

User Manual

Network Video Recorder (NEW GUI)

Date: January 2025

Doc Version: 1.0

English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



For further details, please visit our Company's website
www.zkteco.com.

Copyright © 2025 ZKTECO CO., LTD. All rights reserved.

Without the prior written consent of ZKTeco, no portion of this manual can be copied or forwarded in any way or form. All parts of this manual belong to ZKTeco and its subsidiaries (hereinafter the "Company" or "ZKTeco").

Trademark

ZKTeco is a registered trademark of ZKTeco. Other trademarks involved in this manual are owned by their respective owners.

Disclaimer

This manual contains information on the operation and primarytenance of the ZKTeco Device. The copyright in all the documents, drawings, etc. in relation to the ZKTeco supplied Device vests in and is the property of ZKTeco. The contents hereof should not be used or shared by the receiver with any third party without express written permission of ZKTeco.

The contents of this manual must be read as a whole before starting the operation and primarytenance of the supplied Device. If any of the content(s) of the manual seems unclear or incomplete, please contact ZKTeco before starting the operation and primarytenance of the said Device.

It is an essential pre-requisite for the satisfactory operation and primarytenance that the operating and primarytenance personnel are fully familiar with the design and that the said personnel have received thorough training in operating and primarytaining the machine/unit/Device. It is further essential for the safe operation of the machine/unit/Device that personnel has read, understood, and followed the safety instructions contained in the manual.

In case of any conflict between terms and conditions of this manual and the contract specifications, drawings, instruction sheets or any other contract-related documents, the contract conditions/ documents shall prevail. The contract-specific conditions/documents shall apply in priority.

ZKTeco offers no warranty, guarantee, or representation regarding the completeness of any information contained in this manual or any of the amendments made thereto. ZKTeco does not extend the warranty of any kind, including, without limitation, any warranty of design, merchantability, or fitness for a particular purpose.

ZKTeco does not assume responsibility for any errors or omissions in the information or documents which are referenced by or linked to this manual. The entire risk as to the results and performance obtained from using the information is assumed by the user.

ZKTeco in no event shall be liable to the user or any third party for any incidental, consequential, indirect, special, or exemplary damages, including, without limitation, loss of business, loss of profits, business interruption, loss of business information or any pecuniary loss, arising out of, in connection with, or relating to the use of the information contained in or referenced by this manual, even if ZKTeco has been advised of the possibility of such damages.

This manual and the information contained therein may include technical, other inaccuracies or typographical errors. ZKTeco periodically changes the information herein which will be incorporated into new additions/amendments to the manual. ZKTeco reserves the right to add, delete, amend, or modify the information contained in the manual from time to time in the form of circulars, letters, notes, etc. for better operation and safety of the machine/unit/Device. The said additions or amendments are meant for improvement /better operations of the machine/unit/Device and such amendments shall not give any right to claim any compensation or damages under any circumstances.

ZKTeco shall in no way be responsible (i) in case the machine/unit/Device malfunctions due to any non-compliance of the instructions contained in this manual (ii) in case of operation of the machine/unit/Device beyond the rate limits (iii) in case of operation of the machine and Device in conditions different from the prescribed conditions of the manual.

The product will be updated from time to time without prior notice. The latest operation procedures and relevant documents are available on <http://www.zkteco.com>.

If there is any issue related to the product, please contact us.

ZKTeco Headquarters

Address ZKTeco Industrial Park, No. 32, Industrial Road,
Tangxia Town, Dongguan, China.

Phone +86 769-82109991

Fax +86 755-89602394

For business-related queries, please write to us at sales@zkteco.com. To know more about our global branches, visit www.zkteco.com.

About the Company

ZKTeco is one of the world's largest manufacturers of RFID and Biometric (Fingerprint, Facial, and Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

About the Manual

This manual introduces the product of **Network Video Recorder**.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

TABLE OF CONTENTS

1. Installation	7
1.1. Unpacking Inspection	7
1.2. Hard Disk Installation	7
1.2.1. NVR with Hard Disk	7
2. Getting Started	8
2.1. Start Up and Shutdown	8
2.1.1. Start Up	8
2.1.2. Shut Down	9
2.2. Login	9
2.3. Using Guide	10
2.4. Menu Operation	12
2.4.1. Begin Setup	12
3. Preview	13
3.1. Introduction of Preview	13
3.2. Operations in Preview Mode	15
3.3. Using the Mouse in Preview	16
4. Playback	18
4.1. Instant Playback	18
4.2. Playback by Normal Search	19
4.2.1. Recording Playback	19
4.2.2. Playback by Event Search	21
4.2.3. Playback Pictures	21
5. PTZ Controls	23
5.1. Configuring PTZ Settings	23
5.2. Setting PTZ Preset, Cruise Line, Trajectory & Scan Line	24
5.2.1. Preset Setting	24
5.2.2. Cruise Setting	24
5.2.3. Trajectory Setting	25
5.2.4. Scan Line Setting	25
6. Channel Manage	26
6.1. Channel Config	26
6.1.1. Search Device	26
6.2. Regular Configuration	29
6.2.1. OSD Setting	29
6.2.2. Image Parameters	30
6.2.3. Media Parameters	31

6.2.4. Tour Setting	32
6.2.5. Channel Zero Setting	33
6.3. Regular Detection	34
6.3.1. Video Shelter	34
6.3.2. Video Lost	35
6.3.3. Privacy Mask	37
7. Intelligence	38
7.1. Intelligent Function	38
7.1.1. Crowd Situation	38
7.1.2. Perimeter Protection	40
7.1.3. Object Left/Lost	48
7.2. Intelligent Search	50
7.2.1. Record Search	50
7.2.2. Snap Search	52
7.2.3. Target Counting	53
8. Alarm	54
8.1. Alarm Abnormal	54
8.2. Alarm Input	55
8.3. Alarm Output	57
8.4. Alarm Log	58
9. Storage Manage	59
9.1. Disk Manage	59
9.1.1. Disk Configuration	59
9.1.2. Record Calculate	61
9.2. RAID Manage	62
9.2.1. Disk RAID	62
9.3. Group Manage	64
9.3.1. Disk Grouping	64
9.4. Record Configuration	65
9.4.1. Record Configuration	65
9.5. Snap Config	66
9.5.1. Snap Config	66
10. System Manage	67
10.1. System Configuration	67
10.1.1. System Setting	68
10.1.2. Time Setting	70
10.1.3. Preview Setting	72
10.1.4. System Information	74
10.1.5. Security Setting	79

10.2. Network Configuration	80
10.2.1. Basic Setting	80
10.2.2. Advanced Setting	85
10.2.3. Platform Setting	86
10.2.4. Network Monitoring	88
10.2.5. Network Testing	89
10.3. User Configuration	90
10.3.1. User Management	90
10.3.2. Online User	92
10.4. System Log	93
10.4.1. System Log	93

1. Installation

1.1. Unpacking Inspection

During installation of the NVR:

- Ensure the device is installed in a well-ventilated, dust-free environment.
- The device is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Power down the device before connecting and disconnecting accessories and peripherals.

1.2. Hard Disk Installation

Before you start:

Disconnect the power from the NVR before installing a hard disk drive (HDD). A factory recommended HDD should be used for this installation.

Tools Required: Screwdriver.

1.2.1. NVR with Hard Disk

Steps:

1. Open the front panel,as shown in figure 1.2.1.1.



Figure 1.2.1.1 Front Panel

2. Insert the hard disk along the slot and close it,as shown in figure 1.2.1.2.



Figure 1.2.1.2 Hard Disk Slot

2. Getting Started

2.1. Start Up and Shutdown

2.1.1. Start Up

Plug in the power cord, press the power switch, the power indicator light should turn bright. The device will begin to start. After the device starts up, the video output defaults to multiple screen output mode, as shown in figure 2.1.1.

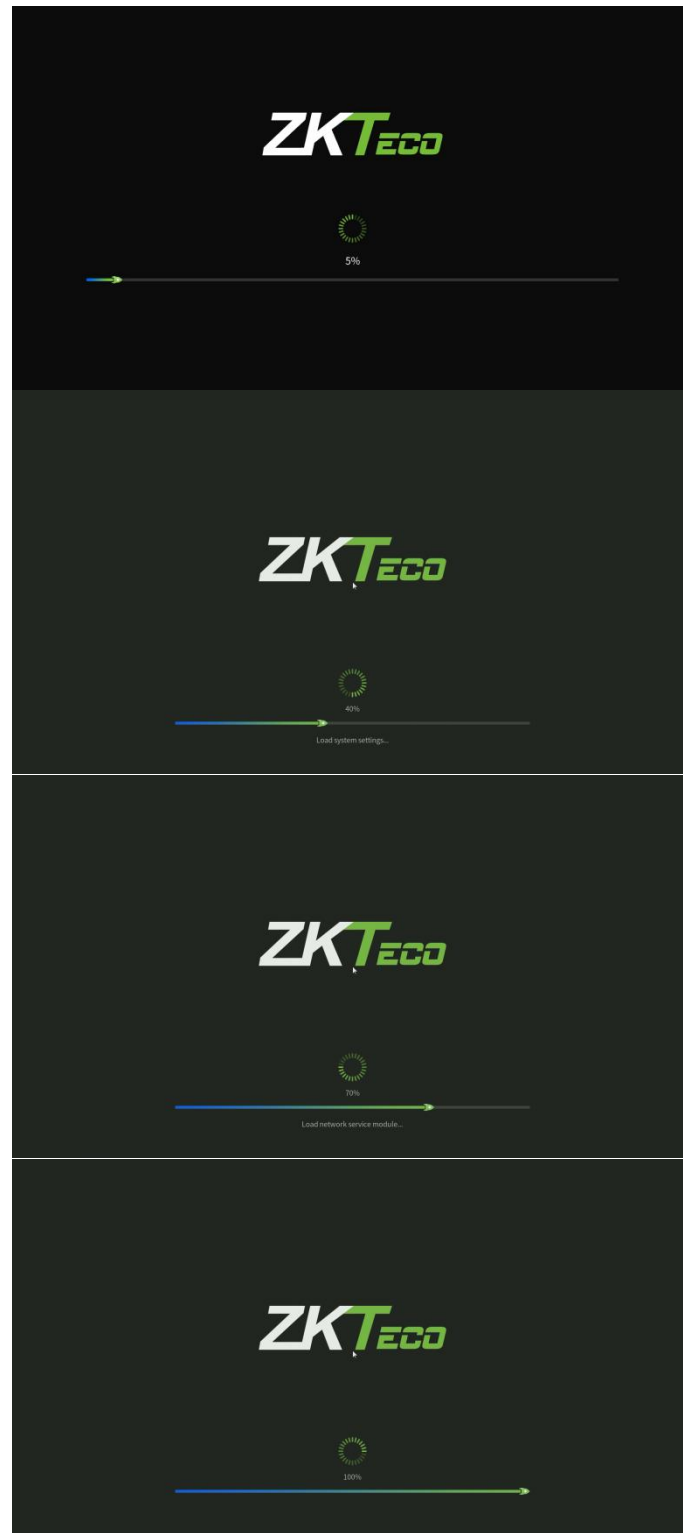


Figure 2.1.1 Start Up

2.1.2. Shut Down

Option 1: Long press the power key on front panel to shutdown the device .

Option 2: Click **Start > Power Off> OK** (**Prompt:** It is recommended to use this way, in order to avoid damage to the device when suddenly powered off.)

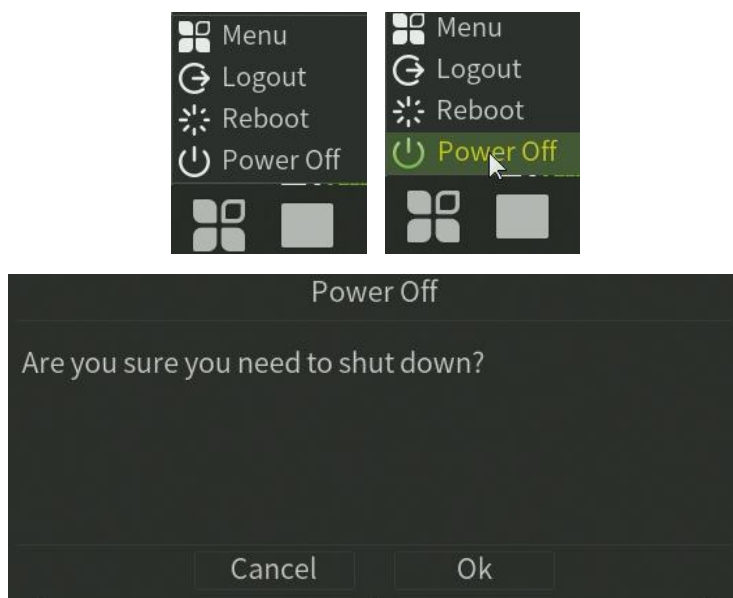


Figure 2.1.2 Shut Down Menu

2.2. Login

If NVR first start-up or has logged out, you must login the device before operating the menu and other functions, as shown in figure 2.2.1 and figure 2.2.2.



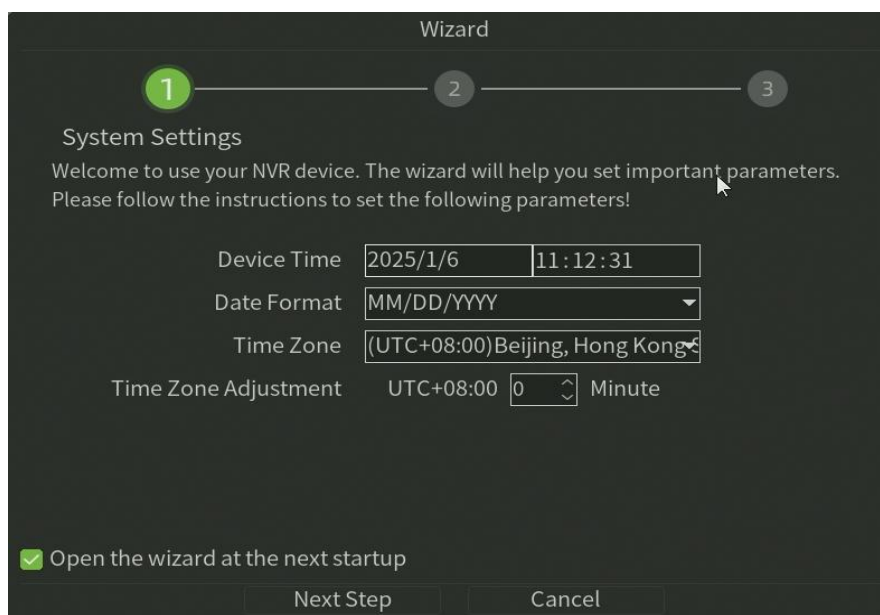
Figure 2.2.1 Login Interface

Steps:

3. Click  button on the top of screen.
4. Click **Login** in the drop-down menu.
5. Input the **Password** in the pop-up interface (Default password: 123456).
6. Click **Login** to log in.

