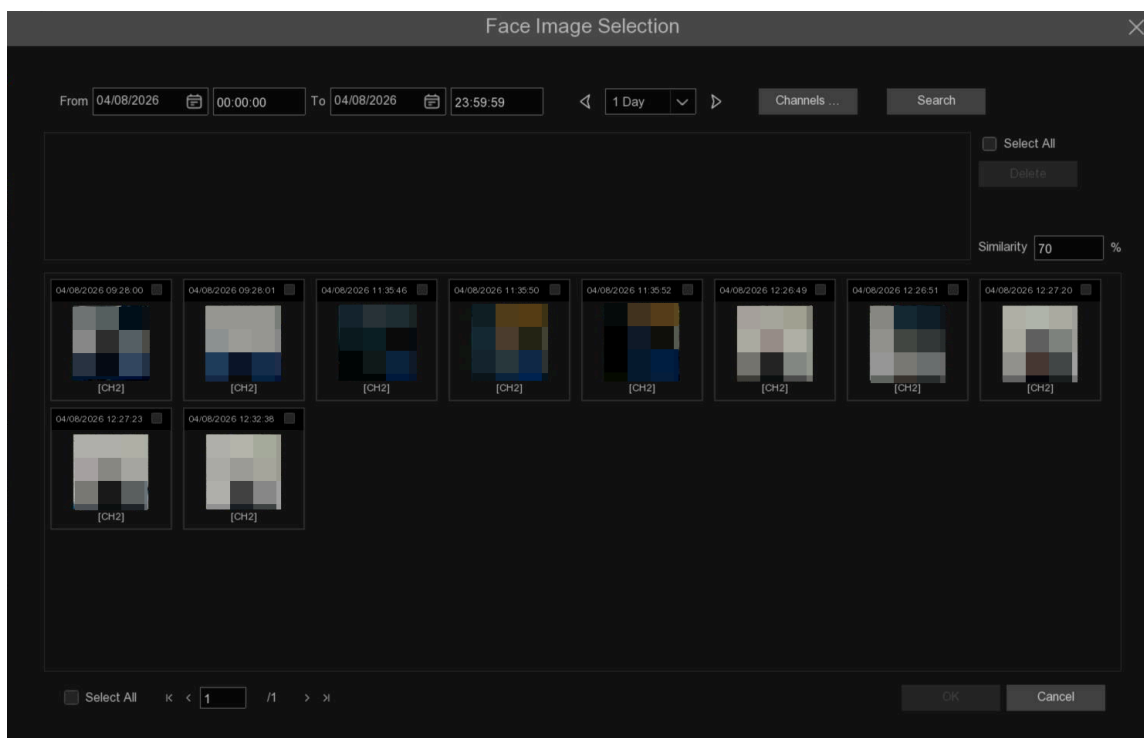


Figure 11-6. Searching for faces stored on the recorder

Select the date, duration, and channel, then click **Search** to return all faces saved by every device during that period. If a face similarity is set before you search, only faces that match the selected face at or above that similarity are returned. To remove a face, select it in the search area and click **Delete**. To add a face to a group, select it and click **OK** to open the face-information entry page.

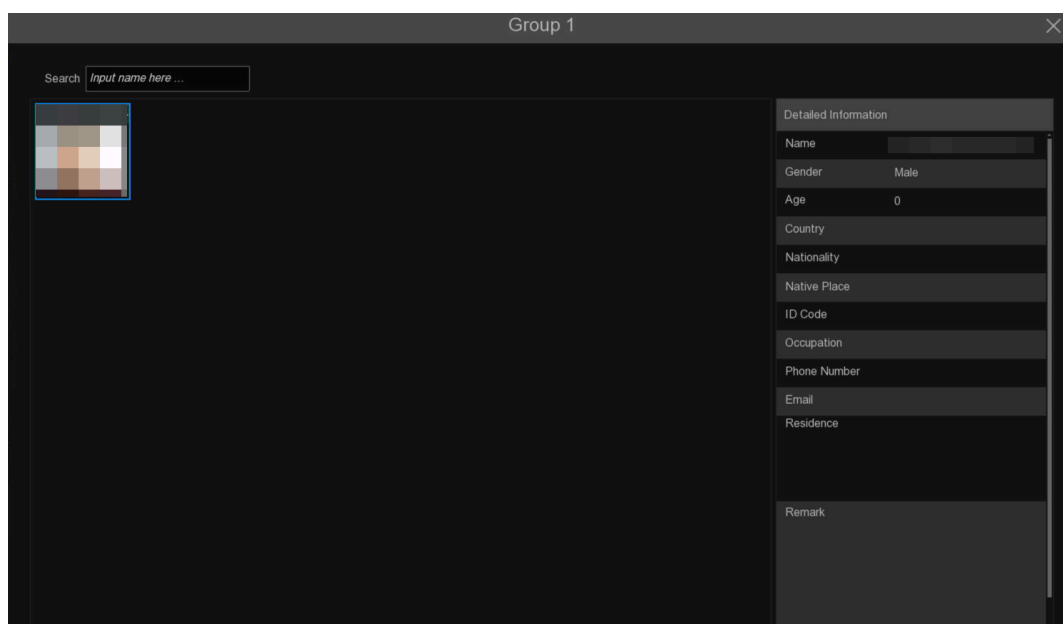


Figure 11-7. Editing face information before import

The face information can be edited in the panel on the right. When you have finished, click **Import** to complete the import, or click **Exit** to leave the page without importing. To import from removable media instead, click **External Storage Device**, select the face images to import, and follow the same steps used for local faces.

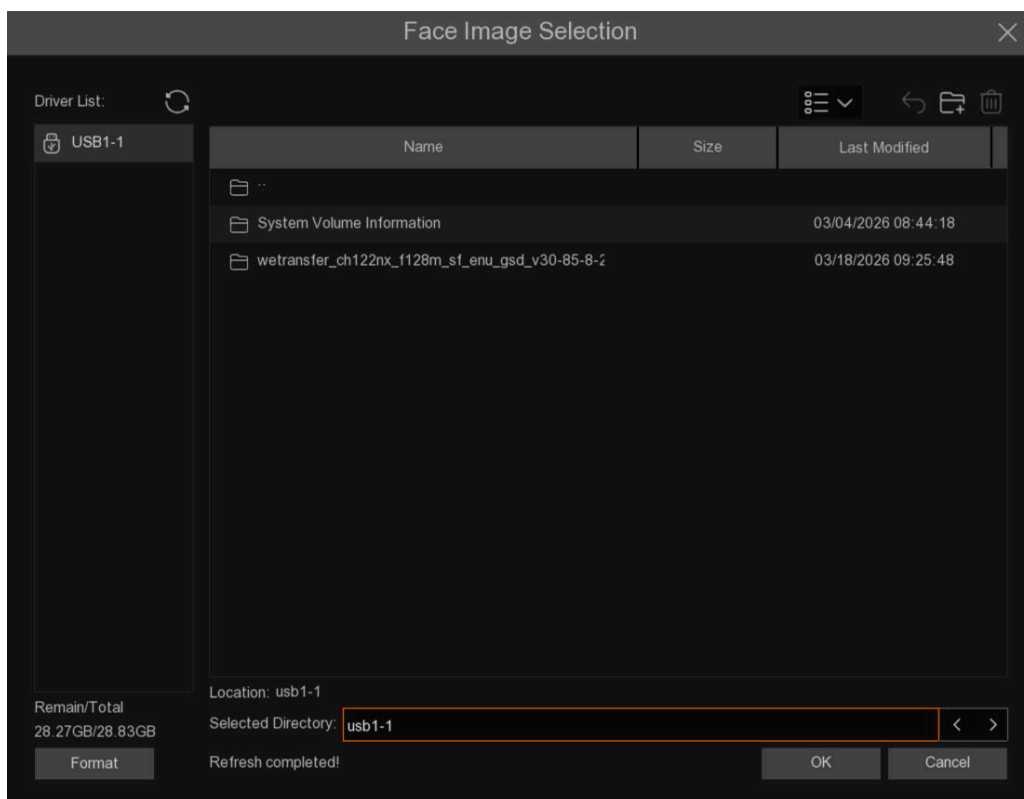


Figure 11-8. Exporting face images to external storage

Click **Export** to export face images to external storage. If no individual image is selected, every image in the face group is exported; if a specific image is selected, only that image is exported.

Click **Download Import Template** to export a template to external storage. The template contains a table and its instructions. Enter the face-image details in the table, then import the completed file to update the information for many face images at once. To add images of the same person captured under different conditions, right-click a face image, select **Edit** to open the face-image editing page, and click **Additional Face Images**.

Import

Name

Screenshot 2026-04-08 161414

Gender

Male

Age

0

Country

Nationality

Native Place

ID Code

Occupation

Phone Number

Email

Residence

Remark

Alarm Channel

Modify

Additional Face Images

Modify

Exit

Figure 11-9. Face group alarm settings

- **Alarm** — Enable or disable the face-comparison alarm for the group.
- **Policy** — Set the alarm response for the face group.
- **Similarity** — Set the comparison similarity threshold.



Figure 11-10. Alarm linkage settings for a face group

Click **Alarm Linkage** to open the linkage settings page.

11.1.2 License Plate Management

On this page you configure the database used for license-plate comparison and the associated alarm linkage.

Import DatabaseBackup Database

		Group Name	Delete	Edit	Enable	Alarm	Policy	Fault Tolerance	Alarm Linkage	Alarm Schedule	Alarm Chann
1		Allowed					Allowed	≤ 1 character(s)			
2		Forbidden					Disallowed	≤ 1 character(s)			
3		Unknown					Unknown	> 1 character(s)			

Figure 11-11. License plate management page

- **Import Database** — Import previously exported group data into the recorder.

- **Backup Database** — Export all groups to a U-disk.



Figure 11-12. License plate group list



Figure 11-13. Adding a license plate group



Figure 11-14. License plate group controls

Use the add and delete controls to create a new plate group or remove an existing one. The first three plate groups cannot be deleted. A group name identifies the database group: a white list, a black list, or the unfamiliar (stranger) plate list. You can add up to 61 custom groups for a total of 64 groups. Each group holds up to 5,000 license plates, and the complete database holds up to 10,000 license plates.



Figure 11-15. Enabling a license plate group



Figure 11-16. Editing a license plate group

- **Enable** — Turn the license-plate group on or off.
- **Edit** — Open the edit page for the license-plate group.

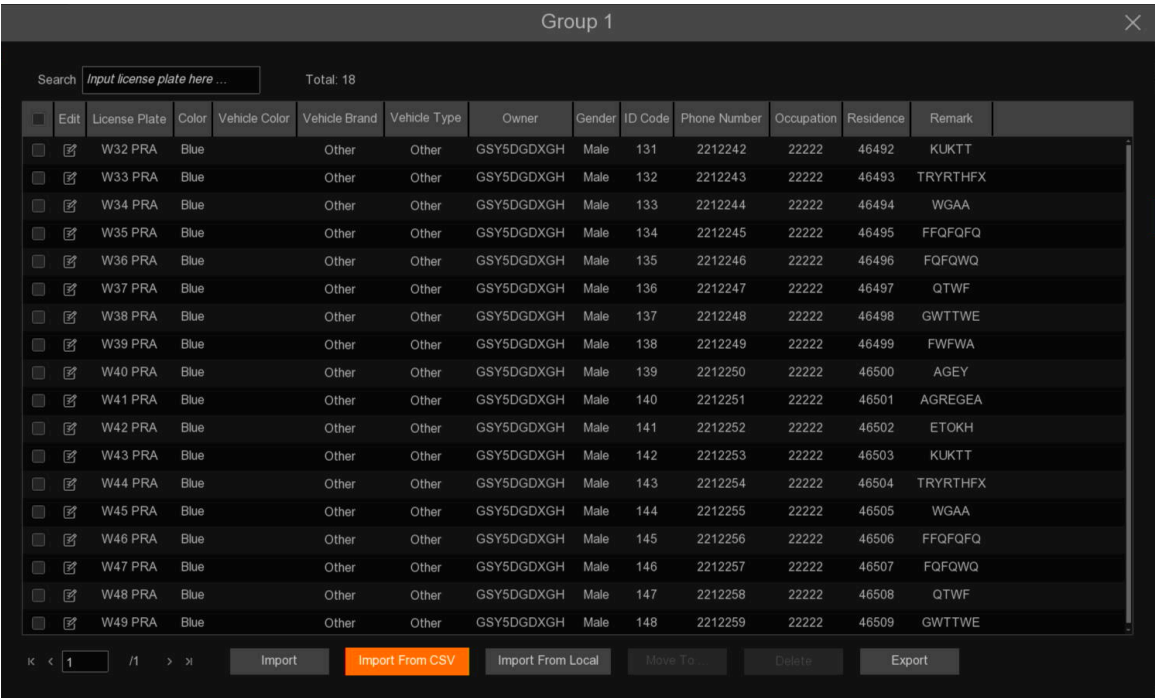


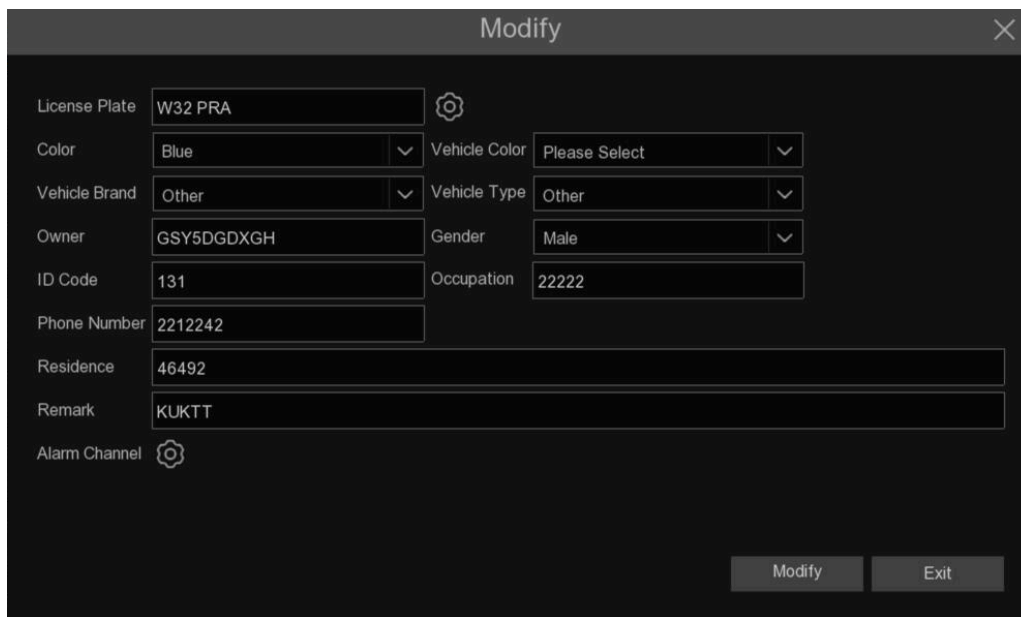
Figure 11-17. License plate group editing page

- **Search** — Filter license plates by keyword.
- **Total** — The total number of license plates in the group.



Figure 11-18. Modifying a license plate entry

Click the edit control beside an entry to modify its license-plate details.



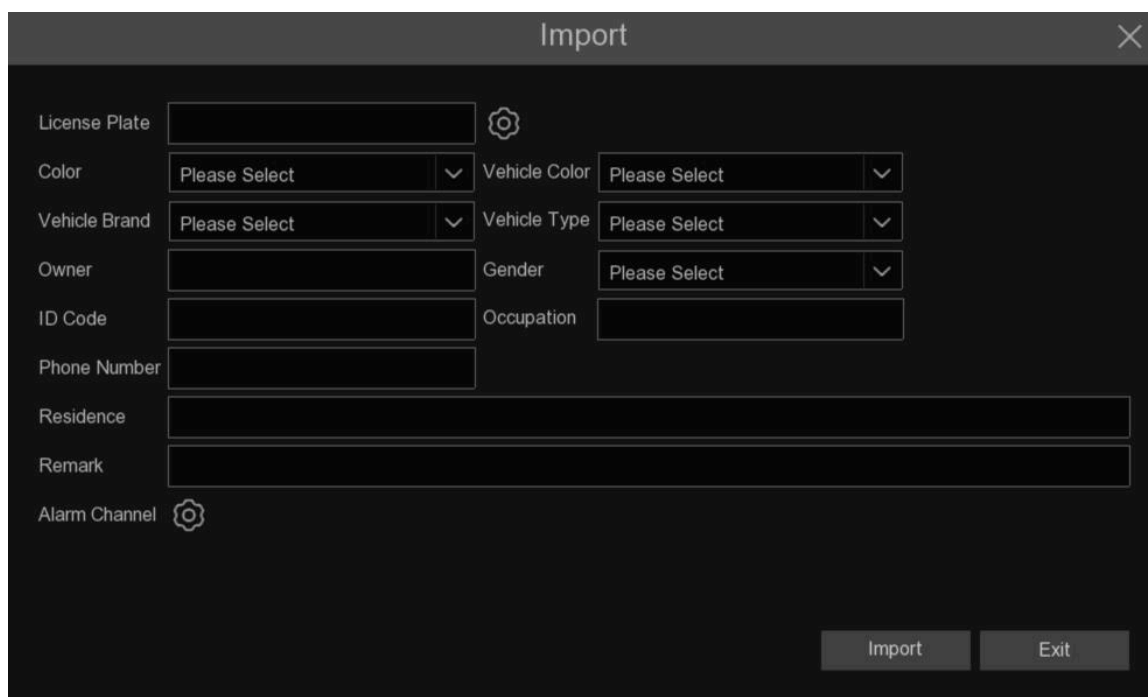
The 'Modify' dialog box contains the following fields and controls:

- License Plate:** Text input field with 'W32 PRA' and a gear icon for settings.
- Color:** Dropdown menu with 'Blue' selected.
- Vehicle Color:** Dropdown menu with 'Please Select'.
- Vehicle Brand:** Dropdown menu with 'Other' selected.
- Vehicle Type:** Dropdown menu with 'Other' selected.
- Owner:** Text input field with 'GSY5DGDUGH'.
- Gender:** Dropdown menu with 'Male' selected.
- ID Code:** Text input field with '131'.
- Occupation:** Text input field with '22222'.
- Phone Number:** Text input field with '2212242'.
- Residence:** Text input field with '46492'.
- Remark:** Text input field with 'KUKTT'.
- Alarm Channel:** Gear icon for settings.

Buttons at the bottom right: 'Modify' and 'Exit'.

Figure 11-19. License plate entry options

License plates can be added in three ways: **Import**, **Import From CSV**, and **Import From Local**. Click **Import** to add a single license plate manually.



The 'Import' dialog box contains the following fields and controls:

- License Plate:** Text input field and a gear icon for settings.
- Color:** Dropdown menu with 'Please Select'.
- Vehicle Color:** Dropdown menu with 'Please Select'.
- Vehicle Brand:** Dropdown menu with 'Please Select'.
- Vehicle Type:** Dropdown menu with 'Please Select'.
- Owner:** Text input field.
- Gender:** Dropdown menu with 'Please Select'.
- ID Code:** Text input field.
- Occupation:** Text input field.
- Phone Number:** Text input field.
- Residence:** Text input field.
- Remark:** Text input field.
- Alarm Channel:** Gear icon for settings.

Buttons at the bottom right: 'Import' and 'Exit'.

Figure 11-20. Exporting a group's license plates

Click **Export** to export the entire group to an external U-disk. The remaining controls on this page are:

- **Alarm Channel** — Set the channel that raises an alarm after a license plate is detected and successfully compared.
- **Move to...** — Select the check box of one or more plates, then click this button to transfer them to another group.
- **Delete** — Select the check box of one or more plates, then click this button to delete them.

Click **Import From CSV** to import one or more records from a CSV table.

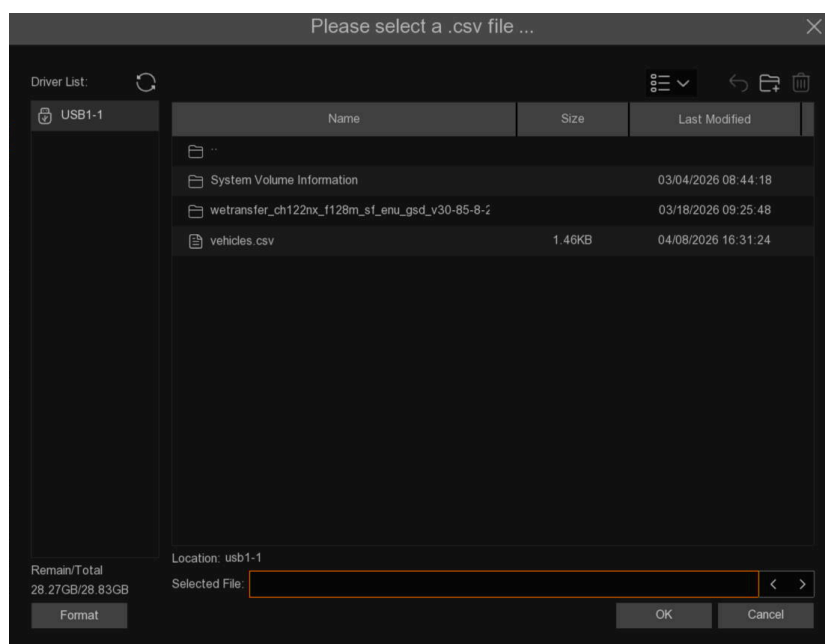


Figure 11-21. Selecting a CSV file to import

Clicking **Import From CSV** opens the file-selection page. Select the CSV license-plate file to import and click **OK**. The page shown below then appears.

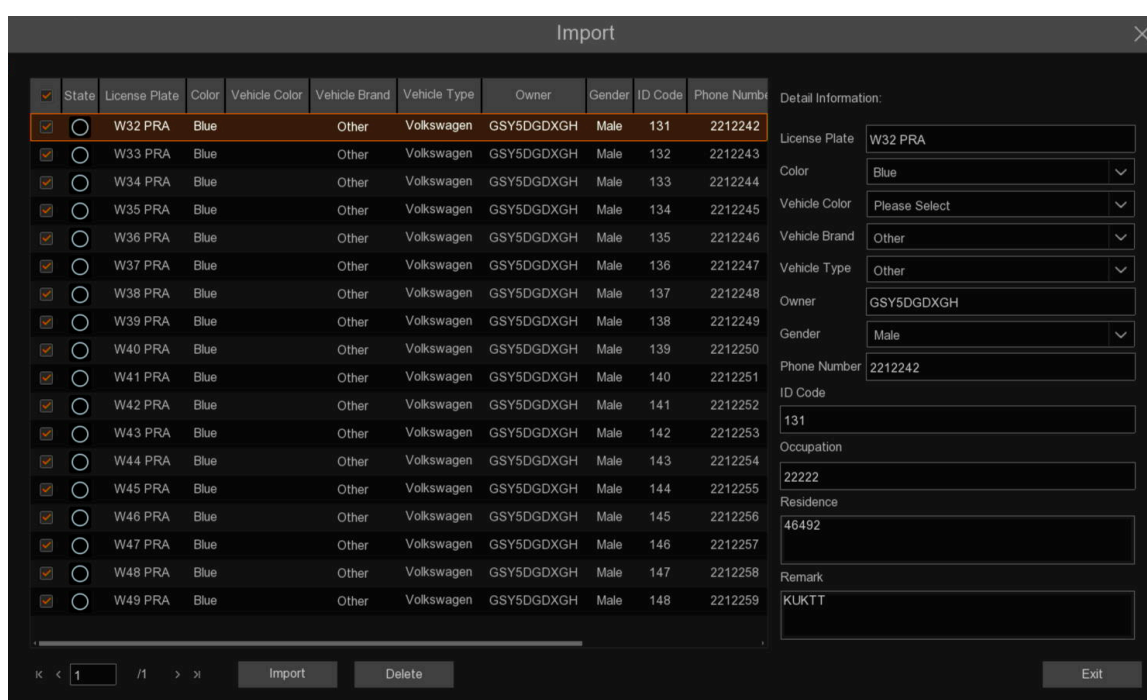


Figure 11-22. Batch import and modification page

Click **Import/Modify** to add the batch, or select a single license plate to modify it individually. When more than 5,000 records are added, a message box reports that the added data has reached the group's upper limit.

Click **Import From Local** to import license plates from local storage into the database.

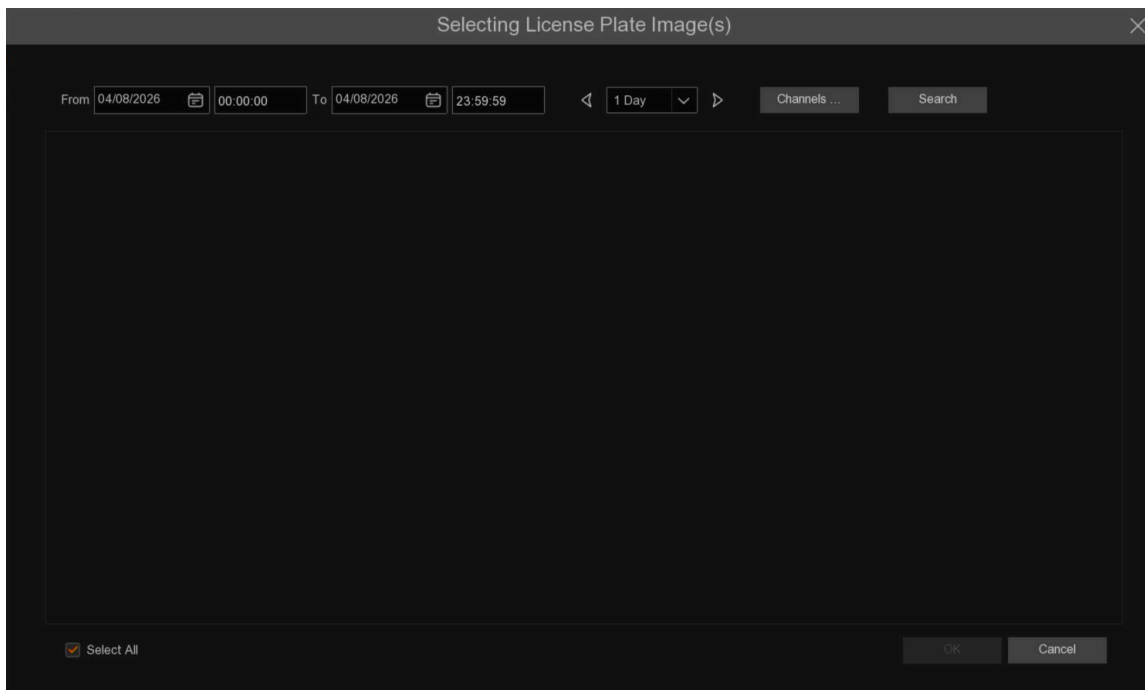


Figure 11-23. Searching for stored license plates

Select the date, duration, and channel, then click **Search** to return the license plates saved by every device during that period.

- **Channels** — License-plate detection events can be searched by the channel that triggered them.
- **Select All** — Select every license plate.

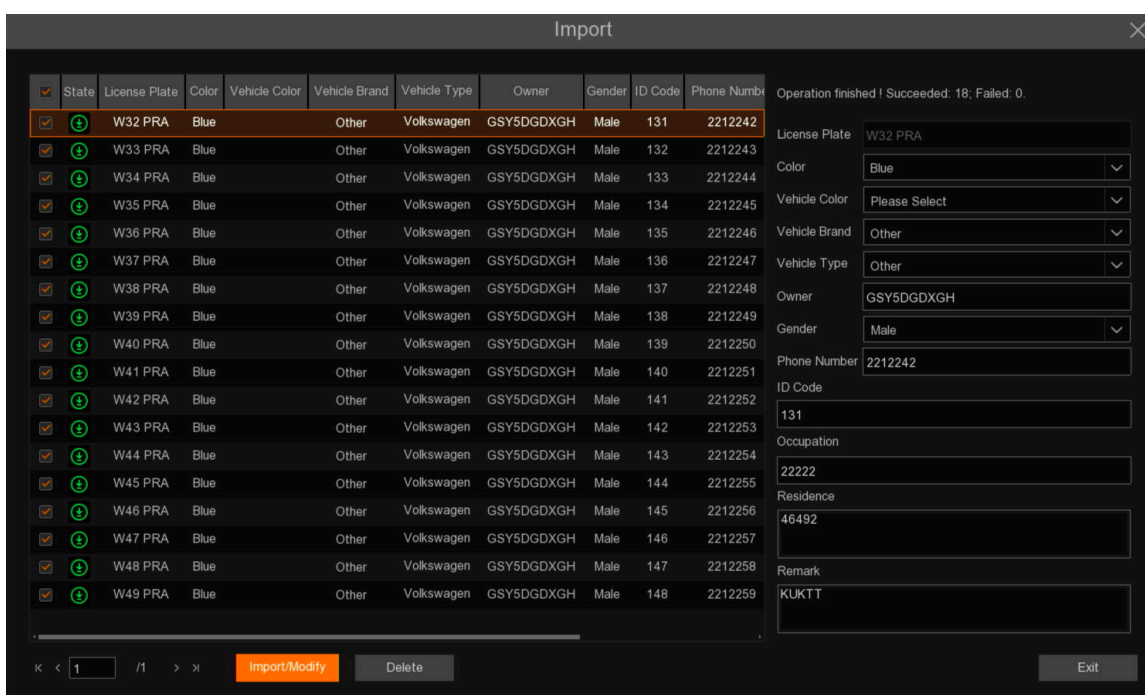


Figure 11-24. Editing a stored license plate



Figure 11-25. License plate group alarm settings



Figure 11-26. License plate alarm policy

Click a record to edit its license-plate details. After editing, click **Import/Modify** to apply the change; the entry updates when the modification succeeds.

- **Alarm** — Enable or disable the license-plate comparison alarm.
- **Policy** — Set the alarm response for the license-plate group.
- **Fault-tolerant** — Set the number of tolerated character differences. For example, with a tolerance of three characters, if the white-list plate B594SB is stored in the group and plate B734KB enters the monitored area, an alarm is still triggered. In other words, a detected plate that differs from a database plate by 0 to the configured number of characters raises an alarm.



Figure 11-27. Alarm linkage options

Click **Alarm** to open the alarm settings page.

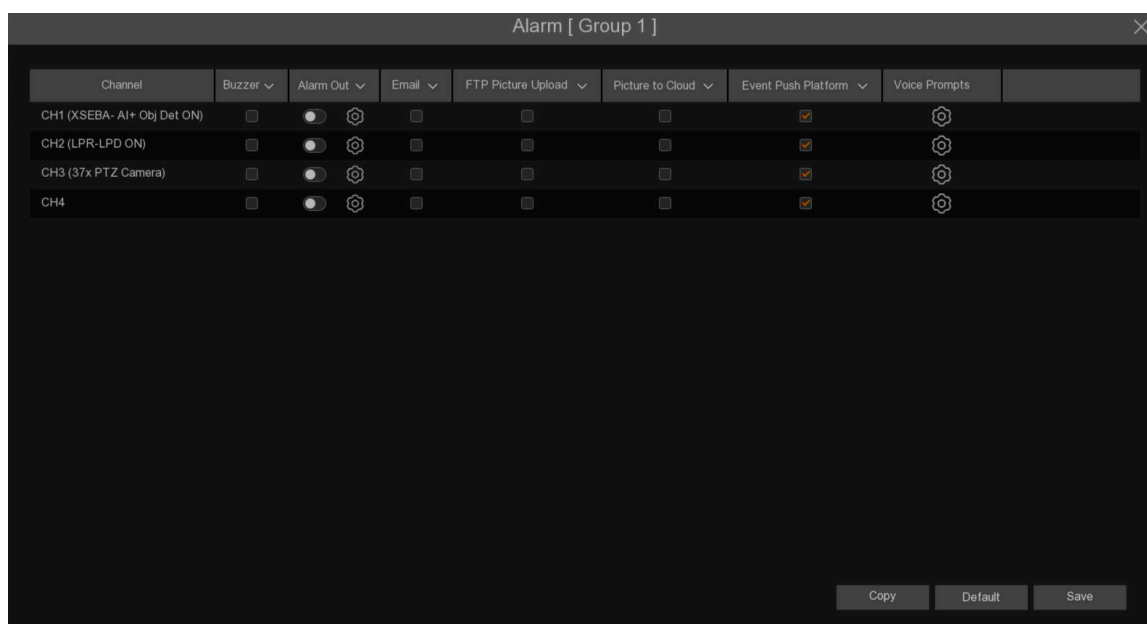


Figure 11-28. License plate alarm linkage page

The alarm-linkage options are:

- **Buzzer** — Set whether the recorder emits a beep after an alarm occurs. The beep lasts 10 seconds.
- **Alarm Out** — Set whether an alarm output is linked when an alarm occurs. Click the settings button to configure the alarm output source.
- **Email** — Set whether an email is sent after an alarm occurs.
- **FTP Picture Upload** — Set whether the alarm snapshot is uploaded to the configured FTP server after a license-plate comparison alarm.
- **Picture to Cloud** — Set whether the alarm snapshot is uploaded to the configured cloud-storage server after a license-plate comparison alarm.
- **Event Push Platform** — Set whether event alerts are pushed to a third-party service platform after a comparison alarm. This option is selected by default. For detailed settings, refer to Section 5.5.6.3, Event Push Platform.
- **Voice Prompts** — Set whether a voice announcement is played after a license-plate comparison. For detailed settings, refer to Section 5.3.4, Voice Prompts.
- **Alarm Schedule** — Set the time period during which each camera channel performs license-plate comparison. Refer to Section 5.2.1.1, Video Schedule.
- **Alarm Channel** — Set the channel on which the license-plate group enables the comparison alarm.

11.1.3 Analysis and Configuration of Personnel Frequency

The recorder supports personnel frequency analysis, which automatically monitors and counts how often individuals appear in a designated monitoring area. The results provide data for people-flow analysis scenarios.

Figure 11-29. Personnel frequency analysis configuration

Configure the analysis using the following options:

- **Channel** — Select the channels used for personnel frequency analysis. Individuals identified on channels that are not selected are excluded from the statistics.
- **Groups...** — Select the face-list groups used for personnel frequency analysis.
- **Alarm Check Interval (min)** — Set the interval between two consecutive appearances of the same person. If the same person is identified several times within this interval, their frequency count is not increased.
- **Similarity** — Set the similarity threshold. A person is counted only when the match meets or exceeds this threshold.
- **Max Stranger Count** — The maximum number of strangers the recorder counts.
- **Alarming** — The personnel frequency alarm switch. An alarm is sent when the appearance frequency reaches the preset threshold.
- **Filter Out Alarms for Age Under** — Minor-alarm filtering. When an identified person's age is below the set value, the person is filtered out and no alarm is raised.
- **Alarm Frequency Threshold** — The frequency threshold at which an alarm is raised.
- **Alarm Statistical Period (Day)** — The statistics period. Only appearances within the preset period are counted.
- **Buzzer** — Set whether the recorder emits a 10-second beep after a personnel frequency alarm.
- **I/O Output** — Set whether an alarm output is linked after a frequency alarm. Click the settings button on the right to configure the alarm output source.
- **Voice Prompts** — Set whether a voice announcement is played after a personnel frequency alarm. Refer to Section 5.3.4, Voice Prompts.

11.1.4 Model Configuration

On this page you select the face-recognition model. The recorder supports either the NVR's local model or the camera's model.

☒ Auto select face recognition model

Device/Channel	Face Recognition Model	Face Detection Model	Enable Face Recognition	In-pick	
Local	V0.5.0.0.3-release	-----	☒	☐	
CH1 (XSEBA- AI+ Obj Det ON)	V0.5.0.0.3-release	V0.5.1.2.2-release	☒		
CH2 (LPR-LPD ON)	V0.4.0.0.3-release	V0.4.1.2.2-release	☐		
CH3 (37x PTZ Camera)	V0.4.0.0.3-release	V0.4.1.2.2-release	☐		

Figure 11-30. Face recognition model configuration

11.2 Statistical Analysis

Statistical analysis consolidates detection events recorded over a chosen period and presents them as charts, allowing you to review trends in faces, pedestrians and vehicles, boundary crossings, and area activity.

11.2.1 Face Recognition Statistics

Face recognition statistics count all faces detected during a chosen period and present the results as a statistical chart.



Figure 11-31. Face recognition statistics page

After you select the **Groups**, **Channels**, date, and statistical time, the results are displayed directly. Click **Export** to save the data to a U-disk. Shortcut buttons open related pages:

- **Face Search** — Jump directly to the intelligent-playback face search page.
- **Repeat Visitors** — Jump directly to the intelligent-playback repeat-visitor page.
- **Face Attendance** — Jump directly to the intelligent-playback face attendance page.

11.2.2 Pedestrian and Vehicle Statistics

Pedestrian and vehicle statistics count all pedestrians and vehicles detected during a chosen period and present the results as statistical charts.



Figure 11-32. Pedestrian and vehicle statistics page

After you select the type, **Channels**, date, and statistical time in the AI section, the results are displayed directly.

- **Pedestrian and Vehicle Search** — Click this button to jump directly to the intelligent-playback pedestrian and vehicle page.

11.2.3 Cross Counting Statistics

Cross counting statistics count the number of entries and exits during a chosen period and present the results as a statistical chart.

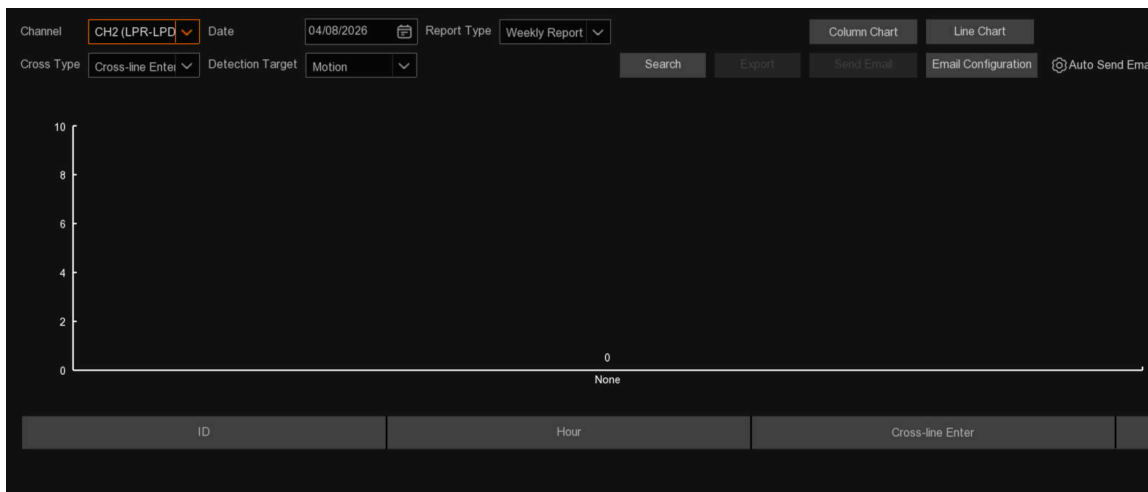


Figure 11-33. Cross counting statistics page

- **Channel** — Select the channel to search.
- **Date** — Select the date to search.
- **Report Type** — Select the report type: Daily Report, Weekly Report, Monthly Report, or Annual Report.
- **Cross Type** — Select the crossing direction: Cross-line Enter or Cross-line Exit.
- **Detection Target** — Select the target type that triggers cross counting: Motion, Person, Motor Vehicle, or Non-motorized Vehicle.
- **Search** — Click to query the data.
- **Export** — Export the results to an external U-disk.
- **Column Chart** — Display the results as a bar chart.
- **Line Chart** — Display the results as a line chart.

11.2.4 Heat Map Statistics

Heat map statistics count activity that is concentrated in particular areas during a chosen period and present the results as a heat map.

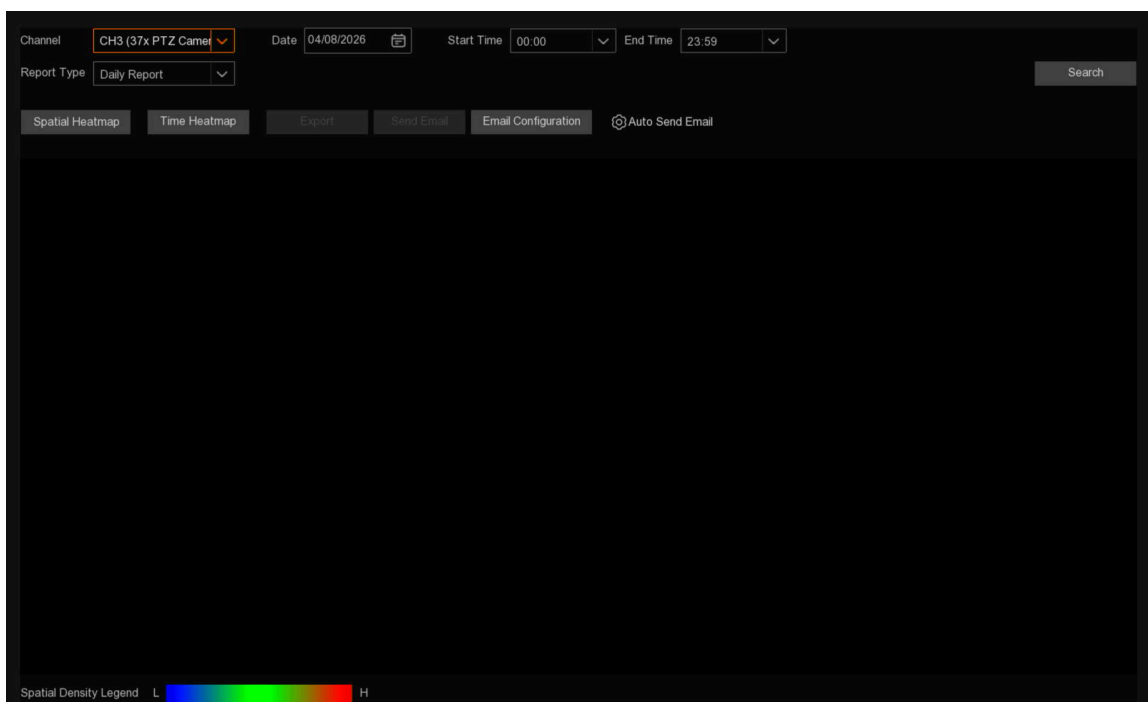


Figure 11-34. Heat map statistics page

- **Channel** — Select the channel to search.
- **Date** — Select the date to search.
- **Start Time** — Select the start time.
- **End Time** — Select the end time.
- **Report Type** — Select the report type: Daily Report, Weekly Report, Monthly Report, or Annual Report.
- **Search** — Click to search the data.
- **Export** — Export the results to an external U-disk.
- **Spatial Heat Map** — Display the results as a spatial distribution map.
- **Time Heat Map** — Display the results as a time distribution chart.