2.3. Using Guide

The Guide starts once login, as shown in figure 2.3.



The image shows a 'Wizard' window titled 'System Settings'. At the top, there is a progress bar with three steps: 1 (highlighted in green), 2, and 3. Below the progress bar, the text reads: 'System Settings', 'Welcome to use your NVR device. The wizard will help you set important parameters. Please follow the instructions to set the following parameters!'. The settings are as follows:

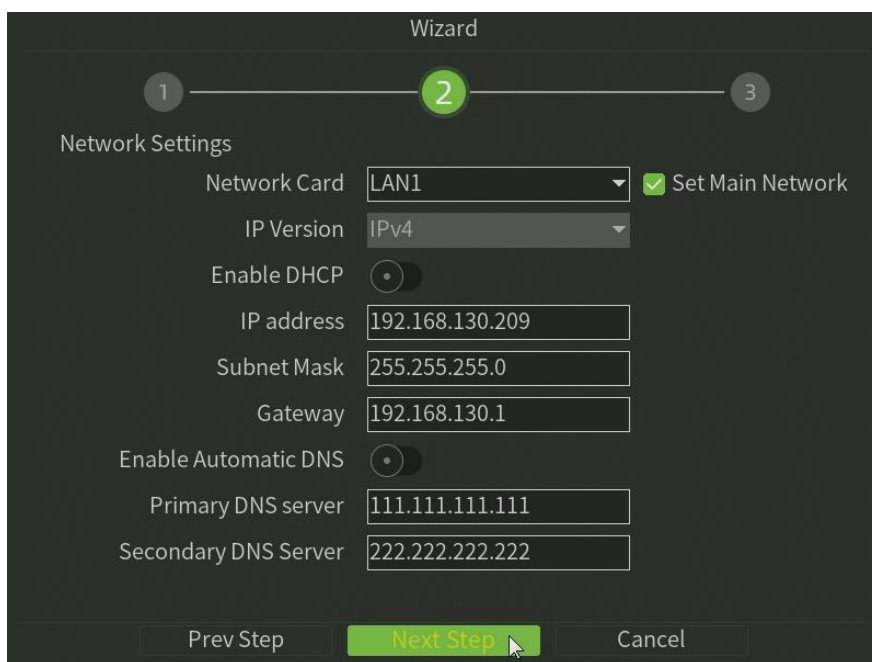
- Device Time: 2025/1/6 11:12:31
- Date Format: MM/DD/YYYY (dropdown menu)
- Time Zone: (UTC+08:00)Beijing, Hong Kong (dropdown menu)
- Time Zone Adjustment: UTC+08:00 0 Minute (with up/down arrows for the number 0)

At the bottom, there is a checkbox labeled 'Open the wizard at the next startup' which is checked. Below the checkbox are two buttons: 'Next Step' and 'Cancel'.

Figure 2.3 System Settings

Operating the Guide:

1. The Guide can walk you through some basic settings of the NVR. If you don't want to use the Guide at that moment, click the **Cancel** button. You can also choose to use the Guide next time by leaving the "Next time no longer display" check-box unchecked.
2. Click **Next Step** button to enter the Network Setting window, as shown in figure 2.4.



The image shows a 'Wizard' window titled 'Network Settings'. At the top, there is a progress bar with three steps: 1, 2 (highlighted in green), and 3. Below the progress bar, the text reads: 'Network Settings'. The settings are as follows:

- Network Card: LAN1 (dropdown menu) ☒ Set Main Network
- IP Version: IPv4 (dropdown menu)
- Enable DHCP: ☐ (disabled)
- IP address: 192.168.130.209
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.130.1
- Enable Automatic DNS: ☐ (disabled)
- Primary DNS server: 111.111.111.111
- Secondary DNS Server: 222.222.222.222

At the bottom, there are three buttons: 'Prev Step', 'Next Step' (highlighted in green), and 'Cancel'.

Figure 2.4 Network Setting

- After the Network Setting, click **Next Step** button to enter the Platform Setting window, as shown in figure 2.5.

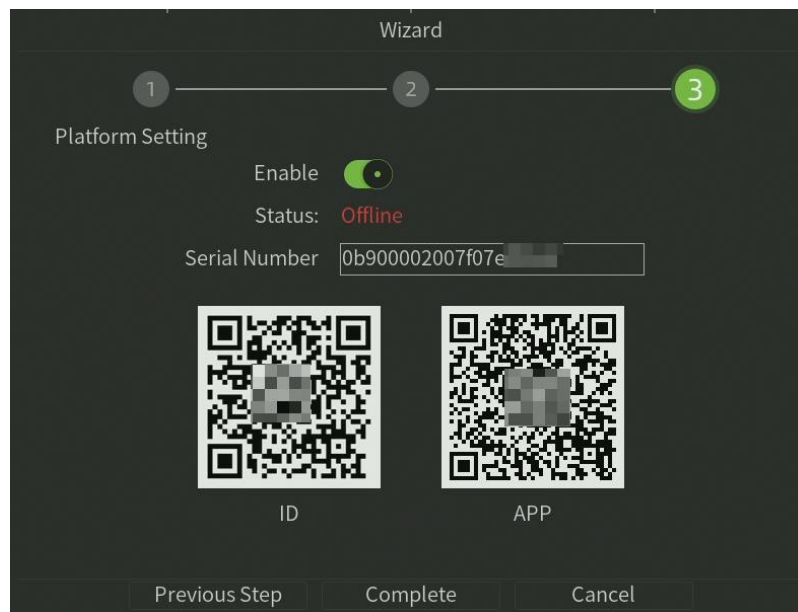


Figure 2.5 Platform Setting

- After the Platform setting, click **Complete** button to complete the basic configuration and then enter into preview page.

2.4. Menu Operation

After the user login successfully, according to the interface of toolbar to perform associated settings, as shown in figure 2.6.

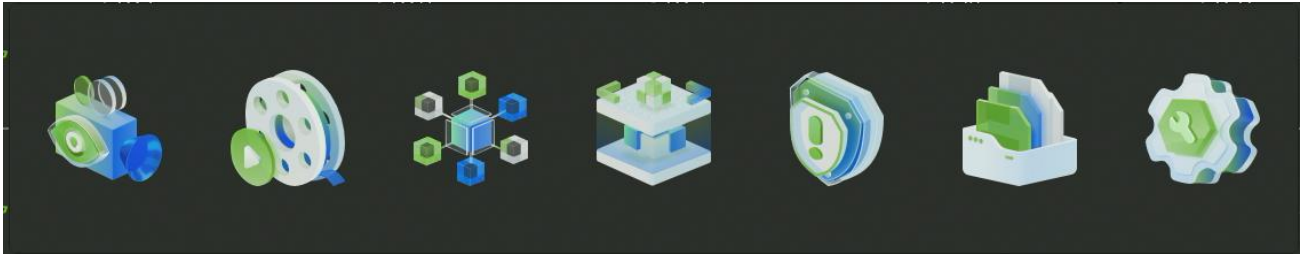


Figure 2.6 Menu Operation

2.4.1. Begin Setup

Click the  icon, it will pop-up the interface as show in figure 2.7.



Figure 2.7 Begin Setup

1. **Menu:**Click **Menu** button,Bring up the menu option window.
2. **Logout:** Click **Logout** button, can exit the current user.
3. **Reboot:** Click **Reboot** button and confirm, the device will automatically reboot.
4. **Power Off:** Click **Power Off** button and confirm, the device will automatically shutdown.

3. Preview

3.1. Introduction of Preview

Preview shows you the video image getting from each camera in real time. The NVR will automatically enter live view mode when powered on, as shown in figure 3.1.

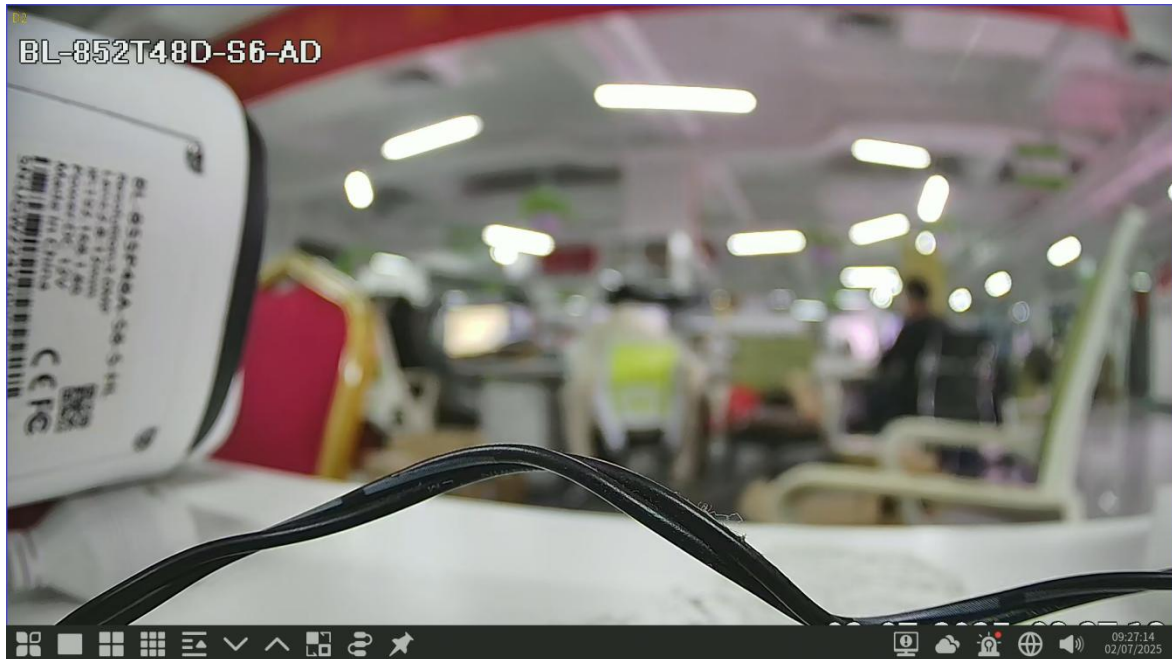


Figure 3.1 Preview Interface

Channel Preview Icons:

In the Preview mode, there are hide icons on the screen of each channel, which shows when you move the mouse to the bottom of channel.

Icons	Description	Icons	Description
	Open/Close PTZ		Show/Hide Smart detection
	Snapshot		Open/Close Voice Intercom
	Open/Close Channel Audio		Manual Recording On/Off
	Instant Playback		
	Media parameters		
	Bit Stream Parameters		

Table 3.1 Preview Icon Description

Media parameters : May revise the brightness, contrast, saturation and hue of the channel that the current mouse selected, one click to restore the default value when necessary, as shown in figure 3.2.



Figure 3.2 Media Parameters

PTZ/Preset/Cruise/Pattern:

Please confirm whether the related parameters setting is correct before control the PTZ. After setting up parameters, select the channel to be controlled in the preview interface, then control the direction of the lens, focal length, focus, aperture amplification and narrow in PTZ operation interface, and adjust the speed of PTZ, as shown in figure 3.3. See below the detailed operation of PTZ control part.

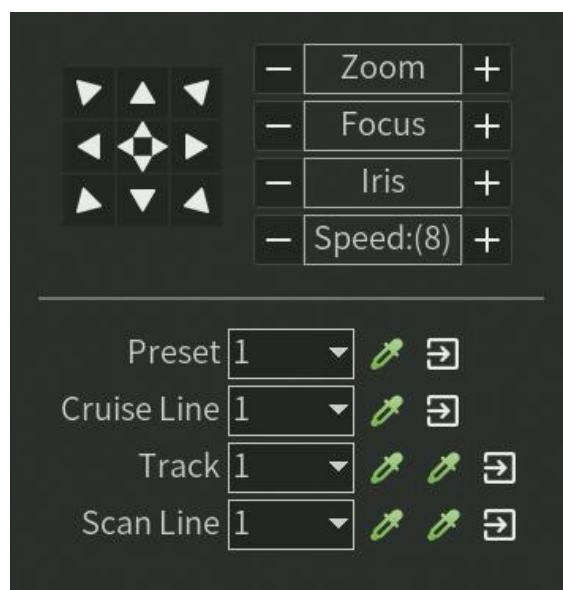


Figure 3.3 PTZ Control

3.2. Operations in Preview Mode

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

Real-time Alarm Information:

On the bottom right corner, there is a real-time alarm information, as shown in figure 3.4.