NOTE When the **Time Heat Map** is selected, the **Start Hour** and **End Hour** options are not available.

- **Spatial Density Legend** — Compares the relative levels of spatial density.

Chapter 12 Network & Services

This chapter describes how to configure the network interfaces and network-dependent services of the OCTAVUE NVR, including basic IP settings, PPPoE dial-up, SNMP, port configuration, cloud services, DDNS, email notifications, IP filtering, and the platform-access protocols used to integrate the recorder with third-party systems.

12.1 Network

12.1.1 General

12.1.1.1 Network Settings

This page configures the basic network parameters that identify the NVR on your network. Open it from **Menu** → **Configuration** → **Network**.

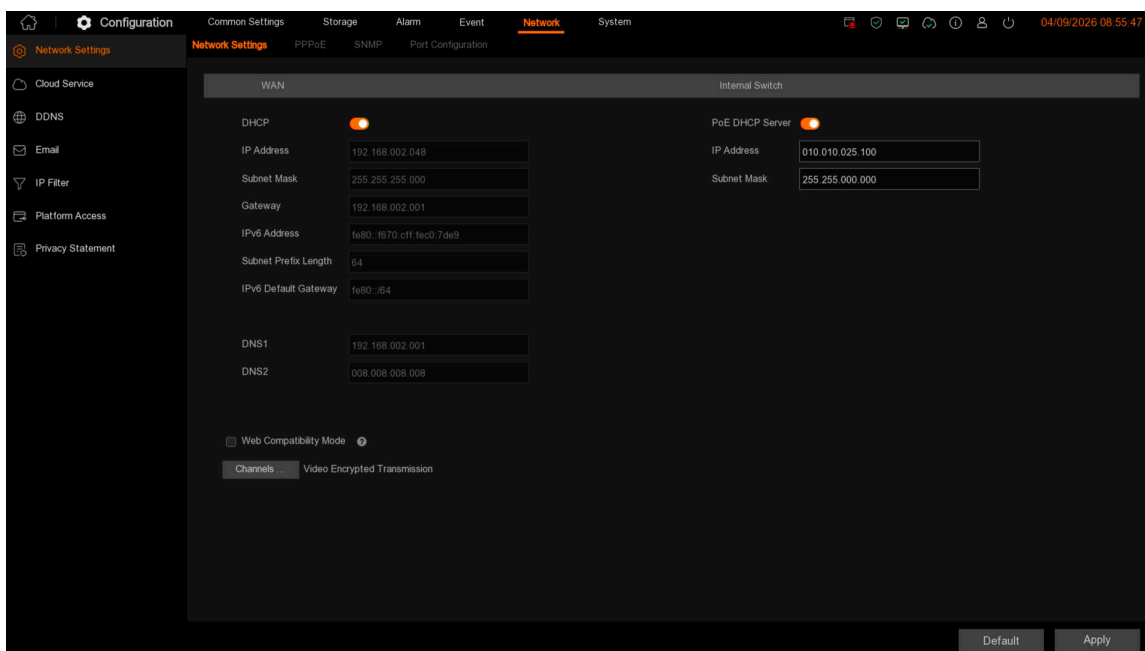


Figure 12-1. Basic network settings page

If the network to which the recorder is connected provides a DHCP service, select the **DHCP** check box. The DHCP service then assigns all network parameters to the device automatically. Otherwise, clear the check box and configure the parameters manually:

- **IP Address** — The IPv4 address that identifies the NVR on the network. It consists of four groups of numbers between 0 and 255, separated by periods, for example "192.168.001.100".
- **Subnet Mask** — Defines the range of IPv4 addresses that can be used on the network. It also consists of four groups of numbers separated by periods, for example "255.255.000.000".
- **Gateway** — The IPv4 gateway address of the network on which the device resides. The default value is 192.168.001.001.
- **IPv6 Address** — The IPv6 address that identifies the NVR on the network. It consists of eight groups of numbers between 0 and FFFF, separated by colons, for example "ABCD:EF01:2345:6789:ABCD:EF01:2345:6789".
- **IPv6 Gateway** — The IPv6 gateway address of the network on which the device resides.
- **DNS 1 / DNS 2** — DNS 1 is the primary DNS server and DNS 2 is the standby DNS server. In most cases it is sufficient to enter the DNS 1 server address.
- **Web Compatibility Mode** — Enable this option if your browser does not support standard web access to the device. Compatibility mode uses a less secure encryption algorithm.
- **Channels** — Configure channel encryption for the video stream transmitted to the client.
- **PoE DHCP Server** — Assigns IP addresses to the cameras connected through the PoE ports. This option appears only on PoE models.

CAUTION Web Compatibility Mode selects an insecure encryption algorithm. Enable it only when a required browser cannot otherwise connect, and disable it as soon as it is no longer needed.

12.1.1.2 PPPoE

PPPoE allows the recorder to connect to the Internet through a dial-up connection.

Enable PPPoE ☐

User

Password

IP Address

Subnet Mask

Gateway

DNS1

DNS2

Figure 12-2. PPPoE configuration page

1. Select the **Enable PPPoE** check box.
2. Enter the **User Name** and **Password** supplied by your carrier.
3. Click **Apply** to save. The system restarts and dials automatically. After a successful connection, the network information is displayed on this page.

12.1.1.3 SNMP

The SNMP protocol lets you obtain device parameters and receive status information from the recorder using a network management station.

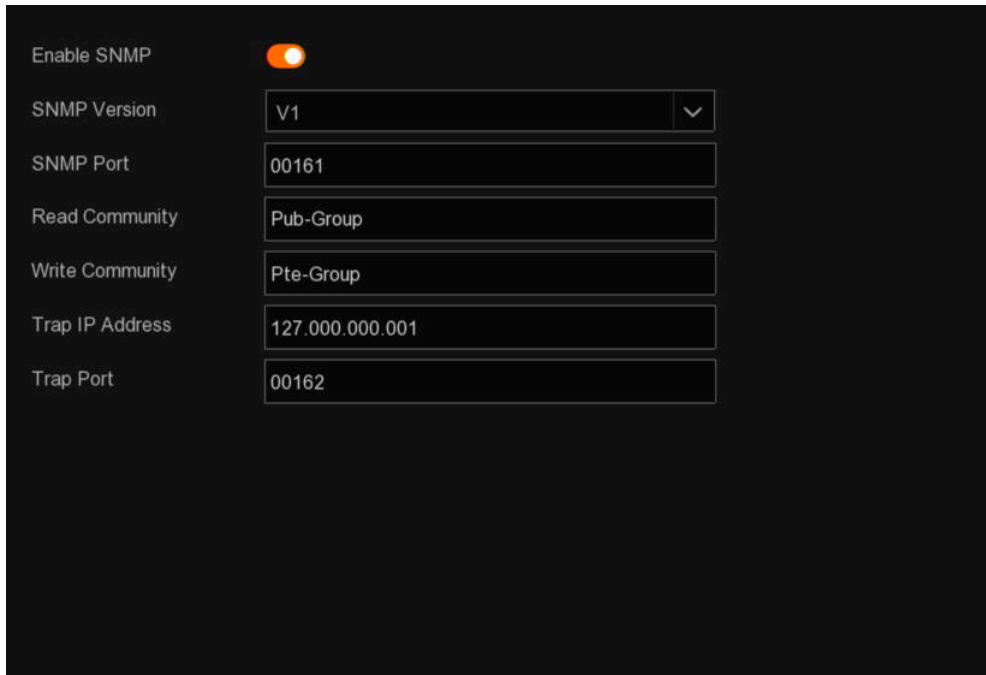
A screenshot of the SNMP configuration page. It features a dark background with white text and input fields. The 'Enable SNMP' option is a toggle switch that is currently turned on (orange). Below it, there are several configuration fields: 'SNMP Version' is a dropdown menu showing 'V1'; 'SNMP Port' is a text box containing '00161'; 'Read Community' is a text box containing 'Pub-Group'; 'Write Community' is a text box containing 'Pte-Group'; 'Trap IP Address' is a text box containing '127.000.000.001'; and 'Trap Port' is a text box containing '00162'.

Figure 12-3. SNMP configuration page

NOTE Before setting the SNMP parameters, install SNMP management software and use the SNMP port to receive device information such as software version, device type, channel IP, resolution, and frame rate. When a trap management address is configured, the device can send alarm and exception information to the management station.

12.1.1.4 Port Configuration

This page configures the service ports and network-mapping behavior of the recorder.

No.	Service	Protocol	Internal Port	External Port	UPNP Status
1	Http	TCP	00080	00080	Inactive
3	RTSP	TCP	00554	00554	Inactive
4	Https	TCP	00443	00443	Inactive

Instruction:

rtsp://ip.port/rtsp/streaming?channel=A&subtype=B

A: 01(ch1), 02(ch2)...

B: 0(main stream), 1(sub stream)

External IP

P2P Switch ☒

Direct Camera Web Access ☒

Auto Redirect to HTTPS ☒

Figure 12-4. Port configuration page

- **HTTP / RTSP / HTTPS** — Set the ports used to access the device through the HTTP, RTSP, and HTTPS protocols.
- **UPnP** (Universal Plug and Play) — When enabled, UPnP applies NAT translation rules to perform automatic port mapping, allowing external computers to reach devices on the intranet. UPnP requires router support. Before enabling it, configure the router, then set the intranet IP address, subnet mask, and gateway to match the router in the basic network configuration.
- **Mapping Strategy** — Select **Manual** to edit the external port (the port on the router) yourself, or **Automatic** to map a random external port that differs from the internal port.
- **External IP** — The external (public) IP address of the device.
- **P2P Switch** — Enables P2P access. When it is turned off, the device can no longer be reached using its P2P ID.
- **Direct Camera Web Access** — When enabled, you can open the web page of a connected IP camera directly by hyperlink from the web interface of the NVR.

12.1.2 Cloud Services

The recorder supports 16-digit Cloud IDs and 18-digit Cloud IDs with region codes. Scanning the QR code adds the device to the OvConnect mobile app.

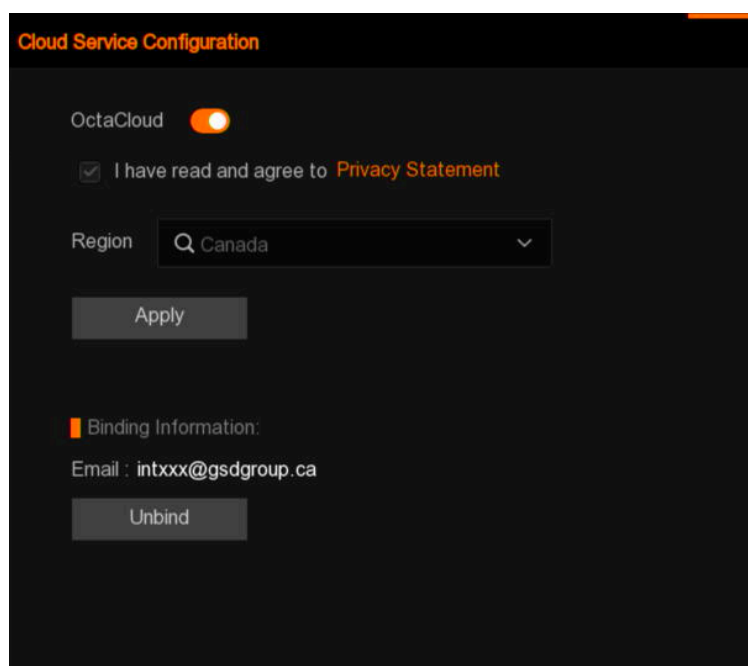


Figure 12-5. Cloud service configuration and dynamic QR code

For devices with a 16-digit Cloud ID, enable the cloud service and set the region of origin to generate a dynamic QR code. Scan this QR code with the OvConnect app to add the device for management.

- **Cloud Server** — The cloud service switch.
- **Privacy Statement** — To enable cloud services, you must first read and agree to the privacy statement.
- **Region** — Select the cloud service region. It must match the region registered in the OvConnect app; region search is supported.
- **QR Code Display** — After the cloud service is enabled and the region is set, a dynamic QR code is generated automatically. The code is valid for 300 seconds and must be regenerated after it expires. Scan it with the OvConnect app to add the device for management.

For devices with an 18-digit Cloud ID, scan the QR code shown on the **System Information** page (see System Information) with the OvConnect app, enter the device password to connect, and add the device for management. Devices with 16-digit Cloud IDs also support this binding method, but the app client must be on the same local area network as the device.

- **Binding Information** — Displays information related to the device binding.
- **Email** — The bound email address.
- **Unbind** — Click to unbind the device from the OvConnect account. After unbinding, the device appears offline in the app and can no longer be accessed.

NOTE The cloud service communicates with the cloud server, so the device must be connected to the Internet while this function is in use.

12.1.3 DDNS

This menu configures the Dynamic Domain Name Server (DDNS) parameters. DDNS lets you access the recorder through a fixed domain name, avoiding the difficulties caused by a changing dynamic IP address. To use DDNS, first create an account on the web page of a DDNS service provider.

DDNS

DDNS ☐

Server NO_IP

Server Address

Hostname

User Name

Password

Test

Figure 12-6. DDNS configuration page

- **DDNS** — Select the check box to enable DDNS.
- **Server** — Select the preferred DDNS server: DYNDNS, NO_IP, CHANGEIP, or DNSEXIT.
- **Domain** — Enter the domain name created on the DDNS provider's web page. When you connect to the NVR remotely from a PC, this is the address you type in the browser URL box.
- **User / Password** — Enter the user name and password obtained when you created the account on the DDNS provider's web page.

After entering all parameters, click **Test** to verify the DDNS settings. If the result is "Network inaccessible" or "DNS wrong", check whether the network is functioning and whether the DDNS information is correct.

Once the dynamic domain name service is active, you can access the NVR remotely from a browser using the form `http://<domain name>:<mapped HTTP port>`. When accessing the NVR through a DDNS domain name, confirm that the port and current IP address are reachable on the public network, and that the server address, host name, user name, and password match the settings on the NVR.

DDNS

DDNS ☒

Server NO_IP ▼

Server Address

Hostname

User Name

Password

Test

Figure 12-7. DNSEXIT authentication key notice

WARNING The DNSEXIT provider has updated its docking protocol; the new protocol no longer authenticates by user name and password. You must log in to your account on the official DNSEXIT website and obtain a key (for example, yUS5qMHQuPIJr4jHtoMuXDO883BqsO). Earlier firmware authenticated by password and will not maintain the DNSEXIT domain name when the external IP changes. Update the recorder to version 8.2.4.1 or later, obtain the key from the DNSEXIT website, and enter it here for the domain name to work correctly.

12.1.4 Email

This menu configures the email parameters. Complete these settings if you want to receive alarm notifications by email when an event is triggered.

12.1.4.1 Email Configuration

Email Schedule

Email ☒

Type Outlook ▼ Inactive

Receiver 1

Receiver 2

Receiver 3

Interval Mode ☒

Interval 3 Min ▼

Activate Test

Figure 12-8. Email configuration page

Figure 12-9. Email account activation

- **Email** — Turn on the switch to enable email notifications.

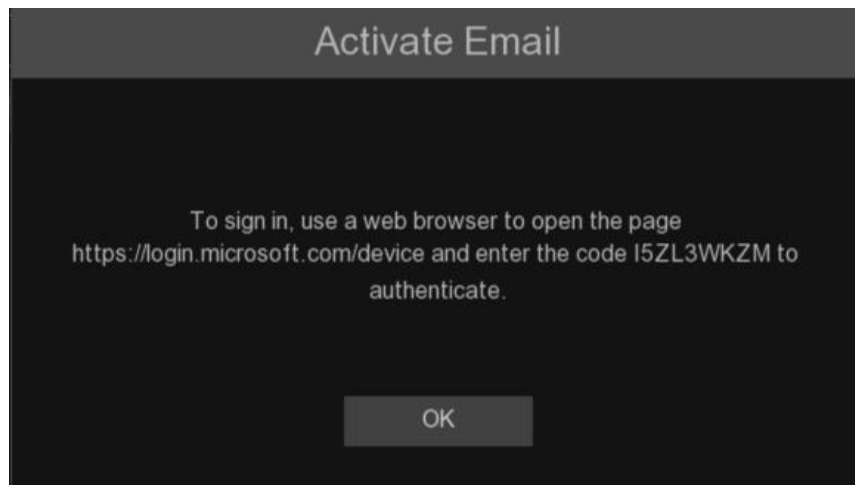


Figure 12-10. Selecting the mailbox type

- **Type** — The mailbox type. You can select an Outlook mailbox or Other. For an Outlook mailbox, click **Activate** and enter the authorization code from the pop-up web page to complete activation. For another mailbox, enter the email address and password to activate.
- **Encryption** — Enable this option if the email server requires SSL or TLS validation. If you are not sure, set it to **Automatic**.
- **SMTP Port** — Enter the SMTP port of the email server.
- **SMTP Server** — Enter the SMTP server address for outgoing mail.
- **User Name** — Enter the email address.
- **Password** — Enter the email password.
- **Receiver 1~3** — Enter up to three email addresses that will receive event notifications from the NVR.
- **Health Mode** — When enabled, the **Interval** function becomes available. When it is disabled, the Interval function is unavailable. For license-plate and face-recognition alarms, the notification email includes both the foreground image and the background picture of the alarm.
- **Interval** — The time interval between notification messages sent by the NVR.

To confirm that all settings are correct, click **Test Email**. A test email is sent to the configured inbox; if it is received, the parameters are correct.

12.1.4.2 Email Schedule

Configure the time periods during which email notifications are sent. The schedule is defined in the same way as the recording schedule; see Record Schedule for details.

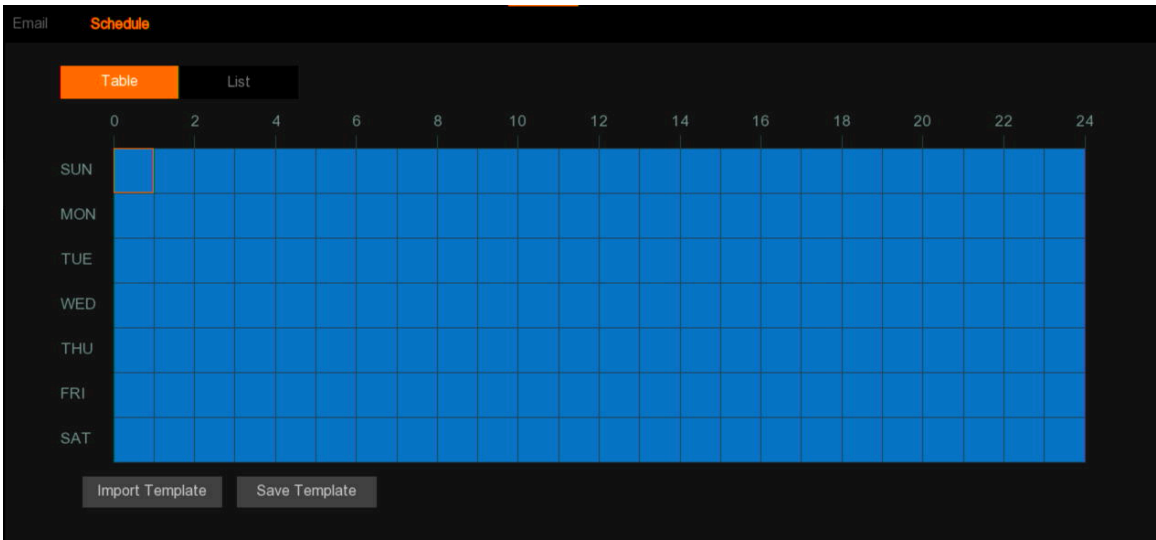


Figure 12-11. Email schedule page

12.1.5 IP Filter

The IP filter function maintains a blacklist and a whitelist. When the whitelist is enabled, only the IP addresses in the list are allowed to access the device. When the blacklist is enabled, the IP addresses in the list are denied access.

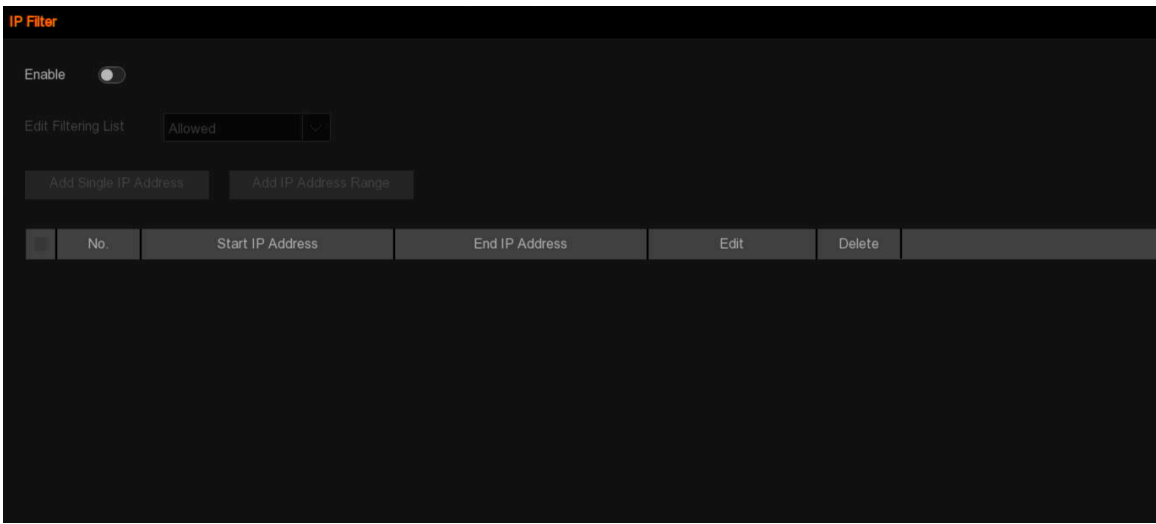


Figure 12-12. IP filter configuration page

- **Enable** — Turns the filter on or off. When it is on, you can choose to enable the **Blacklist** or the **Whitelist**.
- **Edit Filtering List** — Select the list (blacklist or whitelist) to configure.
- **Add Single IP Address** — Add an individual IP address.
- **Add IP Address Range** — Add a range of IP addresses.
- **Start Address** — Enter the starting address of the range.
- **End Address** — Enter the ending address of the range.

12.2 Platform Access

12.2.1 ONVIF

Enabling this function allows the recorder to be connected as a server by a third-party platform through the ONVIF protocol.

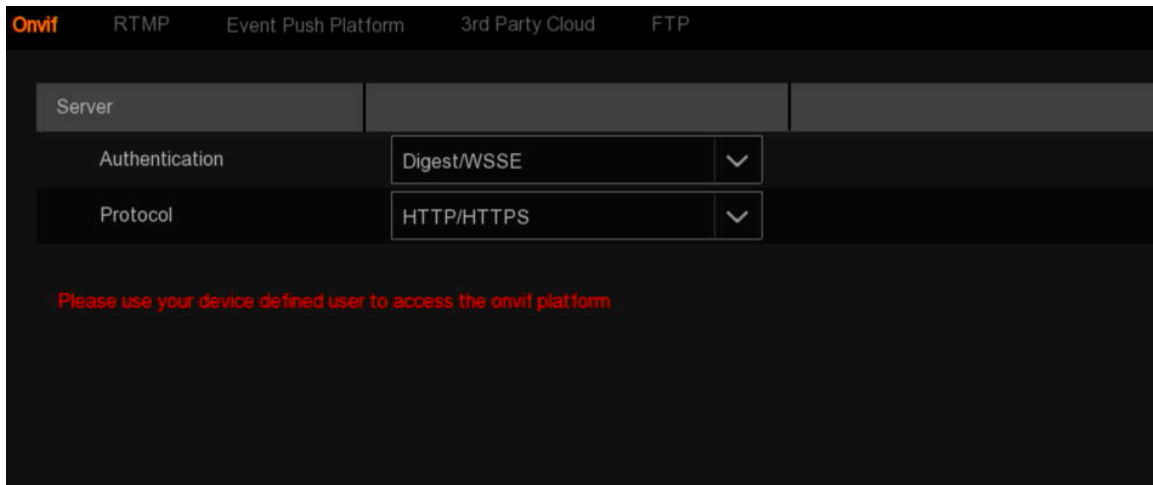


Figure 12-13. ONVIF configuration page

- **Authentication** — The login authentication method. The device supports Digest_SHA256, Digest, Digest/WSSE, and WSSE.
- **Protocol** — The connection protocol supported by the device: HTTP/HTTPS, HTTPS, or HTTP.

12.2.2 RTMP

RTMP pushes the audio and video stream of an NVR channel to a live-streaming website such as YouTube in real time. To use this function, register a YouTube account and create a studio. Copy the studio server URL and stream key into the live server address field on the recorder, enable the function, select the stream type and channel, and save. Refresh the YouTube studio page to watch the live stream.

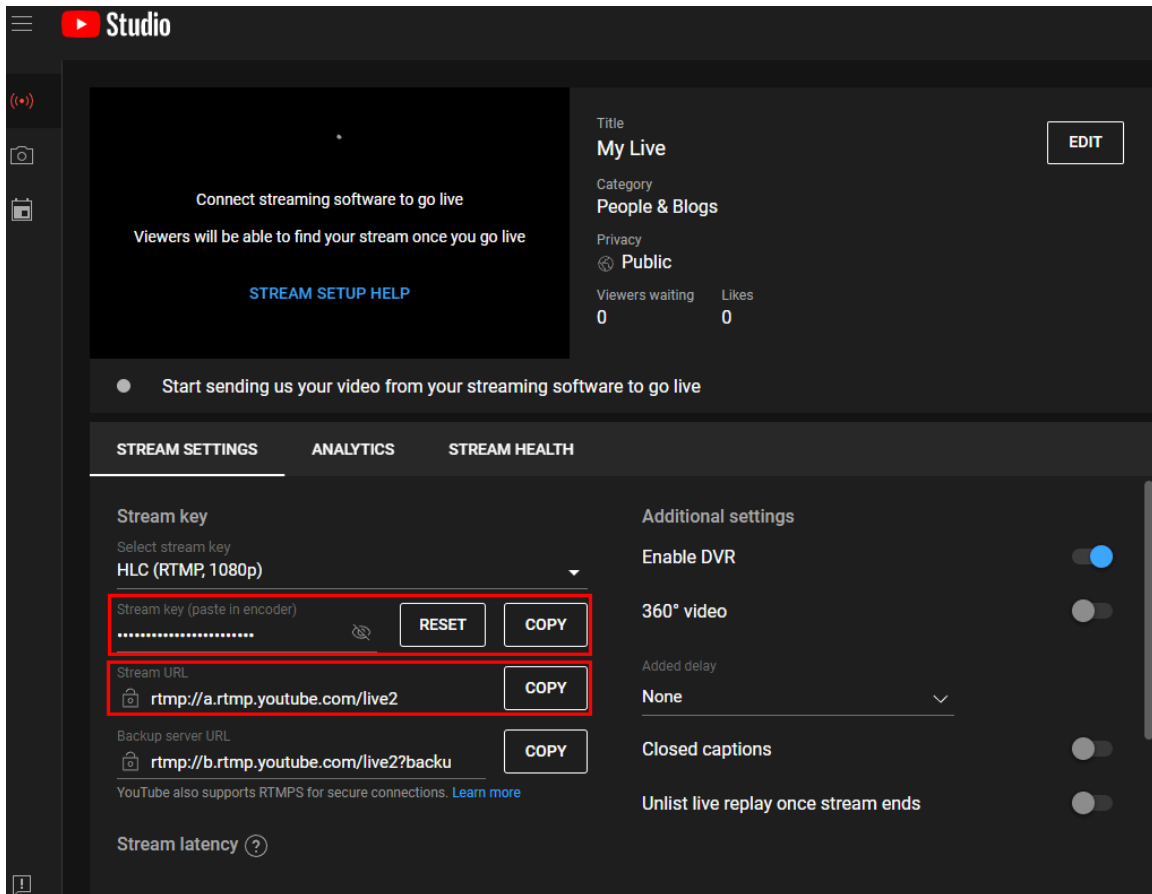


Figure 12-14. RTMP configuration page

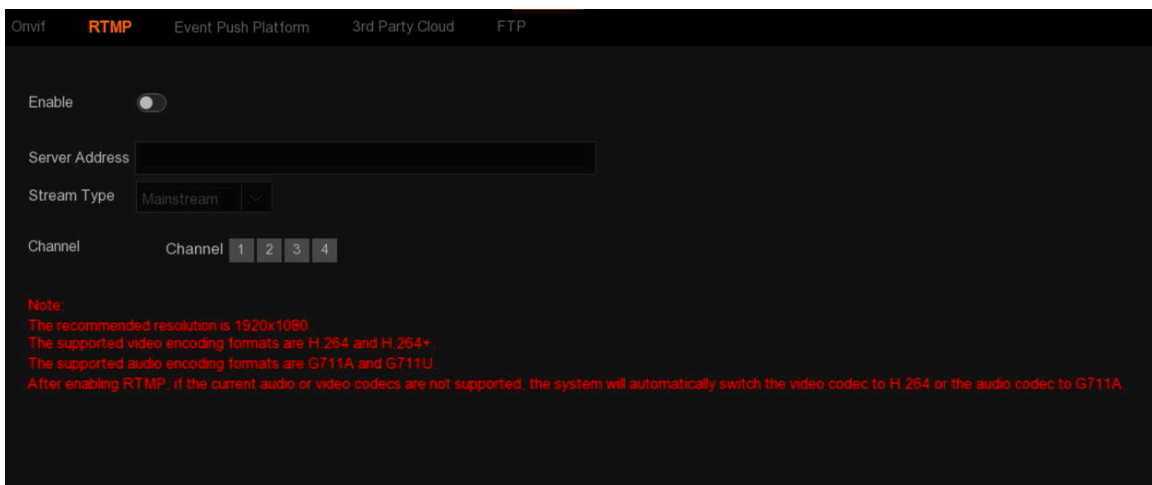


Figure 12-15. RTMP server address and stream key

- **Enable** — The enable switch. Turn it on and save to activate the RTMP live-broadcast function.
- **Server Address** — Enter the live-broadcast address and stream key of the YouTube server. Note that a "/" separates the two parts of the YouTube stream key.
- **Stream Type** — Select the stream type for the live channel. Both the main stream and the sub stream are supported.
- **Channel** — Select the channel to broadcast. Only one channel can be broadcast at a time.

TIP For the best live-broadcast quality, keep the stream resolution at or below 1920x1080. Only the H.264 video encoding format and the G.711A/U audio encoding format are supported. A YouTube stream key can be assigned to only one device and cannot be reused.

12.2.3 Event Push Platform

This function pushes alarm information from the device to a designated third-party platform. Before using it, confirm that the third-party platform has completed docking and debugging with the recorder.

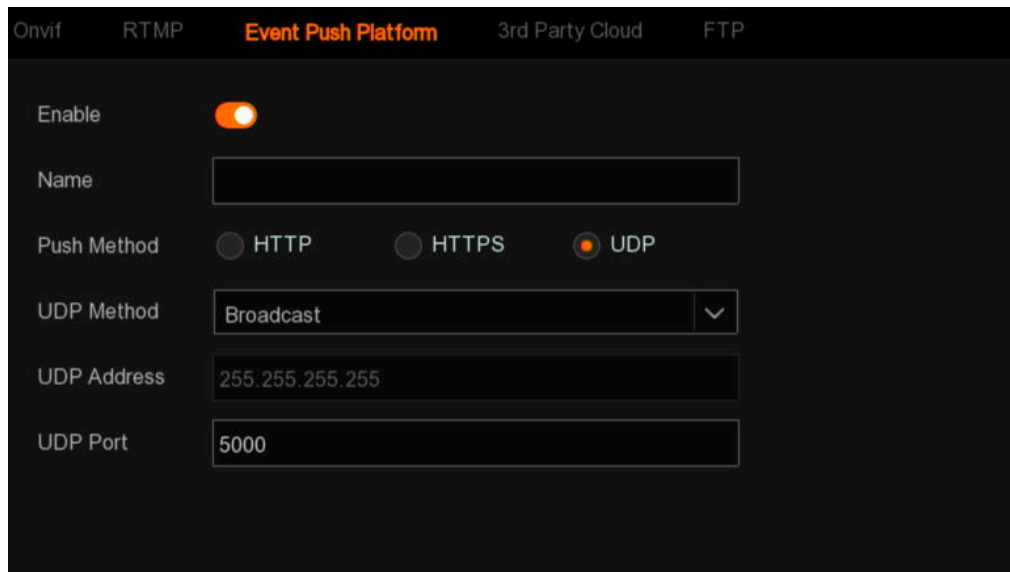
Event push supports three delivery methods: HTTP, HTTPS, and UDP. The HTTP method offers a POST mode and a GET mode; the UDP method offers unicast, multicast, and broadcast modes.

12.2.3.1 HTTP

Figure 12-16. Event push configuration using the HTTP method

- **Enable** — Turns the event push function on or off.
- **Name** — The device name used when sending alarm information to the third-party platform.
- **Push Method** — Select the push mode: HTTP or UDP.
- **Authentication** — The authentication switch. When enabled, an authentication dialog appears. If the third-party platform requires an authentication service, this switch must be enabled for event push to work correctly.
- **Username** — The authentication user name for the third-party platform.
- **Password** — The authentication password for the third-party platform.
- **Server Address** — The address of the third-party platform.
- **Port** — The server port of the third-party platform (range 1-65535).
- **URL** — The API endpoint of the third-party platform server.
- **Method** — The HTTP push type. POST and GET are supported; only the HTTP-POST method supports full message push. The pushed alarm type matches the warning bar in the web preview.
- **Interval** — The keep-alive interval. At the configured time, the device sends periodic messages to the server. The UDP method has no keep-alive mechanism.

12.2.3.2 UDP



The screenshot shows a configuration window for the 'Event Push Platform'. At the top, there are tabs: 'Onvif', 'RTMP', 'Event Push Platform' (which is highlighted in orange), '3rd Party Cloud', and 'FTP'. Below the tabs, the 'Enable' toggle is turned on. The 'Name' field is empty. The 'Push Method' section has three radio buttons: 'HTTP', 'HTTPS', and 'UDP' (which is selected). The 'UDP Method' dropdown menu is set to 'Broadcast'. The 'UDP Address' field contains '255.255.255.255'. The 'UDP Port' field contains '5000'.

Figure 12-17. Event push configuration using the UDP method

- **Enable** — Turns the event push function on or off.
- **Name** — The device name used when sending alarm information to the third-party platform.
- **Push Method** — Select the push mode: HTTP or UDP.
- **UDP Method** — Select one of three modes:
 - **Unicast** — Enter the IP address and port of the client UDP server. Only that address receives the push message.
 - **Multicast** — Multiple client UDP servers that share the same UDP address and port receive the messages; other UDP addresses do not.
 - **Broadcast** — All UDP servers on the same network segment receive the messages.
- **UDP Address** — The UDP server address.
- **UDP Port** — The UDP server port (range 1-65535).

12.2.4 Cloud Storage

The recorder can upload alarm images and video clips to the cloud for storage. Dropbox and Google Drive both provide free storage services suitable for this purpose.

Figure 12-18. Cloud storage configuration page

Before enabling cloud storage, create a Dropbox account with an email user name and password. After creating the account, log in at www.dropbox.com, enter your email address and password, agree to the terms, and click the login button.

- **Enable** — Select the check box to enable the feature.
- **Type** — Select the cloud storage type: Dropbox or Google Drive.
- **Status** — The activation state of the cloud storage: Unactivated or Activated.
- **Capacity** — Displays the remaining and total storage capacity.
- **Overwrite Storage** — Sets the cloud storage overwrite mode.
- **Video Format** — Sets the uploaded video format. AVF, MP4, and AVI are supported.
- **Folder Name** — Sets the name of the folder used to store channel videos and images.
- **Activate Cloud** — Click to activate the cloud storage feature. An activation link is then sent to your email; open the email and click the link to complete activation.

12.2.5 FTP

This menu configures FTP storage for user alarm events. When an alarm is triggered, the recorder uploads captured images and video to the FTP server.

Figure 12-19. FTP configuration page

- **FTP Enable** — Select to enable the FTP function.
- **Server IP** — Enter the FTP server IP address or domain name.
- **Port** — Enter the FTP service port.
- **User Name / Password** — Enter the user name and password of the FTP server.
- **Picture Quality** — Set the quality of the images uploaded to the FTP server.
- **Video Stream Type** — Set the type of video stream uploaded to the FTP server. The main stream and the sub stream are available.
- **Max Package Interval** — Set the maximum duration of a single event recording. When this limit is reached, a new video file is created and recording continues.
- **Directory Name** — Enter the directory in which uploaded files are saved. When the NVR begins uploading, it automatically creates this directory on the server.
- **Upload Alarm Video** — Select the alarm types whose video is uploaded to the FTP server. Clicking this option opens the corresponding alarm menu.
- **Test FTP** — Click to test the FTP settings.

Chapter 13 System, Peripherals & Users

13.1 System Settings

The system settings group lets you review and change the core system information of the OCTAVUE NVR, including the device identity, date and time, daylight saving time, and display output, as well as the connected peripherals and the accounts that may operate the recorder.

13.1.1 System

13.1.1.1 System Settings

Use this page to configure the general identity and behavior of the recorder.

Figure 13-1. General system settings page

- **Device Name** — Set the display name of the recorder.
- **Device ID** — Set the numeric identifier used to distinguish the NVR. The device ID is composed of digits only. When two recorders are installed in the same location, assign each a unique ID (for example, 000000 and 111111) so that a remote control operates only the intended unit. To address a single recorder, enter its device ID on the login page before continuing.
- **Language** — Set the system language of the device.
- **Video Format** — Set the video system to PAL or NTSC.
- **Auto Lock** — Set the idle interval after which the system exits the main menu and locks it.
- **Web Session Timeout (min)** — Set the idle interval after which a web session is closed.
- **Including Live View** — Apply the web idle timeout to the live preview as well.
- **Show the Startup Wizard after system startup** — Select this option to display the startup wizard each time the recorder boots.

13.1.1.2 Date and Time

Set the system date, time, and time zone on this page. Click the calendar to change the date, and click the time box to change the time.

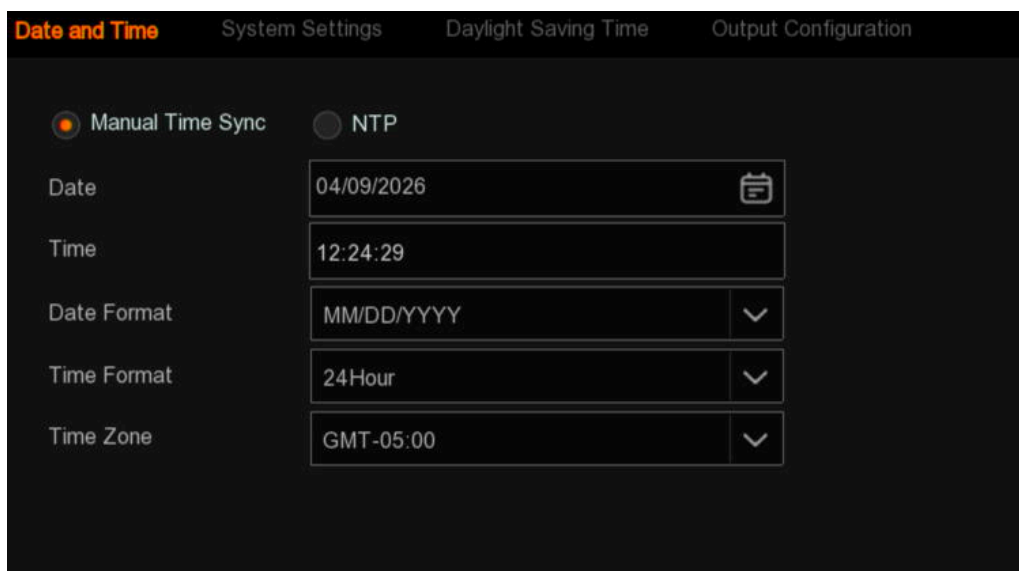


Figure 13-2. Setting the system date from the calendar



Figure 13-3. Setting the system time

- **Date** — Click the calendar to change the date.
- **Time** — Click the time box to change the time.
- **Date Format** — Set the display format of the system date.
- **Time Format** — Set the display format of the system time.
- **Time Zone** — Set the time zone of the device.

When the **NTP** (Network Time Protocol) function is enabled, the NVR automatically synchronizes its clock with a network time server. The recorder periodically requests updates from the server and corrects the system time to keep the device clock accurate.

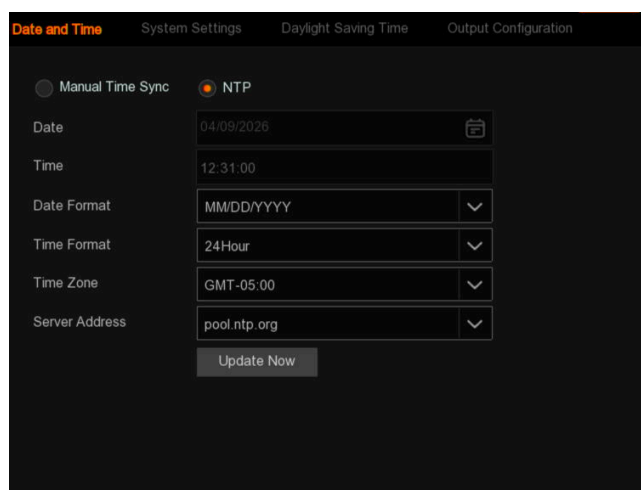


Figure 13-4. NTP time-synchronization settings

Enable **NTP**, then select a server address or manually enter the address of a server that supports NTP timing. Click **Update Now** to synchronize the date and time immediately, and click **Apply** to save the settings.

NOTE For NTP to work, the recorder must remain connected to the network. When the function is enabled, the device corrects the system time at each startup and once daily at approximately 00:07:50.

13.1.1.3 Daylight Saving Time

If daylight saving time (DST) is observed in your region, configure the relevant parameters on this page and enable the function.

Figure 13-5. Daylight saving time settings

- **Enable DST** — Turn daylight saving time on or off.
- **Time Offset** — Set the duration by which the clock is advanced during DST.
- **DST Mode** — Set how the start and end of daylight saving time are determined.
- **Week** — Choose the start and end month, the specific week, and the time — for example, 02:00 on the first Sunday of a given month.