Figure 3.4 Alarming

When you click  , it will pop-up the alarm information, as shown in figure 3.5

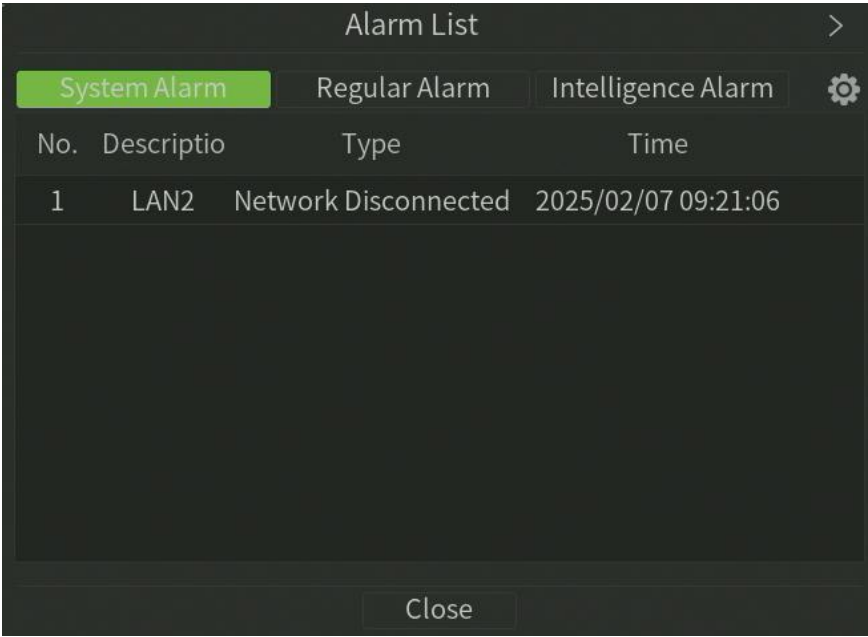


Figure 3.5 Alarm Information

Other Functions:

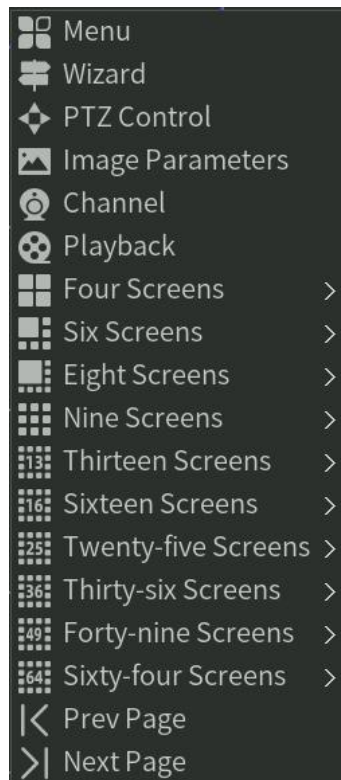


Icons	Functions	Icons	Description
	1 Split Screen		4 Split Screen
	9 Split Screen		ALL Split Screen
	Menu button		Peg
	Cruise on Setting		Linkage Preview
	Page Up		Page Down

Table 3.2 Other Function Description



3.3. Using the Mouse in Preview



Name	Description
Menu	Select and enter menu
Wizard	Select and enter Wizard Interface
PTZ Control	Open the PTZ interface
Image Parameters	Select and enter ISP Interface
Channel	Select and enter Channel Manage Interface
Playback	Select and enter Playback Manage Interface

Four Screens	Select and enter 4 Split Screen mode.
Six Screens	Select and enter 6 Split Screen mode.
Eight Screens	Select and enter 8 Split Screen mode.
Nine Screens	Select and enter 9 Split Screen mode.
Thirteen Screens	Select and enter 13 Split Screen mode.
Sixteen Screens	Select and enter 16 Split Screen mode.
Twenty-five Screens	Select and enter 25 Split Screen mode.
Thirty-six Screens	Select and enter 36 Split Screen mode.
forty-nine Screens	Select and enter 36 Split Screen mode.
Sixty-four Screens	Select and enter 64 Split Screen mode.
Prev Page	Switch to the previous screen.
Next Page	Switch to the next screen.

Table 3.3 Right Click Function Description

4. Playback

4.1. Instant Playback

Purpose:

Playback the recorded video files of a specific channel in the live view mode.

Steps:

Select a channel in live view mode and click the  button in the bottom of the channel, as shown in figure 4.1.



Figure 4.1 Instant Playback

4.2. Playback by Normal Search

4.2.1. Recording Playback

Click  icon to enter the Playback interface, as shown in figure 4.2.

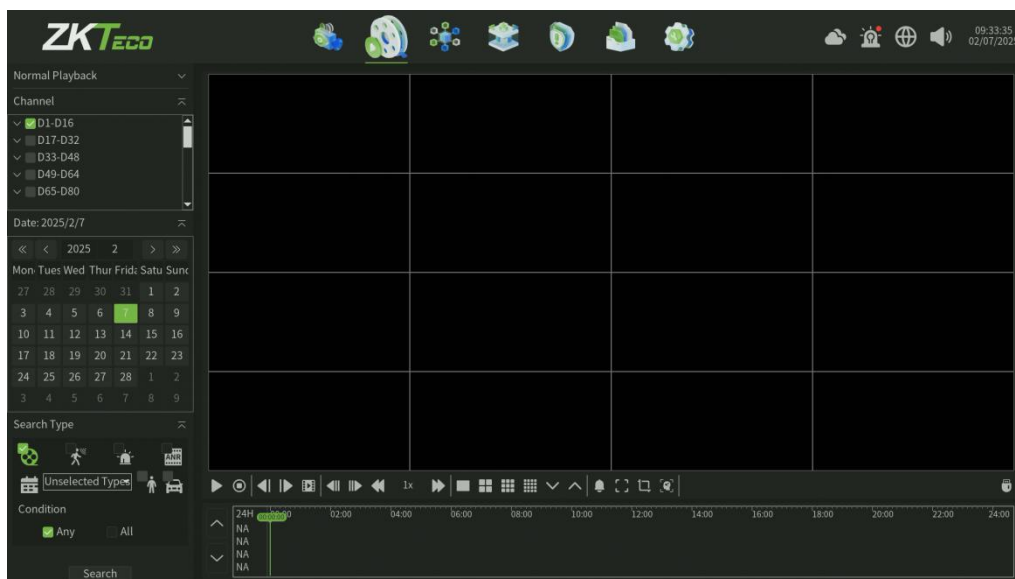


Figure 4.2 Normal Playback Interface

❖ Playback by Time

Purpose:

Playback video files recorded in specified time duration. Multi-channel simultaneous playback is supported.

Steps:

1. Enter **playback** interface.
2. Check the check-box of channel(s) in the channel list and then click to select the date on the calendar.
3. Select the Search Type and Condition then Click Search to search the record
4. Click the  button to start playback, as shown in figure 4.3.

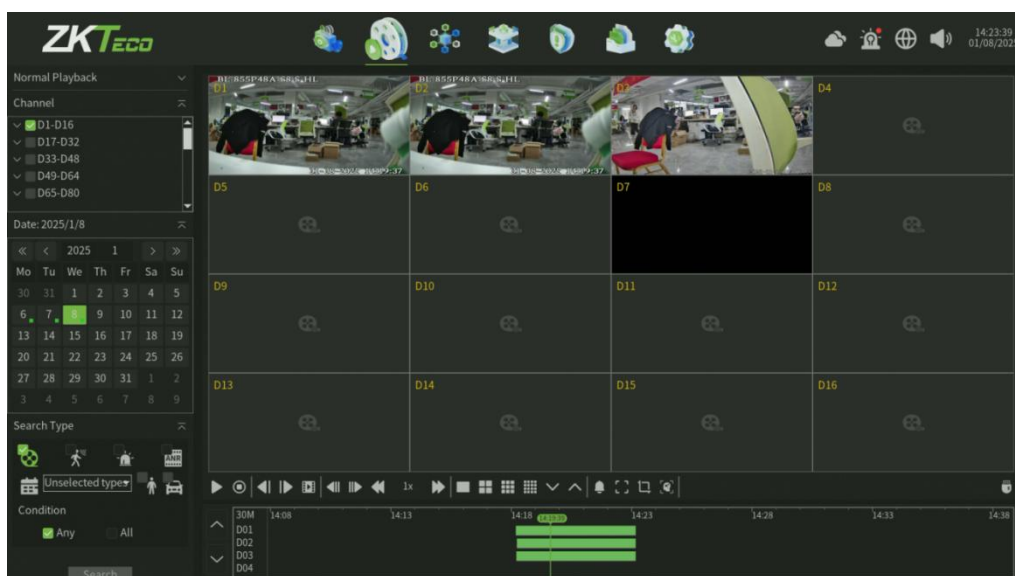
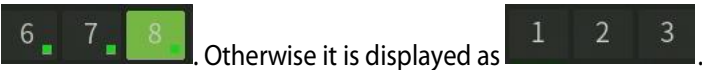


Figure 4.3 Video Playback

Note:

If there are record files for that camera in that day, in the calendar, the icon for that day is displayed as



. Otherwise it is displayed as

❖ **Playback Interface**

You can use the toolbar in the bottom part of Playback interface to control playing progress, as shown in figure4.4.



Figure 4.4 Playback Toolbar

Button	Operation	Button	Operation
	Play/Pause		Stop
	Playback Forward		Playback Backward
	Single Frame		30 Seconds Forward/Backward
	Speed Down		Speed Up
	1 Split Screen		4 Split Screen
	9* Split Screen		16 Split Screen
	Page Up/Page Down		Backup
	Capture		Full Screen
	Sound Adjust		Hide/Show the time bar

Table 4.1 Detailed Explanation of Playback Toolbar



4.2.2. Playback by Event Search

Purpose:

Playback record files on one or several channels searched out by event type (e.g. alarm detection, motion).

Steps:

1. Enter the Playback interface.
2. Select the Retrieving type: There are many types you can select, such as Count Alarm, Motion, Across the line, Regional, Alarm detection and object left/Loss etc. .
3. Click the Search button to get the search result information.
4. Click  button to playback the file.

4.2.3. Playback Pictures

Purpose:

The captured pictures stored in the HDD of device can be searched and viewed, as shown in figure 4.5.

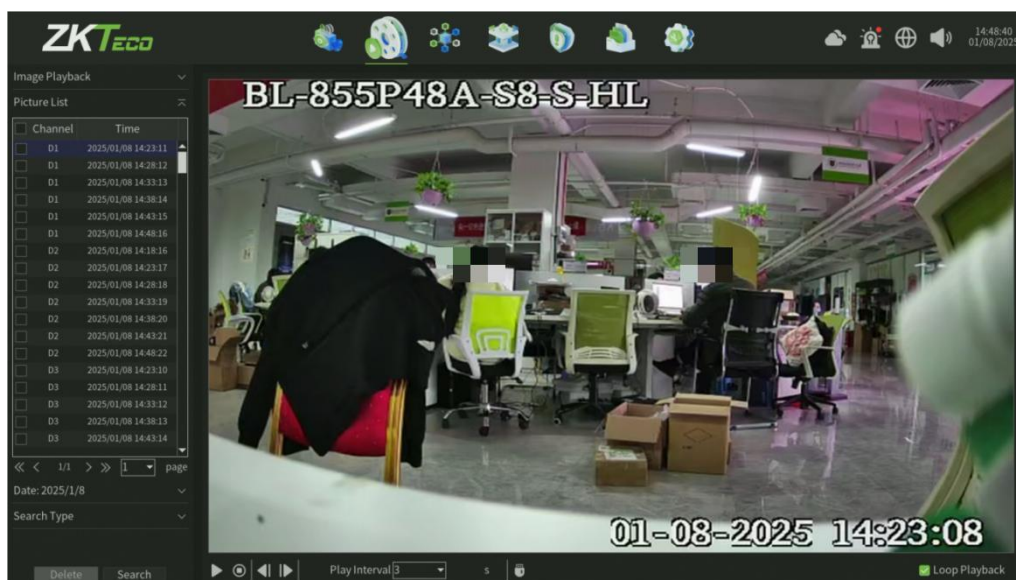


Figure 4.5 Picture Playback

Steps:

1. Enter playback interface.
2. Select playback modes: Image playback.
3. Select Search by day or Search by time.
4. Select Picture source: IPC Snapshot (preview snapshot) or Playback Snapshot.
5. Choose Condition:Any or All.
6. Select Retrieving type.
7. Select Search Channel.
8. Click Search button to search for the capture picture.
9. Check the check-box after the picture listed, then click to view the picture.
10. The toolbar in the bottom of playback interface can be used to control playing process.

Button	Function	Button	Function
	Play/Stop		Stop
	Next picture		Last picture

Table 4.2 Detailed Explanation of Playback Toolbar

Note: Click the check-box of the picture listed, then click Backup button, can enter the Snapshot back-up interface, as shown in figure 4.6.

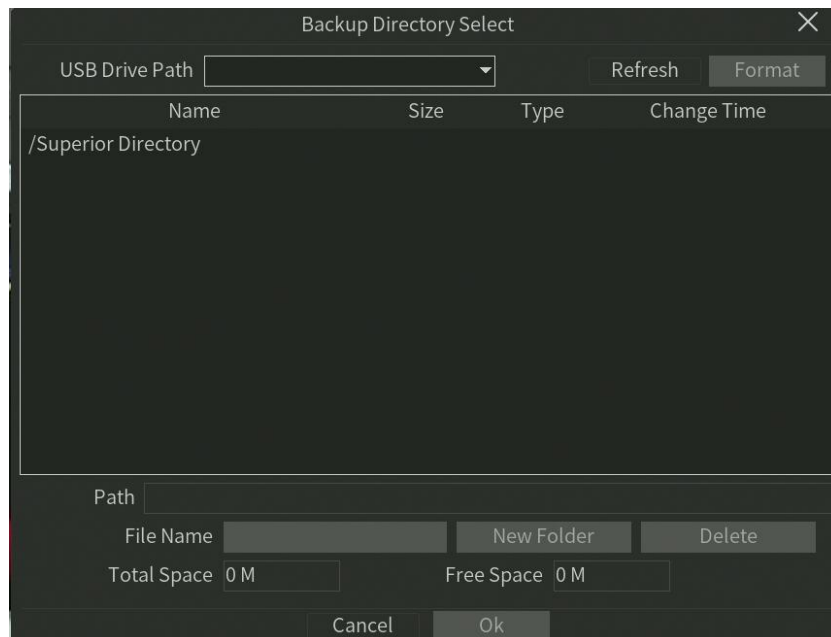


Figure 4.6 Snapshot Backup

5. PTZ Controls

5.1. Configuring PTZ Settings

Follow the procedure to set the parameters for PTZ. The configuring of the PTZ parameters should be done before you control the PTZ camera.