Figure 13-6. Configuring the DST start and end times

- **Date** — Click the calendar icon to select the start and end dates and times of daylight saving time.
- **Start Time / End Time** — Set the times at which daylight saving time begins and ends.

13.1.1.4 Output Configuration

Configure the display output parameters of the system on this page.

Figure 13-7. Display output configuration

- Select the LIVE-OUT mode from the **Video Output** drop-down menu.
- **Cycle Mode** — Set the number of channels displayed by the NVR in sequence (tour) mode.
- **Cycle Dwell Time** — Set the dwell time for the sequence tour, in seconds.
- **Output Resolution** — Select the display resolution suitable for the connected monitor.
- **Automatic recognition** — Detect the resolution of the connected display automatically. After startup, the system determines the highest resolution the display supports and prompts you to switch to it.
- **Scale & Offset** — Adjust the size and position of the displayed image to match the monitor. Click the **Settings** button to make the adjustment.

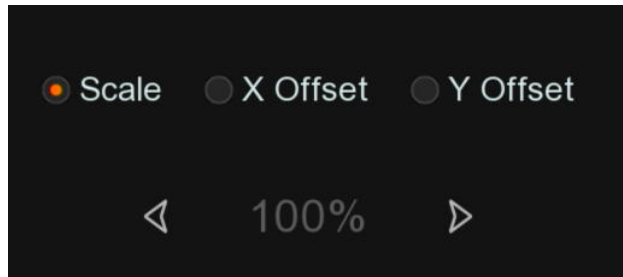


Figure 13-8. Adjusting the display scale and offset

The scale and offset controls let you fit the output precisely to the monitor:

- **Scale** — Enlarge the displayed screen size.
- **X Offset** — Move the screen to the left or right.
- **Y Offset** — Move the screen up or down.

Adjust the size and position by clicking an arrow, by holding the left mouse button on an arrow, or by scrolling the mouse wheel. Right-click to exit, then click **Apply** to save the changes.

- **Cursor Hide Delay** — Set the interval after which the mouse cursor is hidden while the NVR is idle.
- **Cursor Acceleration** — Adjust the speed of cursor movement.
- **Transparency** — Drag the slider to change the transparency of the taskbar and main menu on the screen.

HDMI 2 sets the display output parameters for the auxiliary screen. This function is supported only on some NVR models.



Figure 13-9. Auxiliary screen (HDMI 2) output settings

- **Switch** — Enable or disable the auxiliary screen output.
- **Auto Cycle** — Select the auxiliary display behavior. Choose **Static** or **Dynamic**; in dynamic mode, the auxiliary screen shows a preview tour.
- **Cycle Mode** — Set the number of channels displayed by the recorder in the HDMI 2 tour.
- **Cycle Dwell Time** — Set the dwell time for the auxiliary screen tour, in seconds.
- **Spot Display Channel** — Select the channel shown by the auxiliary screen tour in dynamic mode.

- **Output Resolution** — Select the resolution suitable for the auxiliary display.
- **Decode Performance** — Set the decoding performance of the auxiliary screen output.

13.1.2 Peripheral

13.1.2.1 Peripheral

The peripheral page configures external control devices connected to the recorder.

Network Keyboard — Used to control the PTZ cameras connected to the device, or to navigate the device menus, by means of a network keyboard.

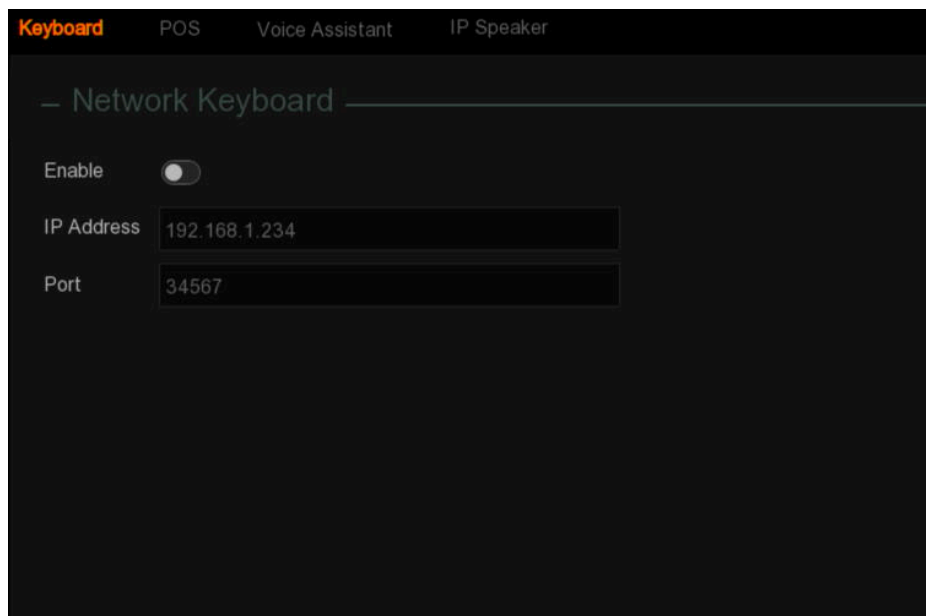


Figure 13-10. Network keyboard settings

- **Enable** — Turn the network keyboard function on or off.
- **IP Address** — Enter the address of the network keyboard.
- **Port** — Enter the port number of the network keyboard.

NOTE To use this feature, first obtain the network keyboard parameters, then save the corresponding settings on this page.

485 Keyboard — Used to control the PTZ cameras connected to the device over the RS-485 bus.

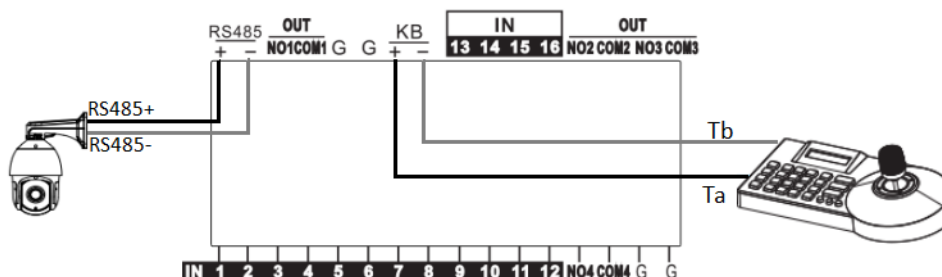


Figure 13-11. 485 keyboard settings

— 485 Keyboard —

Baudrate: 2400

DataBit: 8

StopBit: 1

Parity: None

Figure 13-12. 485 keyboard parameter entry

NOTE The 485 keyboard function applies only to devices with a KB interface. To use it, first obtain the keyboard parameters, then set and save the corresponding values on this page.

13.1.2.2 POS

On this page you can configure POS alerts. When a message is received from a POS terminal, it triggers a POS alert.

ID	POS Name	Switch	Configuration	Alarm Out	Normal Linkage	Connect Mode	Port	IP Address	Delete
1	POS 1	☐				TCP Reception	10010	192.168.1.100	
2	POS 2	☐				TCP Reception	10011	192.168.1.100	
3	POS 3	☐				TCP Reception	10012	192.168.1.100	
4	POS 4	☐				TCP Reception	10013	192.168.1.100	

Figure 13-13. POS alarm list

- **Add a POS Alarm** — Add a new POS alarm group. Up to 32 groups are supported.
- **POS Name** — Set the name of the POS alarm.
- **Switch / Enable** — Enable this POS alarm.
- **Alarm Out** — Configure whether the alarm output is triggered when the POS alarm occurs.
- **Configuration** — Open the configuration page for this POS alarm.

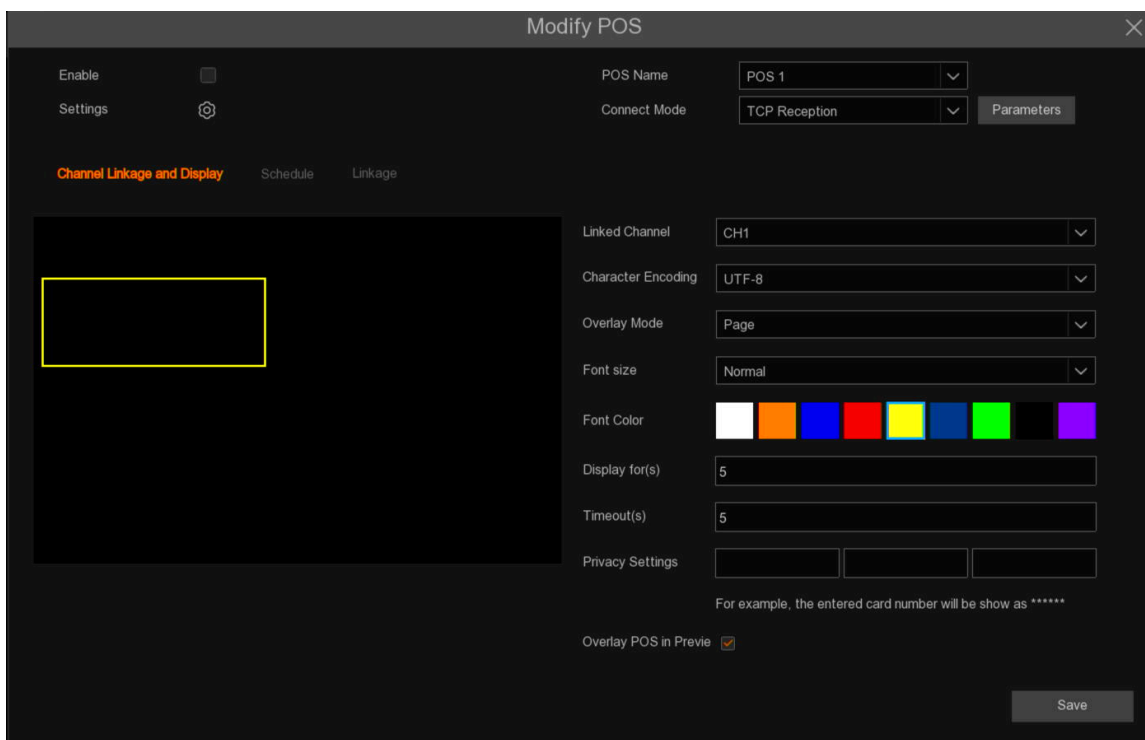


Figure 13-14. Selecting a POS alarm to configure

- **POS Name** — Select an existing POS alarm.
- **Connect Mode** — Configure the data transmission method of the POS terminal. Supported protocols are UDP, TCP, and Multicast. Click the **Parameters** button to open the configuration page.

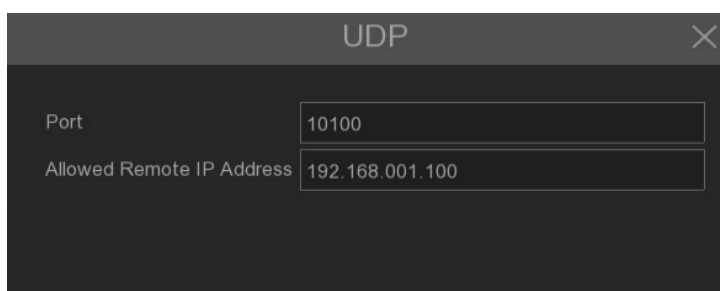


Figure 13-15. POS terminal connection parameters

- **Port** — The service port number of the POS terminal.
- **All Remote IP Address** — The POS terminal service addresses permitted to send information to the recorder.
- **Address** — The POS terminal service address.
- **Settings** — Configure custom POS information. You can customize how POS information is shown in the preview. When the recorder receives information from the POS terminal, the preview displays it according to the configured identifiers.

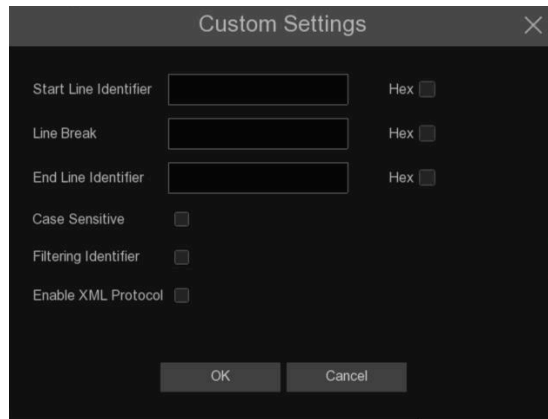


Figure 13-16. Custom POS information identifiers

- **Start Line Identifier** — Set the start identifier for POS information; content is displayed following this identifier.
- **Line Break** — Set the line-break identifier; a new line is started following this identifier.
- **End Line Identifier** — Set the end identifier for POS information; output stops following this identifier. The start and end identifiers must both be set to take effect.
- **Hex** — Configure whether the start, line-break, and end identifiers are hexadecimal. POS information is then output, broken, and terminated according to the specified hexadecimal characters.
- **Case Sensitive** — Configure whether the POS identifiers are case-sensitive. When enabled, POS information is not output, broken, or terminated unless the actual identifier case matches the configured case.
- **Filtering Identifier** — Configure whether POS information filters out the start and end identifiers. When enabled, the identifiers are excluded from the displayed information.
- **Enable XML Protocol** — Configure whether the XML protocol is active. When the start, end, and line-break identifiers are not set, enabling the XML protocol allows POS information to be parsed and displayed according to XML standards.

Channel Linkage and Display — Configure how POS information is bound to a channel and shown on screen.

- **Linked Channel** — Select the bound channel. The same channel cannot be bound twice.
- **Character Encoding** — Set the character encoding so that POS information is displayed in the appropriate language characters.
- **Overlay Mode** — Set how POS characters are overlaid. Options are **Page** and **Scroll**, giving a page-turning or scrolling effect.
- **Font size** — Set the character size. Options are Smallest, Smaller, Small, Normal, Large, Larger, and Largest.
- **Font Color** — Set the character color. Options are White, Orange, Blue, Red, Yellow, Dark Blue, Green, Black, and Purple.
- **Display for (s)** — Set how long the POS characters are displayed. Range: 5-3600 seconds.
- **Timeout (s)** — Set the display timeout for POS characters, from 5 to 3600 seconds, consistent with the POS alarm recording duration.
- **Privacy Settings** — Configure privacy protection for characters in POS information. Matching characters are displayed as "*****".
- **Overlay POS in Preview** — Enable or disable the display of POS information in preview mode; this has the same effect as the preview POS toggle.
- **Schedule** — Configure the active period for each POS event. For detailed schedule settings, refer to the Recording Schedule section.

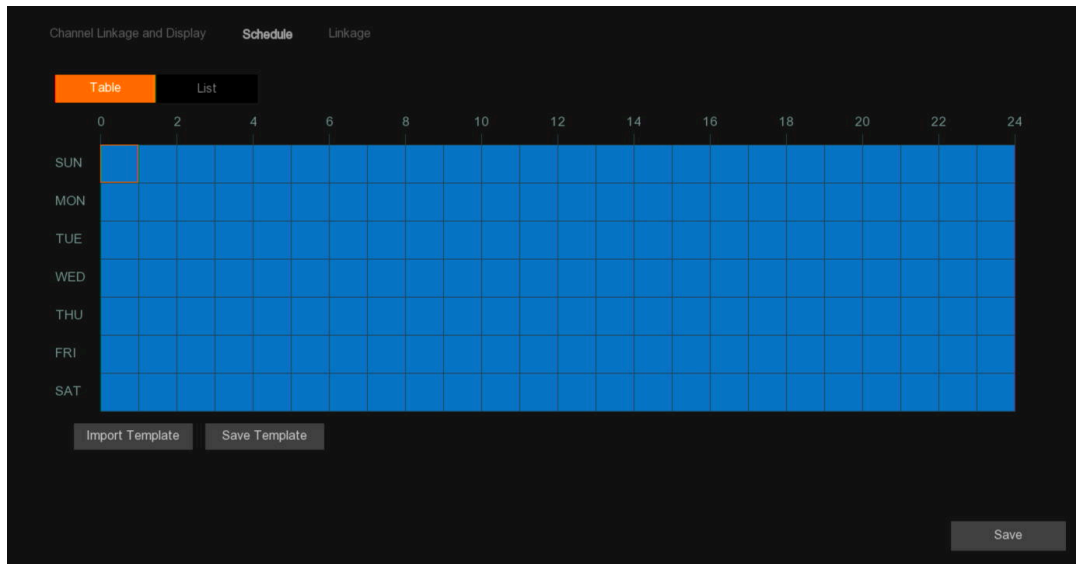


Figure 13-17. POS alarm linkage settings

Linkage — Configure the actions triggered when a POS alarm occurs.

- **Trigger Alarm Output** — Configure the linked I/O output, as described for **Alarm Out** above.
- **Trigger Channel Record** — Specify the channels to record when a POS alarm occurs.
- **PTZ Linkage** — Enable or disable PTZ linkage when a POS alarm occurs. This requires a compatible PTZ camera.
- **Preset** — Configure preset points and dwell times. When the POS alarm is activated, the PTZ camera rotates to the designated preset.
- **Tour** — Configure a preset-point patrol route. When the POS alarm is activated, the PTZ camera patrols along the configured route.
- **Pattern Scan** — Configure a pattern scan. When the POS alarm is activated, the PTZ camera moves according to the configured scan pattern.

Normal Linkage — Configure the standard alarm linkage actions performed when a POS alarm is activated:

- **Buzzer** — Enable or disable the device buzzer when a POS alarm occurs.
- **Email** — Configure whether an email is sent to the specified address when a POS alarm occurs.
- **Event Push Platform** — Configure whether event alerts are pushed to third-party service platforms when a POS alarm occurs. This option is selected by default. Refer to the Event Push Platform section for details.
- **Voice Prompts** — Configure whether a voice announcement is triggered when a POS alarm occurs. Refer to the Voice Prompts section for details.
- **Delete** — Delete this POS alarm.

13.1.2.3 Voice Assistant

The recorder supports integration with a voice assistant. Configure the connection parameters on this page.

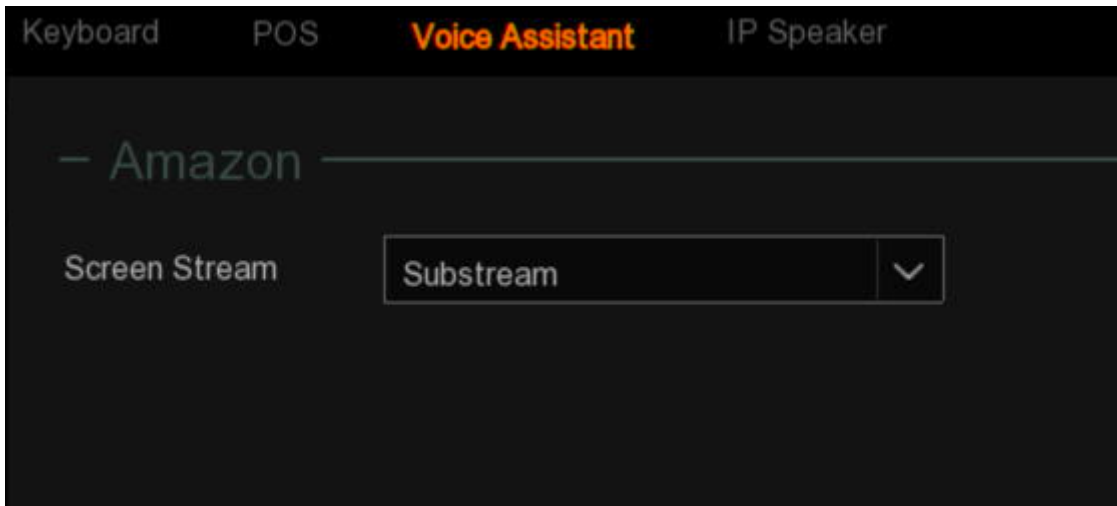


Figure 13-18. Voice Assistant settings

13.1.2.4 IP Speaker

On this page you can add IP Speakers. Once an IP Speaker has been added, you can select it as a broadcast target when configuring voice announcements.

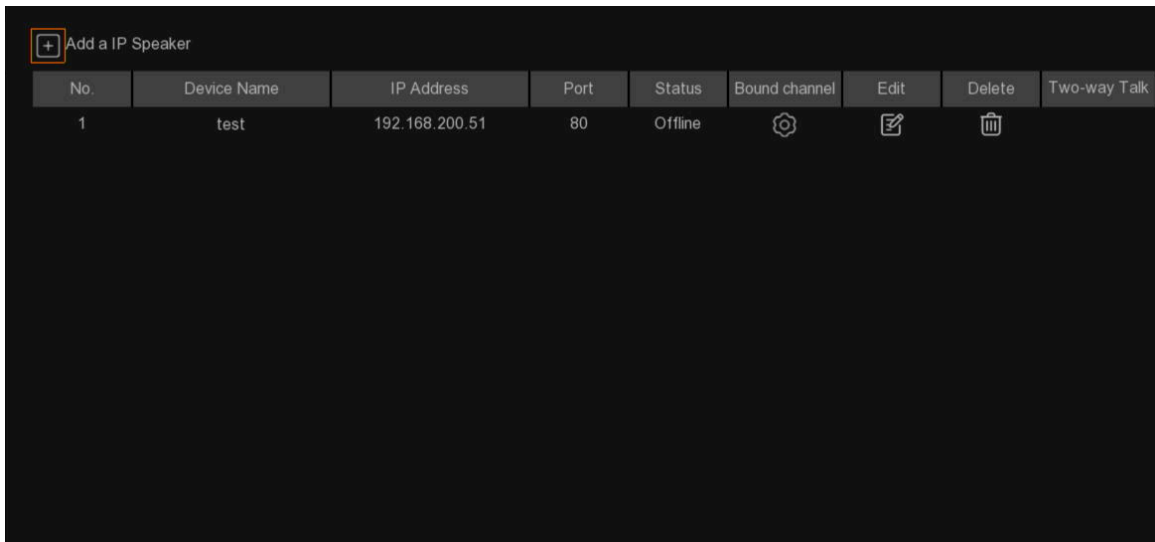


Figure 13-19. Adding an IP Speaker



Figure 13-20. The Add IP Speaker dialog

- **Add a IP Speaker** — Add an IP Speaker.

Figure 13-21. IP Speaker connection parameters

- **Device Name** — Set the name of the IP Speaker being added.
- **IP Address** — Enter the IP address of the IP Speaker.

- **Port** — Enter the port number of the IP Speaker.
- **Username** — Enter the username for the IP Speaker.
- **Password** — Enter the password for the IP Speaker.



Figure 13-22. Editing an IP Speaker and its bound channel

- **Bound Channel** — Set the channel to which the IP Speaker is bound. When you start an intercom to the IP Speaker from the app, the preview of the bound channel is displayed.



Figure 13-23. Deleting an IP Speaker

- **Edit** — Modify the IP Speaker.



Figure 13-24. Two-way talk control for the IP Speaker

- **Delete** — Remove the IP Speaker.



Figure 13-25. IP Speaker list on the peripheral page

- **Two-way Talk** — Press this button to start intercom communication between the recorder and the speaker.

13.1.3 Multi-user Management

The system supports multiple user accounts of the following types.

Multi-user Edit Group Permissions

No.	User Name	Group	Edit	Delete	
1	admin				
2	user1	Advanced			

Figure 13-26. Multi-user management page

- **ADMIN (System Administrator)** — The administrator holds the highest permission level. The administrator can configure the system, change the administrator and user passwords, and enable or disable password protection.
- **USER (Advanced user)** — A regular user can access functions such as preview, search, and playback only. You can create multiple regular user accounts, each with its own access rights.
- **Default Login User** — The user account logged in automatically when the NVR restarts.

13.1.3.1 Change the Password and Concurrent Login Limit

To change the password of the administrator or a regular user, click the edit icon.



Figure 13-27. Changing a user password and the concurrent login limit

WARNING Set the password to 8-16 characters. It must not be the same as the user name and must include at least two of the following: digits, uppercase letters, lowercase letters, or special characters.

Set the maximum number of concurrent access users (1 to 20, or unlimited), then click **Save** to store the settings.

Figure 13-28. User list with the maximum access users setting

13.1.3.2 Add New Users

Add a new account by activating one of the inactive user slots and entering its credentials.

No.	User Name	Group	Edit	Delete
1	admin			
2	user1	Advanced		

Figure 13-29. Selecting an inactive user account



Figure 13-30. Editing the user name and password

- 1. Select one of the currently inactive users and click the user edit icon.

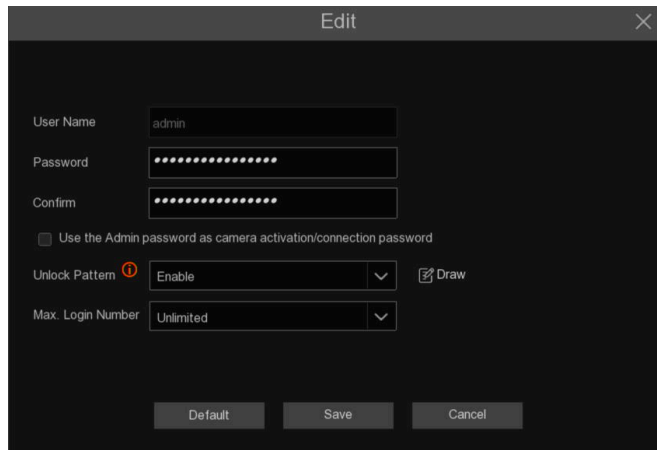


Figure 13-31. Entering the new user name

1. Click **User Name** to edit the user name.
2. Click the **Password** field and enter the desired password.
3. Click the **Confirm** field and re-enter the password.
4. Click **Max. Login Number** to set the maximum number of concurrent access users allowed by the device.

13.1.3.3 Set User Permissions

The administrator account is the only account with full control of the system. On this page, the administrator can enable or disable specific menus and functions for each regular user.



Figure 13-32. Opening the permissions editor for a user

Click the edit icon under the **Permissions** tab.

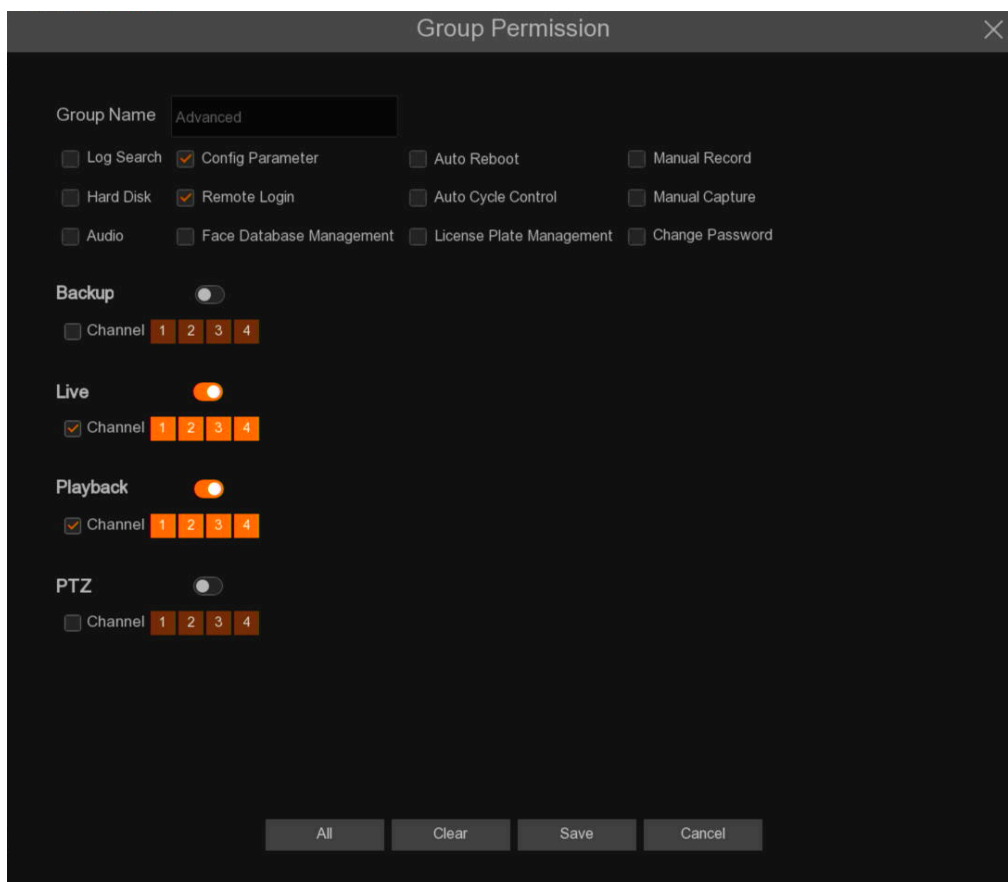


Figure 13-33. Selecting the functions available to a regular user

Set the user's permissions by selecting the check box that corresponds to each function. Click **All** to select every box, or **Clear** to deselect them all. The administrator can grant a regular user any of the following privileges:

- **Log search** — View the device log.
- **Parameter setting** — Configure the parameters on all pages.
- **Automatic restart** — Perform automatic maintenance and restart of the equipment.
- **Manual recording** — Start and stop video recording manually.
- **Hard disk management** — Operate and configure the hard disk.
- **Remote login** — Access the NVR remotely.
- **Polling control** — View the real-time preview of all channels in sequence.
- **Manual capture** — Start image capture manually.
- **Audio** — Control channel audio and intercom.
- **Face database management** — Operate the face database.
- **License plate database management** — Operate the license plate database.
- **Sub-user change password** — Allow a sub-user to change the sub-user password after logging in.
- **Backup** — Enable the backup switch and select the channels a regular user may back up.
- **Preview** — Enable the preview switch and select the channels a regular user may monitor in real time.
- **Video playback** — Enable the playback switch and select the channels a regular user may replay.
- **PTZ** — Enable the PTZ switch and select the channels on which a regular user may operate the PTZ controls.

Click the **Save** button to store the modifications.

Chapter 14 Maintenance & Information

This chapter describes the maintenance tools of the OCTAVUE NVR — system logs, factory restoration, firmware upgrade, parameter management, automatic maintenance, and developer diagnostics — together with the IP camera maintenance functions and the read-only information pages that report the current state of the system.

14.1 Maintenance

14.1.1 Log

The system log records relevant system events, including the various alarm types and a history of system operations.

The screenshot shows the 'Log' page in the OCTAVUE NVR interface. At the top, there are tabs for 'Log', 'Load Default', 'Upgrade', 'Parameter Management', 'Auto Maintenance', 'Illegal Login Lock', and 'Developer Mode'. Below the tabs, there are search filters: 'Start Date' (04/09/2026), 'End Date' (04/09/2026), 'Start Time' (00:00:00), 'End Time' (23:59:59), and 'Log Type' (All). A 'Search' button is located to the right of the 'Log Type' dropdown. Below the search filters is a table with the following columns: Channel, Type, Time, Content, Access Source, Record, and Playback. The table contains several log entries, including motion alarms and account logouts. At the bottom of the table, it says 'Total : 1557'. There are also navigation controls for the log entries, including a page number '1' and a total count '52'. A 'Backup' button is located at the bottom right of the page.

Channel	Type	Time	Content	Access Source	Record	Playback
CH3	Alarm	04/09/2026 00:00:02	Motion alarm started		Yes	
CH2	Alarm	04/09/2026 00:00:36	Motion alarm started		Yes	
	Alarm	04/09/2026 00:00:36	Combined alarm		No	
	Alarm	04/09/2026 00:00:39	Combined alarm		No	
	Alarm	04/09/2026 00:00:48	Combined alarm		No	
CH2	Alarm	04/09/2026 00:01:11	Motion alarm ended		Yes	
CH2	Alarm	04/09/2026 00:01:29	Motion alarm started		Yes	
	Alarm	04/09/2026 00:01:29	Combined alarm		No	
	Account	04/09/2026 00:01:44	admin Logout	127.0.0.1 (unknown)		
CH2	Alarm	04/09/2026 00:01:56	Motion alarm ended		Yes	
CH3	Alarm	04/09/2026 00:02:06	Motion alarm ended		Yes	
CH2	Alarm	04/09/2026 00:03:31	Motion alarm started		Yes	
CH2	Alarm	04/09/2026 00:04:03	Motion alarm ended		Yes	

Figure 14-1. System log search and backup page

14.1.1.1 Searching and Backing Up the Log

1. Click the field beside **Start Date** and **Start Time** and select the beginning of the search period from the on-screen calendar.
2. Click the field beside **End Date** and **End Time** and select the end of the search period.
3. Select the category of event to retrieve from the **Log Type** drop-down list, or select **All** to view the entire system log for the selected period.
4. Click **Search** to run the query.

The following log types are available:

- **System** — System configuration, restart, automatic restart, upgrade, time setting, and NTP synchronization.
- **Configuration** — Preview control; privacy mask, recording mode, and recording schedule settings; main-, sub-, and third-stream settings; network, e-mail, colour, and motion detection settings; hard disk and

multi-user settings; NTP and image control; RTSP and IP-filter settings; restoration to factory settings; audio, video-tampering, and export/import operations.

- **Alarm** — Alarm event information.
- **Account** — Login and logout records for local and remote users.
- **Record** — Search, playback, and backup operations.
- **Storage** — Storage events such as hard disk formatting, disk-full conditions, and disk errors.
- **AI** — Alarm information generated by intelligent events.

To review the results, browse the log entries returned for the selected period. Click **Playback** on an event to play the associated recording immediately.



Figure 14-2. Reviewing log entries returned by a search



Figure 14-3. Playing back a recording associated with a log event



Figure 14-4. Selecting a destination folder on the backup device



Figure 14-5. Confirming the log backup operation

Use the navigation buttons in the lower-right corner of the menu to move between pages of log entries. To export the log, click **Backup**. When the **Backup drive** menu appears, navigate to the folder in which to save the backup file and click **OK** to start.

NOTE Before creating a backup, connect an external storage device to the USB port of the NVR.

14.1.2 Restore Factory Settings

This page provides several methods for restoring the NVR parameters to their factory values. Select the appropriate option and confirm the operation.

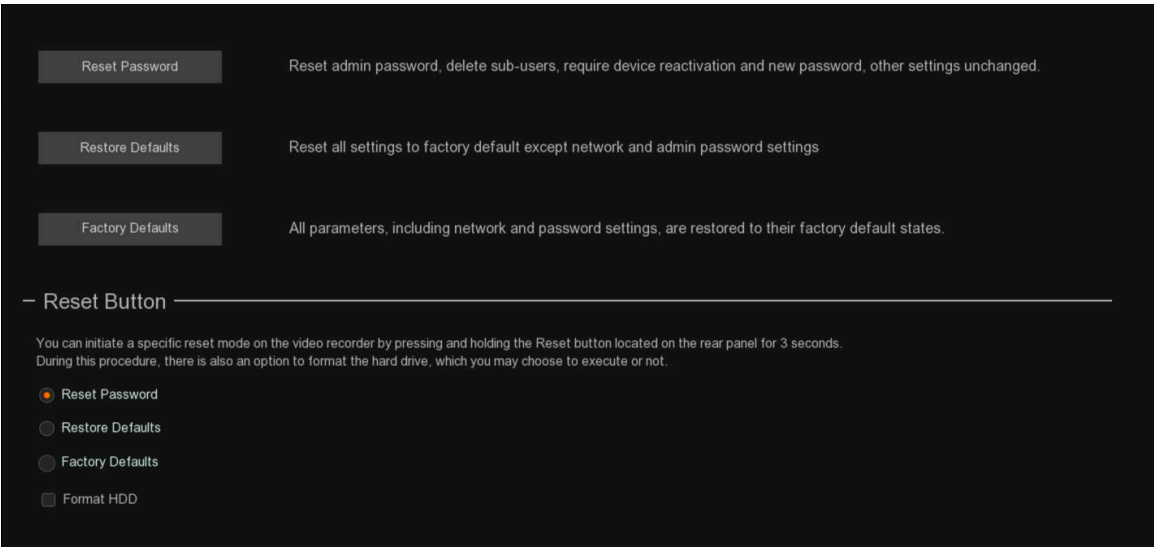


Figure 14-6. Restore factory settings page

- **Restore to Inactive** — Resets the administrator password and deletes all sub-users. The device must be reactivated afterwards. All other page parameters remain unchanged.

- **Restore Defaults** — Restores all parameters to their factory values except the basic network parameters and the administrator password.
- **Factory Defaults** — Restores every parameter to its factory value.

The recorder also supports hardware recovery: press and hold the **RESET** button on the rear panel for 10 seconds to perform the corresponding recovery mode. Select **Format HDD** to format the hard disk during the same operation.

CAUTION Restoring factory settings and formatting the hard disk permanently erase the affected data, which cannot be recovered. Choose the recovery mode carefully and back up any important recordings and configuration beforehand.

14.1.3 Upgrade

14.1.3.1 U-disk Upgrade

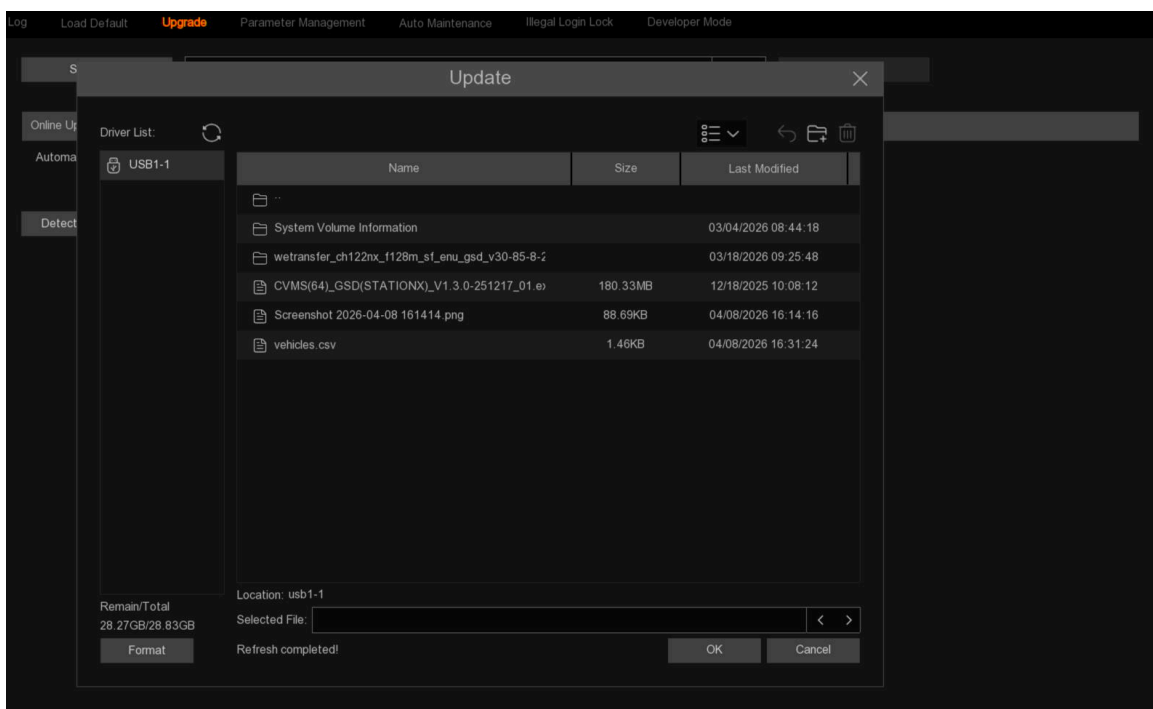


Figure 14-7. U-disk firmware upgrade page

1. Copy the firmware file (a .bin file) to a USB flash drive, then insert the U-disk into the USB port of the NVR.
2. Click **Select File**, choose the firmware file on the U-disk, and click **OK**.
3. Click **Upgrade** to begin. The upgrade takes approximately 5–10 minutes.

WARNING Do not power off the NVR or remove the U-disk during the firmware upgrade. Interrupting the process can leave the recorder inoperable.

14.1.3.2 Online Upgrade

The recorder supports online upgrades. To use this function, first set up the upgrade server, create a file-storage directory on it, and upload the upgrade firmware.

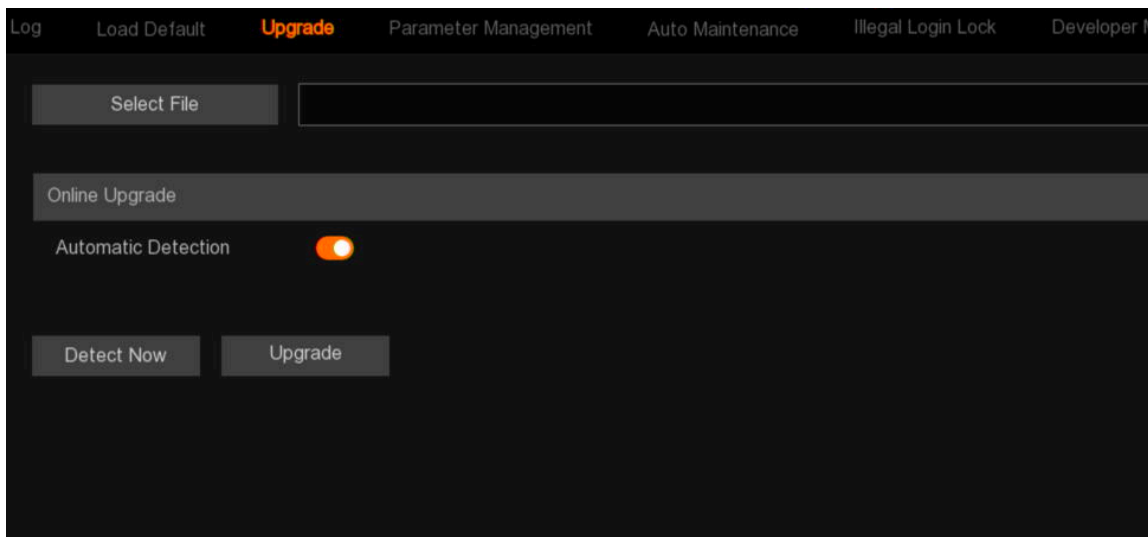


Figure 14-8. Online upgrade page

- **Automatic Detection** — When enabled, the device checks the server for updated firmware periodically, both at startup and during operation. If newer firmware is found, a prompt is displayed.
- **Detect Now** — Manually checks the server for upgradable firmware.
- **Upgrade** — When the server reports upgradable firmware, this button is highlighted; click **OK** to allow the device to upgrade.

NOTE To detect the latest firmware version from the cloud server, enable the cloud service switch, bind the OvConnect app, and clear the online-upgrade configuration parameters on this page.

14.1.4 Parameter Management

You can export the current configuration to a U-disk, or import a previously exported configuration file from a U-disk into another device of the same model.