Steps:

1. Enter the PTZ Setting interface, as shown in figure 5.1, click **System > System configuration > System Setting**.

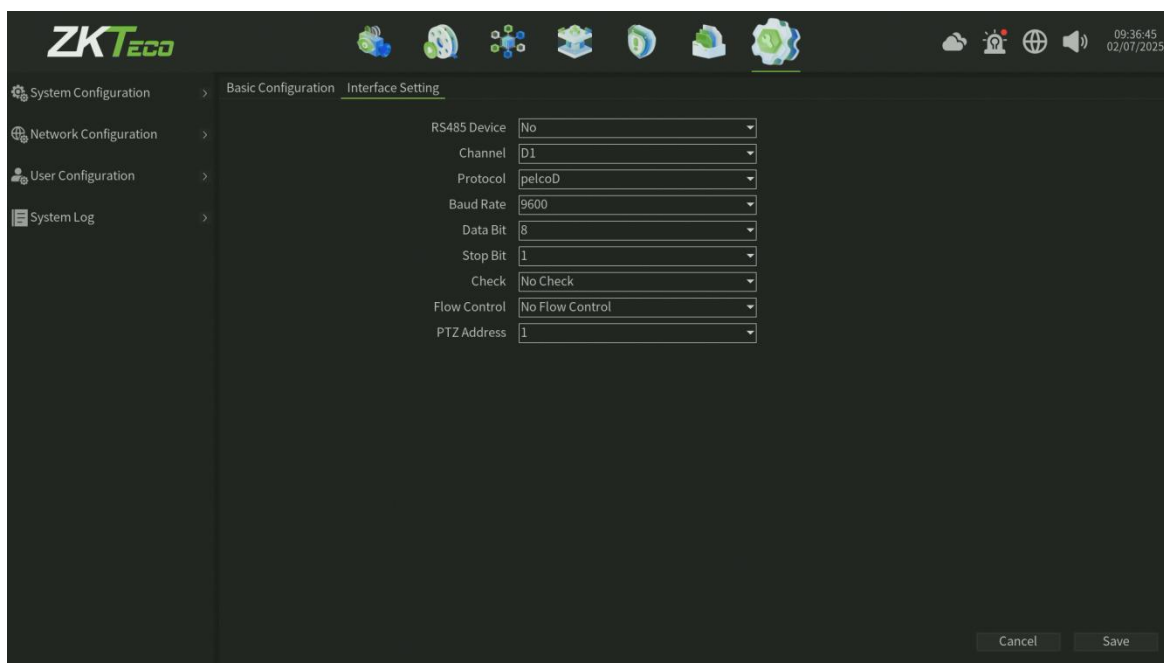


Figure 5.1 PTZ General Setting Interface

2. Set the parameter of PTZ:
 - **Channel:** Choose the channel.
 - **Protocol:** Choose the protocol for your PTZ.
 - **Decoder Address:** Choose the decoder address.
 - **Baud Rate:** Select the baud rate.
 - **Data Bit:** Select the data bit.
 - **Stop Bit:** Select the stop bit.
 - **Check:** Select the check, No Check by default.
 - **Flow Control:** Select the flow control, No Flow Control by default.
3. Click **Save** button to save the settings.

5.2. Setting PTZ Preset, Cruise Line, Trajectory & Scan Line

Before you start:

Please make sure that the preset, cruise and pattern should be supported by PTZ protocols, as shown in figure 5.2.

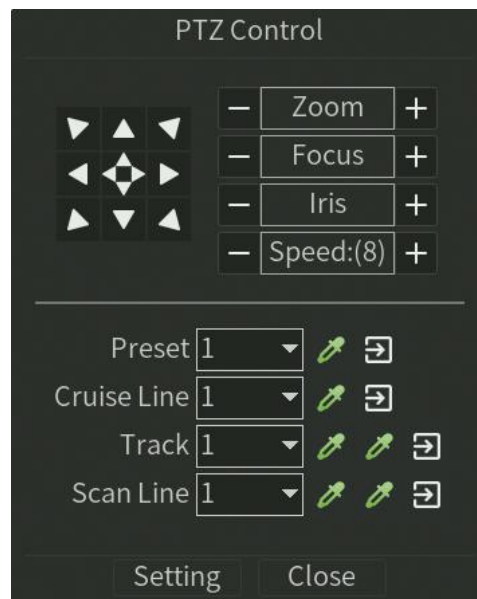


Figure 5.2 PTZ Setting Interface

5.2.1. Preset Setting

Follow the steps to set the Preset location which you want the PTZ camera to point to when an event takes place.

Steps:

1. Use the directional button to wheel the camera to the location where you want to set preset, and the zoom and focus operations can be recorded in the preset as well.
2. Setting the name of preset, click  button to save the preset. Repeat the above steps to save more presets.

5.2.2. Cruise Setting

Purpose:

Cruise can be set to move the PTZ to different locations and have it stay there for a set duration before moving on to the next location. The locations are corresponding to the presets. The presets can be set following the steps above in **Preset Setting**.

Steps:

1. Select cruise No. in the drop-down list of cruise.
2. Click the  button to add key points for cruise, as shown in figure 5.3.

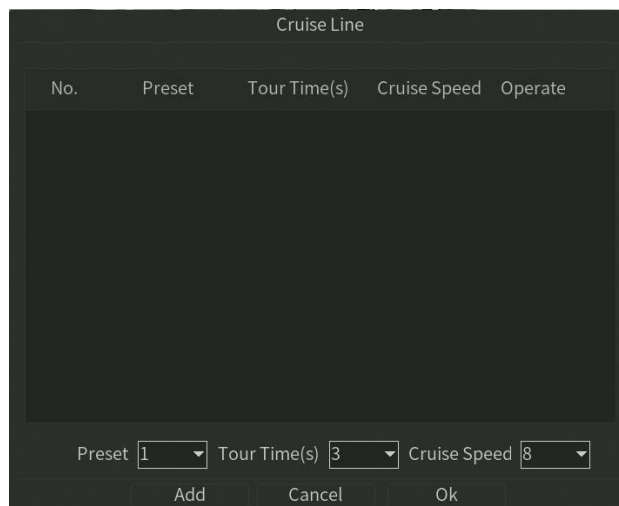


Figure5.3 Tour Line

1. Configure key point parameters, such as the key point No., duration of staying for one key point and speed of cruise. The key point is corresponding to the preset. The Key Point No. determines the order at which the PTZ will follow while cycling through the cruise. The **Cruise time** refers to the time span to stay at the corresponding key point. The **Cruise Speed** defines the speed at which the PTZ will move from one key point to the next.
2. Click the **Add** button to add the next key point to the patrol.
3. After finish setting, click OK button.

5.2.3. Trajectory Setting

Purpose:

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

Steps:

1. Choose pattern number in the drop-down list.
2. Click  button to begin and click corresponding buttons in the control panel to move the PTZ camera, then click  button to end. The movement of the PTZ is recorded as the pattern.

5.2.4. Scan Line Setting

Steps:

1. Select a number, use the directional button to wheel the camera to the location where you want to set starting point, click  button.
2. Wheel the camera to the location where you want to set end point, click  button.
3. Click  button, the PTZ camera will move from the starting point to the end point.

6. Channel Manage

6.1. Channel Config

Purpose:

Before you can get live video or record the video files, you should add the network cameras to the connection list of the device.

Before you start:

Ensure the network connection is valid and correct, and the IP camera to add has already been activated.

6.1.1. Search Device

Steps:

1. Click  icon, enter into the Channel Config interface, as shown in figure 6.1.

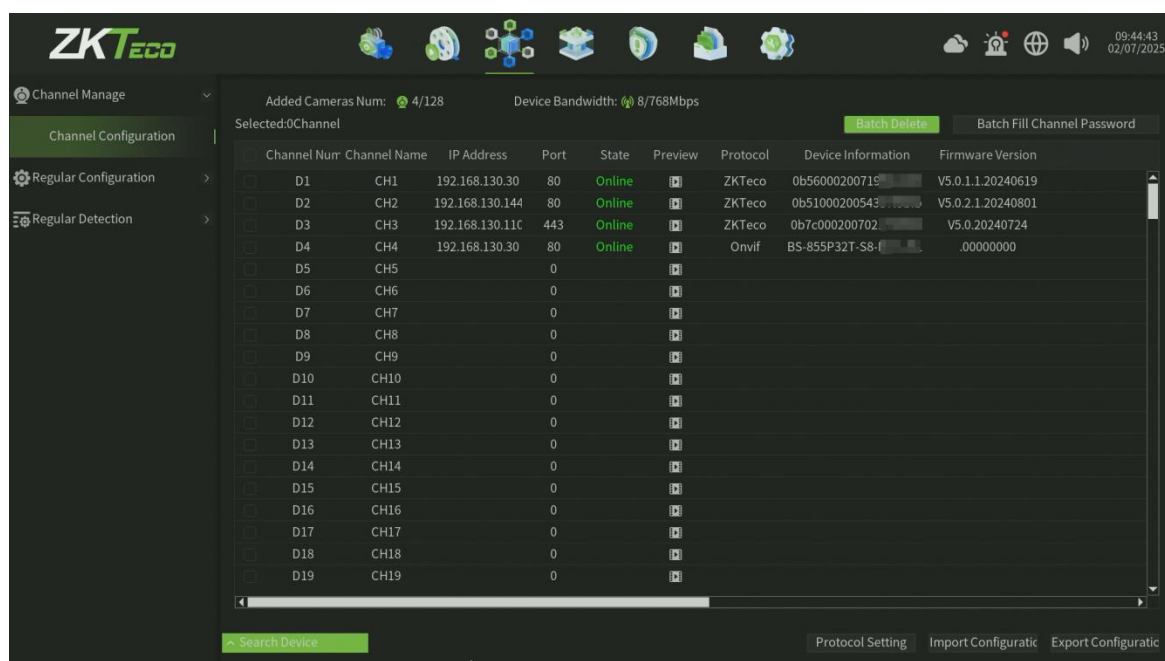


Figure 6.1. Quick Adding IP Camera Interface

2. Click **Search Device** button, it will automatically search all the IP cameras in the same network with NVR.
3. After that, Also you can select the different Protocol Type (**ZKTeco**, **ONVIF**) firstly, then click **search**.
4. After the Stop time out, you can select the camera you want to add into NVR, or search again. By the way, you also can choose the Add method (**Do not modify IP address**, **Force Modify IP Address**, **Modify IP address when unable connected**), as shown in figure 6.2

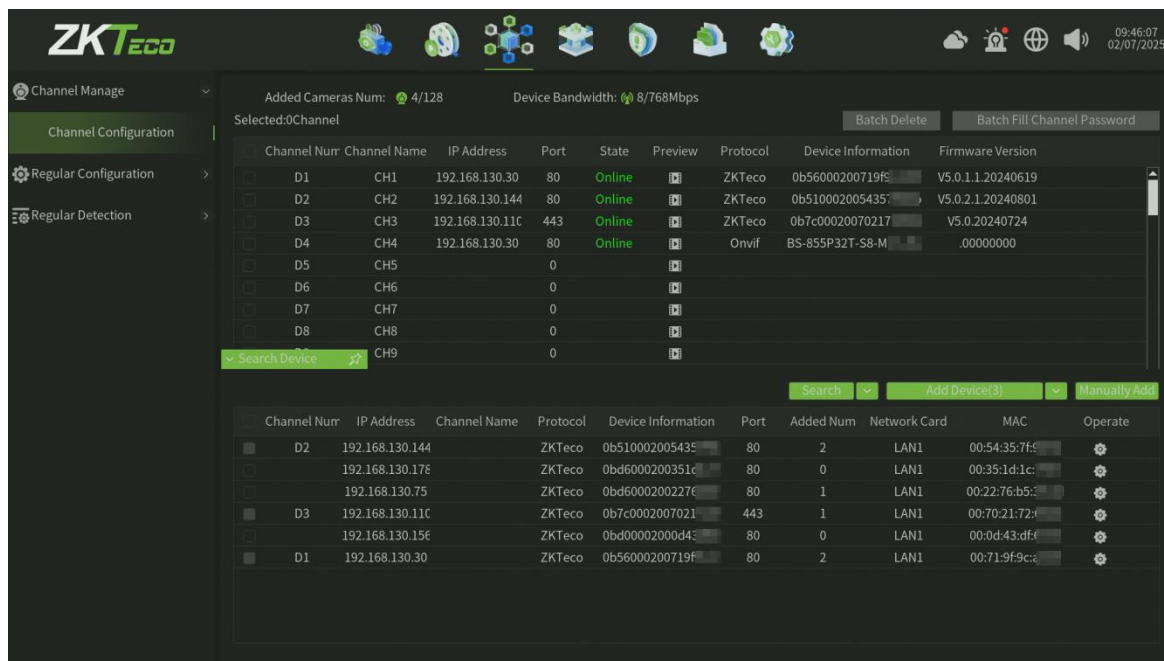


Figure 6.2 Adding IP Camera with conditions

5. Before adding the camera, note to input the camera **username** and **password**;
6. Or you can choose to **Manually Add** the IP camera by editing the parameters in the corresponding text field and then click the **OK** button to add it, as shown in figure 6.3.

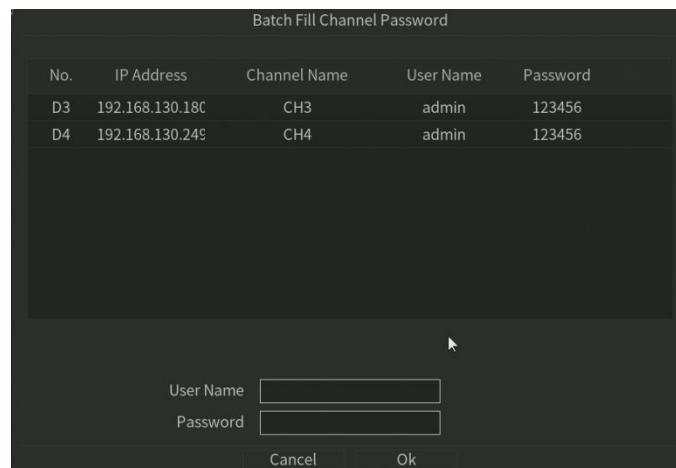
The 'Manually Add' dialog box contains the following fields and options:

- Channel: D1 (dropdown menu)
- Enable Channel: ☒ (checkbox)
- Device Protocol: ZKTeco (dropdown menu)
- Device IP: 192.168.130.210 (text field)
- Port: 80 (text field)
- Device Information: 0b56000200714d3 (text field)
- Network Type: TCP (dropdown menu)
- User Name: admin (text field)
- Password: ***** (password field)

At the bottom, there are 'Cancel' and 'Ok' buttons.

Figure 6.3 Manually Adding IP Camera Interface

7. You can click **Batch Fill Channel Password** button to input the IP Camera username and password batchly,as shown in figure6.4.



The dialog box titled "Batch Fill Channel Password" contains a table with the following data:

No.	IP Address	Channel Name	User Name	Password
D3	192.168.130.180	CH3	admin	123456
D4	192.168.130.245	CH4	admin	123456

Below the table are input fields for "User Name" and "Password", and "Cancel" and "Ok" buttons at the bottom.

Figure 6.4 Batch Fill IP Camera username and Password

8. After adding the IP Camera, if you want delete some channels ,you can select the check -box of channels and then click the Batch Delete button and click OK button to confirm,as shown in figure 6.5.

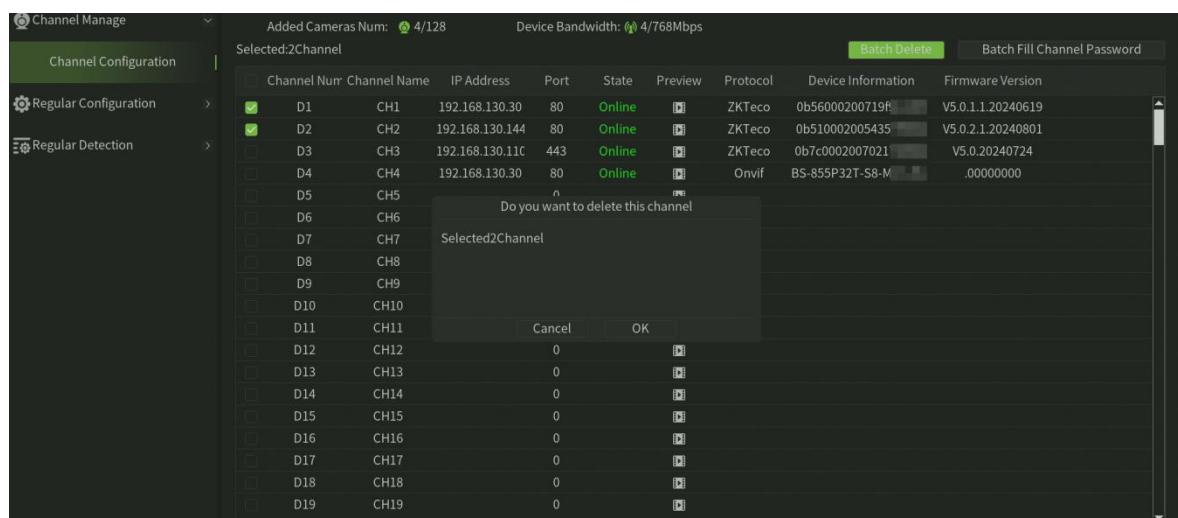


Figure 6.5 Batch Delete IP Camera

6.2. Regular Configuration

6.2.1. OSD Setting

Purpose:

You can configure the OSD (On-screen Display) settings for the camera, including camera name, date /time, etc.

Steps:

1. Enter the OSD Setting interface. Click **Channel > Regular config > OSD Setting**, as shown in figure 6.6.

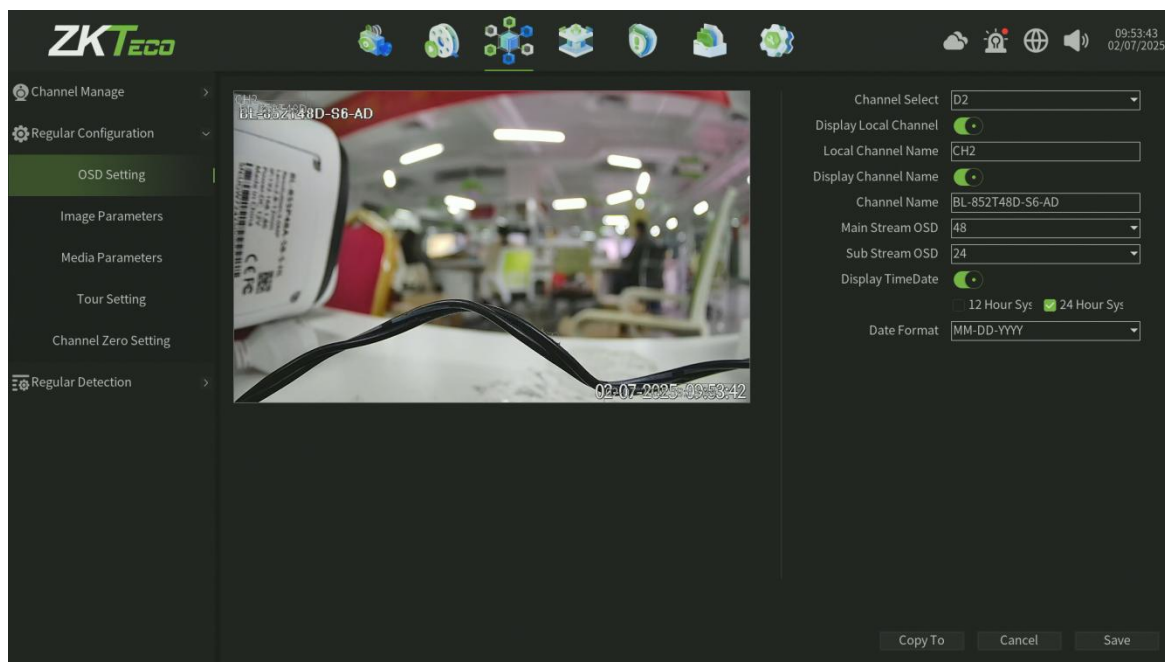


Figure 6.6 OSD Setting interface

2. Select the channel of camera to configure OSD settings.
3. Local Channel Name setting.
 - 1) Check the check-box before **Display Local Chan**, enter the **Local Chan Name** in the text field.
 - 2) Click **Save** button, the name that enter will show on the screen. You can use the mouse to click and drag the text frame on the window to adjust the OSD position.
4. IP Camera Name setting (configure camera interface).
 - 1) Check the check-box before **Display Chan Name**, then enter the **Channel Name** in the text field.
 - 2) Click **Save** button, the name that enter will show on the screen, you can use the mouse to click and drag the text frame on the window to adjust the OSD position.
5. IP camera TimeDate setting (configure camera interface).
 - 1) Check the check-box before **Display TimeDate**.
 - 2) Select the Date & Time Format (should be supported by the camera).

6.2.2. Image Parameters

Purpose:

You can configure Image Parameters:

1. **Basic Param:** Adjust the Brightness, Contrast, Saturation and Hue of the channel, as shown in figure 6.7.

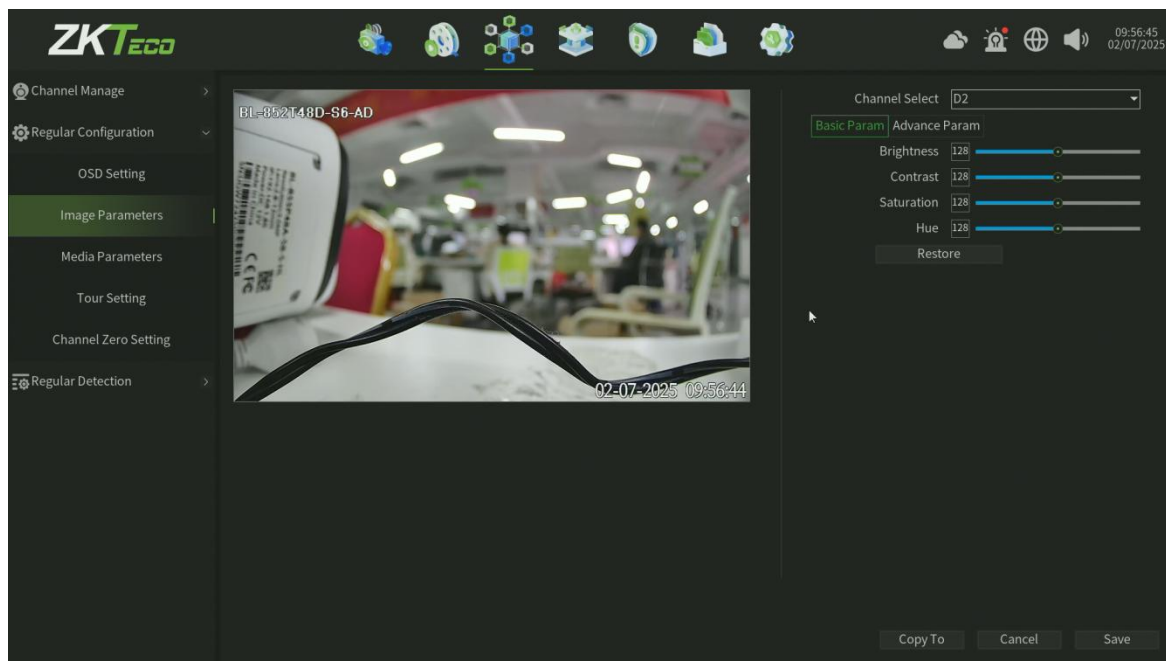


Figure 6.7 Image Base Param Setting

2. **Advance Parm:** Adjust the Image Mode, Mirror, WDR, 3DNR, Sharpness, Public Parameters, Exposure, Gamma, as shown in figure 6.8.

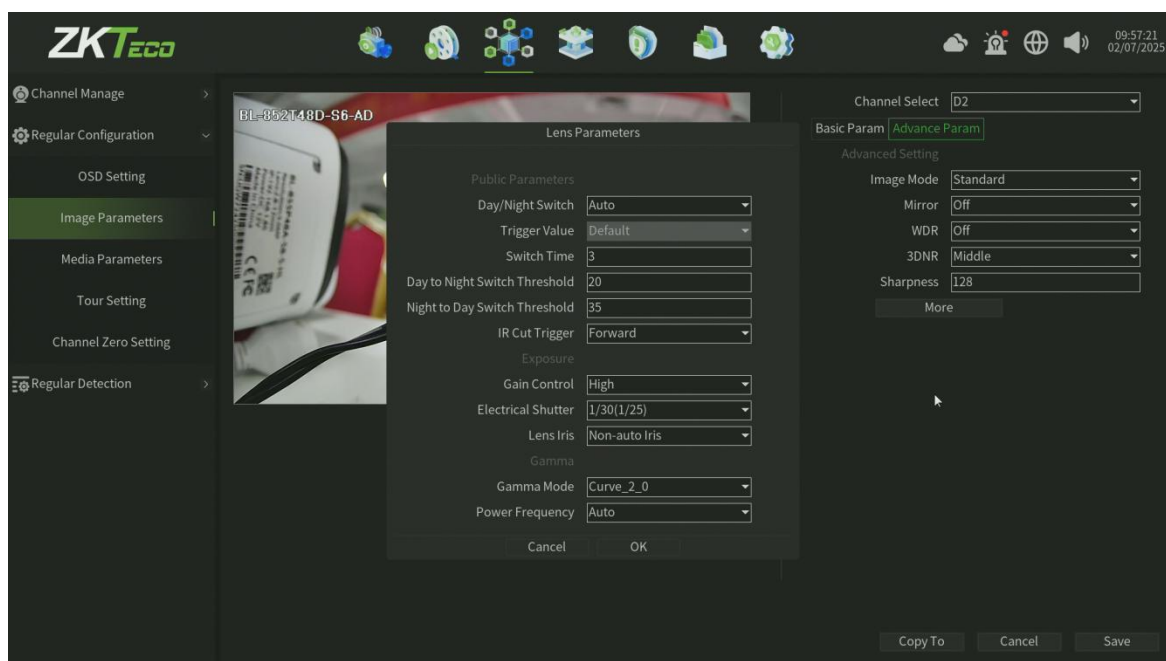


Figure 6.8 Image Advance Param Setting

3. Click **Save** button to save the settings.

6.2.3. Media Parameters

Purpose:

Sometimes you need to edit the channel Camera recording parameters for better image.

Steps:

1. Enter the media parameters interface, as shown in figure 6.9.
2. Then you can configure the Main Stream and Second Stream or the third Stream(need supported by camera).

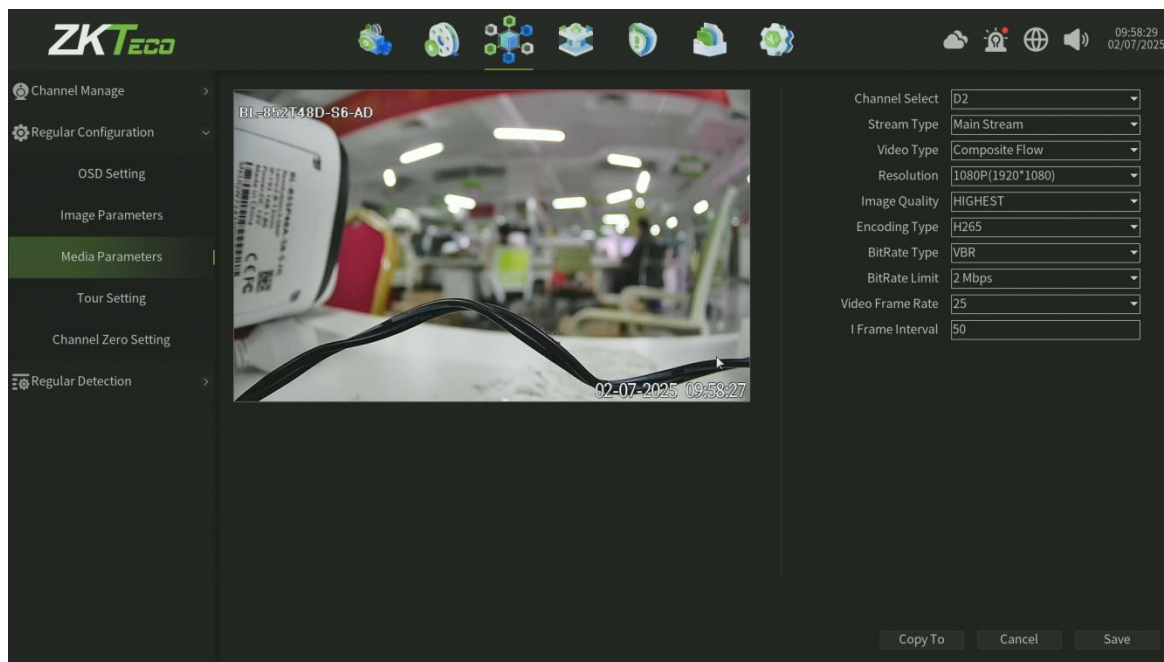


Figure 6.9 Media Parameter Setting

3. Set the video parameter:
 - **Channel Select:** Select the channel of camera to configure the encoding type.
 - **Stream Type:** Select Main Stream or Sub Stream.
 - **Video type:** Select the video type.
 - **Resolution:** Select the video resolution.
 - **Image Quality:** Select the Image quality when VBR (Variable bite rate).
 - **Encoding type:** Select H.264 or H.265.
 - **BitRate Type:** CBR & VBR can be selected.
 - **Bitrate Limit:** Set the Bit-Rate.
 - **Video Frame Rate:** Select the frame rate.
 - **I Frame Interval :** select the i frame interval.
4. Click **Save** button to save the setting.