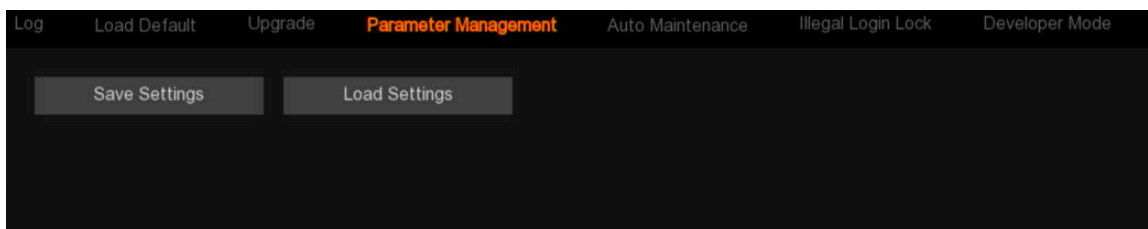


Figure 14-9. Parameter management page

- **Save Settings** — Saves the current system configuration parameters to the specified USB storage directory.
- **Load Settings** — Imports the configuration parameters from the USB storage directory into the current device. The device restarts automatically once the import is complete.

14.1.5 Automatic Maintenance

This menu allows the system to restart on a regular schedule. Keeping this function enabled is recommended.

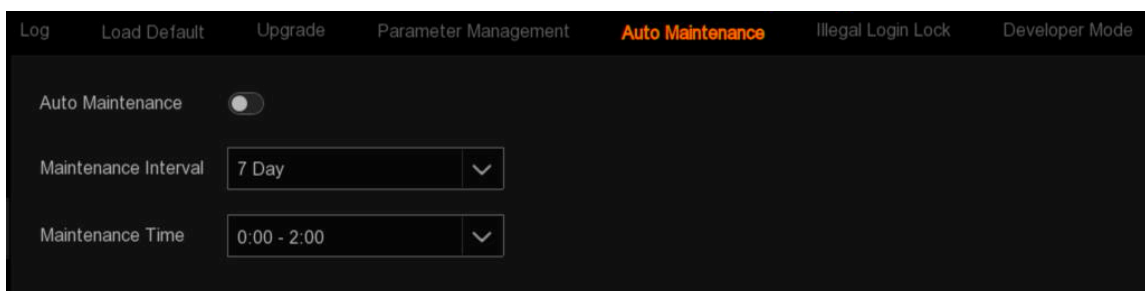


Figure 14-10. Automatic maintenance page

- **Auto Maintenance** — Enables or disables the automatic maintenance function.
- **Maintenance Interval** — Sets the automatic maintenance cycle of the device.
- **Maintenance Time** — Sets the period during which automatic maintenance is performed.

NOTE The device restarts at a random time within the configured maintenance period.

14.1.6 Developer Mode

When the system encounters an exception, developers can use this page to collect serial-port log information generated while the system runs, in order to locate the problem.

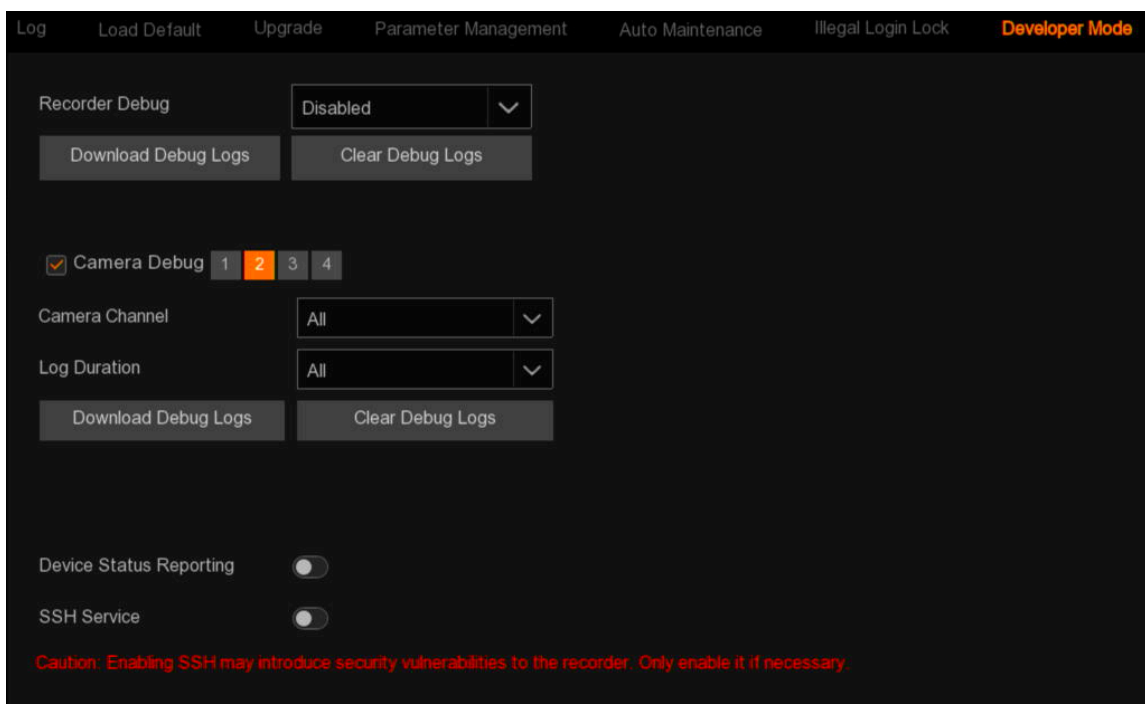


Figure 14-11. Developer mode page

Recorder Debug determines whether the recorder enters debug mode and where its debug log is written:

- **Disabled** — Does not save the serial-port log.
- **Output To Terminal** — Sends the serial-port log to the terminal.
- **Output To Hard Disk** — Saves the serial-port log to the hard disk.
- **Download Debug Logs** — Exports the recorder serial-port log to a U-disk.
- **Clear Debug Logs** — Deletes the collected recorder serial-port log from the hard disk.

The camera-side debugging options control logging for the connected IP cameras:

- **Camera Debug** — Determines whether the camera serial-port log is recorded to the recorder. After a channel is selected and saved, the debug log for that channel is transmitted to the recorder for storage.

- **Camera Channel** — Selects the camera channel from which to export the debug log.
- **Log Duration** — Selects the period for which to export the debug log.
- **Download Debug Logs** — Exports the camera debug log to a U-disk, with the option to save by channel and recording time.
- **Clear Debug Logs** — Deletes the stored camera debug log from the hard disk.
- **Device Status Reporting** — When enabled, uploads the storage status, channel status, and device information to the P2P server.
- **SSH Service** — When enabled, allows the device to be accessed over SSH.

14.2 IP Camera Maintain

14.2.1 IP Camera Upgrade

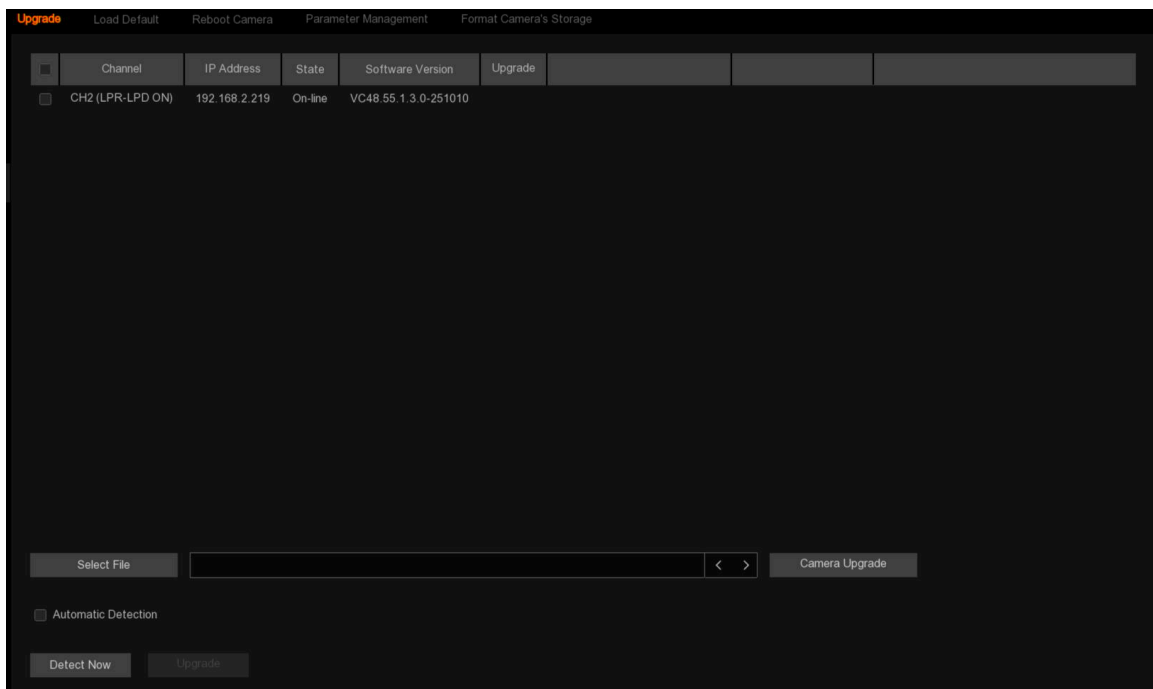


Figure 14-12. IP camera upgrade page

1. Select the IP camera to upgrade.
2. Click **Select File**, choose the upgrade file on the USB storage device, and click **OK**.
3. Click **Upgrade** to begin.

WARNING Do not power off the NVR or the IP cameras, and do not unplug the U-disk, during the upgrade.

Online upgrade of the IP camera is also supported:

- **Automatic Detection** — When enabled, the device checks the server for the latest upgrade file after 24 hours of operation and indicates whether an upgrade is available.
- **Detect Now** — Manually checks for the latest upgrade file.
- **Upgrade** — Click to upgrade when the latest upgrade file has been detected.

14.2.2 Load Default

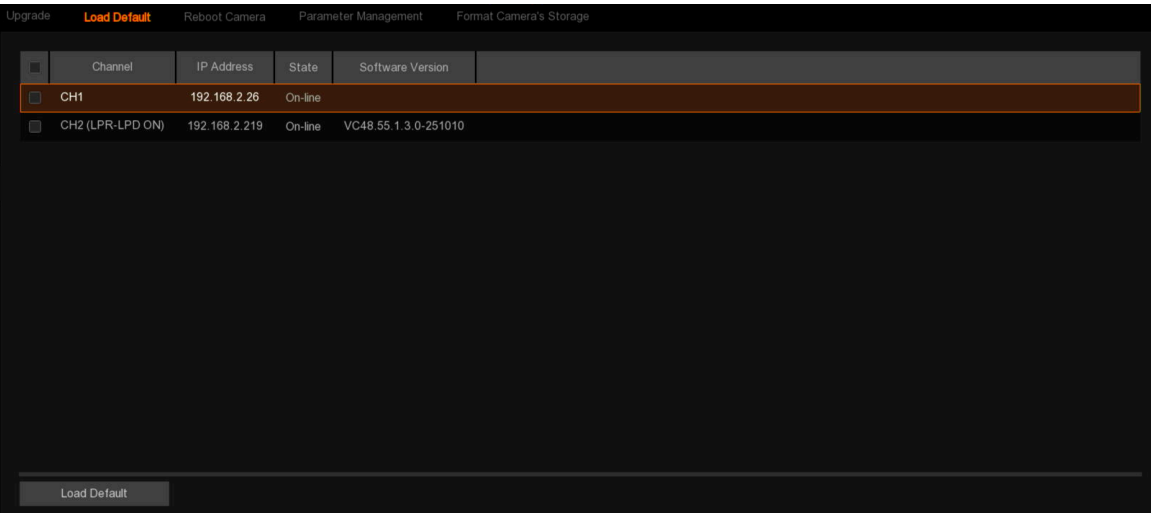


Figure 14-13. Restoring an IP camera to its factory settings

1. Select the IP camera to restore to its factory settings.
2. Click **Load Default**. Enter the administrator password when prompted to authorize the operation.

14.2.3 Reboot Camera

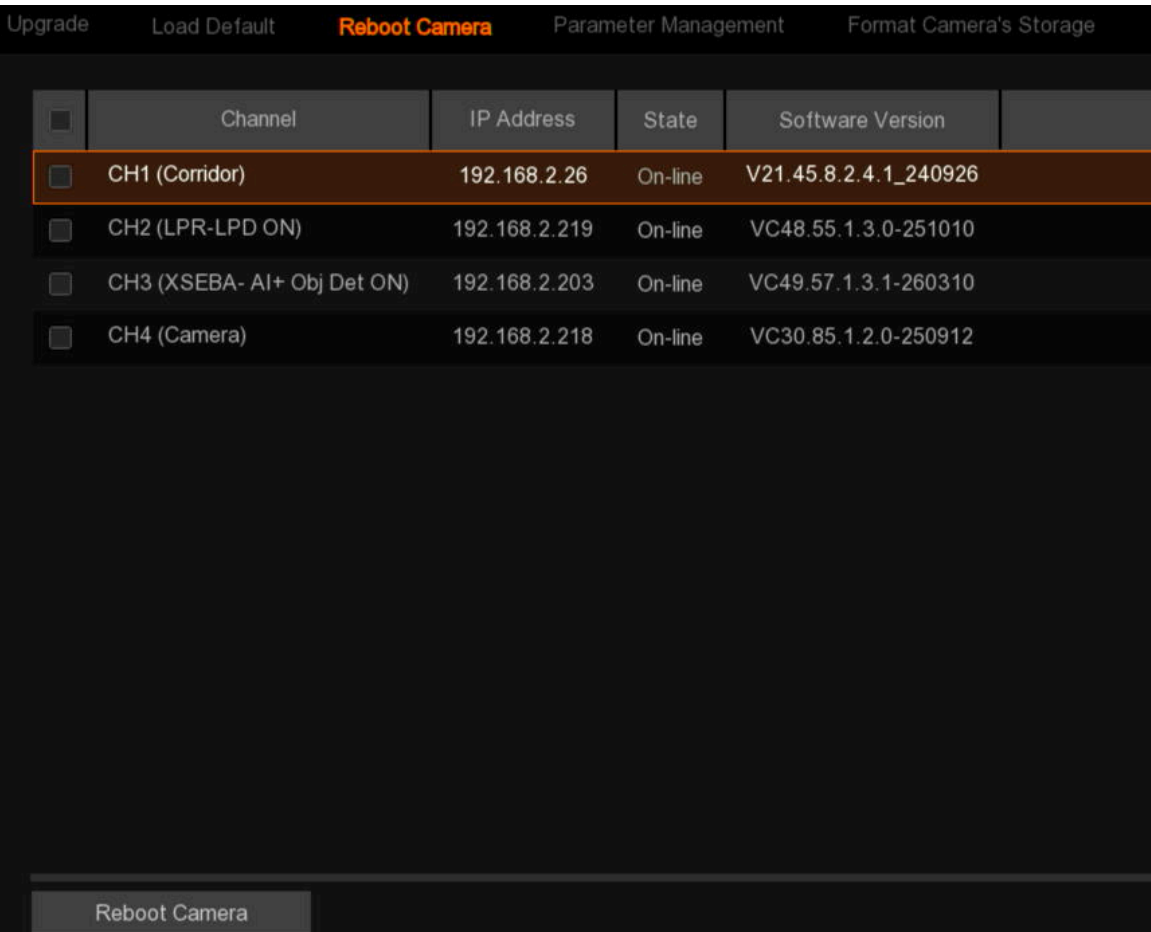


Figure 14-14. Rebooting an IP camera

Select the IP camera and click **Reboot Camera** to restart it.

14.2.4 Parameter Management

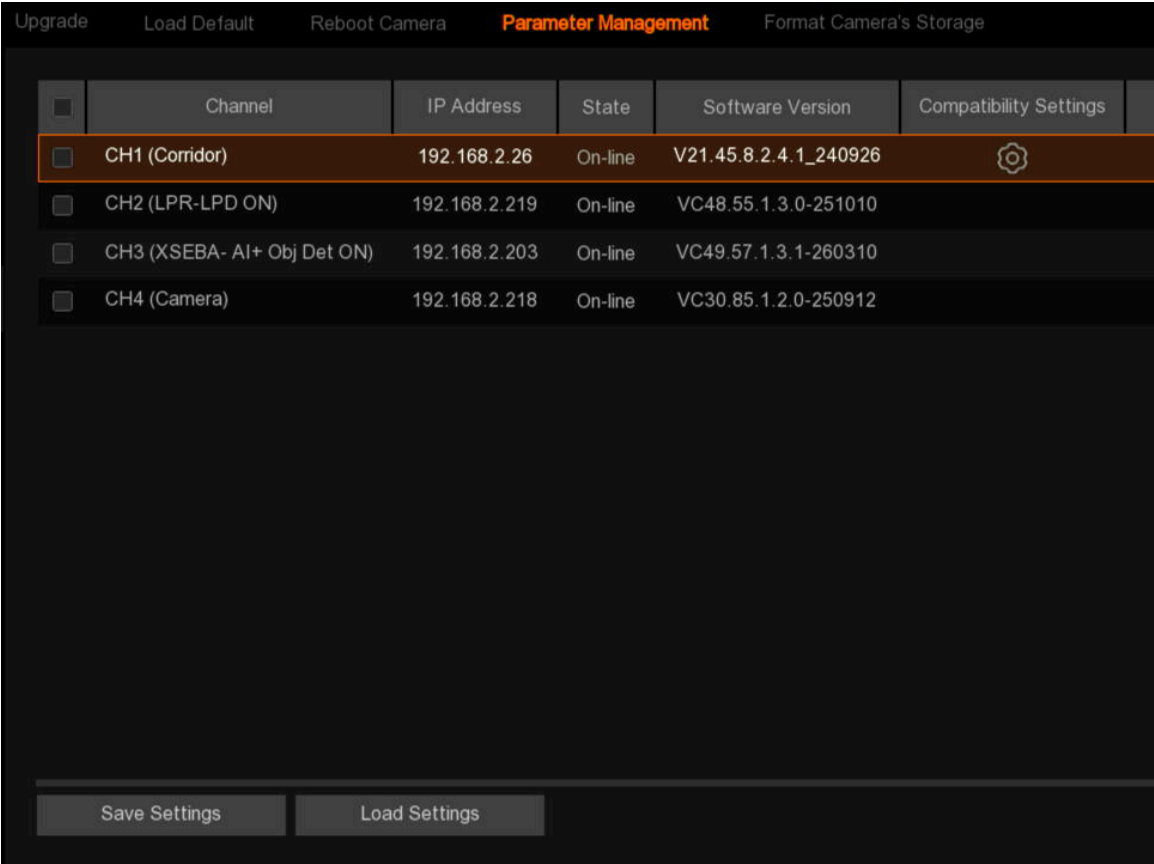


Figure 14-15. IP camera parameter management

Select an IP camera and click **Save Settings** to save its parameters to a U-disk. To restore them, select the IP camera, choose the saved parameter file, and click **Load Settings** to import the parameters.

CAUTION A parameter file may only be imported into an IP camera of the same model.

NOTE If the camera firmware is significantly outdated, the AI schedule and PTZ linkage settings may be accessible. For detailed configuration, refer to the Schedules and Alarm Linkage sections.

14.2.5 Format Camera SD Disk

☐	Channel	IP Address	Serial No.	Type	State	Free/Total	Free Time
☐	CH7 (3)	172.20.58.6	SD Card	Read and Write	FULL	0M/14G	0s/10Hour
☐	CH11 ()	10.10.11.11	SD Card	Read and Write	FULL	0M/14G	0s/4Hour
☐	CH15 ()	172.20.58.46	SD Card	Read and Write	FULL	0M/29G	0s/33Hour
☐	CH20 ()	172.20.58.44	SD Card	Read and Write	Unformatted	0M/14G	0s/4Hour
☐	CH21 ()	172.20.58.44	SD Card	Read and Write	Unformatted	0M/14G	0s/4Hour
☐	CH29 ()	172.20.58.40	SD Card	Read and Write	HDD ERROR	0M/14G	0s/11Hour
☐	CH30 ()	172.20.58.22	SD Card	Read and Write	FULL	0M/14G	0s/5Hour
☐	CH32 ()	172.20.58.41	SD Card	Read and Write	FULL	0M/29G	0s/33Hour

Format

Figure 14-16. Formatting the SD card of an IP camera

The system detects any IP camera that has an SD card installed. Click **Format** to format the SD card of the selected IP camera.

CAUTION Formatting permanently erases all data on the SD card. This action cannot be undone.

14.3 Information

14.3.1 System Information

View general device details, including the device ID, device model, IP address, MAC address, and firmware version.

Information	Channel Information	Record Info	Network State	Privacy Statement	Support
Device ID	000000				
Device Name	N3604				
Device Type	N3604				
Hardware Version	N3604				
Software Version	VC1.3.0-251225				
IE Client Version	VC1.3.0.3-251219				
Video Format	NTSC				
Total HDD Capacity	931G				
IP Address					
IPv6 Address	fe80::f670:cff:fec0:7de9/64				
Http	80,80				
MAC Address					
Network State	Connected				
P2P ID					
Cloud ID					
SN					

Figure 14-17. System information page

14.3.2 Channel Information

Information	Channel Information	Record Info	Network State	Privacy Statement	Support
Channel	State	Mainstream	Substream	Thirdstream	
CH1 (Corridor)	On-line	1920x1080, 30Fps, 4Mbps	640x 480, 25Fps, 512Kbps	640x 480, 30Fps, 512Kbps	
CH2 (LPR-LPD ON)	On-line	3840x2160, 30Fps, 10.105Mbps	640x 480, 25Fps, 512Kbps	640x 480, 30Fps, 512Kbps	
CH3 (XSEBA- AI+ Obj Det ON)	On-line	3840x2160, 30Fps, 4Mbps	640x 480, 25Fps, 512Kbps	640x 480, 30Fps, 512Kbps	
CH4 (Camera)	On-line	2880x1620, 25Fps, 4Mbps	640x 480, 25Fps, 512Kbps	640x 480, 20Fps, 512Kbps	

Figure 14-18. Channel information page

View the channel information for each connected camera, such as the alias and the recording parameters of the main, sub, and third streams.

14.3.3 Record Information

InformationChannel InformationRecord InfoNetwork StatePrivacy StatementSupport

Channel	Record State	Record Switch	Stream Type	Resolution	Frame Rate	Bitrate
CH1 (Corridor)	ON	Enable	Dual Stream	1920x1080 640x480	30fps 25fps	4Mbps 512Kbps
CH2 (LPR-LPD ON)	ON	Enable	Dual Stream	3840x2160 640x480	30fps 25fps	10.105Mbps 512Kbps
CH3 (XSEBA- AI+ Obj Det ON)	ON	Enable	Dual Stream	3840x2160 640x480	30fps 25fps	4Mbps 512Kbps
CH4 (Camera)	ON	Enable	Dual Stream	2880x1620 640x480	25fps 25fps	4Mbps 512Kbps

Figure 14-19. Record information page

View the recording information for each connected IP camera, including the bit rate, stream type, recording resolution, and frame rate (FPS).

14.3.4 Network State

Information	Channel Information	Record Info	Network State	Privacy Statement	Support
Item		Value			
DHCP		Enable			
IP Address					
Subnet Mask					
Gateway					
IPv6 Address					
IPv6 Default Gateway					
MAC Address					
DNS1					
DNS2					
Internal Switch		Connected			
IP Address					
Subnet Mask					
PPPoE		Disable			
Port					
Http		80,80,Inactive,Disable			
RTSP		554,554,Inactive,Disable			
Https		443,443,Inactive,Disable			
Total Bandwidth:		76Mbps			
Used Bandwidth:		26.105Mbps			

Figure 14-20. Network state page

View the system network information.

- **Total Bandwidth** — The total input bandwidth of the NVR available for the IP cameras.
- **Used Bandwidth** — The bandwidth currently used by the IP cameras.

14.3.5 Privacy Statement

View the full text of the device privacy statement on this page.

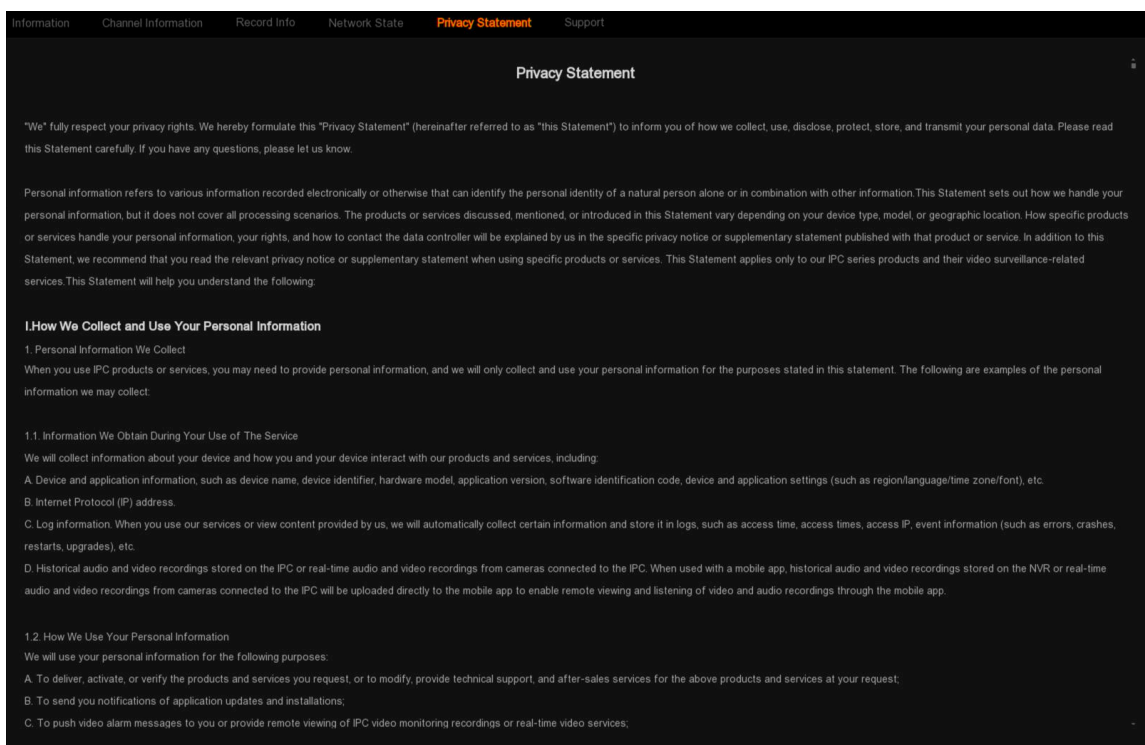


Figure 14-21. Device privacy statement

Video & Remote Access

AI scenarios, playback, backup, and remote clients

Chapter 15 AI Scenarios

The OCTAVUE NVR provides a set of purpose-built AI scenario applications that turn the raw detection results from AI-capable IP cameras into actionable, real-time business intelligence. This chapter describes the cross-counting scenario, face attendance, and non-motor vehicle statistics.

15.1 Cross Counting Scenario

The cross-counting scenario is an AI application built on the line-crossing counting function. It helps monitor and control the number of customers, visitors, or vehicles present in public venues such as restaurants, parks, zoos, theaters, museums, and parking lots.

15.1.1 Channel

Channel mode performs counting on a single camera and displays the real-time results for that camera. It is intended for a single entrance at a small venue.

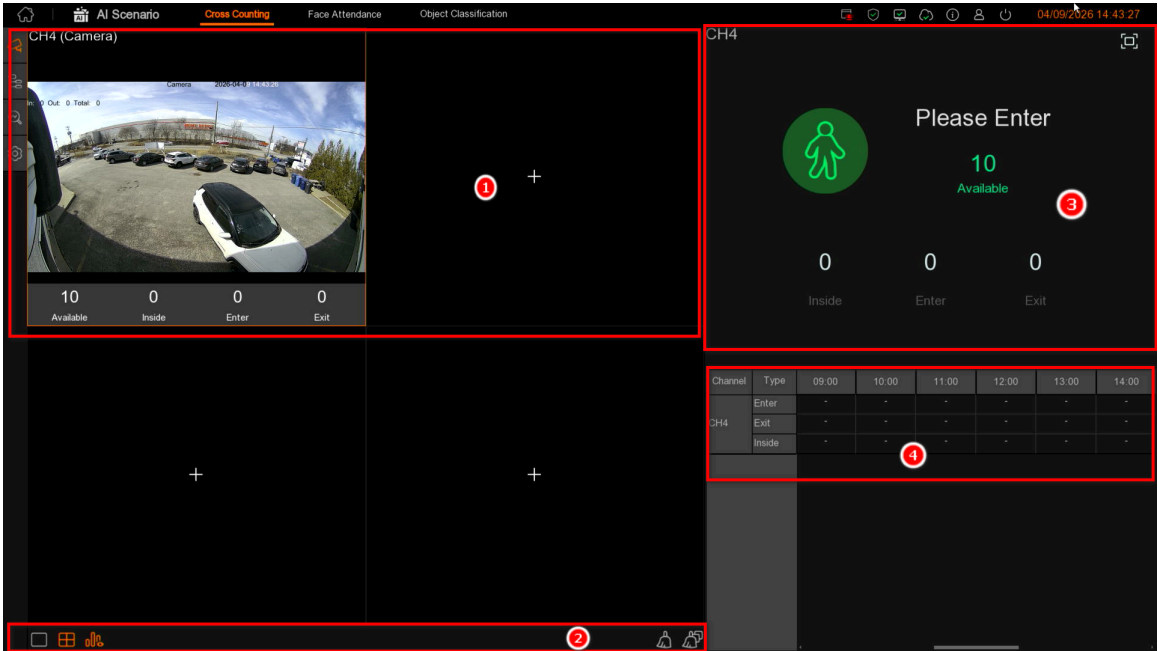


Figure 15-1. Cross counting scenario in channel mode.



Figure 15-2. Real-time availability indicator for the selected channel.

1. The main area shows the live drawing for each channel together with its real-time line-crossing statistics. Choose the channel to be displayed under **Channels** in **Setup**.



Figure 15-3. Real-time count readout for a channel.

The following values are reported for each counted area:

- **Available** — the number of remaining entries still permitted.
- **Inside** — the number of people or objects currently present in the control area.
- **Enter** — the cumulative number of entries recorded.
- **Exit** — the cumulative number of exits recorded.



Figure 15-4. Window-count selector in channel mode.



Figure 15-5. Show or hide the per-channel statistics.



Figure 15-6. Clear the statistics of the currently selected channel.



Figure 15-7. Clear the statistics of all channels.



Figure 15-8. Full-screen total-statistics control.



Figure 15-9. Consolidated real-time count information.

1. Select the number of drawing windows: four, six, or nine windows are available. Use the associated controls to show or hide the statistics beneath each channel, to clear the statistics of the currently selected channel, or to clear the statistics of all channels.



Figure 15-10. Entry and exit data for each channel and time period.

1. The real-time count panel summarizes the current counting data. Click it to display the total statistics in full screen.
2. The lower table lists the entry and exit data for each channel across each time period.

15.1.2 Group

Group mode aggregates statistics and displays real-time results by group. It is intended for large venues that have multi-channel entrances monitored by several cameras.

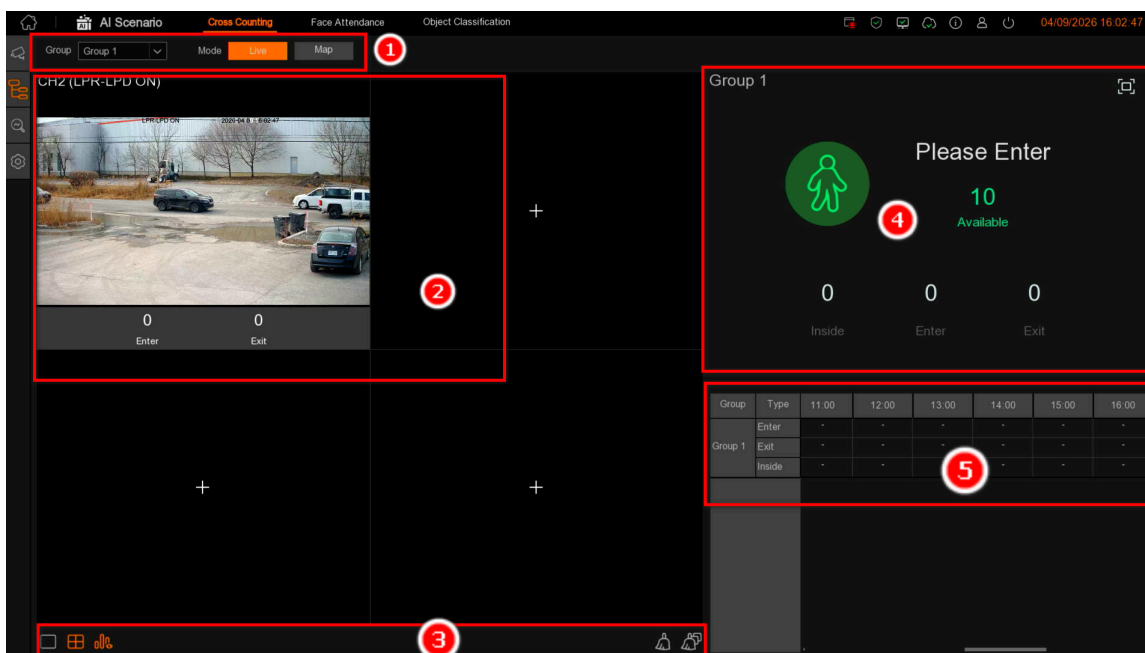


Figure 15-11. Cross counting scenario in group mode.

1. Use **Group** to select which group's information is displayed. **Live** shows the channel preview together with the statistics, while **Map** shows the map view.



Figure 15-12. Real-time availability indicator for a group.

1. The main area shows the live drawing and real-time line-crossing statistics. Select the drawing channel for each group under **Group** in **Setup**.



Figure 15-13. Real-time entry and exit readout for a group.

The following values are reported for each group:

- **Enter** — the cumulative number of entries recorded.
- **Exit** — the cumulative number of exits recorded.



Figure 15-14. Window-count selector in group mode.



Figure 15-15. Show or hide the per-channel statistics.



Figure 15-16. Clear the statistics of the currently selected channel.



Figure 15-17. Clear the statistics of all channels.



Figure 15-18. Full-screen total-statistics control.



Figure 15-19. Consolidated real-time count information.

1. Select the number of drawing windows: four, six, or nine windows are available. Use the associated controls to show or hide the statistics beneath each channel, to clear the statistics of the currently selected channel, or to clear the statistics of all channels.



Figure 15-20. Entry and exit data for each group and time period.

1. The real-time count panel summarizes the current counting data. Click it to display the total statistics in full screen. It reports **Available** (the number of remaining entries permitted) and **Inside** (the number currently present in the control area).
2. The lower table lists the entry and exit data for each group across each time period.



Figure 15-21. Add a map image to the group.



Figure 15-22. Set the position of each IP camera icon on the map.



Figure 15-23. Display the map and group statistics in full screen.

1. Configure the map view. Add a map image, set the position of each camera icon on the map, and display the map together with the current group's statistics in full screen.

15.1.3 Search



Figure 15-24. Cross counting search interface.

Channels and groups are searched separately. Select the channel or group to be searched, set the search period by day, week, month, or year, and choose the target type. Click the search icon; the results are shown on the right side of the window.

15.1.4 Setup

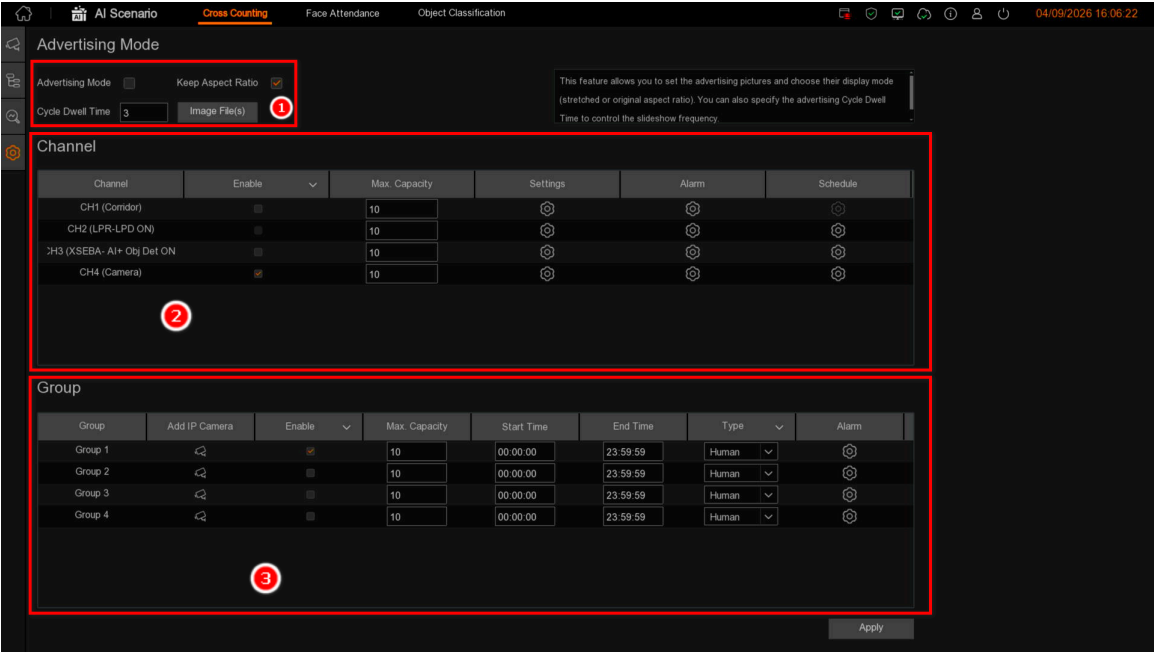


Figure 15-25. Advertising-mode configuration.

Select **Advertising Mode** to enable advertising playback, and set the image dwell time in seconds (the default is 3 seconds). Click **ImageFile(s)** to import the advertisement images to be displayed from the USB directory.

NOTE Advertising mode supports up to 16 images in JPG, PNG, or BMP format, each with a resolution no greater than 2560x1600.

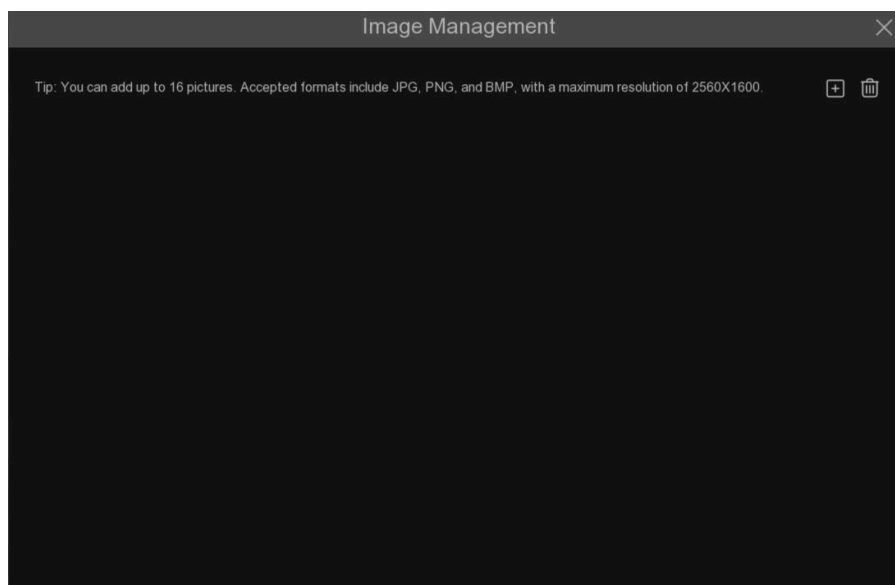


Figure 15-26. Add or remove advertisement images.



Figure 15-27. Aspect-ratio option for advertisement playback.



Figure 15-28. Full-screen advertisement playback with real-time count data.

Click **Add New Picture** to import images, and use **Delete** to remove added images one at a time.

To display an image at its original aspect ratio, select **Keep Aspect Ratio**. To stretch the image to fill the screen, clear the check box. In channel mode or group mode, click the full-screen button in the upper-right corner of the page to display the advertisement image together with the real-time count data.



Figure 15-29. Per-channel display and capacity settings.



Figure 15-30. Channel enable and AI-support indicators.



Figure 15-31. Detection-condition and alarm configuration entry.

Use the **Enable** check box to choose which channels appear on the channel page. If the camera on a channel supports AI, its setup and alarm icons are shown in blue; if the camera does not support AI, the icons are gray. Set the **Capacity** for each channel, which is the maximum permitted attendance. Click **Setup** to configure the detection conditions, and click the alarm configuration to define the alarm action performed when the available number reaches zero.

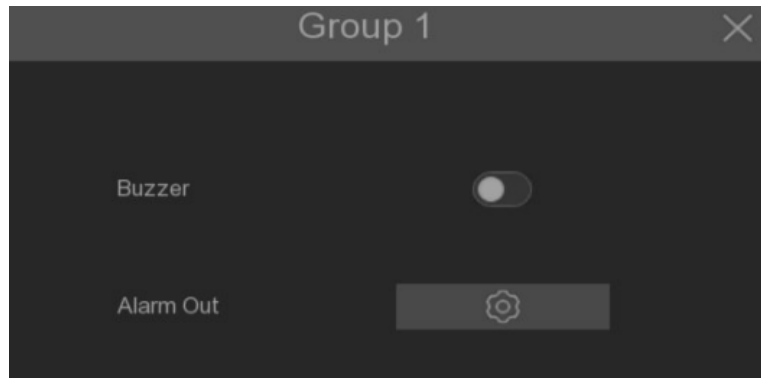


Figure 15-32. Alarm action configuration for a zero available count.

The alarm action supports the following outputs when the available count reaches zero:

- **Buzzer** — set the buzzer duration, in seconds, when the available number is 0.
- **Alarm Out** — if the NVR supports connection to an external alarm device, configure that device to be triggered when the alarm fires.



Figure 15-33. Add an IP camera to a group.



Figure 15-34. Group enable, capacity, and detection-type settings.

1. Click the **Add IP Camera** icon to add channels to the group. Up to eight groups can be configured, and each group may contain only one channel. A channel that is already enabled in channel view mode cannot be added to any group. Select the **Enable** check box to activate the group. For each group you can set the **Capacity**, **Start Time**, **End Time**, and detection type (**Person**, **Vehicle**, or **Motion**). Click the alarm configuration to define the alarm action performed when the available number reaches zero.

15.2 Face Attendance

The face attendance scenario provides a full-screen display that records face attendance in real time and lets you review the attendance results as they occur.

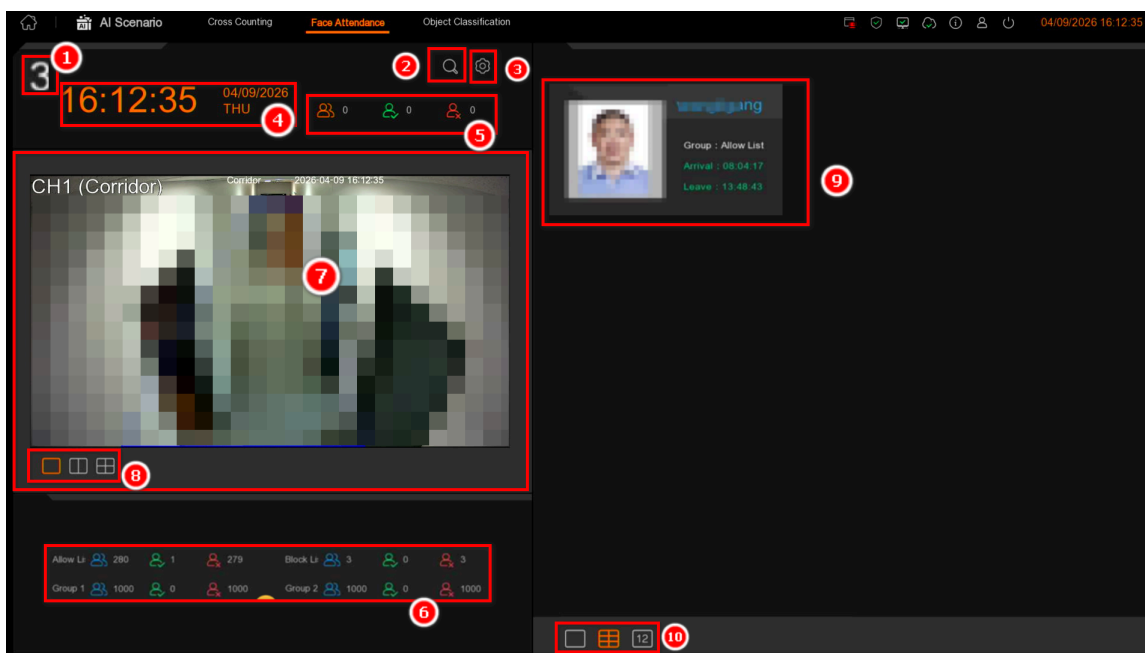


Figure 15-35. Face attendance interface theme.

The interface theme applied to the face attendance display.



Figure 15-36. Playback attendance search control.

Click this button to open the playback face attendance search interface. By default, the face images in the current face group are selected.

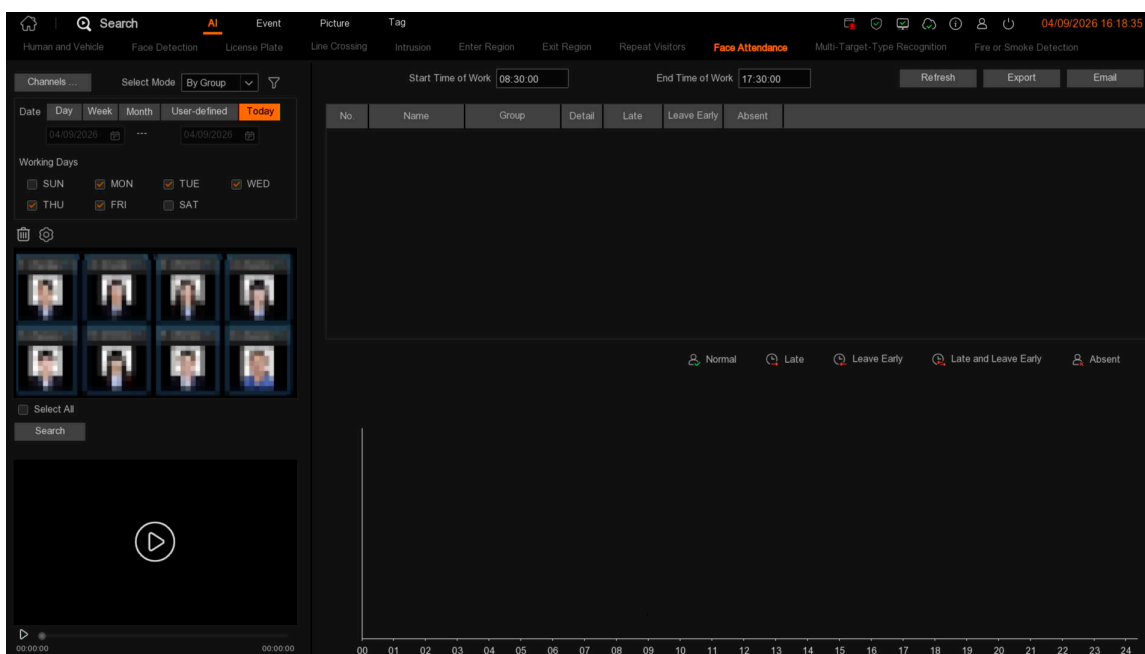


Figure 15-37. Settings control for face attendance.



Figure 15-38. Face attendance settings interface.

Click the settings button to open the configuration interface, where the following options are available.

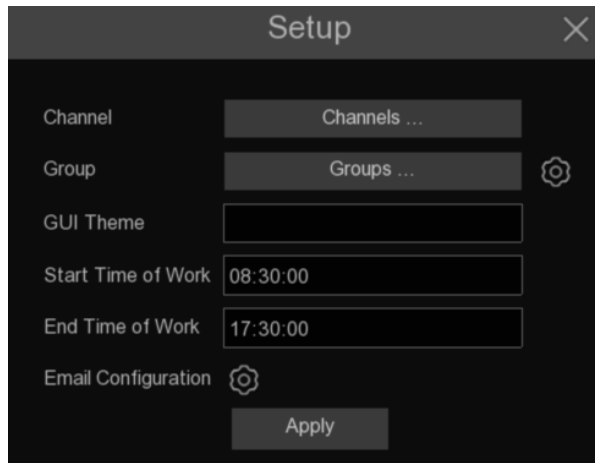


Figure 15-39. Channel selection for face attendance.

- **Channels** — select the attendance channels.



Figure 15-40. Face-group selection for attendance.

- **Groups** — select the face groups used for attendance. Click the control on the right to open the AI face bank setting interface.

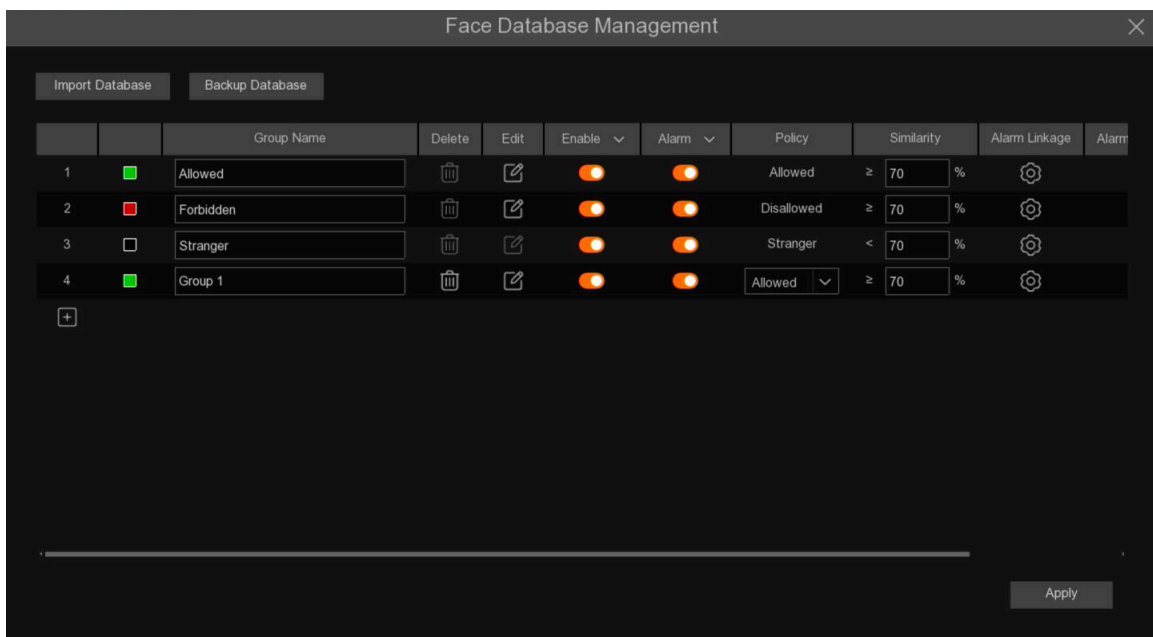


Figure 15-41. GUI theme selection.

- **GUI Theme** — the interface theme.
- **Start Time of Work** — set the start of working hours.
- **End Time of Work** — set the end of working hours.



Figure 15-42. Email configuration for attendance results.

Email Configuration — configure the mailbox to which the face attendance results are sent. Click to open the email configuration for the attendance result.

The 'Email Configuration' window has a title bar with a close button (X). Inside, there are several sections:

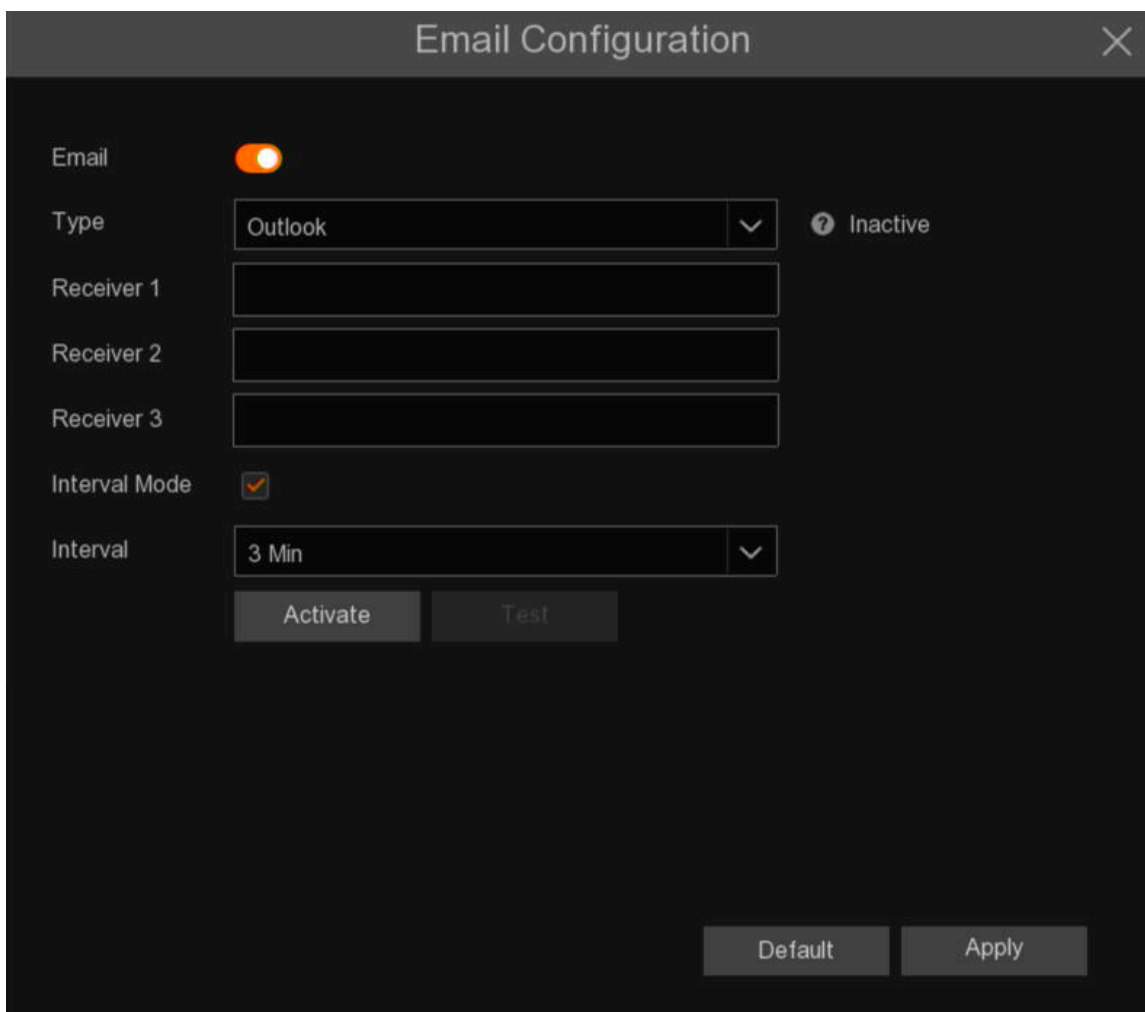
- Enable:** A checkbox that is checked.
- Email:** A text field containing '08:30:00' and a gear icon for settings.
- Mode:** A dropdown menu showing 'Month' and a numeric field showing '1'.
- Working Days:** A section with checkboxes for days of the week:
 - ☐ All
 - ☐ SUN
 - ☒ MON
 - ☒ TUE
 - ☒ WED
 - ☒ THU
 - ☒ FRI
 - ☐ SAT
- Buttons:** 'Default' and 'Apply' buttons at the bottom right.

Figure 15-43. Enable option for attendance email delivery.

- **Enable** — enable email delivery of the face attendance results (the attendance result is provided as a table file).



Figure 15-44. Email send-time and mode configuration.



The 'Email Configuration' dialog box features a title bar with a close button (X). The main area contains several settings: an 'Email' toggle switch is turned on; the 'Type' is set to 'Outlook' with a dropdown arrow; a status indicator shows 'Inactive' with a question mark icon; there are three empty text input fields for 'Receiver 1', 'Receiver 2', and 'Receiver 3'; the 'Interval Mode' is checked with a checkbox; the 'Interval' is set to '3 Min' with a dropdown arrow. At the bottom, there are 'Activate' and 'Test' buttons, and at the very bottom right, 'Default' and 'Apply' buttons.

Figure 15-45. System email configuration entry.

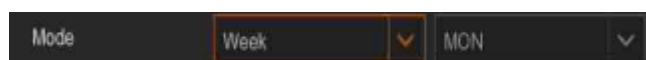
Email — set the time at which the face attendance result email is sent. Click the control to the right of the send time to open the system mail setting interface and configure the system email. **Mode** sets the delivery frequency of the attendance results: **Day**, **Week**, or **Month**.



A close-up of the 'Mode' dropdown menu showing 'Day' selected.

Figure 15-46. Weekly delivery mode.

- **Day** — sent once per day; delivers the previous day's attendance results.
- **Week** — sent once per week. You can choose the day on which the email is sent; the report covers the week preceding that day. For example, an email sent on Monday reports attendance from Monday to Sunday, while an email sent on Tuesday reports attendance from the previous Tuesday to the following Monday.



A close-up of the 'Mode' dropdown menu showing 'Week' selected, with a secondary dropdown showing 'MON'.

Figure 15-47. Monthly delivery mode.

- **Month** — sent once per month. You can choose the date each month on which the email is sent; the report covers the month preceding that date. For example, if an email is sent on the 10th of each month, it reports attendance from the 10th of the previous month to the 9th of the current month. An email sent on May 10th therefore reports attendance from April 10th to May 9th.
- **Working Days** — select the working days; you may select every day as a working day.
- **Apply** — click to save the settings.
- **Default** — restore the attendance email settings to their default values.

The main display also shows the current date and time and the current overall attendance situation.



Figure 15-48. Total number of attendance required.

The total number of people required to be present for attendance.



Figure 15-49. Number of people marked present.

The number of people currently recorded as present.



Figure 15-50. Number of people marked absent.

The number of people recorded as absent, together with the attendance status of each face group.



Figure 15-51. Window-count selector for the face attendance display.

The channel drawing area; select the channel under **Channels**.



Figure 15-52. Real-time attendance push panel.



Figure 15-53. Attendance record with face image and identity details.



Figure 15-54. Clock-in and clock-out time display.

Select the number of preview windows: one, two, or four windows are available. The real-time attendance push displays each attendee's face image, name, source group name, clock-in time, and clock-out time.



Figure 15-55. Attendance push with a single window layout.



Figure 15-56. Attendance push with a six-record layout.



Figure 15-57. Attendance push with a twelve-record layout.

The interface also sets the maximum number of face attendance records shown in the push panel, with options for 1, 6, and 12 records.

15.3 Non-Motor Vehicle Statistics

This scenario provides a full-screen display for the detection of faces, human shapes, motor vehicles, and non-motor vehicles. The detection results can be viewed in real time.

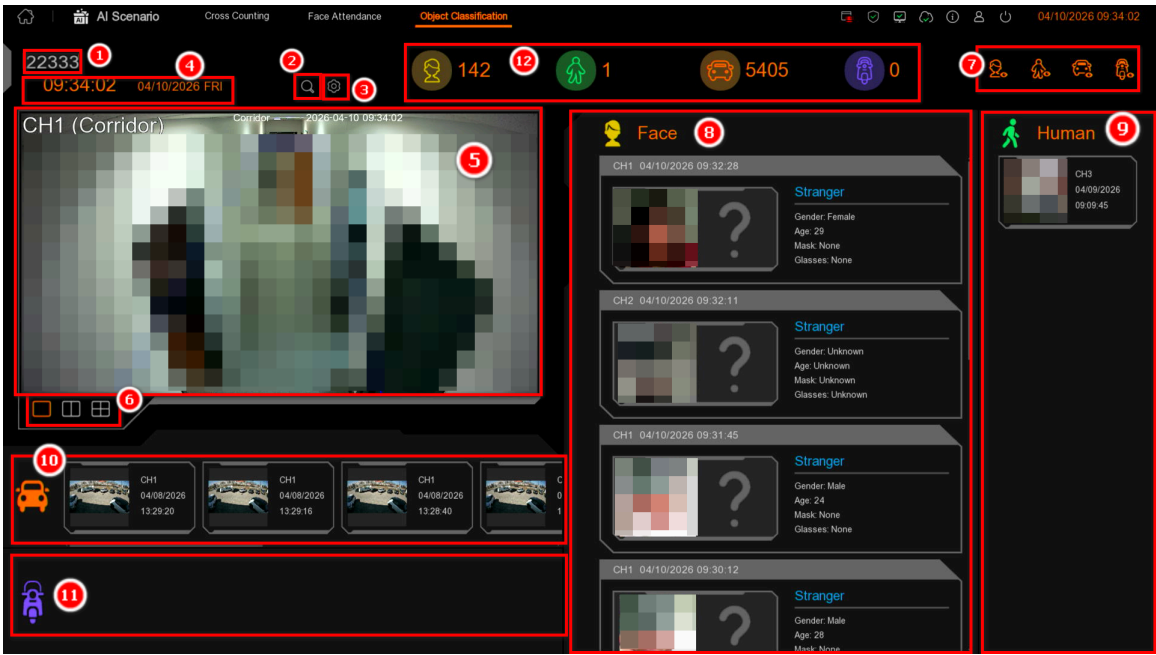


Figure 15-58. Non-motor vehicle statistics interface theme.

1. The interface theme applied to the statistics display.



Figure 15-59. Playback search control.

1. Click to open the playback human-shape model search interface.

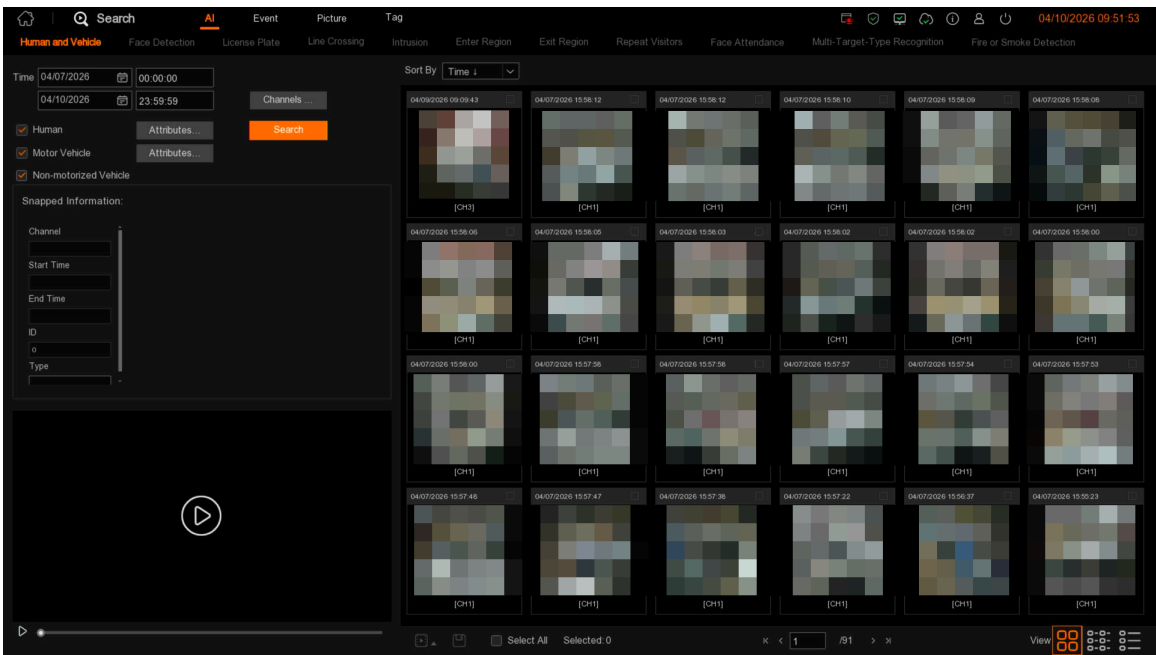


Figure 15-60. Settings control.



Figure 15-61. Statistics settings interface.

1. Click to open the configuration interface, where the following options are available.

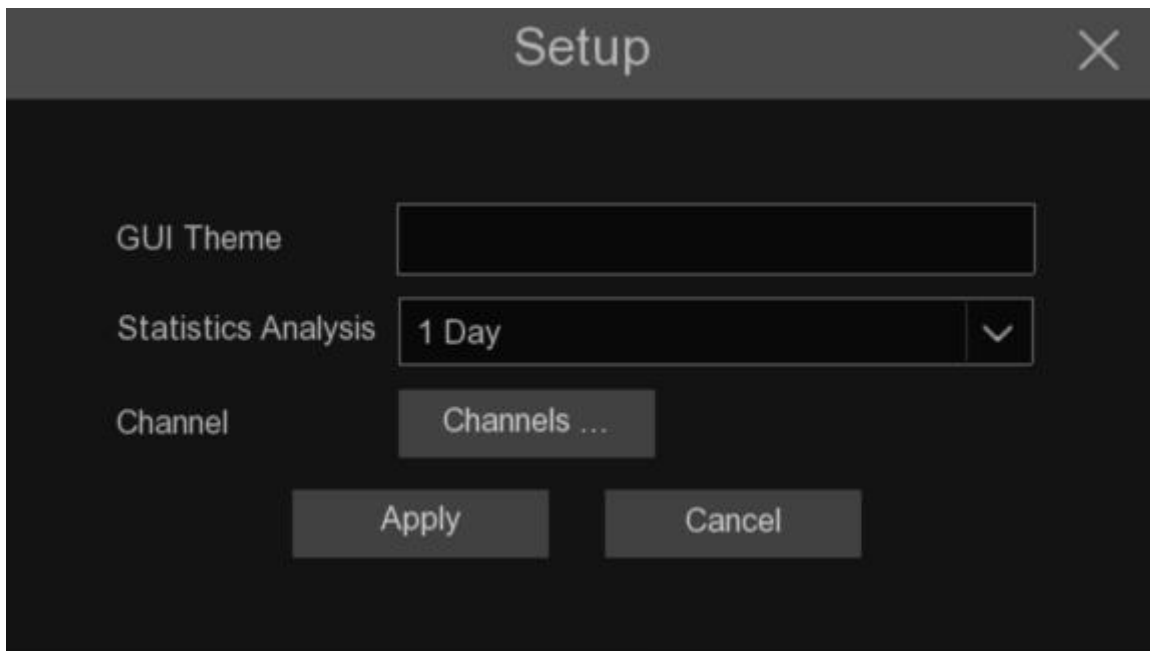


Figure 15-62. GUI theme, statistics period, and channel selection.

- **GUI Theme** — the interface theme.
- **Statistics** — the statistical period; choose 1, 2, 3, 4, 5, 6, or 7 days, or week, month, or year.
- **Channels** — the channel selection; choose the channels to be included in the statistics.

1. The current date and time are shown.



Figure 15-63. Channel drawing area.

1. The channel drawing area; select the drawing channel under **Channels**.



Figure 15-64. Real-time push display switch.



Figure 15-65. Detection-result push toggle.



Figure 15-66. Captured-count statistics panel.

1. Select the number of drawing windows: one, two, or four windows are available.
2. Use the real-time push display switches to show or hide the corresponding detection results in the real-time push panel.
3. Real-time push of face detection displays the detected face image, the name, and the source group name.

4. Real-time push of human-shape detection displays the detected human-shape image, the detection channel, and the detection time.
5. Real-time push of motor-vehicle detection displays the detected motor-vehicle image, the detection channel, and the detection time.
6. Real-time push of non-motor-vehicle detection displays the detected non-motor-vehicle image, the detection channel, and the detection time.
7. The statistics panel reports the number of captured faces, human shapes, motor vehicles, and non-motor vehicles.

Chapter 16 Playback, Search & Backup

The OCTAVUE NVR provides a comprehensive search and playback workspace for reviewing recorded video, locating specific events, and exporting footage to an external storage device. This chapter describes each search mode, the playback controls, and the backup workflow, including the AI-based search tools for faces, license plates, and other intelligently detected targets.

16.1 Using the Search Function

From the system menu, click the **Playback** icon to open the playback workspace, then use the **Search** icon to retrieve recordings. The search and playback interface is shown below.



Figure 16-1. The search and playback interface.



Figure 16-2. The search and playback interface, showing the channel and timeline layout.

The recorder offers several search and playback methods, which are selected from the search options at the top of the interface: general playback, event, slice playback, smart (intelligent), tag playback, external files, pictures, sub-periods, and AI. Select the search date and channel, then use the timeline and transport controls to review the results.

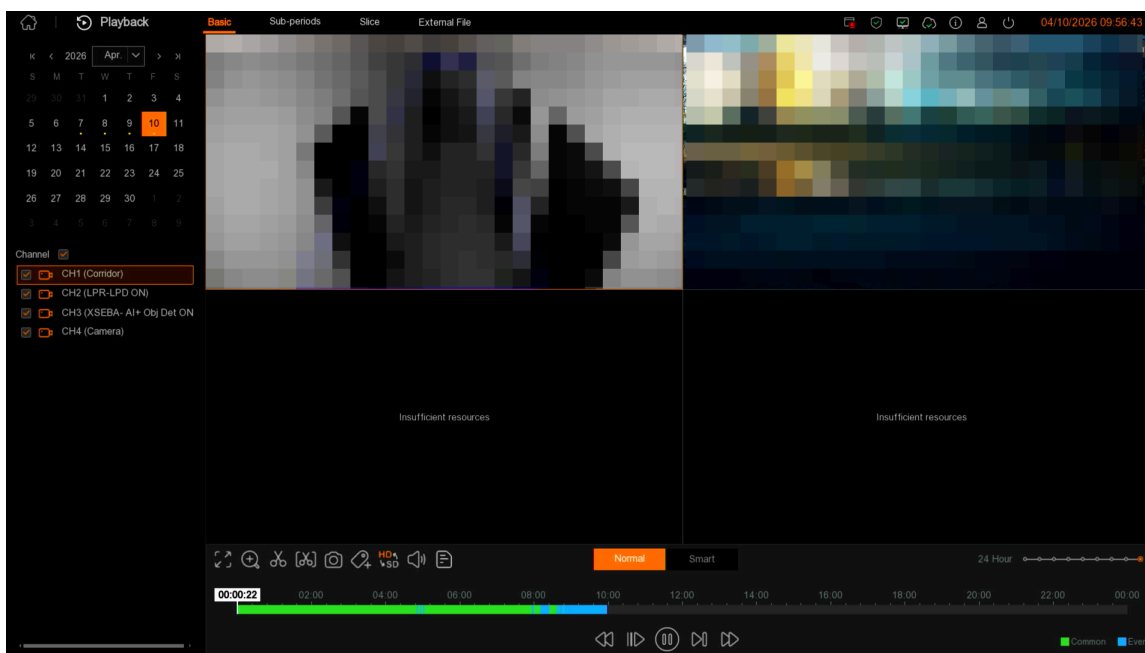


Figure 16-3. Selecting the search date from the calendar.

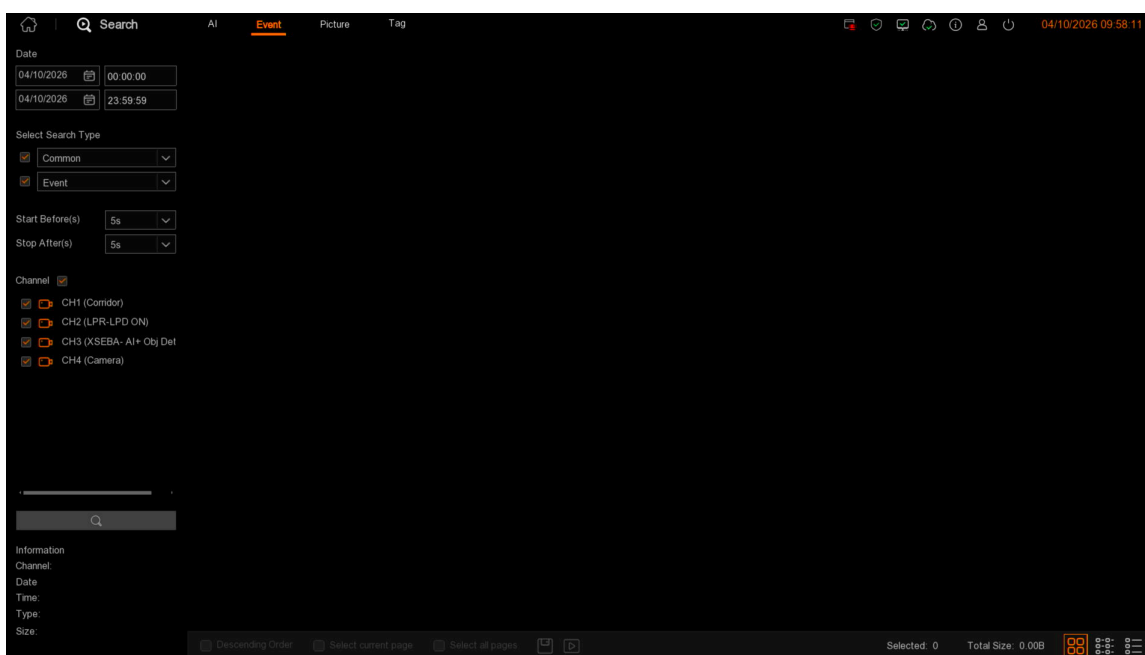


Figure 16-4. Selecting the channels to be searched and played back.

The main areas of the interface are described below:

- **Search options:** Select the search and playback method — general, event, slice playback, smart, tag playback, external files, pictures, sub-periods, or AI.
- **Search date:** Select the date to be played back.
- **Channel selection:** Select the channel or channels to search and play.
- **Video playback control:** Controls the playback of the retrieved video, as described in the toolbar reference below.
- **Timeline:** Displays the search results across the 00:00–24:00 period.
- **Video playback status:** Displays the current state of playback.

16.1.1 Playback Control Toolbar

The video playback control toolbar provides the transport, zoom, capture, and backup functions used during review. Each control is described below.



Figure 16-5. Zoom the video to full screen.



Figure 16-6. Fast playback, at rates of x2, x4, x8, and x16.



Figure 16-7. Slow playback, at rates of 1/2, 1/4, 1/8, and 1/16.

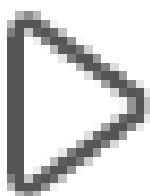


Figure 16-8. Play the video.



Figure 16-9. Stop the video.



Figure 16-10. Play by frame — click to advance the video one frame at a time.



Figure 16-11. Fast-forward, at rates of x2, x4, x8, and x16.



Figure 16-12. Electronic zoom — click to enlarge, then click and drag across the image during playback to magnify the selected area. Right-click to return to normal playback.



Figure 16-13. Video clip — quickly save a segment of video to the USB storage directory.



Figure 16-14. Manually enter the backup time period and save the video to the USB storage directory.



Figure 16-15. Save the clipped video.



Figure 16-16. Volume control — drag the scroll bar to raise or lower the volume.



Figure 16-17. Screenshot — capture an image to the USB storage device. In split-screen playback, move the cursor onto the channel to be captured, then click the icon.



Figure 16-18. Capture a selected area of the video to the USB storage directory as a picture, or capture a face for import into the face database.



Figure 16-19. Switch between the main stream and the substream.



Figure 16-20. Add Tag — click to open the definition window and name a tag at the current position.



Figure 16-21. POS information display switch — when on, POS-related information is shown during playback of a POS-triggered alarm; when off, it is hidden.

Continuous recordings are shown on the timeline as colored bars, with different colors representing different recording types. The color legend appears in the lower-right corner of the display. Use the time-frame option, or the mouse wheel, to zoom the timeline in or out over smaller or larger periods.



Figure 16-22. Recording-type color legend shown at the lower-right of the timeline.

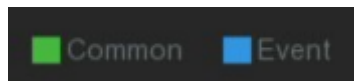


Figure 16-23. The video playback status indicator.

16.1.2 Searching and Playing Recordings from the Playback Interface

1. Select the search date in the calendar.
2. Select the channel to be searched. Matching recordings are displayed on the 00:00–24:00 timeline.

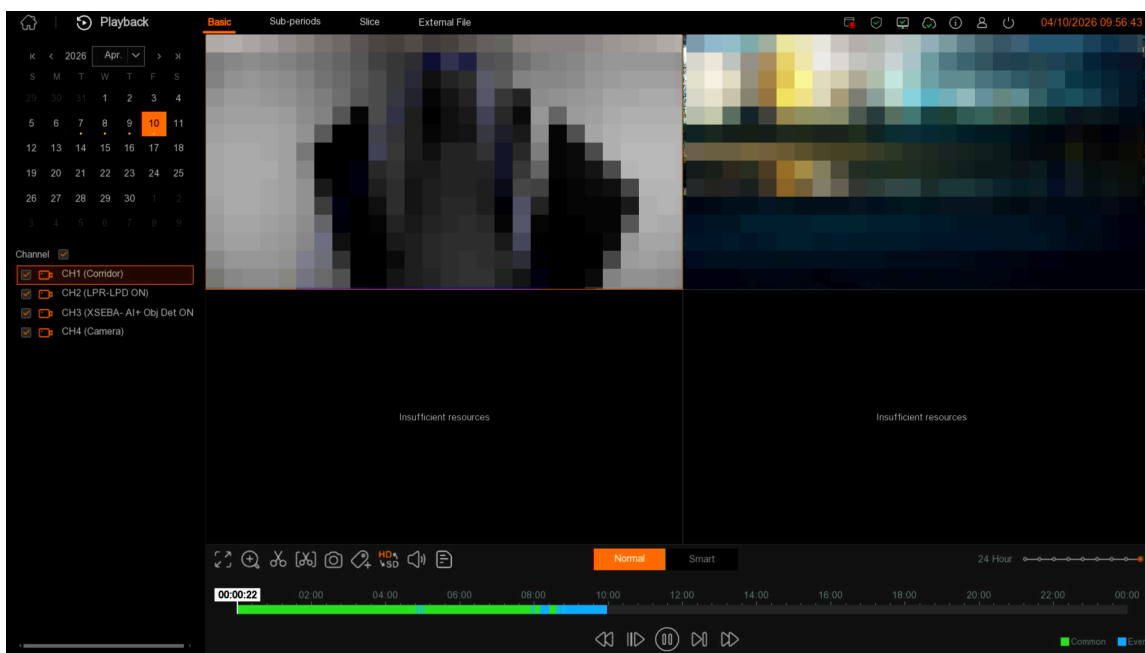


Figure 16-24. Selecting the search date in the calendar.

1. Click the **Play** icon to start playback, and use the toolbar controls to manage the video.

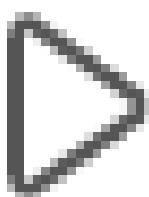


Figure 16-25. Using the transport controls to manage playback.

1. Select a time frame, or scroll the mouse wheel, to view smaller or larger time periods.



Figure 16-26. Adjusting the timeline scale to view a smaller or larger period.

1. To quickly save video during playback, use the video clip backup function.



Figure 16-27. Saving a segment during playback with the video clip function.

1. Click **Add Tag** to place a marker at the current time on the current channel. Once added, you can jump directly to the marked position from the tag playback interface.



Figure 16-28. Adding a custom tag at the current playback position.

16.1.2.1 Smart Mode

After selecting **Smart** search, click the **Pedestrian**, **Vehicle**, and **Animal** buttons below the timeline. The progress bar highlights, in blue, the alarm recordings for people, vehicles, and animals triggered on that day.

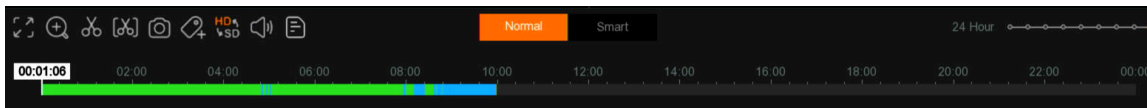


Figure 16-29. Smart mode with the pedestrian, vehicle, and animal filters selected.

Human- and vehicle-type alarm recordings include footage of human and vehicle events intelligently detected by Pedestrian & Vehicle, Intrusion, Enter Region, Exit Region, Line Crossing, and motion detection. Animal detection requires a supported camera model; animal-type alarm recordings capture footage of animal events intelligently detected by motion detection.

Click **Policy Playback** to adjust the playback strategy.



Figure 16-30. Opening the playback strategy settings.



Figure 16-31. The playback strategy options.



Figure 16-32. Configuring the smart-mode playback strategy.

- **Do not play normal video:** When selected, normal-event recordings for the day are not played; only the alarm-event recordings that match the searched target type are played, at the speed set under Smart / Events Video.
- **Normal Video:** When **Do not play normal video** is not selected, set the playback speed used for normal-event recordings.
- **Smart / Events Video:** Set the playback speed used for the matching alarm-event recordings.



Figure 16-33. The 'Do not play normal video' option.

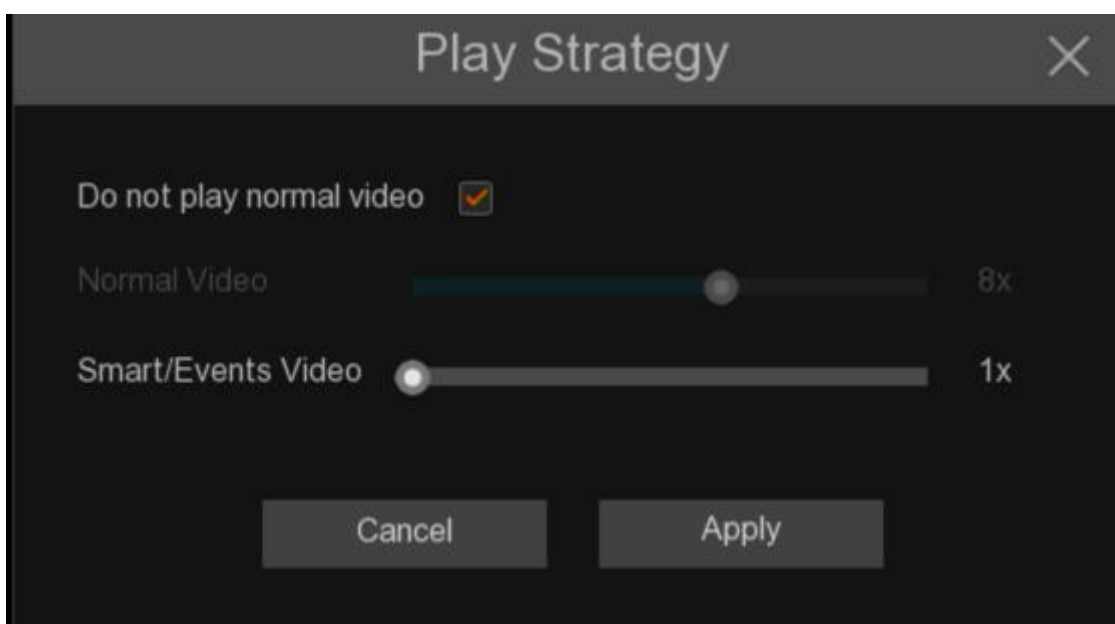


Figure 16-34. Setting the playback speeds for normal and alarm-event video.

NOTE In Smart mode, only single-channel search and main-stream playback are supported.

16.1.2.2 Motion Search

The recorder detects motion-search results and displays them in yellow on the time bar below the progress bar. Click the corresponding control to open the motion-search region settings.

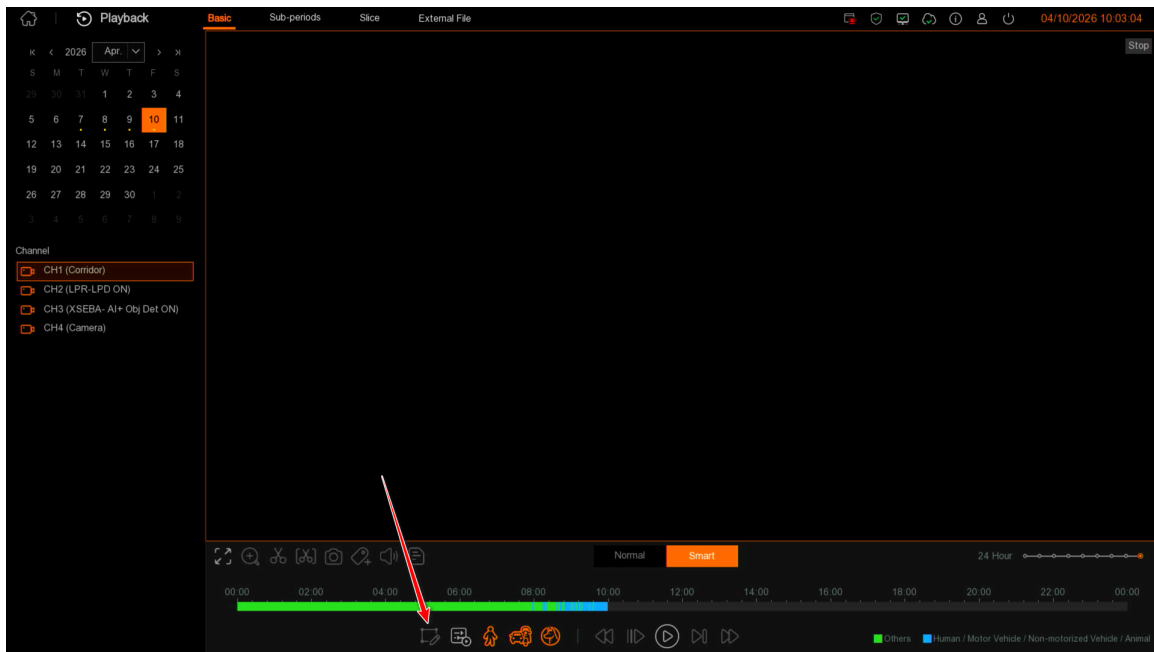


Figure 16-35. Motion-search results shown in yellow on the time bar.