6.2.4. Tour Setting

Purpose:

If you need to open the Tour preview function, can configure this setting.

Steps:

1. Enter the Tour Setting interface, as shown in figure 6.10.
2. **Create** a TourPreview **Group**, then select the **channel** to the group.
3. You can set the **Switch Time** for Tour Preview
4. Click **Save** button to save the setting.

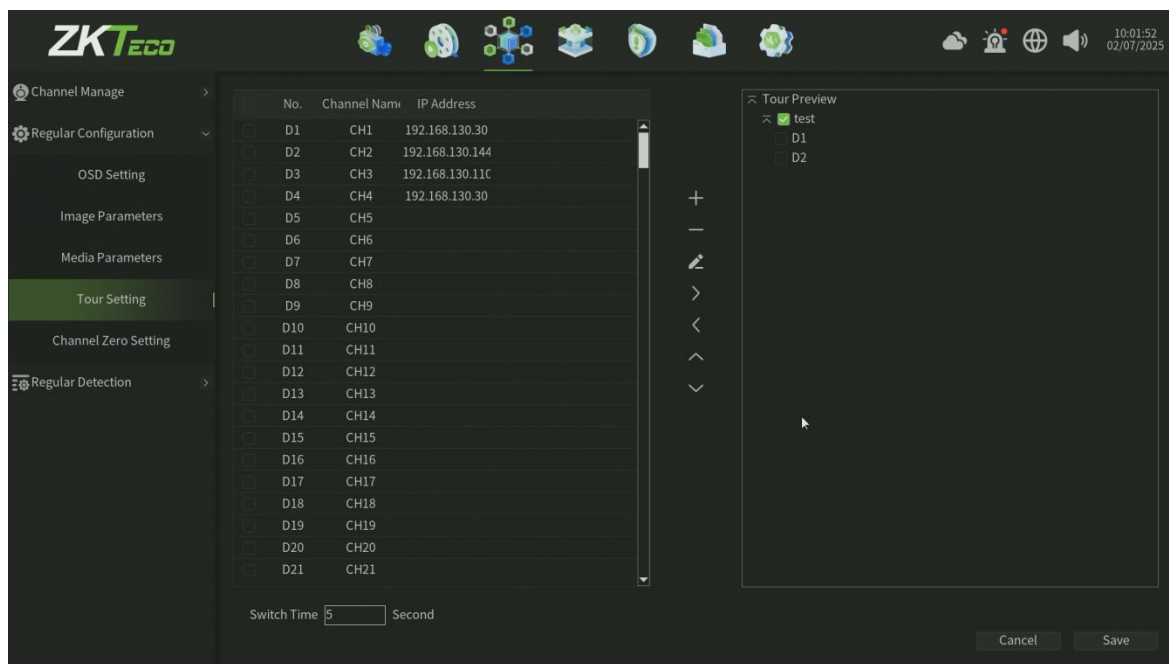


Figure 6.10 Tour Setting Interface

6.2.5. Channel Zero Setting

Purpose:

You can configure the **Channel Zero Setting** Function for the low bandwidth environment in this Setting page.

Steps:

1. Enable the Channel Zero Setting interface, as shown in figure 6.11.
2. Setting the Resolution,Encoding Type,I Frame Interval,Frame Rate,Image Quality,BitRate Type,BitRate.
3. You can choose the 1 split or 4 split screen.
4. Click **Save** button to save the setting.

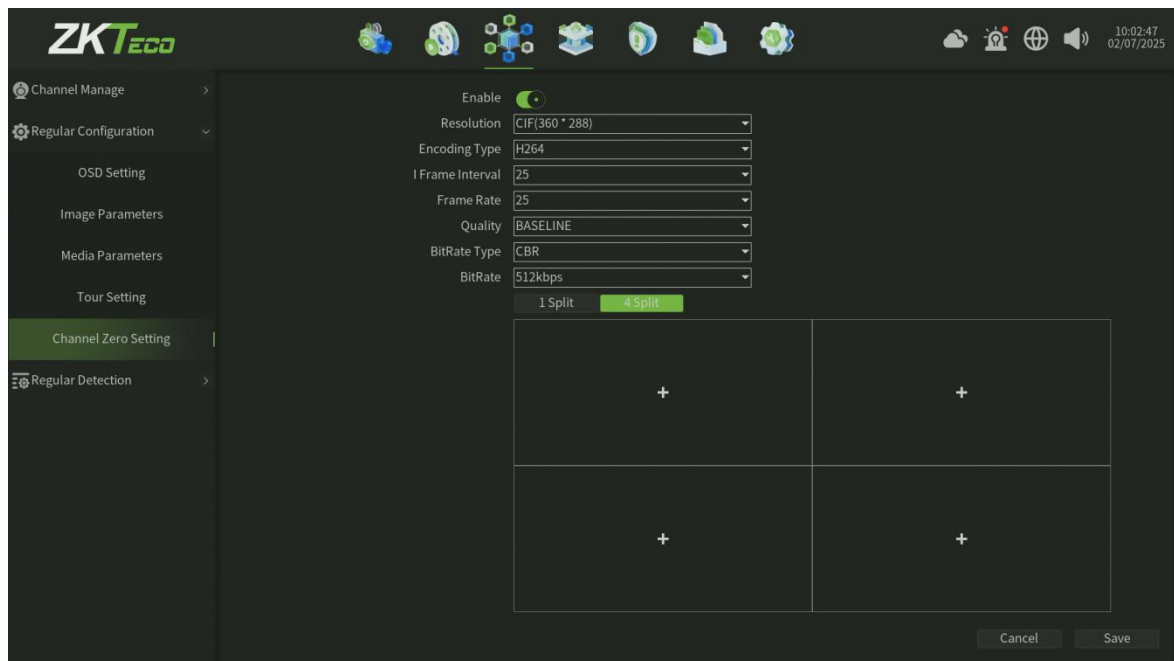


Figure 6.11 Channel Zero Setting

6.3. Regular Detection

6.3.1. Video Shelter

Purpose:

Trigger alarm when the lens is covered and take alarm response action(s).

Steps:

1. Enter Video Mask Alarm interface of channel parameter and choose a channel you want to setup Video Mask Alarm, as shown in figure 6.12.

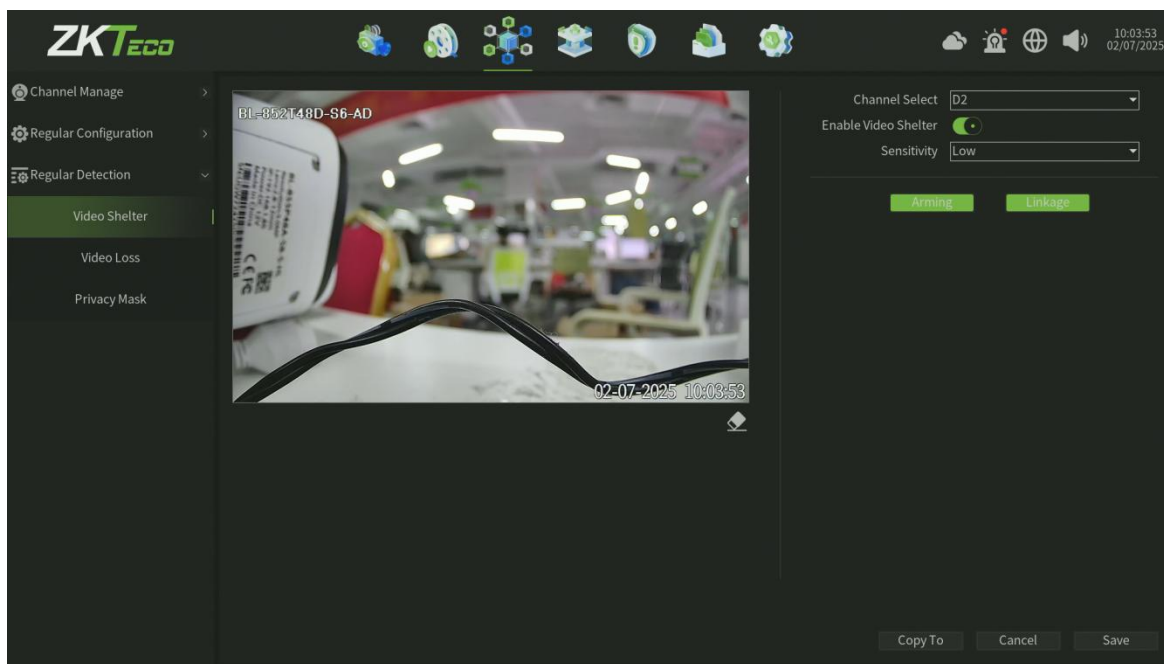


Figure6.12 Video Tampering

2. Set the video mask alarm handling action of the channel.
 - 1) Check the check-box of **Enable Video Shelter**.
 - 2) Select the sensitivity.
 - 3) Use the mouse to draw an area you want to detect video shelter.
3. Click Arming button, Setup the Time Setting of the channel, as shown in figure 6.13.



Figure 6.13 Time Setting

4. Click Linkage button, Setup the linkage operation of the function, as shown in figure 6.14.

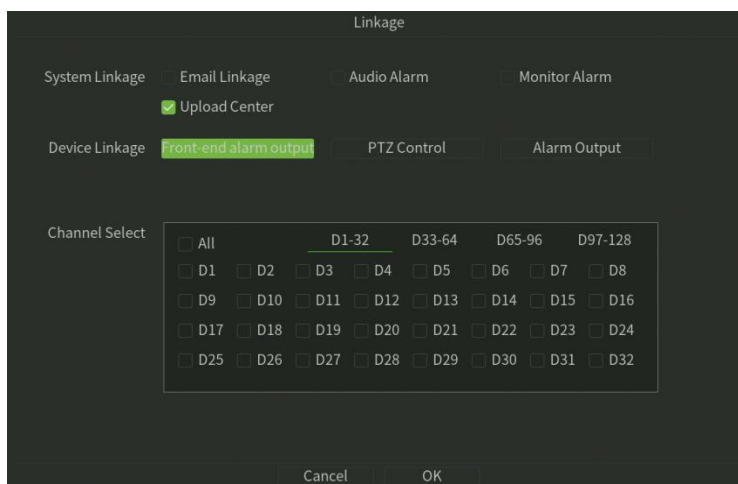


Figure 6.14 Linkage

5. Click **Save** button to save the settings.

6.3.2. Video Lost

Purpose:

Trigger alarm when occur to Video Lost .

Steps:

1. Enter Video Lost interface of Regular Detection and select a channel you want to setup Video Lost Alarm, as shown in figure 6.15

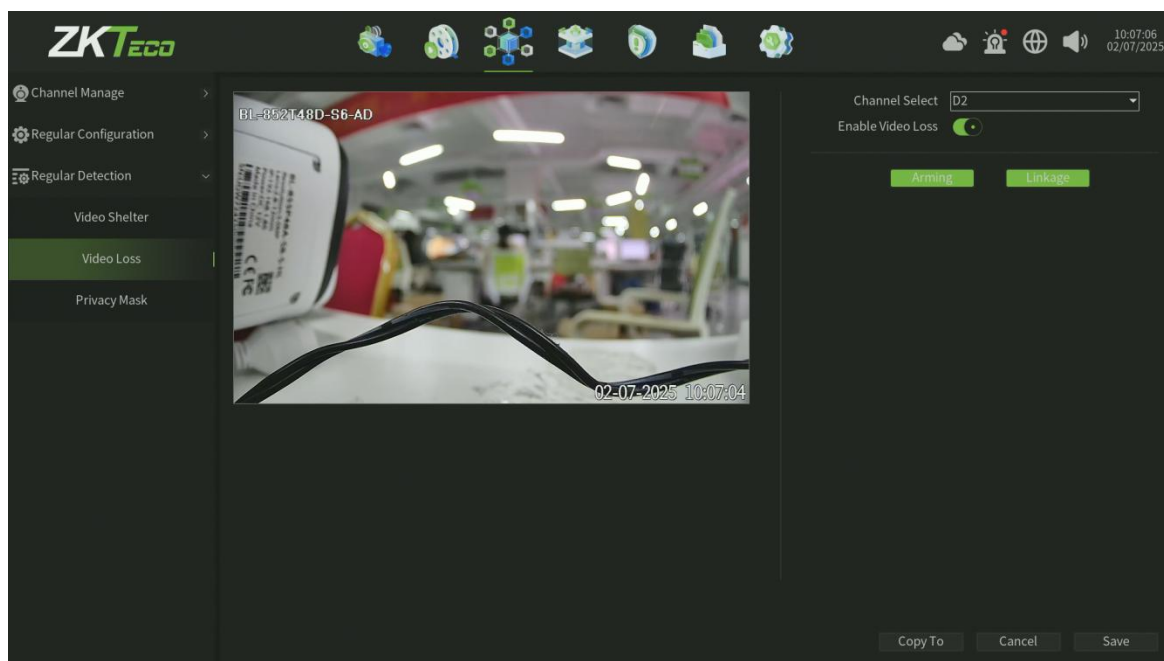


Figure 6.15 Video Loss

2. Click Arming button, Setup the Time Setting of the channel, as shown in figure 6.16.

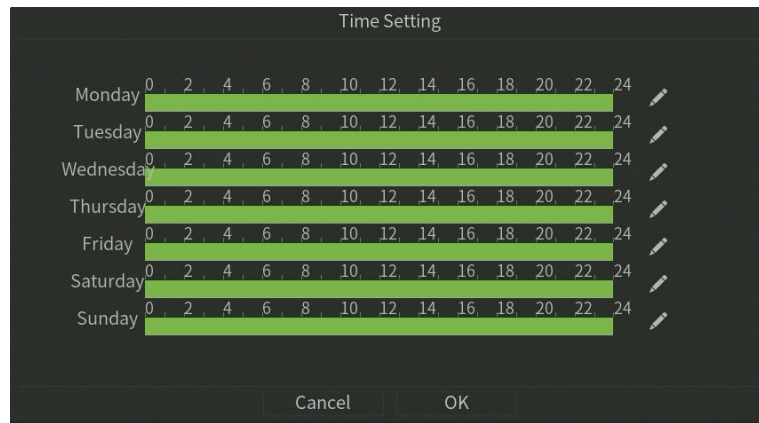


Figure 6.16 Time Setting

3. Click Linkage button, Setup the linkage operation of the function, as shown in figure 6.17.

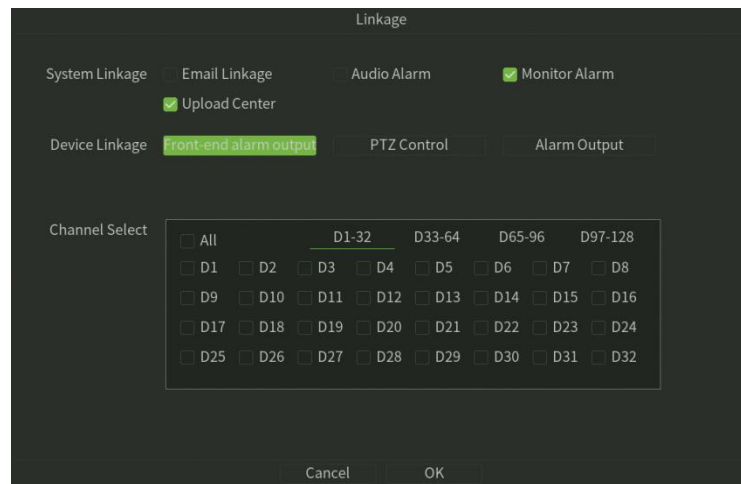


Figure 6.17 Linkage

4. Click **Save** button to save the settings.

6.3.3. Privacy Mask

Purpose:

You are allowed to configure the four-sided privacy mask zones that cannot be viewed by the operator. The privacy mask can prevent certain surveillance areas to be viewed or recorded(the privacy area just display on the preview interface,the record can not save the privacy area image).

Steps:

1. Enter the **Privacy Mask** interface, as shown in figure 6.18.

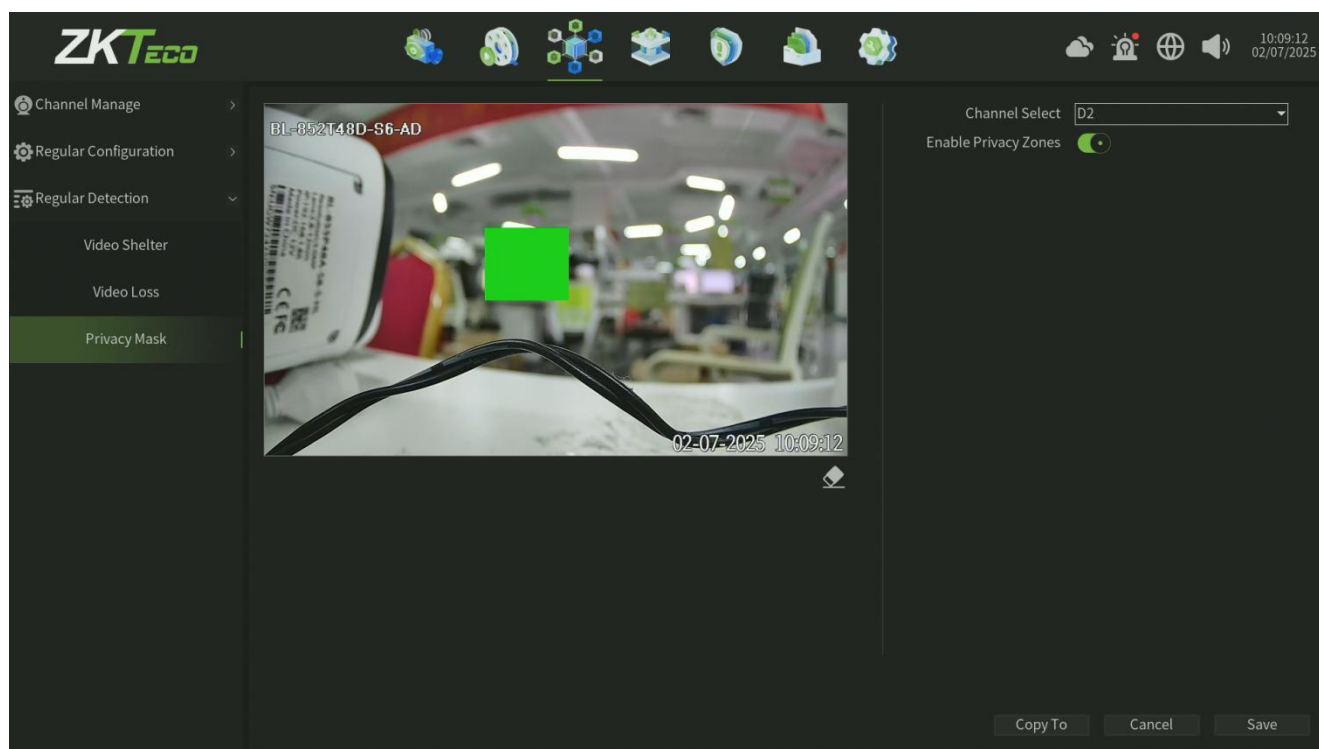


Figure 6.18 Privacy Mask

2. Select the channel to set privacy mask.
3. Click the check-box of **Enable Privacy Zones** to enable this feature.
4. Use the mouse to draw a zone on the window, up to 4 privacy mask zones can be configured and the size of each area can be adjusted.
5. Click the **Save** button to save the settings.

Note: Onvif protocol can't support privacy mask.

7. Intelligence

7.1. Intelligent Function

Smart analysis is the vital function of Intelligent NVR, and this chapter will give clear and specific instructions in terms of intelligent performance, process and parameter configuration.

7.1.1. Crowd Situation

7.1.1.1. Target Counting

Purpose:

The purpose of this page is to configure the relevant parameters so that the target count alarm occurs when a moving object whose proportion is larger strides the set detection line to obtain the number set by the detection rules, as shown in figure 7.1, The following describes the parameters of the pages on the set method.

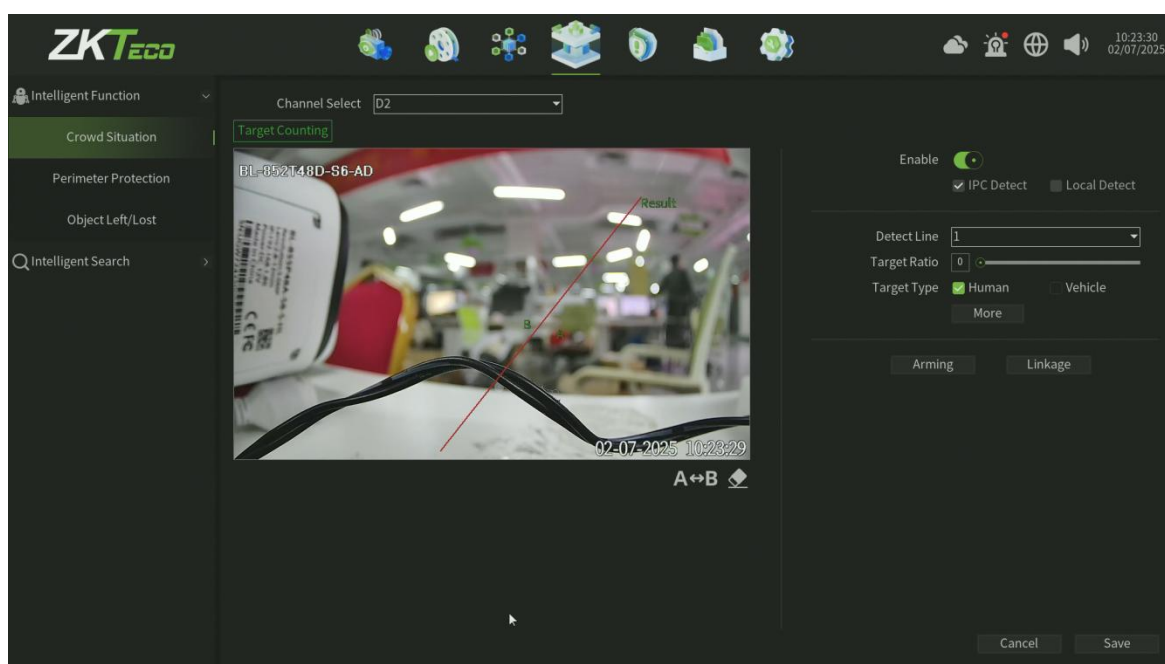


Figure7.1 Target Counting

Steps:

1. **Channel Select:** Select the channel.
2. **Enable:** Check to enable the target count.
3. **Detect Mode:** The default is "IPC Detect", when NVR support smart (smart detection) can switch mode to "Local Detect".
4. **A<—>B:** A / B area location on both sides of detection line can be exchanged.
5. **Detection line:** Each chan can be set up to four detection lines, directly on the screen drag the left mouse button to draw the line, release the left button, right-click to complete the drawing line, the completion of the detection line on both sides were AB Area, upper side display the statistical results.
6. **Target Ratio:** Set the proportion of the target in the whole screen, the default value is 0, which means that any proportion will capture the trigger and is regarded as the most accurate.
7. **Target Type:** The detection based on different algorithms is divided into **Human** shape detection and **Vehicle** shape detection.

Target Count Param

The following describes the parameters of the pages on the set method. as shown in figure 7.2.

The screenshot shows a configuration window titled "Target Count Param". It contains three main sections:

- Statistical Method:**
 - A->B: ☒ Increase Count
 - B->A: ☐ Increase Count ☐ Decrease Count ☒ Ignore
- Flow Count:**
 - Toggle: ☒
 - Interval:
 - Threshold:
- Total Count:**
 - Toggle: ☒
 - Time:
 - Threshold:

At the bottom are "OK" and "Cancel" buttons.

Figure 7.2 Target Count Param

8. Statistical Method

- **A-> B:** Acquiesce is A area to B area to increase counting, A / B area location on both sides of detection line can be exchanged.
- **B-> A:** Acquiesce is B area to A area to increase counting or Reduce Count or Ignore, A / B area location on both sides of detection line can be exchanged.

9. **Flow Count:** Enable the Flow Count function, You can set an alarm to trigger when the count reaches a certain threshold within a certain period of time

- **Interval:** Setup the detect time under the Flow Count function.
- **Threshold:** Setup the Count Threshold under the Flow Count function.

10. **Total Count:** Enable the Total Count function, You can set an alarm to be triggered when the count reaches a certain threshold within a certain time interval

- **Time:** Setup the time Sechedule under the Flow Count function.
- **Threshold:** Setup the Count Threshold under the Total Count function.

11. **Arming:** Click Arming button, Setup the Time Setting of the channel, as shown in figure 7.3.

The screenshot shows a configuration window titled "Time Setting". It displays a weekly schedule with days of the week (Monday through Sunday) listed on the left. Each day has a corresponding row of time slots (0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24) with green bars indicating active periods. There are edit icons (pencil) next to each row. At the bottom are "Cancel" and "OK" buttons.

Figure 7.3 Time Setting

12. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 7.4.

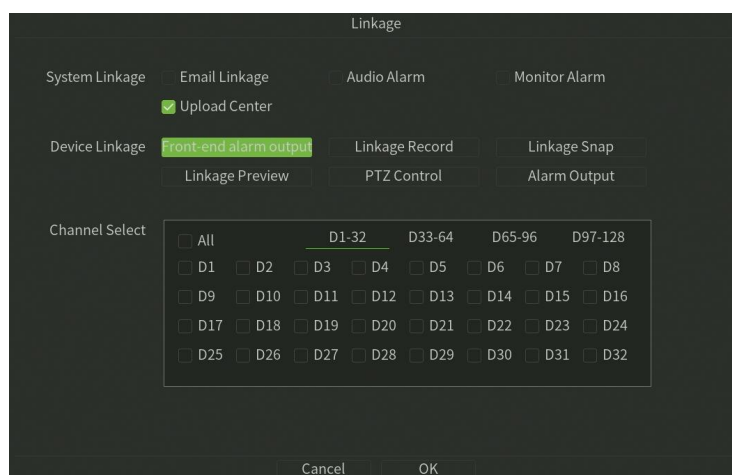


Figure 7.4 Linkage

13. **Save:** Click **Save** button to save the settings.

7.1.2. Perimeter Protection

7.1.2.1. Motion Detection

Purpose:

Motion detect interface is shown in figure 7.5, can set the related parameters of motion detection.