Figure 16-36. The motion-search region settings interface.

The red box marks the selected area. If the image within the area changes, the matching period is retrieved and marked in yellow on the time bar.



Figure 16-37. Defining the motion-search region with the selection box.

16.1.2.3 Video Clip Backup

Use the video clip function to export a specific segment of a recording to a USB storage device during playback.

1. Insert the USB flash drive into the NVR.
2. Select the channel to be backed up and start playback.

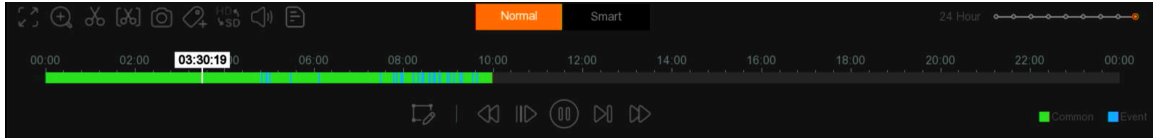


Figure 16-38. Starting playback on the channel to be backed up.

1. Click the clip icon.
2. Move the cursor to the point on the timeline where the clip should begin.
3. Hold down the left mouse button and drag to the point where the clip should end.



Figure 16-39. Marking the start and end of the clip on the timeline.

1. When the clip icon changes to the save icon, click it to save the clip.
2. Select a file type for the backup, then click the **Save** icon.



Figure 16-40. Saving the clipped segment.



Figure 16-41. Selecting the backup file type before saving.

WARNING Ensure the USB storage device has sufficient free space before saving the video clip.

1. On the **Backup** page, select the destination directory.

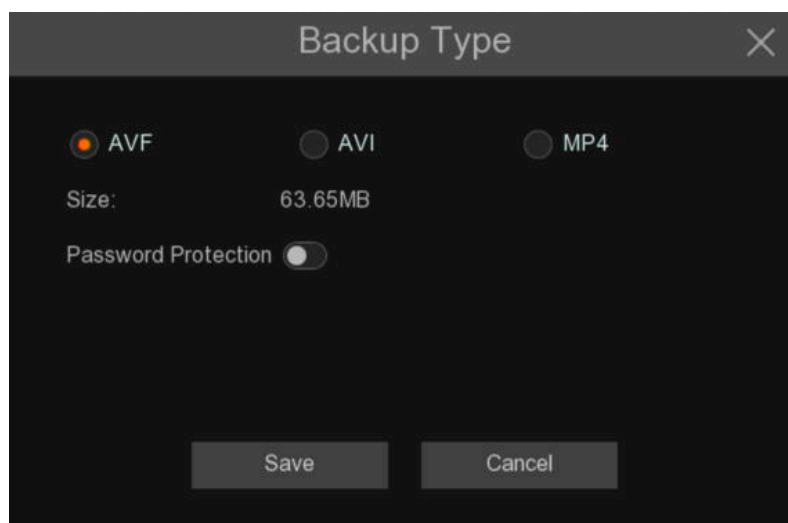


Figure 16-42. Selecting the destination directory on the backup page.

1. Click **OK** to start the backup. The progress bar at the bottom of the window shows the status of the operation.

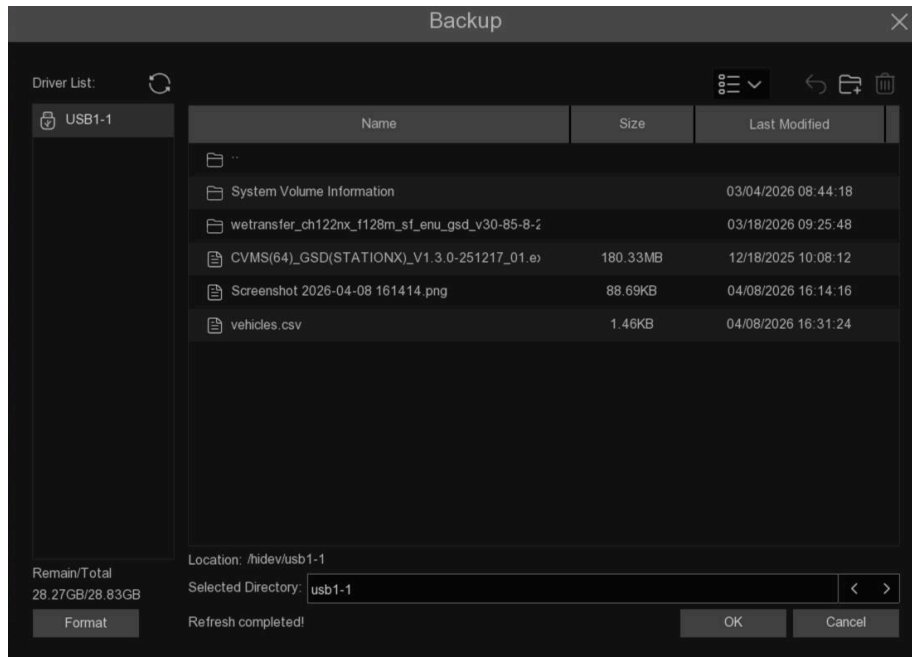


Figure 16-43. The backup progress bar.

16.1.3 Sub-Periods

Sub-periods playback can play event video from multiple periods of a single channel at the same time. The searched period is divided according to the selected split-screen mode. For example, if the retrieved event video is 60 minutes long and the split-screen mode is set to x4, each pane plays a 15-minute segment.

To search and play back in sub-periods mode:

1. Select the search date and time.
2. Select the number of split-screen panes for the channel.
3. Select the type of video to search for, or select **All**.
4. Select the stream type and the search channel (only one channel may be selected).

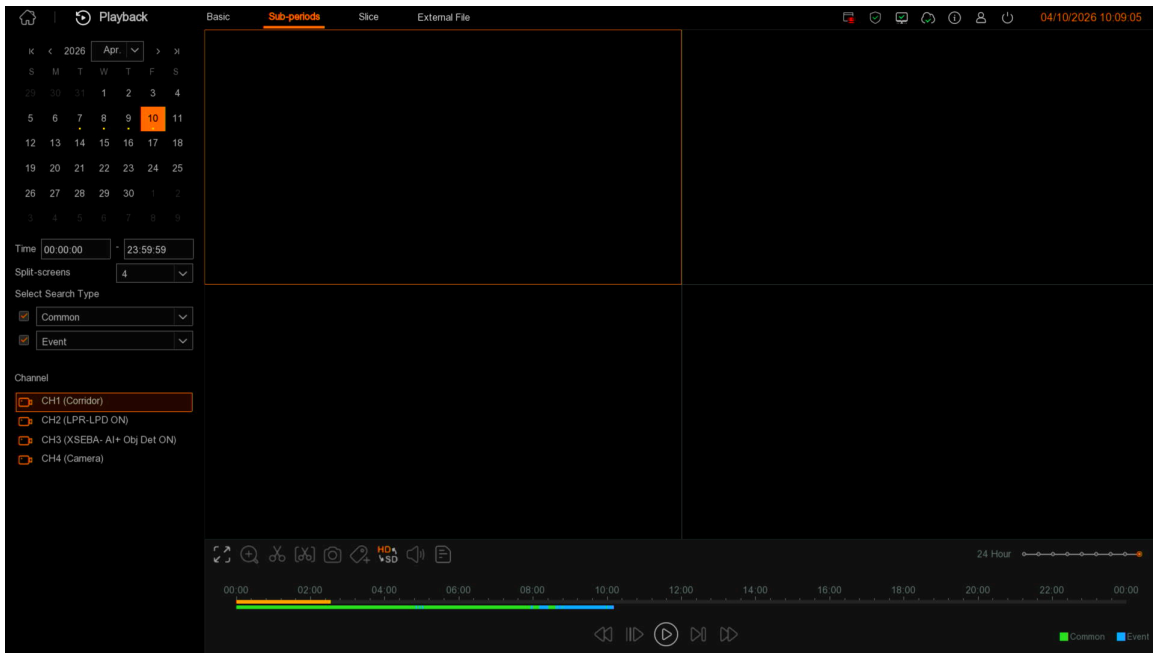


Figure 16-44. Configuring a sub-periods search.

1. Click the **Play** icon to start playback and use the toolbar controls to manage the video.
2. Click a specific pane to display its time span on the timeline. The color bar at the top of the timeline indicates the time span of the selected pane; the color bar at the bottom indicates the time span of the entire retrieved video.

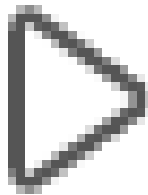


Figure 16-45. Selecting a pane to display its time span on the timeline.

1. Select a time frame, or scroll the mouse wheel, to view smaller or larger time periods.

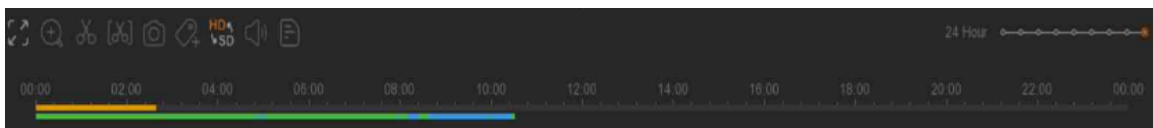


Figure 16-46. Adjusting the timeline scale in sub-periods mode.



Figure 16-47. A sub-periods playback session.

16.1.4 Slice Playback

Slice playback refines the retrieved video to a per-minute display.

Select the **Code stream**, **Channel**, **Month**, **Days**, and **Hours**. The right-hand panel then displays the 60 minutes of the selected hour, one pane per minute. Click a pane to preview it in the lower corner, and click again to open normal playback.

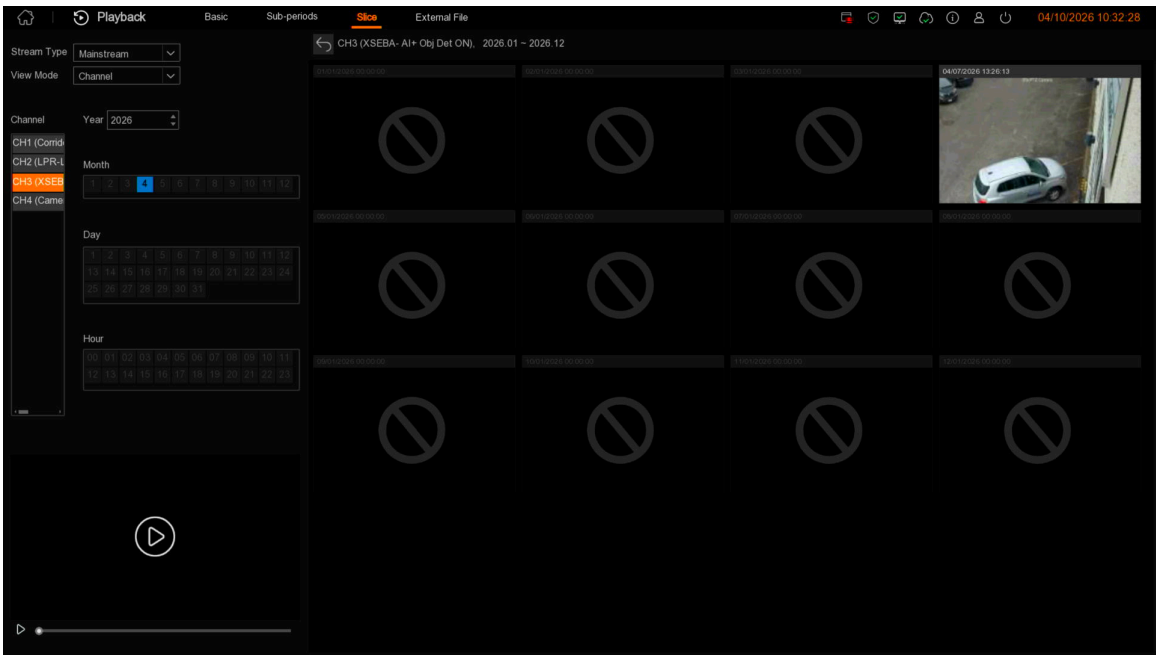


Figure 16-48. The slice playback view, showing one pane per minute of the selected hour.

The view mode determines the search order. If **Channel** is selected, the channel must be chosen first before searching; if **Time** is selected, the time must be chosen first.



Figure 16-49. Selecting the slice playback view mode.

16.1.5 External Files

To play a video file stored on an external USB flash drive, select the file from the list on the left, then click the **Play** button.

16.1.6 Event Search, Playback, and Backup

The event search page lists every event recording, showing the channel, start and end time, storage size, and event type for each event.



Figure 16-50. The event search page.

To search, play back, and back up events:

1. Select the date and time to search.
2. Select the type of video to search for, or select **All**.

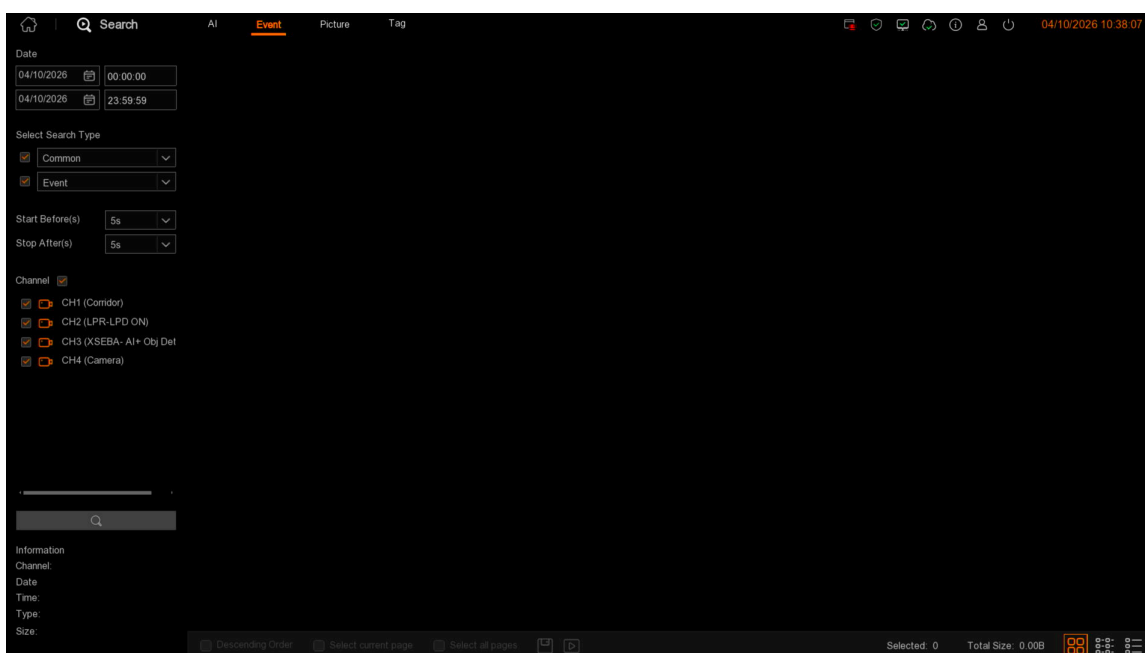


Figure 16-51. Selecting the search criteria for events.

NOTE Selecting the **POS** event type on its own enables filtering and searching of POS event replays.

Use the **POS Search Detail** options to configure POS event replay filtering:

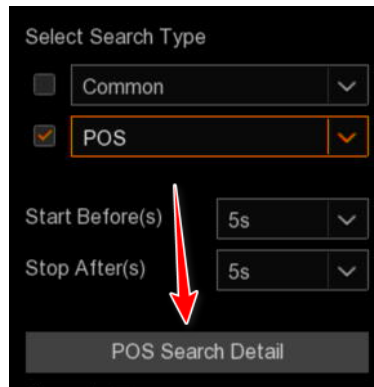


Figure 16-52. Configuring POS event replay filtering criteria.

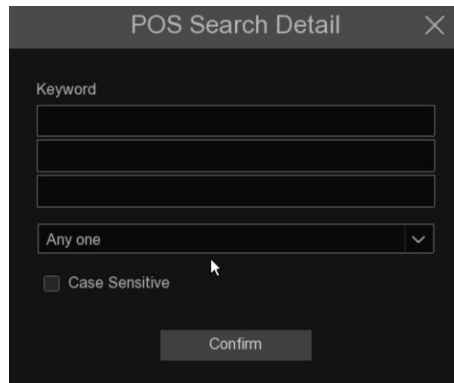


Figure 16-53. The POS keyword filtering options.

- **Keyword:** Set the keywords used as filter criteria; searches across three keyword groups are supported.
- **Any one:** POS events matching any single keyword group are returned.
- **All of:** Only POS events matching all three keyword groups are returned.
- **Case Sensitive:** Specifies whether the keywords are case-sensitive.

1. Set how far before the event playback should begin and how far after it should end.
2. Select the channel to search, or select all channels.
3. Click the **Search** icon to run the search.

Events that meet the criteria are displayed as thumbnails. Double-click an event to play its video immediately.



Figure 16-54. Search results displayed as thumbnails.

Use the control in the lower-right corner of the page to move between event pages, and the view control to switch the list format.



Figure 16-55. Switching the list view from the lower-right corner of the page.

- **Thumbnail view:** Displays a snapshot of each event.



Figure 16-56. Thumbnail view.

- **List view:** Displays the events in a list.



Figure 16-57. List view.

- **Details view:** Displays the details of each event.



Figure 16-58. Details view.

In details view, you can lock an event to prevent it from being overwritten on the hard disk. Click the lock icon to lock the event, or click it again to unlock.



Figure 16-59. Locking and unlocking an event in details view.



Figure 16-60. Event information shown in the lower-left corner of the screen.

When you left-click an event, its information is shown in the lower-left corner of the screen. You can also arrange the file list in descending order.

Use the check boxes to make a selection: select the box before an event number to select that event, the box before **Select Current Page** to select every event on the current page, or the box before **Select All Pages** to select every event. The number of selected files and their total size are shown in the lower-right corner.

After selecting a file, click the save icon to export the video to the USB flash drive, or click the playback icon to open the event playback control window.



Figure 16-61. Exporting the selected event to a USB flash drive.



Figure 16-62. Opening the event in the playback control window.

16.1.7 Picture Search

The picture search page searches all images saved to the hard disk.

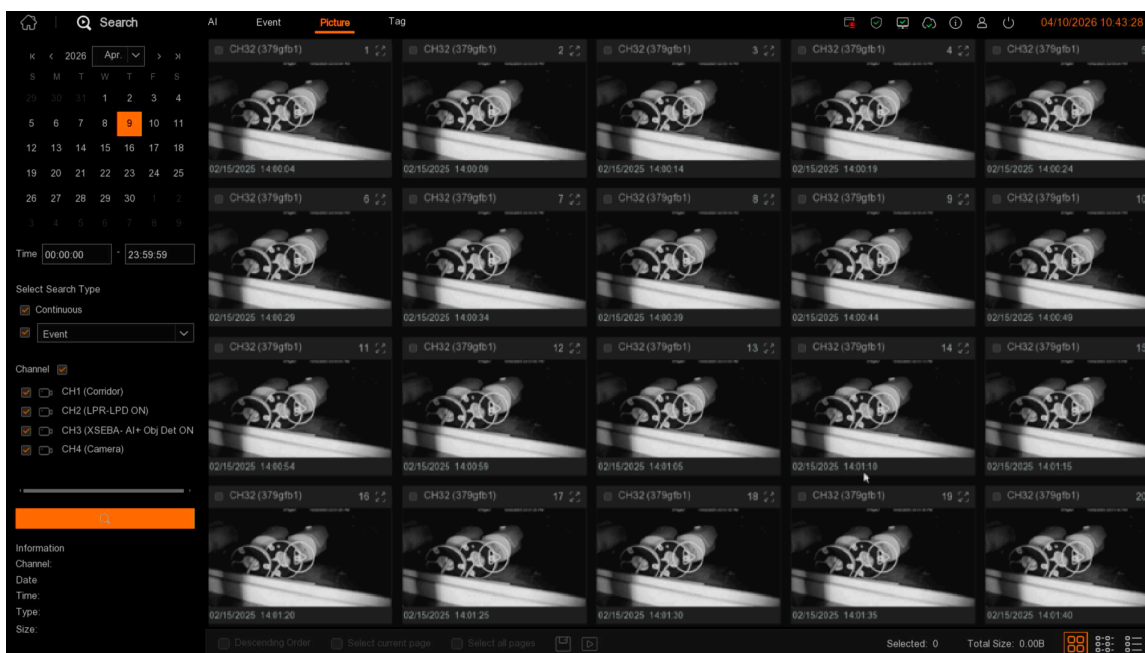


Figure 16-63. The picture search page.

To search, view, and back up pictures:

1. Select the date and time to search.
2. Select the capture type to search for, or set **Search Type** to all.
3. Select the channel to search.
4. Click the **Search** icon to run the search.



Figure 16-64. Running a picture search.

Pictures that meet the criteria are displayed as thumbnails. Click the button in the upper-right corner of a thumbnail to view the image, and the button in the middle to play the video before and after the moment the image was captured.



Figure 16-65. Picture search results shown as thumbnails.



Figure 16-66. Viewing an image and its surrounding video.

Use the control in the lower-right corner to move between pages, and the view control to switch the list format.



Figure 16-67. Switching the picture list view.

- **Thumbnail view:** Displays a thumbnail of each picture.



Figure 16-68. Thumbnail view of pictures.

- **List view:** Displays the pictures in a list.



Figure 16-69. List view of pictures.

- **Details view:** Displays the details of each picture.



Figure 16-70. Details view of pictures.

When you left-click a picture, its information is shown in the lower-left corner of the screen. Use the check boxes to select an image number, **Select Current Page**, or **Select All Pages**. The number of selected files and their total size are shown in the lower-right corner.

After selecting a file, click the save icon to export the picture to the USB flash drive, or click the playback icon to open the picture playback interface.



Figure 16-71. Exporting the selected picture to a USB flash drive.



Figure 16-72. Opening the picture playback interface.

16.1.8 Tag Playback

The tag playback page displays all tags that have been added, and lets you edit, replay, or delete them. Select the time and channel, then click **Search**. Click a tag to jump to the marked position for playback.



Figure 16-73. Searching for tags by time and channel.



Figure 16-74. The list of added tags.

Keyword: Enter part of a tag name to perform a precise search.

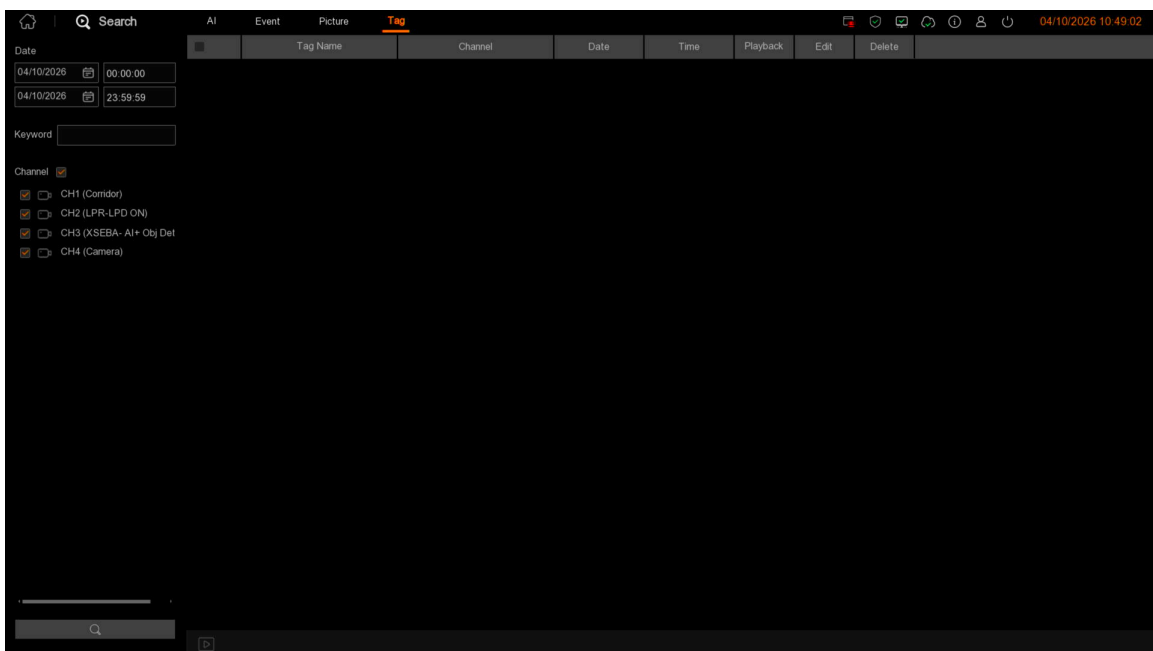


Figure 16-75. Filtering tags by keyword.

16.1.9 AI

The AI search tools retrieve intelligently detected events — faces, license plates, pedestrians and vehicles, and other targets — captured by supported cameras.

16.1.9.1 Face

Select the date, time, channel, and facial attributes, then click **Search** to retrieve the matching alarm capture events.

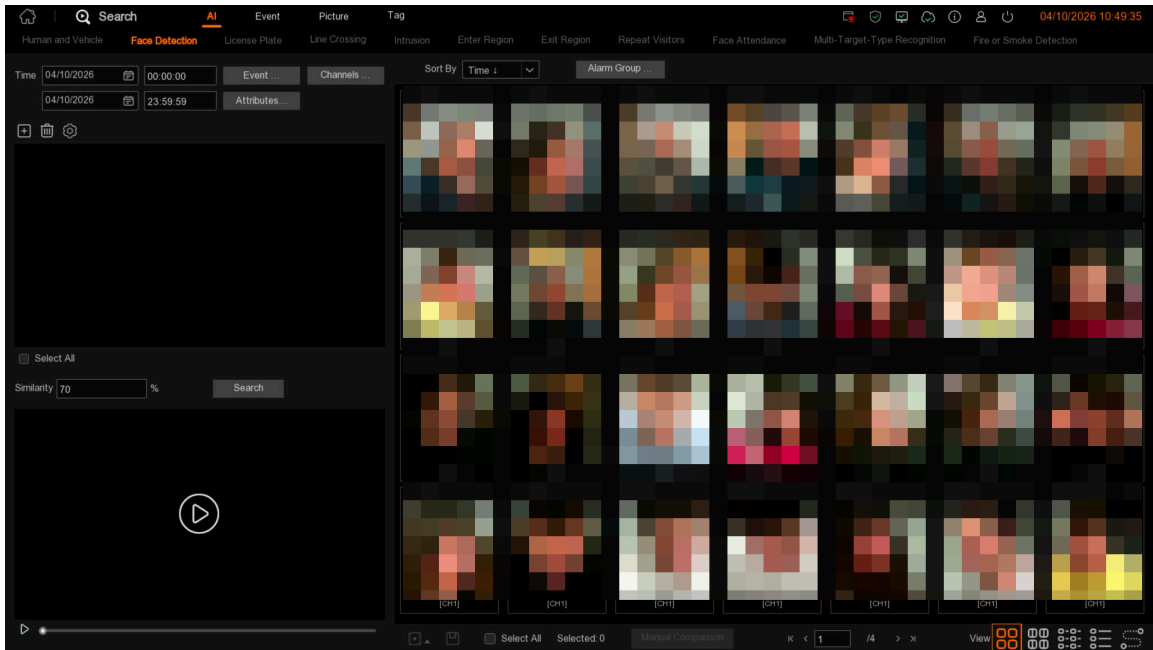


Figure 16-76. Adding a custom face, or selecting all face events for a comparison search.



Figure 16-77. The alarm enable switch on the face database page.

- **Face recognition alarm:** Face recognition with alarm linkage enabled.
- **Frequent persons alarm:** Face capture triggered after personnel frequency analysis raises an alarm.
- **Others:** Face recognition without alarm linkage enabled, and face captures triggered by face detection.

NOTE Face recognition refers to a face alarm detected after face information has been imported and at least one face group has been enabled. Face detection refers to captures made when no face information has been imported, or when no face group is enabled. Alarm linkage refers to the **Alarm** enable switch on the face database page.

1. Click **Channels** to select the channel to search.
2. Click **Attributes** to set the facial attribute conditions — **Gender**, **Age**, **Mask**, **Glasses**, and **Expression**.
3. Under **Alarm Groups**, select the face group to compare against.

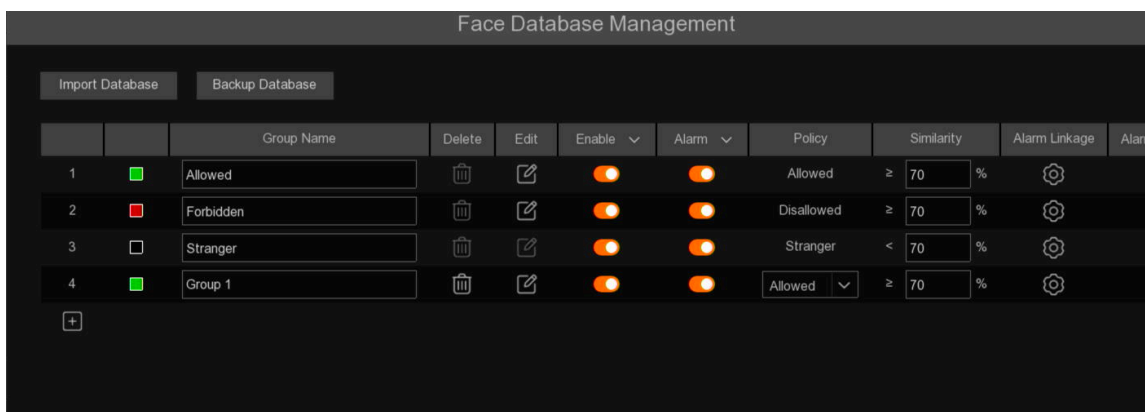


Figure 16-78. Selecting the channel and facial attribute conditions.

In the search area, select a picture to delete it, or open the face database settings interface. In the search results, right-click and choose **Import To** to add the image to a face library group, or **Detail Information** to view the details of the face. Click **Custom Playback** to play back from the time the face was detected.



Figure 16-79. Right-clicking a result to import the image into a face library group.



Figure 16-80. Viewing the detailed information for a detected face.



Figure 16-81. Switching between the available result views.

16.1.9.2 Face Track Map

Click the control in the lower-right corner to open the electronic track map.



Figure 16-82. Opening the electronic track map.

Click **Load Map** to browse the USB flash drive and add a map image. Select **Edit** to drag each IPC icon to its position on the map, then exit edit mode. Select a face from the local face library or the USB flash drive and click **Search** (only one face can be searched at a time). Every camera that detected the face is identified, and a color marker is placed on the map.

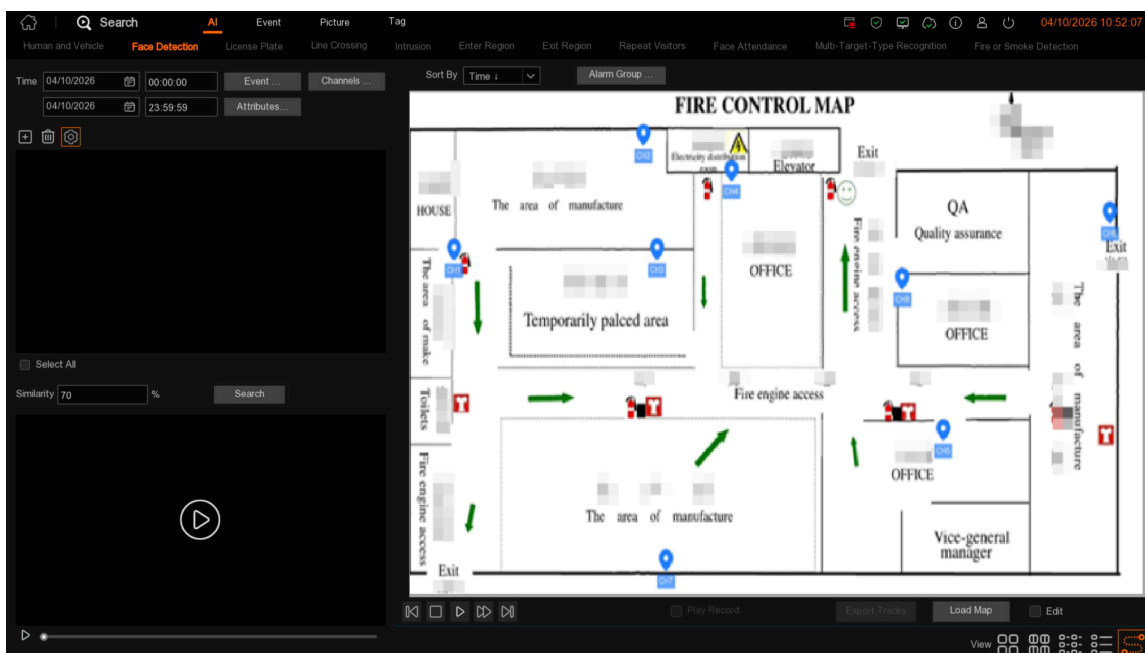


Figure 16-83. Loading a map and positioning the camera icons.



Figure 16-84. Selecting a face to search across the mapped cameras.

Left-click an IPC icon to play its footage in a preview at the lower-right corner. If more than one camera detected the face, the player automatically determines the person's movement and draws an arrow to indicate the direction of travel.

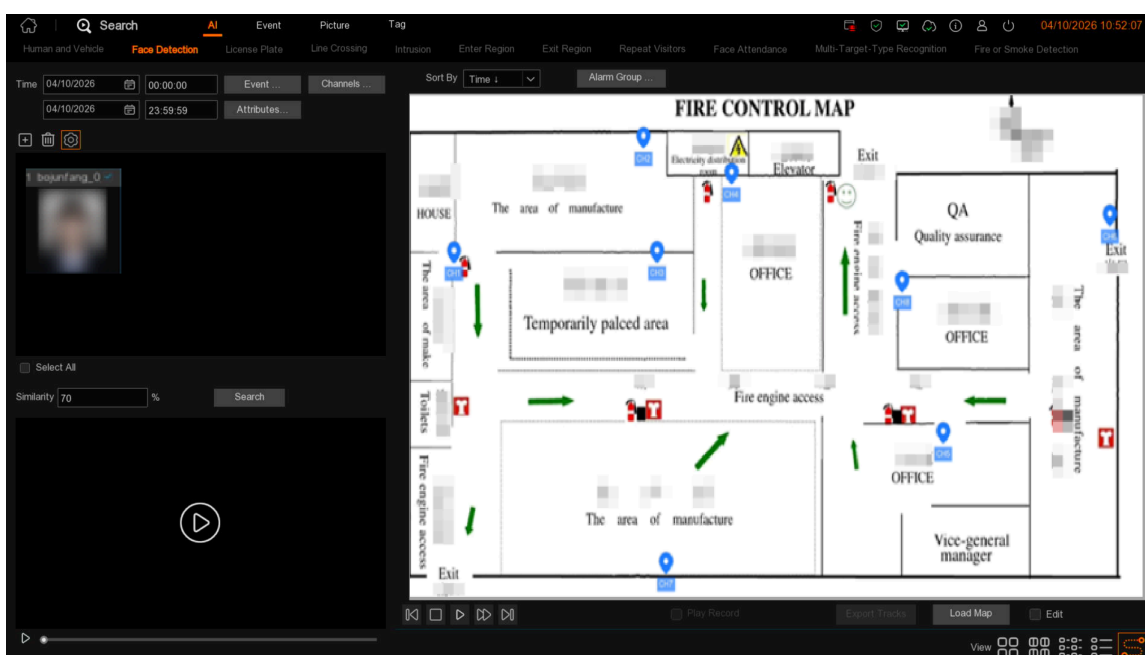


Figure 16-85. The face track shown with a directional arrow across multiple cameras.

16.1.9.3 License Plate

If a camera has license plate detection enabled, it triggers an alarm and records video when a plate is detected. Use this page to view the event details or export the footage.

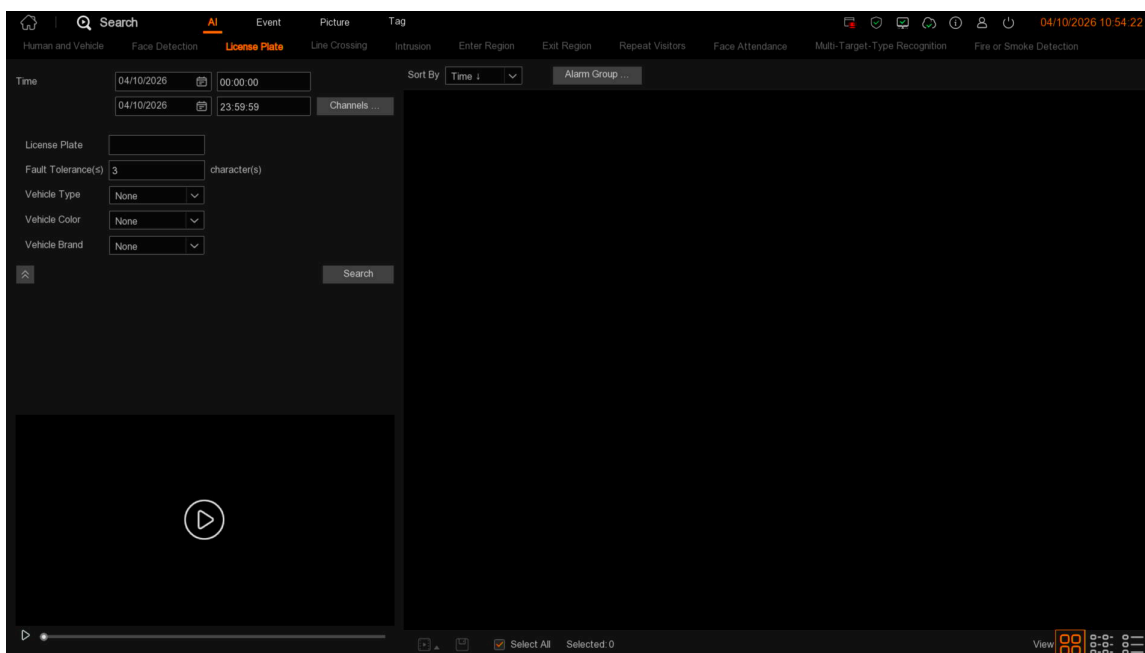


Figure 16-86. Setting the time period for a license plate search.



Figure 16-87. Filtering by license plate information.

- **Time:** Set the time period; click the date field to set the date.
- **License Plate:** Filter and query by the license plate number.
- **Fault-tolerant:** The number of characters permitted to differ from the entered plate number. A lower setting produces more closely matched results.

TIP To find a target plate from only a few characters, set the fault tolerance to its maximum. Many unrelated plates will be returned, but the results are sorted by similarity, so the most similar plates appear first and the target is easy to locate.

- **Vehicle Type:** Filter by vehicle type.
- **Vehicle Color:** Filter by vehicle color.
- **Vehicle Brand:** Filter by vehicle brand.

The **Snapped Information** for each alarm event includes the following five items:

- **Channel:** The channel that recorded the event.
- **Start Time:** The time the event was triggered.
- **End Time:** The time the event ended.
- **Snap License Plate:** The plate number read from the captured photograph.
- **Capture License Plate:** The matching plate number obtained from the database.
- **Sort By:** Event videos are sorted by time.
- **Channels:** Search the license plate detection events triggered by each channel.
- **Search:** Run the query using the selected settings.
- **Alarm Group:** Select a database group to compare against and display the results.

Click the triangle in the lower-right corner of an event to set the playback padding: 5s, 10s, 20s, 30s, 1min, 2min, 5min, 10min, or **Custom Playback**. For example, selecting 30s extends the clip by 30 seconds at each end.



Figure 16-88. Selecting the playback padding for a license plate event.

NOTE Video can be backed up to the USB flash drive in AVF, AVI, or MP4 format.



Figure 16-89. The count of selected videos.

The number of selected videos is shown as you make a selection. Use the paging control to move between pages, and the view control to switch between the available views.

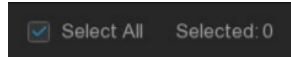


Figure 16-90. The paging control.



Figure 16-91. Switching between the available views.

Right-click an event to display two options:

- **Detail Information:** View the event details.



Figure 16-92. The right-click options for a license plate event.

- **Custom Playback:** Set how far in advance playback begins and how far after the event it ends, up to a maximum of 10 minutes.

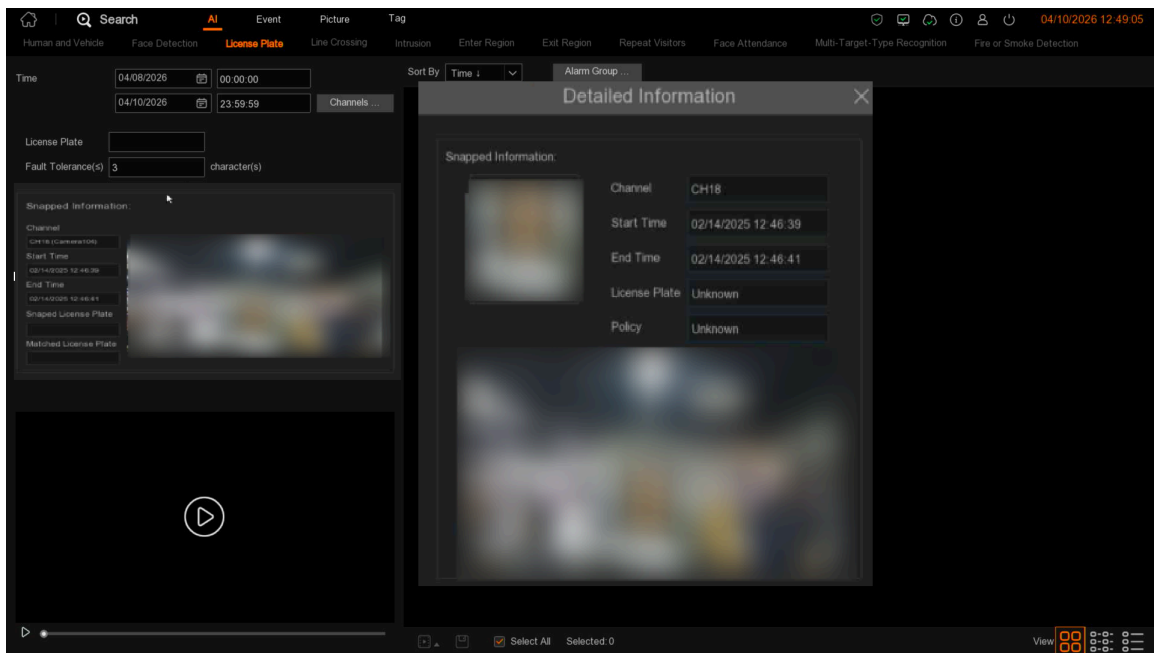


Figure 16-93. Configuring custom playback for a license plate event.

Double-click an event, or drag it to the lower-left corner, to play its video.

16.1.9.4 Pedestrians and Vehicles

Select the date, time, channel, target type, and related attributes, then click **Search** to retrieve the matching alarm capture events.

Left-click a result to display its basic information; right-click to open custom playback or view the details. Click the preview in the lower-left corner for a quick preview, and double-click to enlarge it and enter normal playback.

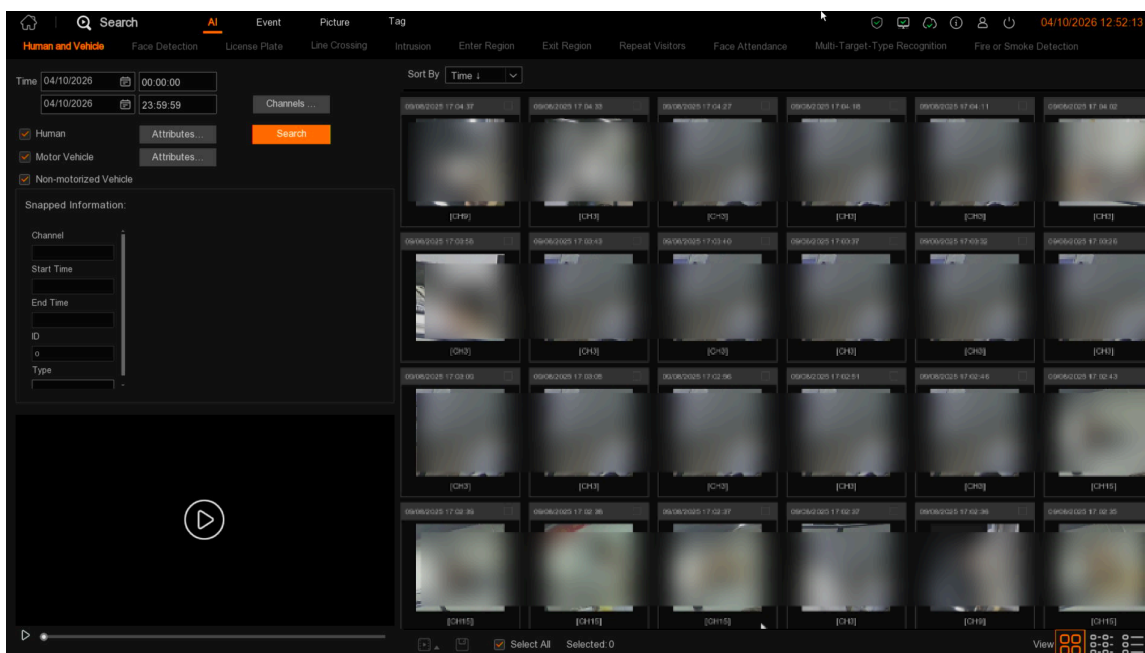


Figure 16-94. Pedestrian and vehicle search results.

16.1.9.5 Line Crossing

Select the date, time, channel, target type, and related attributes, then click **Search** to retrieve the matching line crossing alarm capture events.

Left-click a result to display its basic information; right-click to open custom playback or view the details. Click the preview in the lower-left corner for a quick preview, and double-click to enlarge it and enter normal playback.

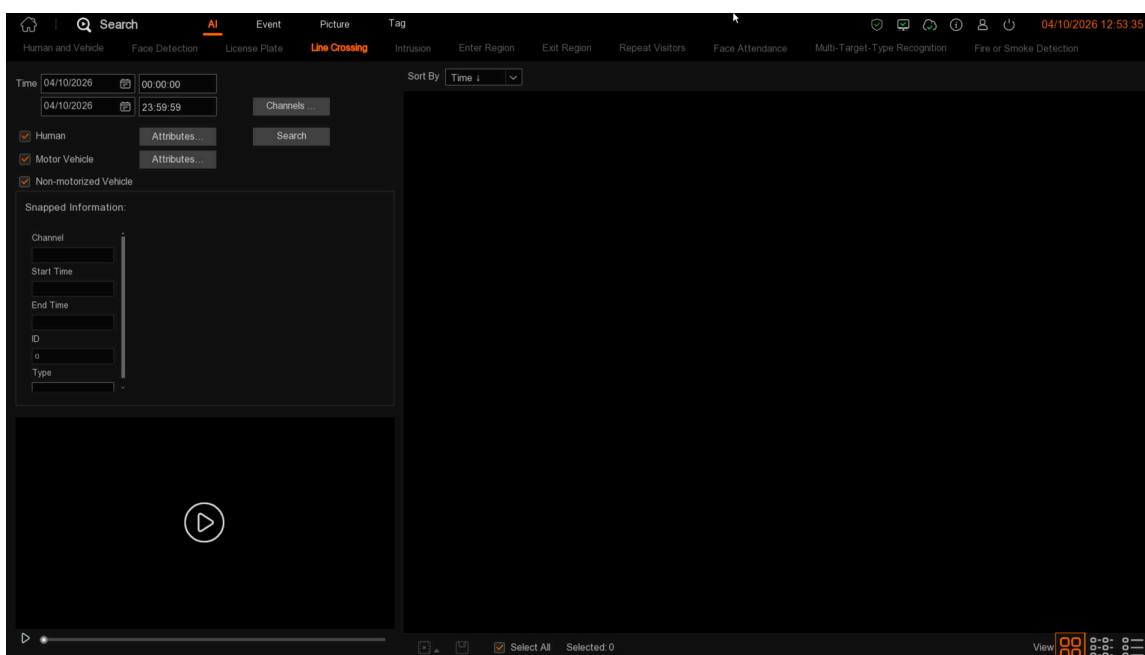


Figure 16-95. Line crossing search results.

16.1.9.6 Intrusion / Enter Region / Exit Region

Select the date, time, channel, target type, and related attributes, then click **Search** to retrieve the matching alarm capture events.

NOTE Person attribute options include upper- and lower-body clothing color, gender, age, hat, glasses, accessories, sleeve length, lower garment, backpack, and facing direction. Vehicle attribute options include color, brand, and type.

16.1.9.7 Repeat Visitors

The repeat visitors tools report how often the same person appears, based on personnel frequency analysis. Two search modes are available.

Real-time Repeat Visitor — set **Search Mode** to **Real-time Search** to retrieve the statistical results of the personnel frequency analysis.

1. Select the date and time to search.
2. Select the face library group to compare against (the default group is used if none is chosen).
3. Set the minimum and maximum number of appearances to search for (for more than 20 times, enter 21).
4. Click **Search**. The results are shown on the right, with the number of appearances displayed beneath each face capture.
5. Click a result to view the detailed playback and information on the left. Right-click to import the face into the library, edit the library image information, or view the details.
6. Click **Sort By** to sort the results by time or by count.

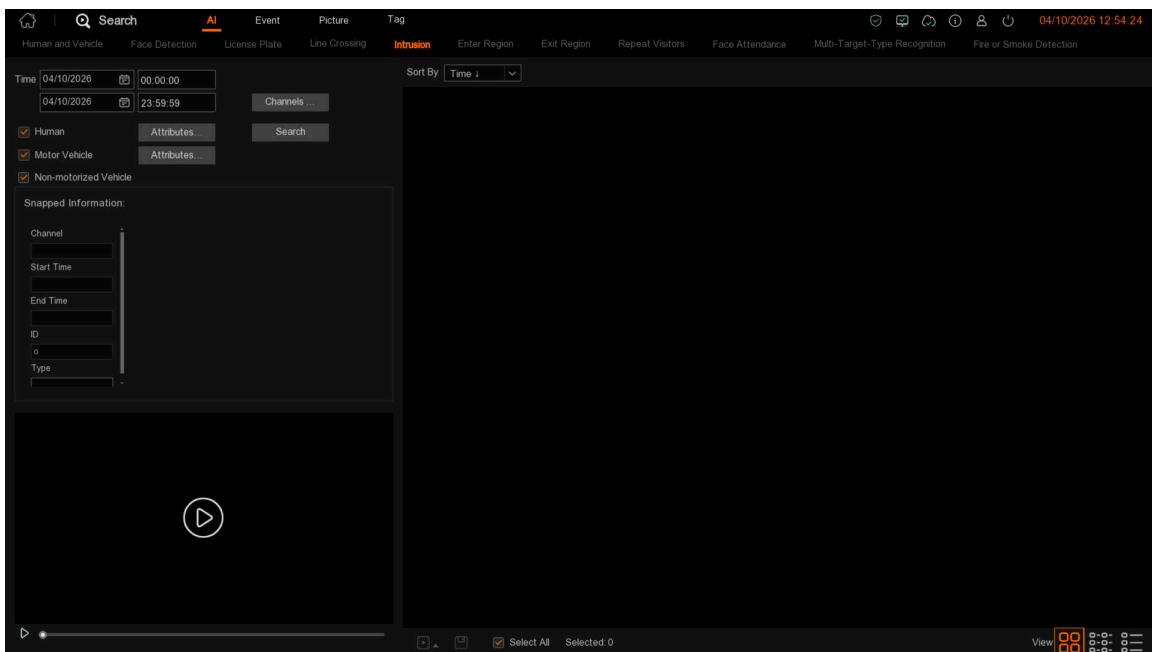


Figure 16-96. Configuring a real-time repeat visitor search.

1. Select the results individually or choose **Select All**, then click the custom playback icon, or back up the pictures and video to the USB storage device.



Figure 16-97. Selecting results for custom playback or backup.



Figure 16-98. Backing up the selected repeat visitor results.

Database Mining — set **Search Mode** to **Database Mining** to retrieve and count the appearances of the same face by similarity and facial attributes.

1. Select the date and time to search.
2. Select the face library group to compare against.
3. Select the channel to search.
4. Set the facial attribute conditions on the **Attribute** page.
5. Enter the minimum interval, in seconds.
6. Enter the minimum number of appearances under **Minimum Times** to filter the results.
7. Left-click a result to view the detailed playback and information on the left. Right-click to import the face into the library, edit the library image information, or view the details.
8. Click **Sort By** to sort the results by time or by count.

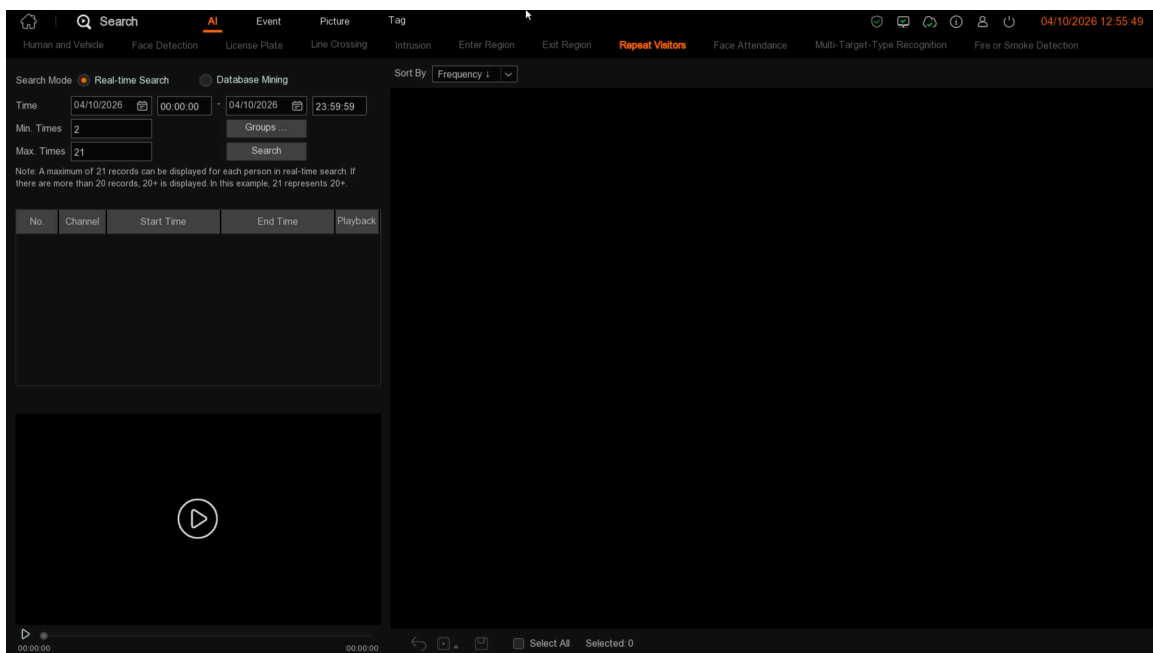


Figure 16-99. Configuring a database mining search.

1. Select the results individually or choose **Select All**, then click the custom playback icon, or back up the pictures and video to the USB storage device.



Figure 16-100. Selecting database mining results for playback or backup.



Figure 16-101. Backing up the selected database mining results.

16.1.9.8 Face Attendance

The attendance function checks whether a person appears within a specified period and automatically determines whether they arrived late or left early.

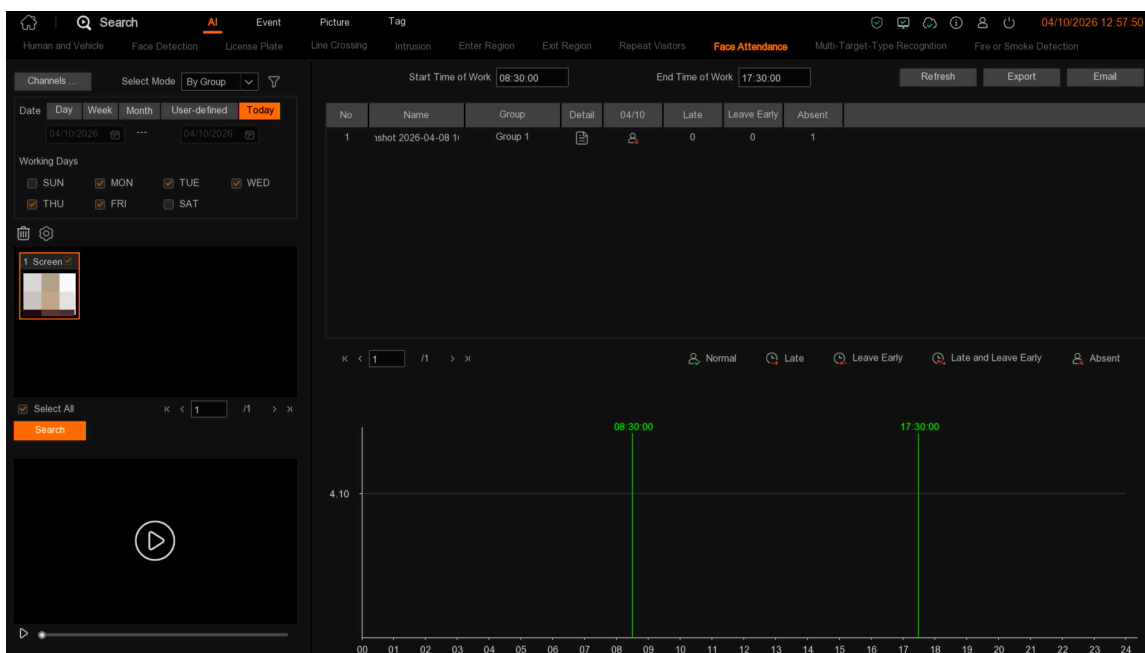


Figure 16-102. The face attendance configuration page.

- **Channels:** Choose the channel used for attendance.
- **Select Mode:** Choose the attendance faces **By Group** or **By Person**.
- **By Group:** Select faces by face group, adding every face in the group.
- **By Person:** Select individual faces; right-click to open the face library picture interface.
- **Date:** Select the search date. The default is the current system day. Five modes are available: Day, Week, Month, User-defined, and Today.
- **Working Days:** Select the working days.
- **Start Time of Work:** Set the start of the working period.
- **End Time of Work:** Set the end of the working period.

Click **Search** to retrieve the results.

Click a result to display all of its detection records below, then click the detail icon to open the details interface.

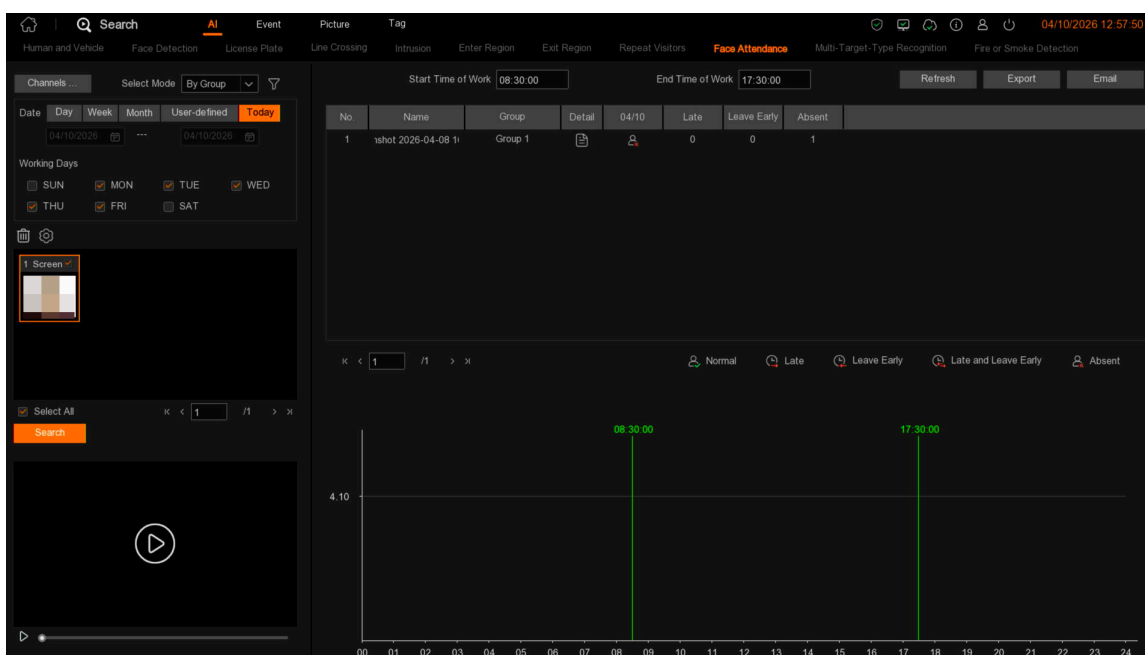


Figure 16-103. Attendance results with their detection records.



Figure 16-104. The attendance details, including first and last appearance.

The details include the first and last appearance. Click the preview in the lower-left corner for a quick preview.

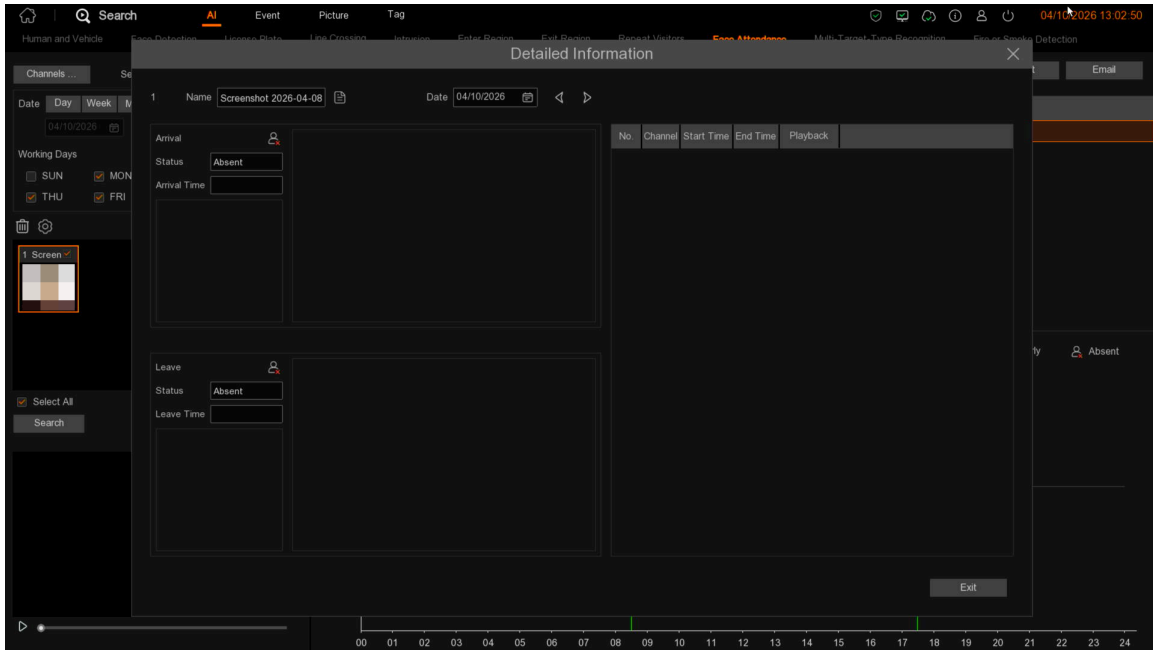


Figure 16-105. Previewing an attendance detection record.

Click **Export** to save the attendance report to the USB flash drive, or click **Email** to send it to a mailbox.



Figure 16-106. Exporting or emailing the attendance report.

16.1.9.9 Multi-Target-Type Recognition

Select the date, time, and channel, then click **Search** to retrieve the matching alarm events.

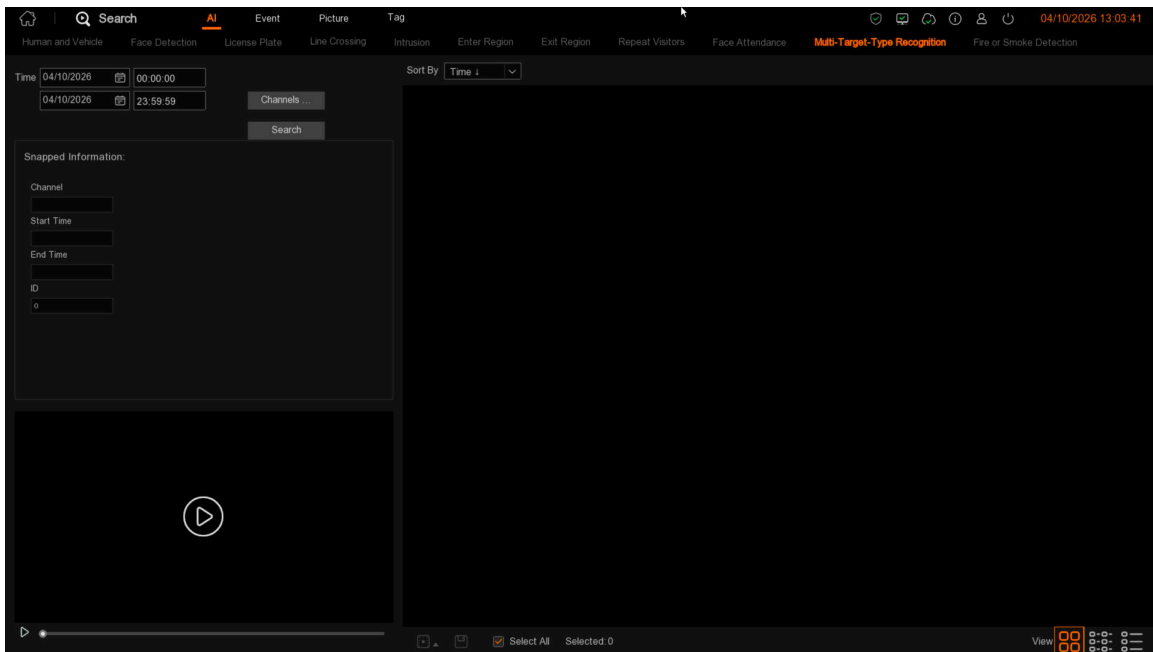


Figure 16-107. Multi-target-type recognition search results.

16.1.9.10 Fire or Smoke Deterrence

Select the date, time, and channel, then click **Search** to retrieve the matching alarm events.

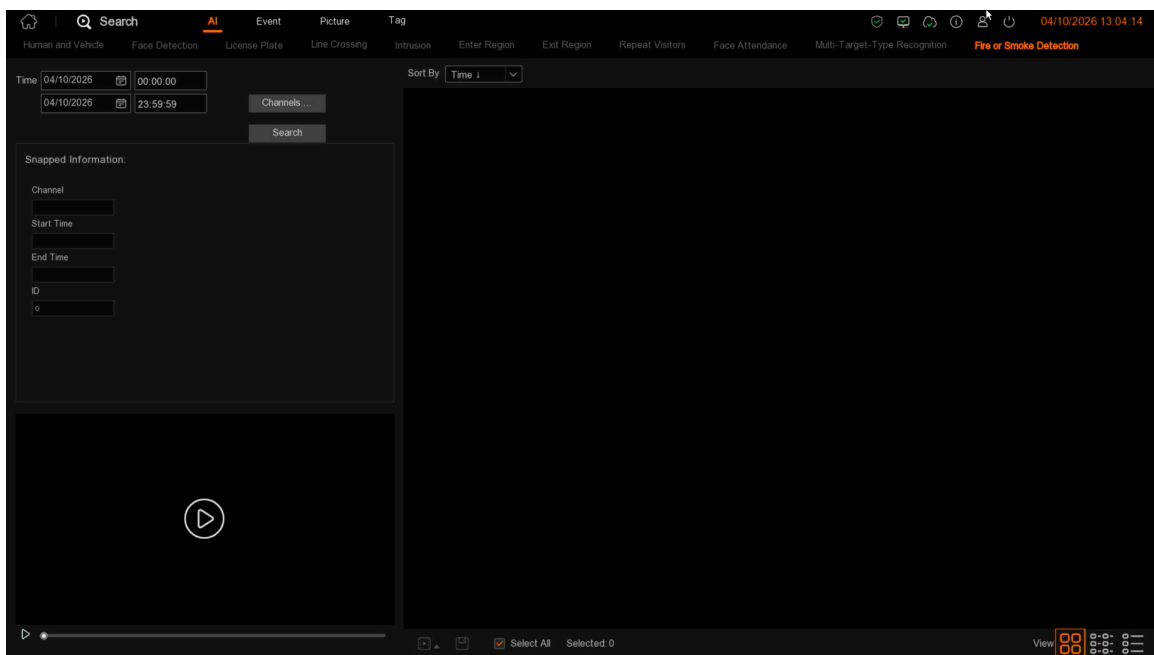


Figure 16-108. Fire or smoke deterrence search results.

Chapter 17 Backup Video Player

This chapter describes how to play video files that have been exported from the OCTAVUE NVR using the bundled VideoPlayer application. The player runs on a standard computer and reproduces the proprietary and standard video formats produced during backup.

17.1 System Requirements

Before installing the player, confirm that the host computer meets the following minimum specifications:

- **Processor:** Intel i3 or higher.
- **Operating system:** Microsoft Windows 7 / 8 / 10 / 11, or macOS 10 and above.
- **Memory:** 8 GB of RAM or more.

17.2 Installing the Player

The VideoPlayer installation package is supplied on the disc included with the recorder. Install the application before transferring any backup files.

1. Insert the supplied disc, locate the video playback software, and run the installer. Follow the on-screen prompts to complete the installation.
2. Copy the backup files from the USB storage device or exported media to a local folder on the computer.

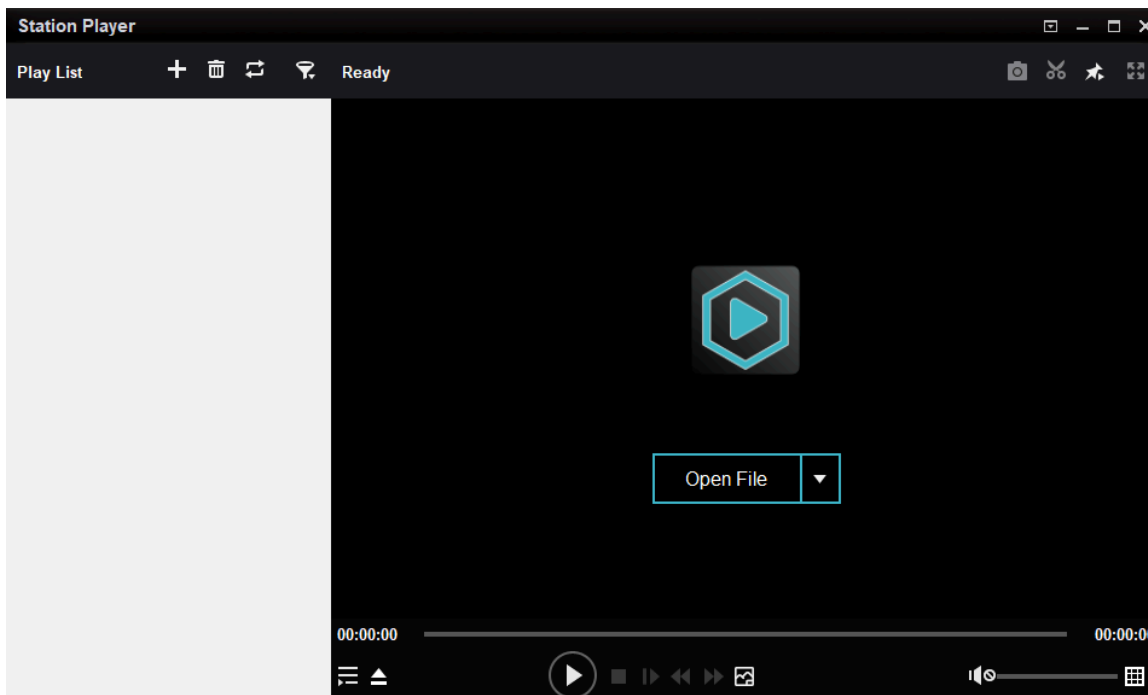


Figure 17-1. Copying the backup files to the computer.



Figure 17-2. The VideoPlayer main interface.

17.3 Loading and Playing Video Files

The player can open individual clips or an entire backup folder. Use the toolbar controls or the playlist to build the sequence to be reviewed.

1. Click the **Open File** icon, or click the **+** icon in the playlist, to add one or more video files.
2. To import an entire backup directory at once, click the **Open Folder** icon and select the folder that contains the backed-up video.
3. Select a file in the playlist to begin playback, and use the transport controls to play, pause, and seek within the recording.

NOTE The player supports the *.avf, *.avi, and *.mp4 file formats. Files in other formats cannot be added to the playlist.

TIP Keep each backup session in its own folder. Loading the folder rather than individual clips preserves the original recording order in the playlist.

Chapter 18 Web Client Access

The OCTAVUE NVR can be accessed remotely from a PC at any time through its built-in Web client. Before attempting to connect, confirm that the recorder is correctly connected to the network and that its network configuration is functioning.

18.1 System Requirements

The following table lists the minimum and recommended hardware, operating-system, and browser requirements for the PC used to run the Web client.

Item	Minimum	Recommended
CPU	Intel® Core™ i5	Intel® Core™ i5 or higher
System memory (RAM)	4 GB or more	8 GB or more
Hard disk drive	500 GB or more	500 GB or more
Video memory	2 GB or more	4 GB or more
Display resolution	1280 × 1024	1920 × 1080
Operating system	Windows 7 or above; Mac OS X® 10.9 or above	
DirectX	DirectX 11	
Direct3D	Acceleration function required	
Ethernet adapter	10 / 100 / 1000 Mbps Ethernet adapter	
Internet Explorer	Microsoft IE, version 10 or 11	
Mozilla Firefox	V52 or above	
Google Chrome	V57 or above	
Apple Safari	Version 12.1 or above	
Microsoft Edge	V79 or above	

18.2 Downloading and Installing the Web Plug-in

To access the Web client for the first time, complete the following steps.

1. Open a web browser and enter the IP address (or the DDNS name) of the recorder together with its port number in the address bar. On the user-verification page, enter a valid user name and password to log in to the Web client.

WARNING For security, five consecutive incorrect password entries lock the account for 180 seconds before another attempt is permitted.

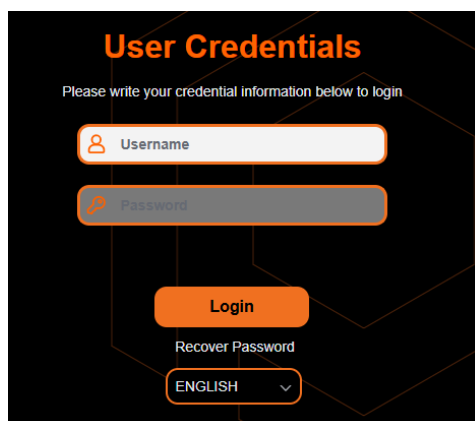
The image shows a login interface titled "User Credentials" in orange text. Below the title, it says "Please write your credential information below to login". There are two input fields: "Username" with a person icon and "Password" with a lock icon. Below these fields are three buttons: "Login" (orange), "Recover Password" (white), and a language dropdown menu currently set to "ENGLISH". The background is dark with a faint geometric pattern.

Figure 18-1. Web client login page, where the user name and password are entered for verification.

1. When the client is first accessed with Internet Explorer, the system prompts for a plug-in. Click **Download and install the player** to download the plug-in, then run the downloaded file to install it on the PC.

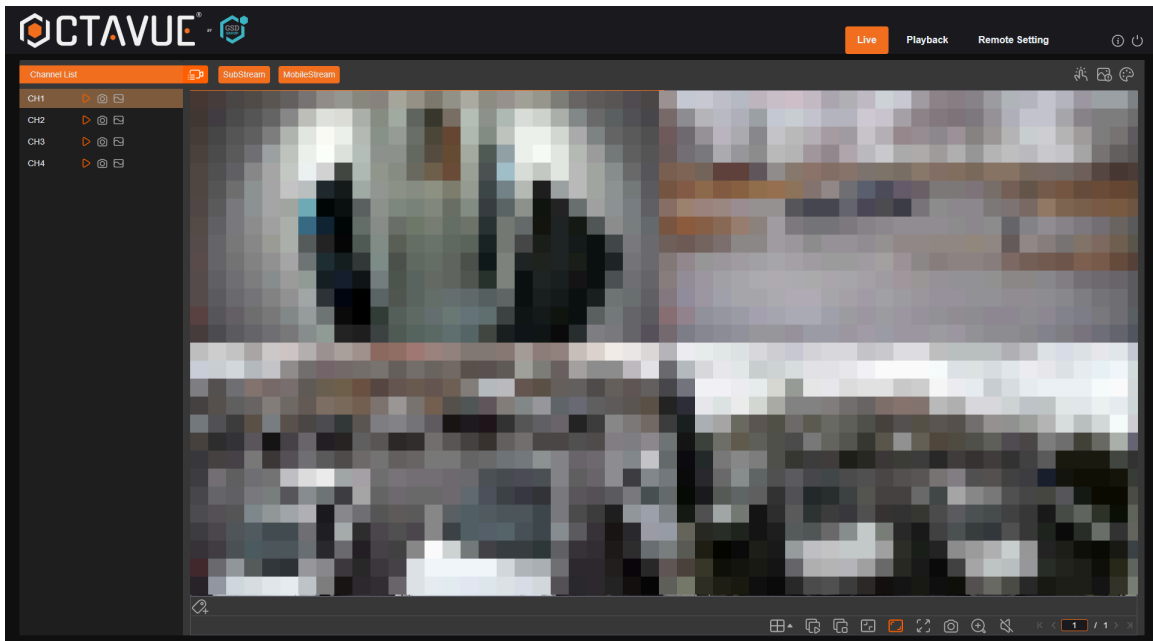


Figure 18-2. Plug-in download prompt displayed on first access with Internet Explorer.

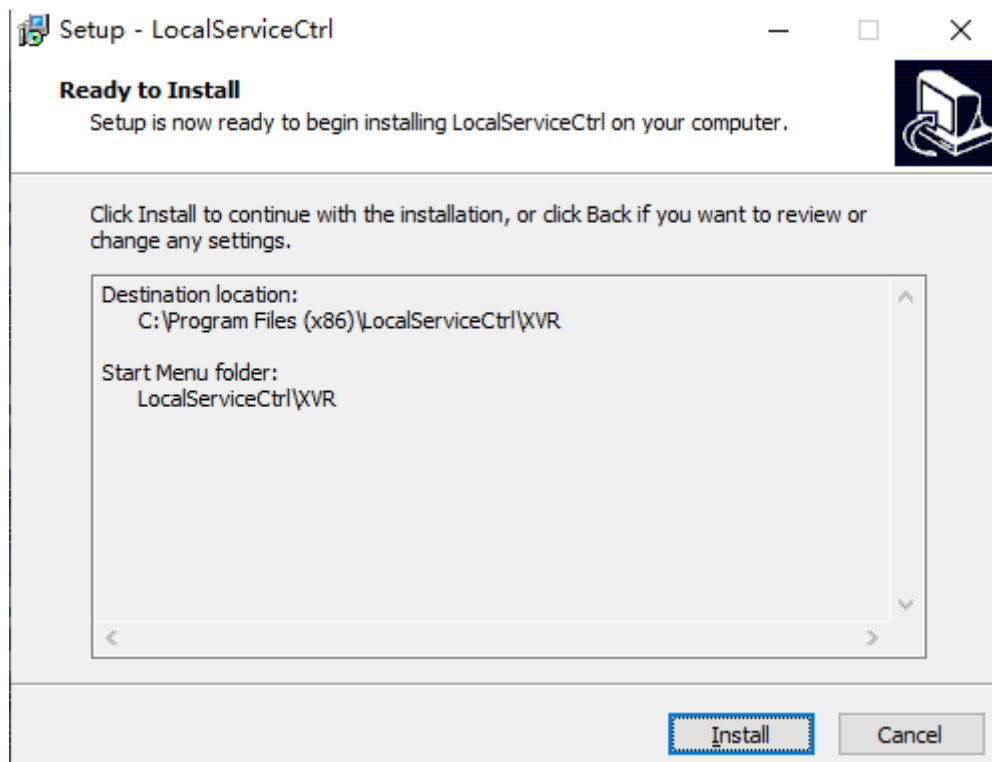


Figure 18-3. Player download and installation dialog.

1. After the plug-in is installed, refresh the page. In the permission pop-up shown at the bottom of the page, grant the requested permission; the live image then displays normally.

NOTE When using Apple Safari, Google Chrome, Mozilla Firefox, or Microsoft Edge, no plug-in is required — you can log in and access the recorder directly.

18.3 Web Client Management

18.3.1 Preview Interface

Once the Web client has verified the user credentials against the recorder, the real-time preview page opens. From this page you can start and stop live preview, record video manually to the local PC, capture snapshots, control the PTZ, adjust image color, and more.

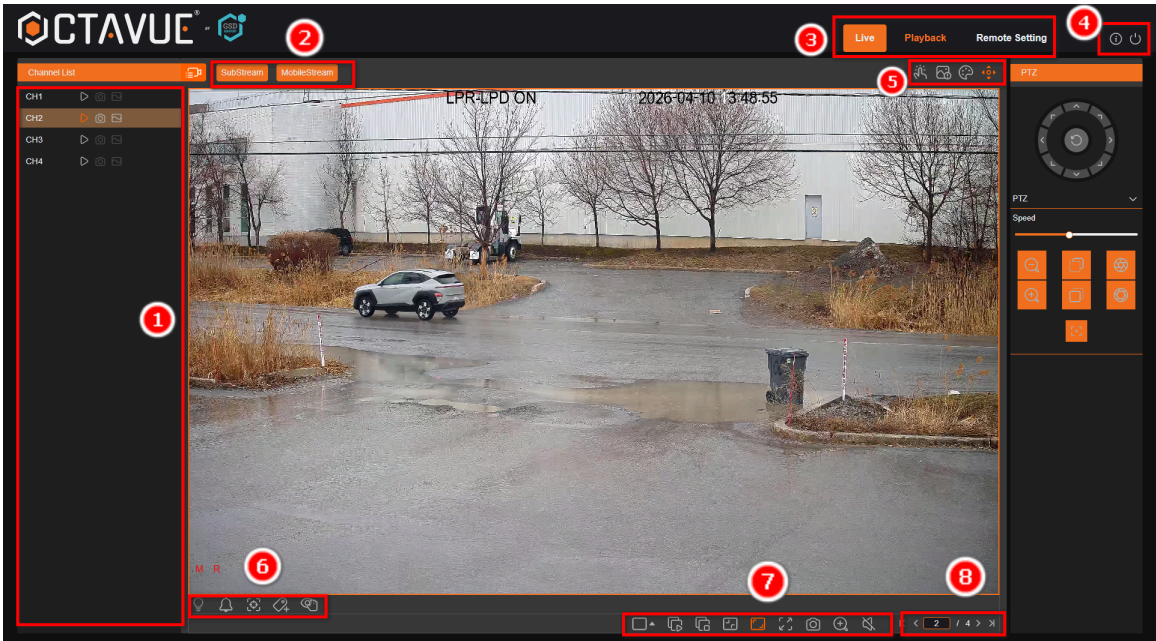


Figure 18-4. Real-time preview interface with the channel list displayed.

1. Channel list. The channel list panel lists every available channel. Click a channel in the list to open its live stream.



Figure 18-5. Channel-list button, used to open or close the channel list.

Each channel entry provides the following inline controls.



Figure 18-6. Live-stream toggle — stream stopped.



Figure 18-7. Live-stream toggle — stream running (the icon turns blue when the live stream is on).



Figure 18-8. Manual recording button — idle state.



Figure 18-9. Manual recording button — recording state; the icon turns blue while recording, and the file is saved to the PC.



Figure 18-10. Manual snapshot button — click to save the currently displayed live image to the PC.



Figure 18-11. Bitrate indicator, showing whether the channel uses the main stream, sub stream, or mobile stream (IP channels only).

- **Live-stream toggle:** turns the live video stream on or off. The icon appears blue while the stream is running.
- **Manual recording:** click to start recording the live stream; click again to stop. Recordings are saved to the PC, and the icon is blue while recording.
- **Manual snapshot:** click to save the current live image to the PC.
- **Bitrate:** indicates the stream type (main stream, sub stream, or mobile stream) configured for the camera. Available for IP channels only.

2. Stream switch. The Web client automatically selects the main stream for single-window viewing and the sub stream for multi-window viewing. You can also select the appropriate stream manually to suit the available network bandwidth.

3. Main menu. The main menu provides three views:

- **Preview:** real-time access to the recorder's live video streams.
- **Playback:** remote playback of video stored on the recorder.
- **Remote Settings:** remote configuration of the recorder.



Figure 18-12. User and version information area — point to it to display the current system user and the Web client version.

4. User and version information. Point to this area to display the current system user and the Web client version.



Figure 18-13. Log-out button, used to exit the Web client.



Figure 18-14. Manual Alarm button, used to manually enable or disable the IO alarm.

5. Manual Alarm. Manually opens or closes the IO alarm.

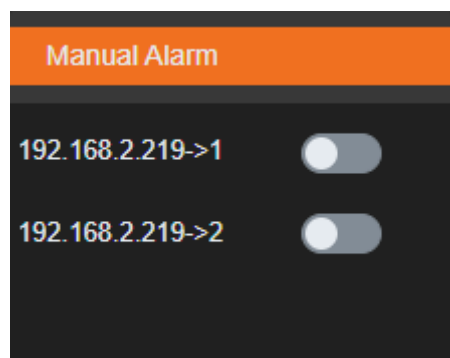


Figure 18-15. Color settings button, used to show or hide the color-control panel.



Figure 18-16. Color-control panel for adjusting the image of the selected channel.

6. Color settings. Click to show or hide the color-control panel.



Figure 18-17. AI alarm button, used to open the AI alarm push panel.



Figure 18-18. AI alarm push-type selection.



Figure 18-19. AI alarm event push list.



Figure 18-20. Clear button for the AI alarm push list.

7. AI alarm. Pushes AI alarm events to the client. Click to select the AI push types; events of the selected types are then pushed, and the list can be cleared to empty the current push list.

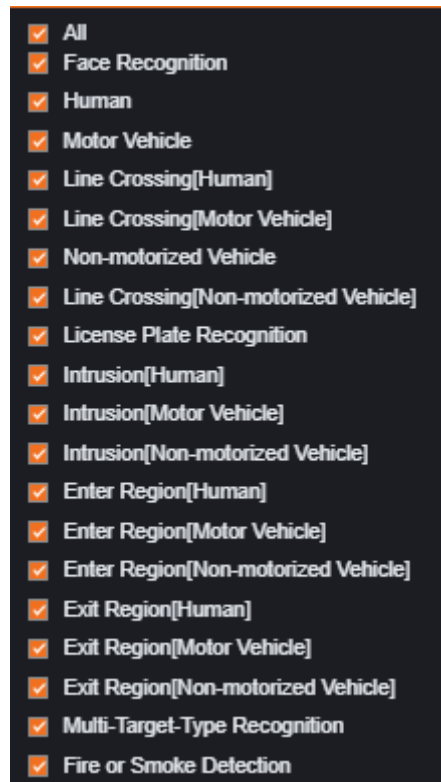


Figure 18-21. PTZ control button, used to open or close the PTZ operation menu.



Figure 18-22. PTZ control button — alternate state.

8. PTZ control. Click to open or close the PTZ operation menu.

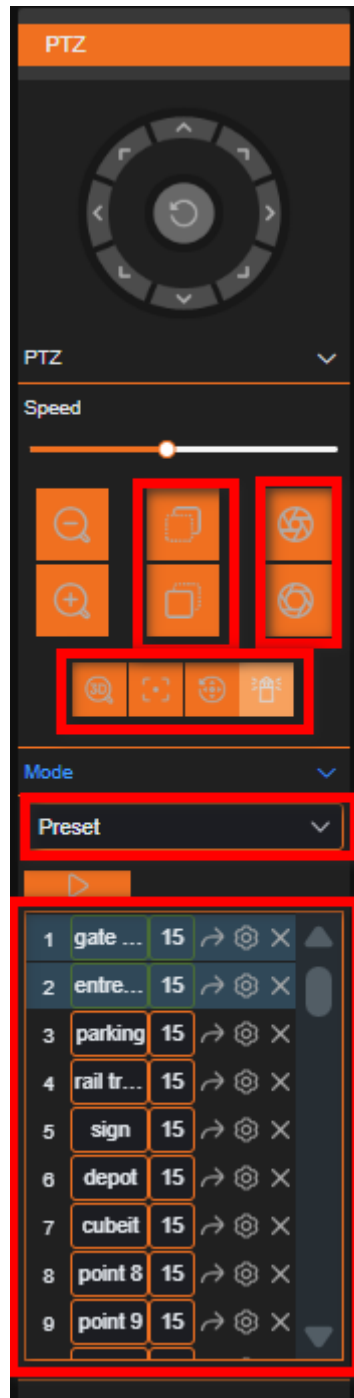


Figure 18-23. PTZ operation menu with direction, zoom, focus, aperture, and preset controls.

The PTZ operation menu provides the following controls:

- **Direction arrows:** click to pan and tilt the PTZ camera.
- **PTZ speed:** sets the rotation speed of the PTZ camera.
- **Zoom:** click – / + to zoom in or out.
- **Focus:** click – / + to adjust focus.
- **Aperture:** click to adjust the aperture size.
- **Cruise:** starts or stops the PTZ cruise, including the default cruise.
- **Additional buttons:** 3D PTZ, automatic focus, reset preset point, and watch mode.
- **Preset point:** rename, go to, add, and delete preset points.
- **PTZ rotation mode:** select from six modes — PTZ, Preset, Line Scan, Watch Mode, Tour, and Pattern Scan.

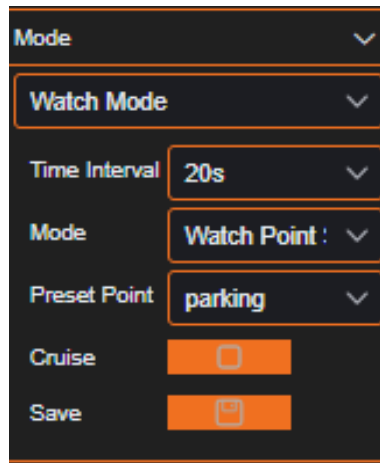


Figure 18-24. Watch Mode configuration page.

- **Watch Mode:** set **Time Interval** (the wait time before the watch action resumes after operation stops) and **Mode** (default, preset point, line scan, tour cruise, or pattern scan), then start the cruise.

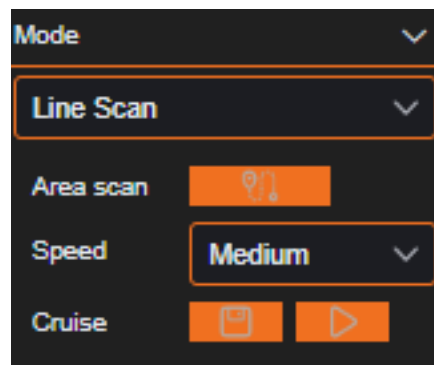


Figure 18-25. Line Scan configuration page.

- **Line Scan:** for **Area scan**, click to record the start position, rotate the high-speed dome, and click to record the end position. Select the **Speed** of the scan, then start it. In this mode the dome moves only within the same horizontal plane.

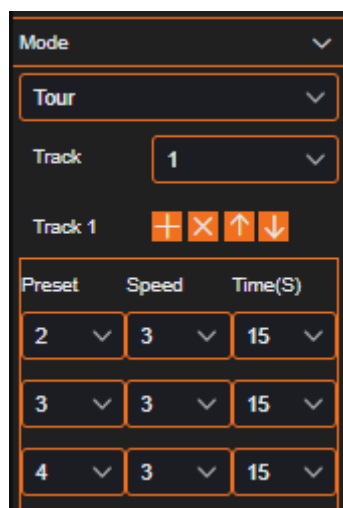


Figure 18-26. Tour configuration page.

- **Tour:** set the **Time Interval** (dwell time at each preset point), add or delete preset points, reorder them with **Up / Down**, then start the cruise.

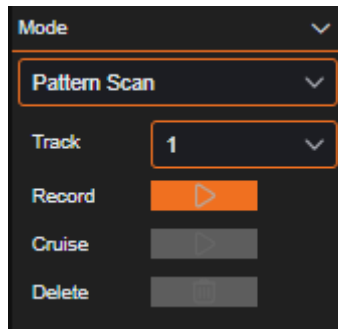


Figure 18-27. Pattern Scan configuration page.

- **Pattern Scan:** click to start recording the cruise route and click again to stop; then start the cruise to follow the previously recorded route and actions.

9. Live view control buttons. The control bar below the preview windows provides the following buttons.



Figure 18-28. Screen layout selector — switches the channel-window display mode.



Figure 18-29. Open all channel previews.



Figure 18-30. Close all channel previews.



Figure 18-31. Original proportion — displays the live video at its original aspect ratio.



Figure 18-32. Stretch — stretches the live video to fill each channel window.



Figure 18-33. Full screen — expands the Web client to full-screen view.



Figure 18-34. Manual recording (all channels) — click to start recording all displayed channels; click again to stop. Files are saved to the PC.



Figure 18-35. Manual capture (all channels) — click to save a snapshot of every displayed channel to the PC.



Figure 18-36. Electronic zoom — click an active window, then click-drag over an area to zoom in; right-click to return to normal display.



Figure 18-37. Volume control — adjust the audio level or select silent mode.



Figure 18-38. Two-way audio (intercom) — closed state.



Figure 18-39. Two-way audio (intercom) — open state.



Figure 18-40. White-light control — manually turns on white-light deterrence (requires camera support).



Figure 18-41. Warning-alarm control — manually triggers the audible alarm warning (requires camera support).



Figure 18-42. Red-and-blue-light control — manually turns on the red-and-blue-light warning (requires camera support).



Figure 18-43. Area focus — click the button, then drag over an area in the preview so the lens focuses on that region (zoom cameras only).



Figure 18-44. Add a custom tag event.



Figure 18-45. Privacy mode (requires camera support).



Figure 18-46. Fisheye mode selector.

- **Two-way audio:** click to open the intercom between the client and the recorder; click again to close it. This function requires the device to support two-way audio.
- **Area focus:** click the button and drag over a region of the preview; the lens focuses according to the selected area. Supported on zoom cameras only.



Figure 18-47. Fisheye mode button — shown when a fisheye-capable camera is connected; click to enter fisheye preview mode.

NOTE Fisheye mode is available only when a fisheye-capable camera is connected, and it is supported by some NVR models only.

18.3.2 Playback

The playback page searches and replays video stored on the recorder's hard disk and downloads video clips to the PC.

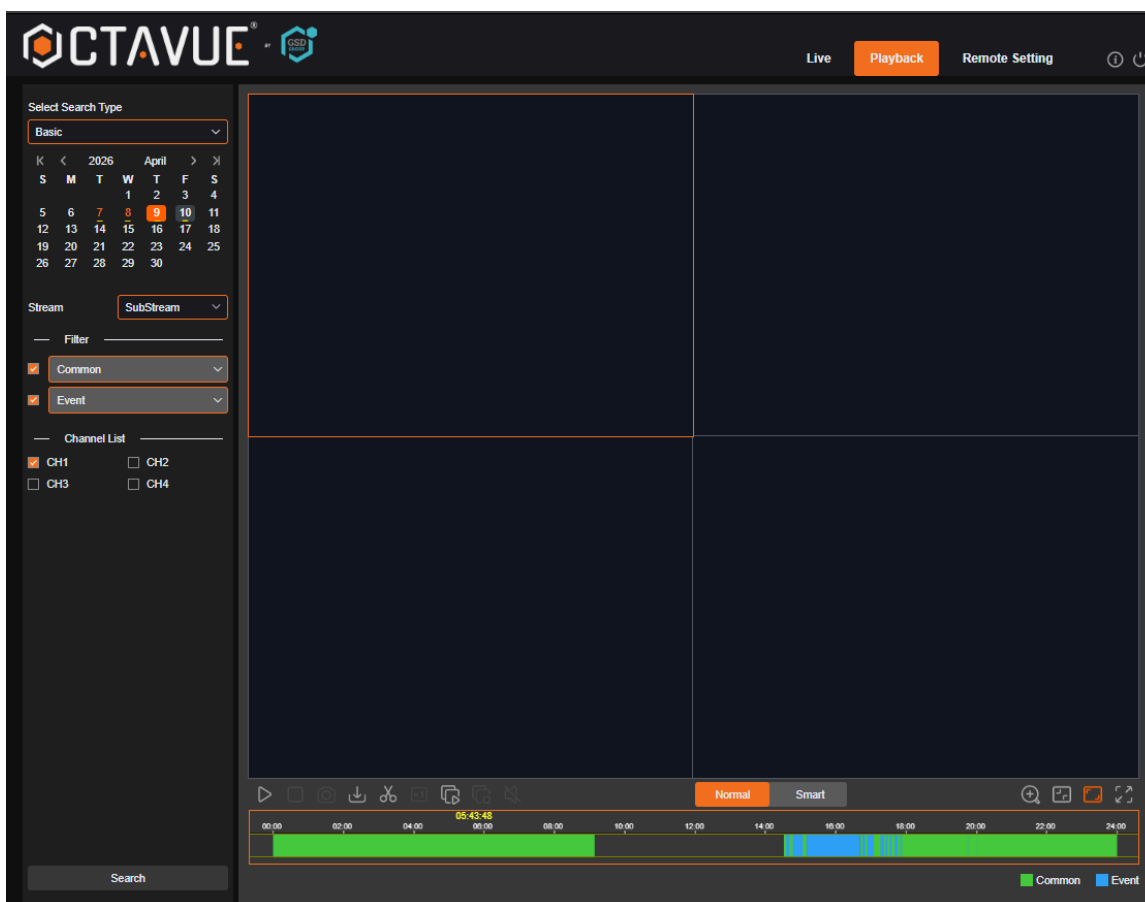


Figure 18-48. Playback interface with the calendar, search options, and timeline.

To search for recorded video:

1. Click **Playback** in the upper-right corner to open the playback interface.
2. On the calendar, select the date to query. Days that contain recordings are shown with a red underline.
3. Select the recording type to query in the **Type** list.
4. Select the video stream to search and play.
5. Select the channels to play back in the **Channel** list (up to four channels simultaneously).
6. Click the **Search** icon to search for the video.



Figure 18-49. Play button, used to start playback of the selected clip.

1. The search results appear on the timeline. Click the clip you want, then click the play icon to begin playback.

18.3.2.1 General Playback

The general playback controls are described below.



Figure 18-50. Play — play a single video.



Figure 18-51. Pause — pause the single video.



Figure 18-52. Stop — stop playback of a single-channel recording.



Figure 18-53. Play by frame — advance frame by frame from the first frame. Available only when Sync playback is not selected.



Figure 18-54. Sync play — click to play all selected channels synchronously.



Figure 18-55. Record — select a playing channel, then click to record the current video to the PC; click again to stop.



Figure 18-56. Capture — select a playing channel, then click to take a snapshot and save it to the PC.



Figure 18-57. Download menu — opens the download menu to download video of the selected type and time for the selected channel.

	☐	Start Time	End Time	Status	File Size	
1	☐	2026-04-09 00:00:01	2026-04-09 01:54:20	Not Downloaded	644.33M	
2	☐	2026-04-09 01:54:20	2026-04-09 04:51:27	Not Downloaded	999.71M	
3	☐	2026-04-09 04:51:27	2026-04-09 07:49:50	Not Downloaded	999.76M	
4	☐	2026-04-09 07:49:50	2026-04-09 09:08:29	Not Downloaded	439.88M	
5	☐	2026-04-09 14:31:17	2026-04-09 14:35:40	Not Downloaded	11.39M	
6	☐	2026-04-09 14:35:40	2026-04-09 14:36:10	Not Downloaded	1.41M	
7	☐	2026-04-09 14:36:10	2026-04-09 14:36:52	Not Downloaded	1.86M	
8	☐	2026-04-09 14:36:52	2026-04-09 14:38:04	Not Downloaded	3.46M	

14 Row / Page

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Secret Password

Confirm Password

Start Download

Stop Download

Figure 18-58. Download controls — select the file to download and press Start Download to begin (the status is shown); press Stop Download to cancel.



Figure 18-59. Clip backup — clip a time segment and download it to the PC.



Figure 18-60. Reverse playback — available only when Sync playback is not selected.



Figure 18-61. Playback speed — click to select the playback speed.



Figure 18-62. Play all channels — plays all channels of the current search. Available only when Sync playback is not selected.



Figure 18-63. Stop all channels — stops playback of all channels. Available only when Sync playback is not selected.



Figure 18-64. Electronic zoom — click the playing video, then click-drag over an area to zoom in; right-click to return to normal display.



Figure 18-65. Original scale — displays the playback at its original aspect ratio.



Figure 18-66. Stretch — stretches the playback to fill each channel window.



Figure 18-67. Full screen — expands the Web client to full-screen playback.



Figure 18-68. General Playback interface, showing the timeline and playback control bar.

18.3.2.2 Picture Playback

After the recorder is configured to capture pictures, the images it captures can be searched on this page. A single search returns up to 5,000 pictures, and the time interval can be adjusted as needed.

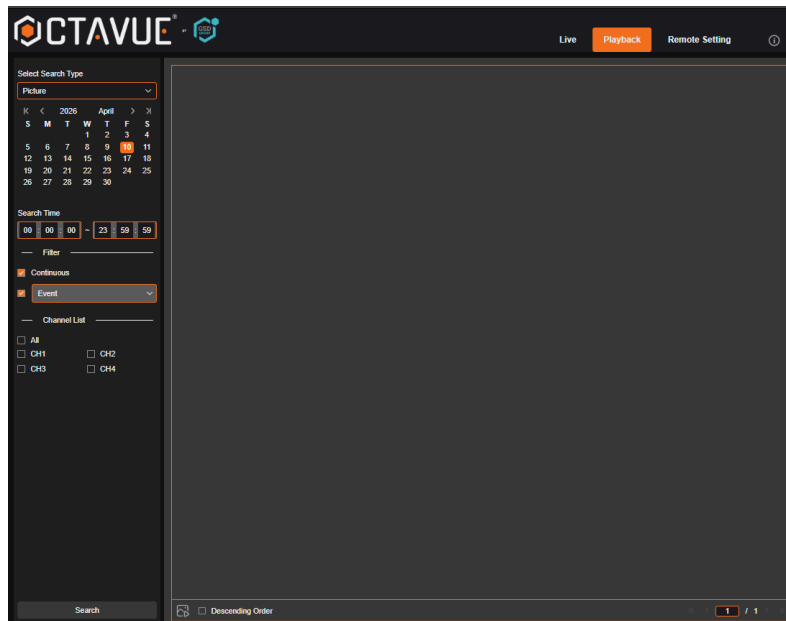


Figure 18-69. Picture Playback search interface.

To search for captured pictures:

1. Click **Playback** in the upper-right corner of the window.
2. Select **Picture** from the drop-down menu in the upper-left corner.
3. On the calendar, select the date to query (shown with a red underline).
4. Select the image type to search from the **Search Type** menu.
5. Select the channels to search.
6. Click **Search**.



Figure 18-70. Picture search results; double-click a picture to play the surrounding video.

1. Pictures matching the criteria appear on the right. Double-click a picture to play the video from just before and after the capture; click to return to the previous view.

18.3.2.3 Smart Playback

The recorder marks recordings as the smart type when it detects a change in the scene. Those recordings can be searched and replayed as Smart Playback video.

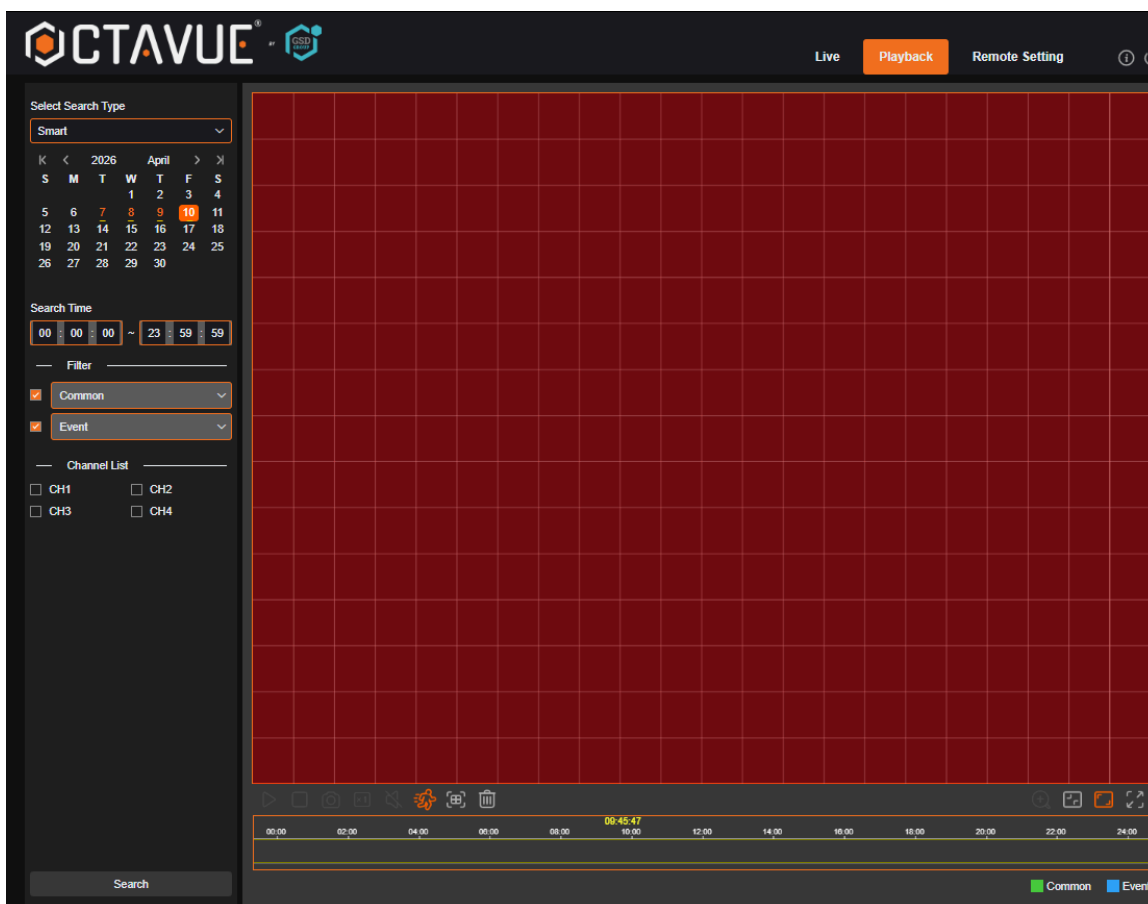


Figure 18-71. Smart Playback interface.



Figure 18-72. Display the smart detection-area grid.



Figure 18-73. Select all detection areas.



Figure 18-74. Clear all selected detection areas.

Use the area buttons to display the smart detection-area grid, select all areas, or clear all selected areas.

18.3.2.4 Tag Playback



Figure 18-75. Tag Playback interface.



Figure 18-76. Play button — jumps to the tagged position for playback.

This page searches, plays back, or removes all added tags. Select the time and channel and click **Search** to complete the search, then click to jump to the tagged position for playback.

18.3.2.5 AI Playback

After AI alerts are enabled on the recorder, AI alarm events can be searched on this page. Searchable event types include Face Detection, License Plate, Pedestrian and Vehicle, Line Crossing, Multi-Target-Type Recognition, Intrusion, Enter Region, Exit Region, Fire or Smoke Detection, Repeat Visitor, and Face Recognition Attendance.

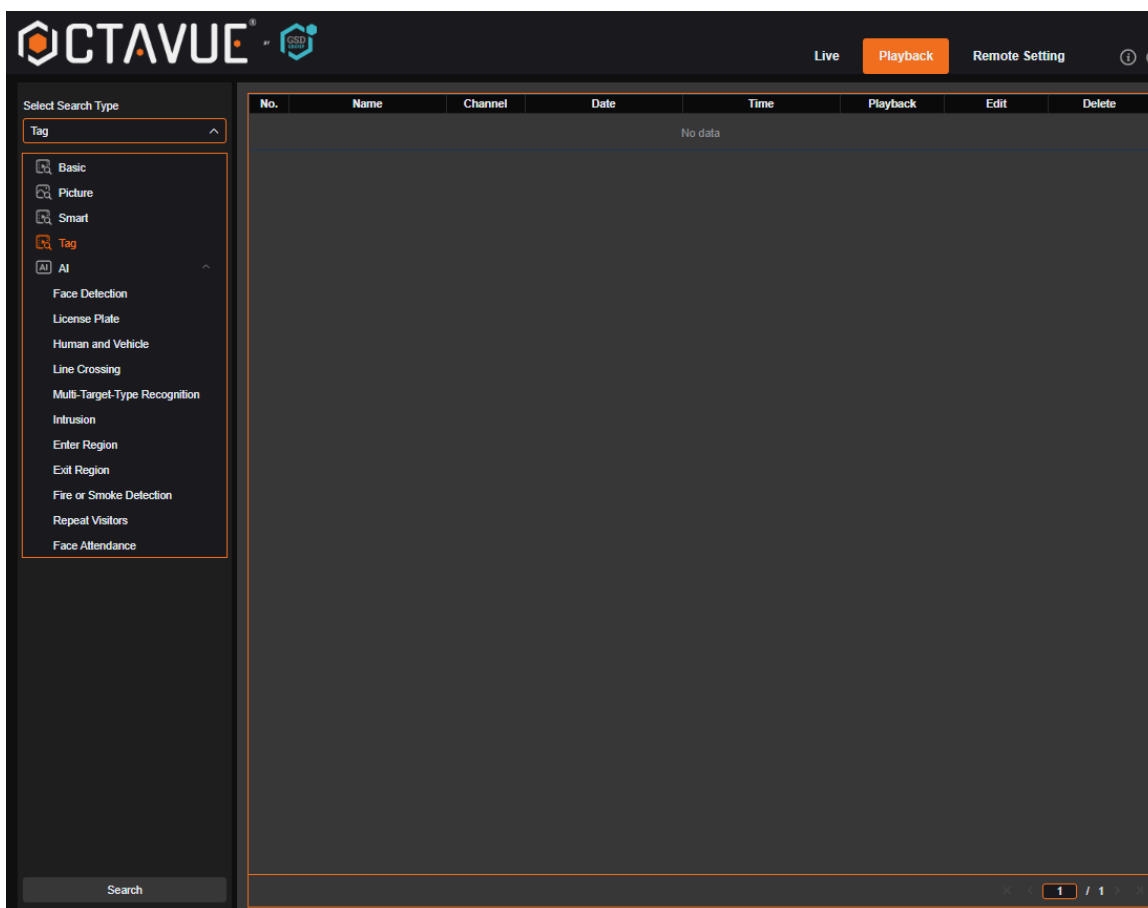


Figure 18-77. AI Playback interface, with searchable AI event types.

18.3.3 Remote Settings

This interface supports remote configuration of the recorder's parameters, including channel, recording, storage, alarm, event, network, and system settings.

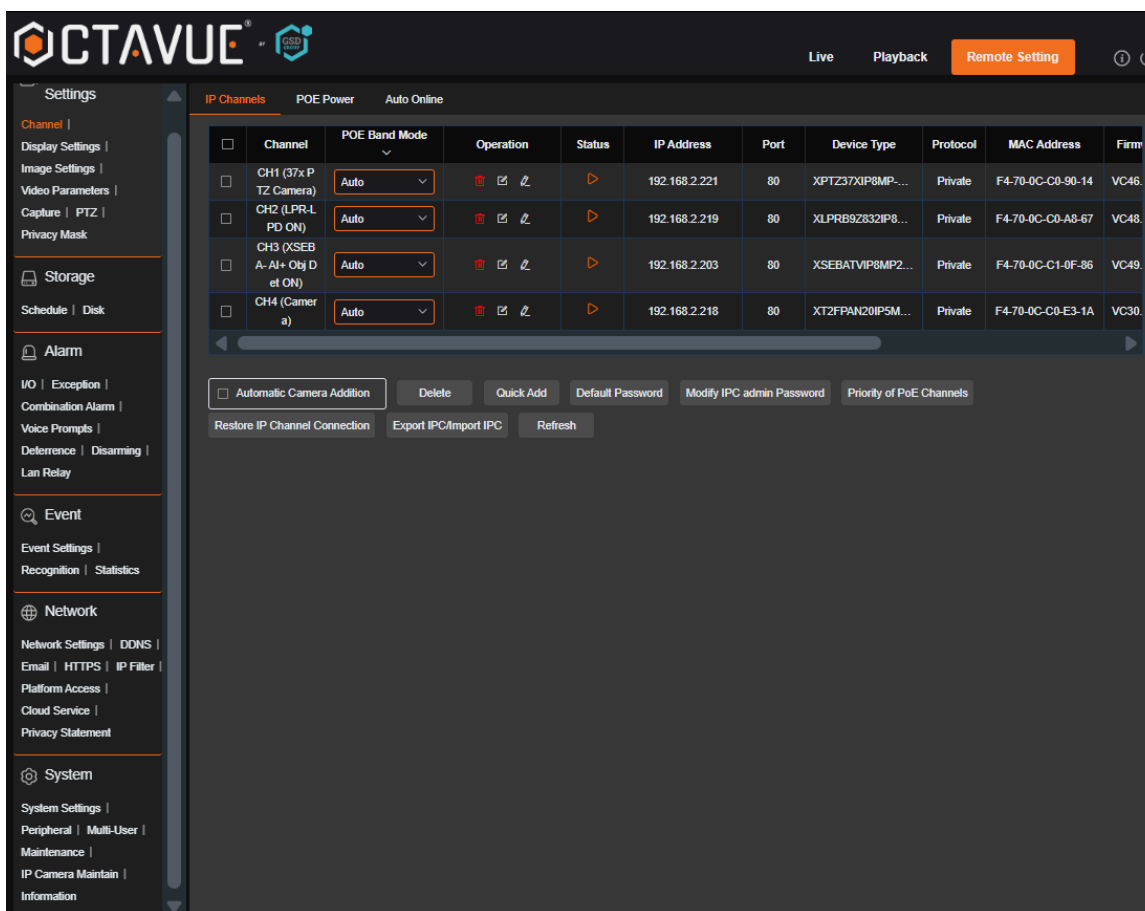


Figure 18-78. Remote Settings interface.

18.3.3.1 Custom Alert Notification Settings

Custom alarm push enables the recorder to push alarm information to multiple designated servers. This feature requires the servers to be fully integrated and debugged with the recorder.



Figure 18-79. Remote linkage parameters, where custom alarm push is configured.



Figure 18-80. Custom alarm push settings page.

Configure custom alarm push in the remote linkage parameters. Click the **Custom Alarm Push** settings button to open the configuration page.

The screenshot shows the 'Notification' configuration window. The 'Notification URL' is set to 'URL 1'. The 'Enable' toggle is off. The 'Protocol' is 'HTTP', 'Trigger Interval' is '30' seconds, 'Method' is 'POST', and the 'URL' field is empty with a 'http://' prefix. The 'Authentication' toggle is off. At the bottom are 'Save', 'Default', and 'Refresh' buttons.

Figure 18-81. Notification URL and server selection.

This screenshot is identical to the previous one, but the 'Enable' toggle switch is now turned on (orange). All other settings remain the same.

Figure 18-82. Server parameter configuration (protocol, trigger interval, method, and URL).

- **Channel:** channel selection is supported for IO-linked alerts only. Select different IO input sources for configuration; when an alert is triggered, the corresponding information is pushed to the server.
- **Notification URL:** selects the servers. Up to three identical or distinct servers are supported.
- **Enable:** when enabled, the server parameters can be configured and alarm information is pushed to that server. When disabled, the parameters are grayed out and no information is pushed. Each server switch is independent.
- **Protocol:** supports HTTP and HTTPS for pushing alarm information to the server.
- **Trigger Interval:** range 0 s–900 s. The recorder sends alert messages according to the configured push interval.
- **Method:** the push method. Supports POST and GET (both without image data).
- **URL:** the server address. Based on the selected protocol, enter the address and port in the format “address:port/string” (for example, 172.20.86.250:1133/Notification).

NOTE With a 90-second interval, if an alert triggers at 10:10:05 the server receives it immediately; if the alert persists, the second message arrives at 10:11:35. When the interval is set to 30 seconds or less, the server must wait 30 seconds after the first alert before it can receive the next one.

Authentication ☒

Username

Password

Figure 18-83. Authentication switch.

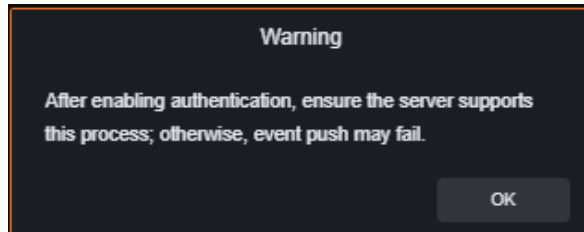


Figure 18-84. Authentication user name and password fields.

- **Authentication:** enabling this switch triggers an authentication prompt. If the server requires authentication, this switch must be enabled for custom push alerts to function correctly.
- **Username:** the server authentication user name.
- **Password:** the server authentication password.
- **Default:** click the restore button to reset all notification settings to their default values.

18.3.4 Local Settings

Local settings define where video and snapshots captured through the Web client are stored on the PC, and let you select the file type for recorded video.

Path configuration

Record Path

Download Path

Snapshot Path

File type

Capture Type

Save

Figure 18-85. Local Settings interface.



Figure 18-86. Browse button for the Record Path.



Figure 18-87. Browse button for the Download Path.



Figure 18-88. Browse button for the Snapshot Path.

- **Record Path:** click **Browse** and select the folder on the PC where manual recordings are saved.
- **Download Path:** click **Browse** and select the folder on the PC where downloaded files are saved.

- **Snapshot Path:** click **Browse** and select the folder on the PC where manual snapshots are saved.
- **File Type:** select the file type for manual video recordings.

Click **Save** to apply the changes.

Chapter 19 Mobile Access (OVConnect)

The **OVConnect** mobile application provides secure remote access to the OCTAVUE NVR from a smartphone or tablet. After the recorder is bound to a Cloud account, you can view live video, play back recordings, configure parameters, and share content from anywhere with an internet connection.

19.1 Downloading and Installing the App

Download **OVConnect** from the Apple App Store (iOS) or Google Play Store (Android), or scan the download QR code printed in the recorder documentation. Install the application and grant it the permissions it requests so that camera, notification, and network features operate correctly.

NOTE The mobile device and the NVR do not need to be on the same network for day-to-day remote viewing. A shared local area network (LAN) is required only during the initial device-binding steps described below.

19.2 Registering a Cloud Account

1. Launch **OVConnect** and, on the sign-in screen, tap **Register** to create a new Cloud account.

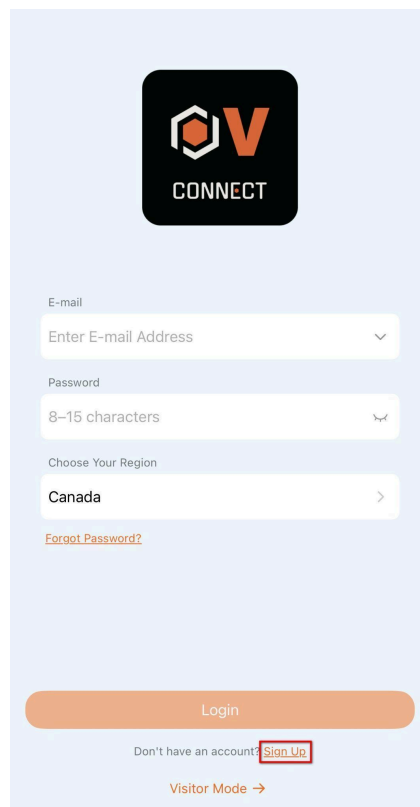
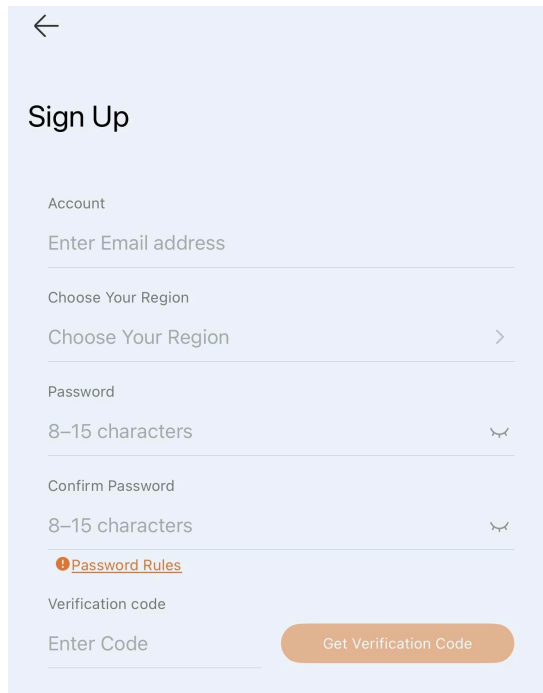


Figure 19-1. OVConnect sign-in and account registration screen

1. Enter your email address and set an account name and password. Select the **country/region** in which the NVR is physically located, then complete registration to activate the account.



The image shows a 'Sign Up' form with a light blue background. At the top left is a back arrow. The title 'Sign Up' is centered. Below it, the section 'Account' contains an 'Enter Email address' field. The 'Choose Your Region' section has a dropdown menu currently showing 'Choose Your Region' with a right arrow. The 'Password' section has two fields: '8-15 characters' and 'Confirm Password' (also '8-15 characters'), both with eye icons for toggling visibility. Below the password fields is a link for 'Password Rules'. The 'Verification code' section has an 'Enter Code' field and an orange button labeled 'Get Verification Code'.

Figure 19-2. Entering account details during Cloud registration

TIP Choose the country/region that matches the recorder's physical location. This ensures the app connects to the nearest Cloud node and complies with regional data-handling requirements.

19.3 Binding the NVR

Log in with the registered account and tap the **Add Device** button on the **Home** page to begin binding the NVR.



Figure 19-3. Home page with the option to add and bind a device

The application supports three methods for binding a device:

- **Scan the device QR code** — scan the QR code shown on the NVR **Information** page. The recorder and the mobile device must be on the same LAN.
- **LAN online search** — let the app automatically discover recorders on the local network. The recorder and the mobile device must be on the same LAN.
- **Scan the dynamic Cloud QR code** — scan the dynamic QR code on the NVR **Cloud Service** page. Refer to the Cloud Service section for details.

WARNING If binding fails, confirm that the recorder is connected to the internet, that P2P/Cloud service is enabled on the NVR, and that the mobile device and recorder share the same LAN when using QR-scan or online-search binding.

19.4 Managing the NVR from the App

After the device is bound successfully, it appears on the **Home** page. From there you can operate the recorder remotely — adjust parameter settings, view live preview, perform playback, and share collected footage.

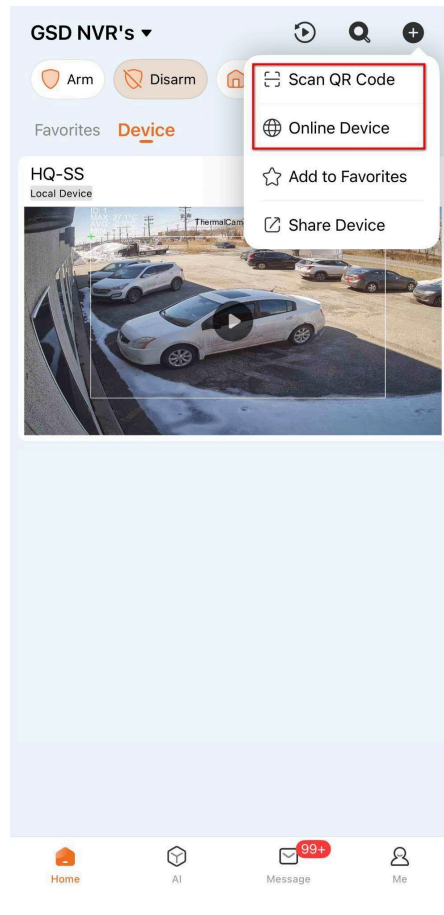


Figure 19-4. Bound NVR displayed on the app Home page

The live preview view presents connected channels and provides on-screen controls for stream quality, snapshot capture, and manual recording.

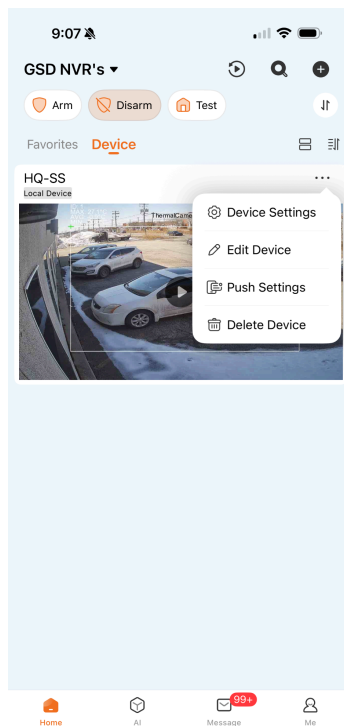


Figure 19-5. Live preview of connected channels

The playback view lets you search recorded footage by date and time and review events captured on the recorder's storage.

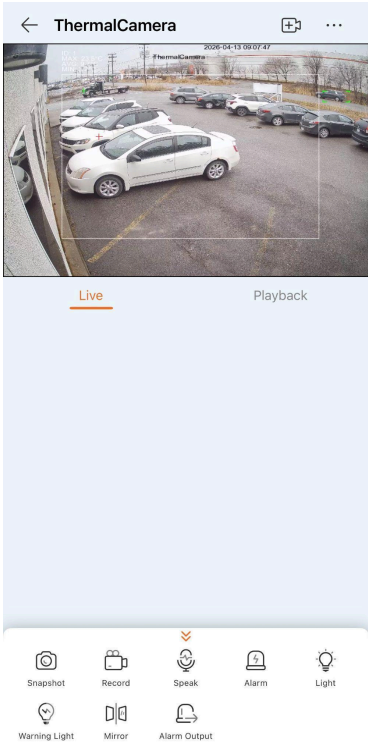


Figure 19-6. Remote playback of recorded footage

The sharing and collection features allow you to save favorite channels and share access or clips with other authorized Cloud accounts.

Figure 19-7. Sharing and collection management in the app