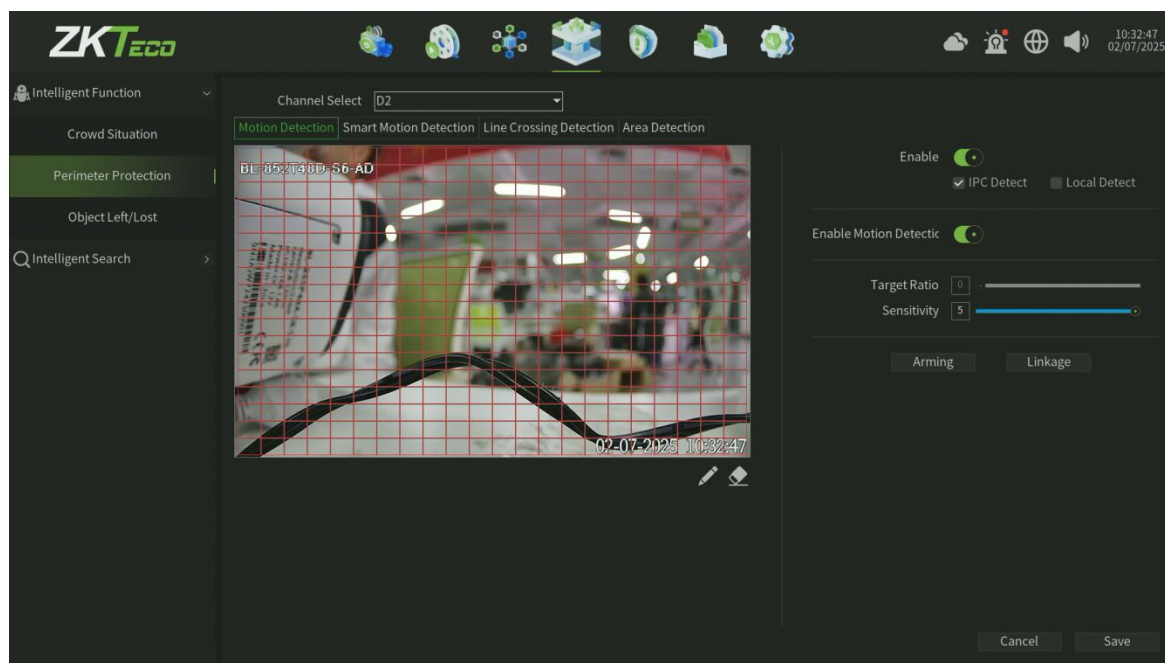


Figure 7.5 Motion Detect

Steps:

1. **Channel Select:** Select the channel.
2. **Enable:** Check to enable the Motion Detect.
3. **Detect Mode:** The default is "IPC Detect", when NVR support smart (smart detection) can switch mode to "Local Detect".

4. **Enable Motion Detection Log:** Check to enable the Motion Detection Log pushed.
5. **Zone setting:** One click  and hold the left mouse button directly in the picture, drag to the area that needs motion detection, the red plaid area is the selected motion detection area.
6. **Clear all:** One click  to clear the motion detect area on the screen set before.
7. **Target Ratio:** Set the proportion of the target in the whole screen, the default value is 0, which means that any proportion will capture the trigger and is regarded as the most accurate.
8. **Sensitivity:** Can increase the accuracy of the motion detection trigger after setting up reasonably.
9. **Arming:** Click Arming button, Setup the Time Setting of the channel, as shown in figure 7.6.



Figure 7.6 Time Setting

10. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 7.7.

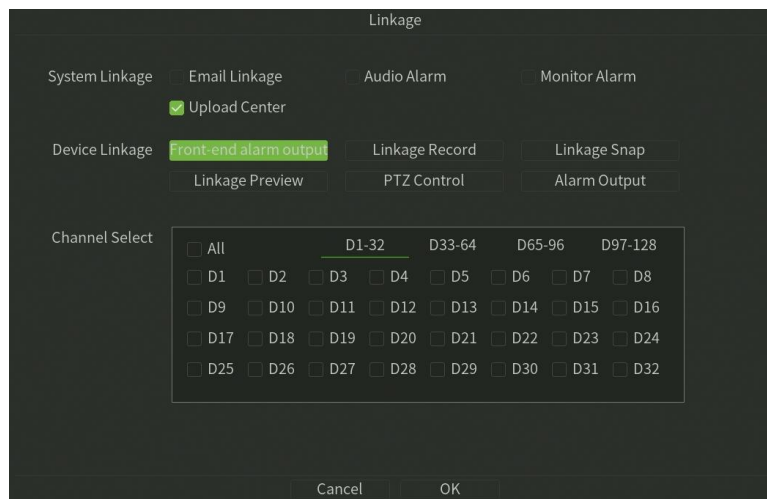


Figure 7.7 Linkage

11. **Save:** Click **Save** button to save the setting.

7.1.2.2. Smart Motion Detection

Purpose:

Smart Motion detect interface is shown in figure 7.8, Different from Motion Detect, it supports a Vehicle-Human detection algorithm, can set the related parameters of motion detection.

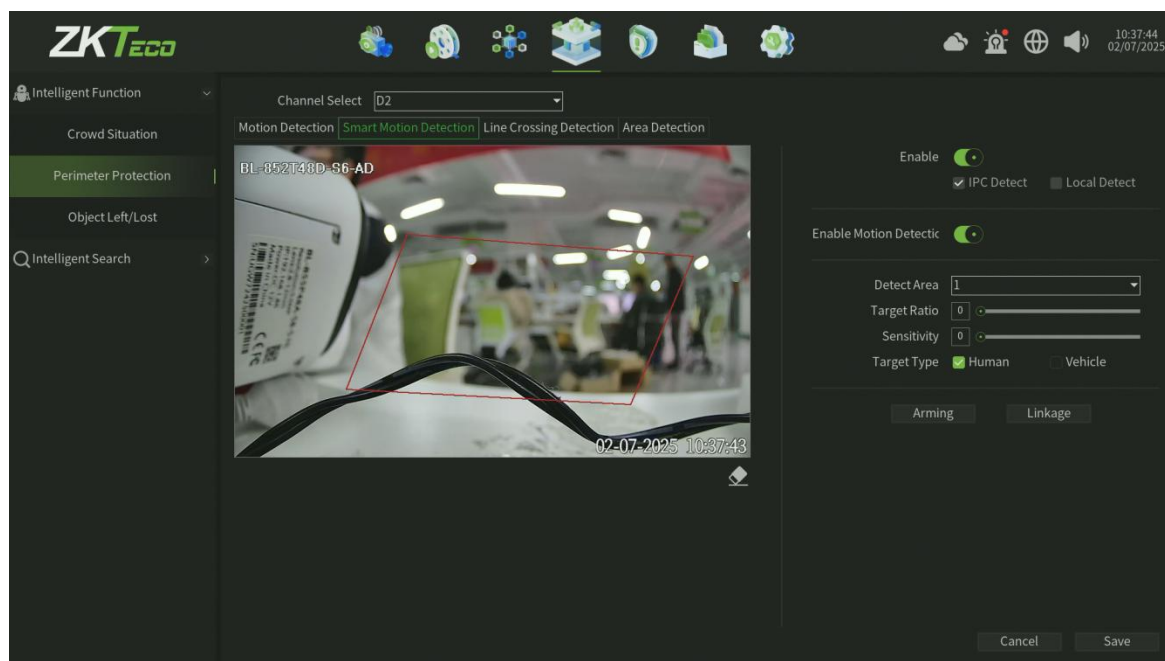


Figure 7.8 Intelligent Motion Detect

Steps:

1. **Channel Select:** Select the channel.
2. **Enable:** Check to enable the Intelligent Motion Detect.
3. **Detect Mode:** The default is "IPC Detect", when NVR support smart (smart detection) can switch mode to "Local Detect".
4. **Enable Motion Detection Log:** Check to enable the Motion Detection Log pushed.
5. **Detect Area:** Each chan can be set up to four detection lines, directly on the screen drag the left mouse button to draw the line, release the left button, right-click to complete the drawing line, the completion of the detection line on both sides were AB Area, upper side display the statistical results.
6. **Clear all:** One click  to clear the motion detection area on the screen set before.
7. **Target Ratio:** Set the proportion of the target in the whole screen, the default value is 0, which means that any proportion will capture the trigger and is regarded as the most accurate.
8. **Sensitivity:** Can increase the accuracy of the motion detection trigger after setting up reasonably.
9. **Target Type:** The detection based on different algorithms is divided into **Human** shape detection and **Vehicle** shape detection.

10. **Arming:** Click Arming button, Setup the Time Setting of the channel, as shown in figure 7.9.



Figure 7.9 Time Setting

11. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 7.10.

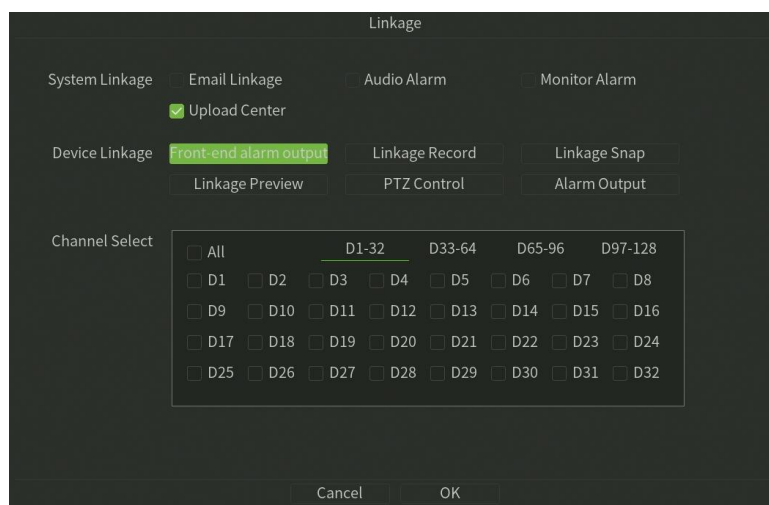


Figure 7.10 Linkage

12. **Save:** Click **Save** button to save the setting.

7.1.2.3. Line Crossing Detection

Purpose:

The purpose of this page is to configure the relevant parameters, so that more than the proportion of moving objects, across the set of test lines, the virtual alarm immediately alarm line. The following describes the main parameters of the page setting method, as shown in figure 7.11.

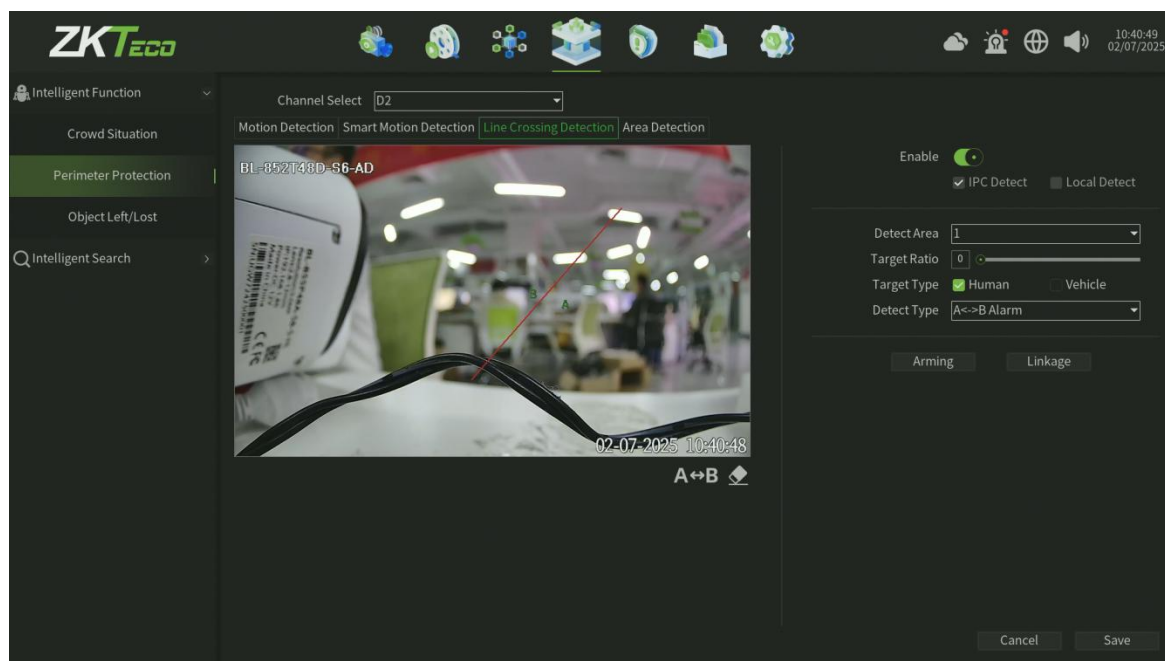


Figure 7.11 Tripwire Detection

Steps:

1. **Channel Select:** Select the channel.
2. **Enable:** Check to enable the Tripwire Detection.
3. **Detect Mode:** The default is "IPC Detect", when NVR support smart (smart detection) can switch mode to "Local Detect".
4. **Detection Area:** Each chan can be set up to four detection lines, directly on the screen drag the left mouse button to draw the line, release the left button, right-click to complete the drawing line, the completion of the detection line on both sides were AB Area, upper side display the statistical results.
5. **A<->B:** A / B area location on both sides of detection line can be exchanged.
6. **Clear all:** One click  to clear the motion detection area on the screen set before.
7. **Target Ratio:** Set the proportion of the target in the whole screen, the default value is 0, which means that any proportion will capture the trigger and is regarded as the most accurate.
8. **Target Type:** The detection based on different algorithms is divided into **Human** shape detection and **Vehicle** shape detection.
9. **Detect Type:** There are two types: "A-> B Alarm" and "A <-> B Alarm".

10. **Arming:** Click Arming button, Setup the Time Setting of the channel, as shown in figure 7.12.



Figure 7.12 Time Setting

11. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 7.13.

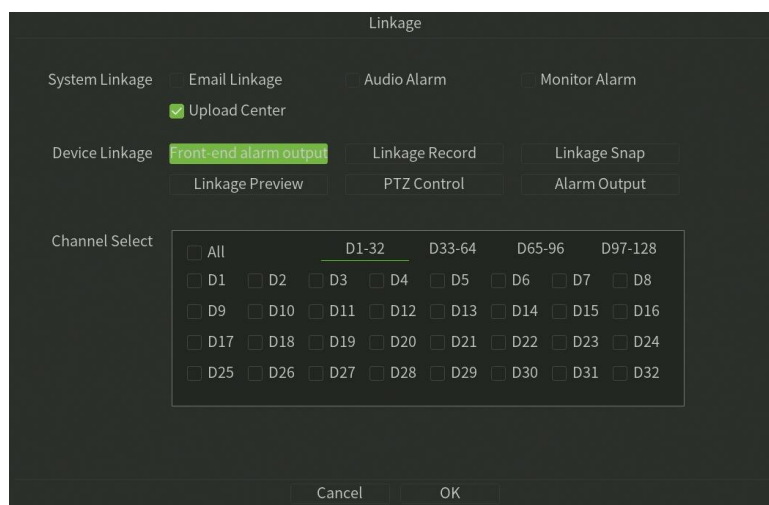


Figure 7.13 Linkage

12. **Save:** Click **Save** button to save the setting.

7.1.2.4. Area Detection

Purpose:

The purpose of this page is to configure the relevant parameters, so that more than the proportion of moving objects, enter / leave / hovering in the set detection area, over time detection zone detection alarm occurs, the following page describes the main parameters of the setting method, as shown in figure 7.14.

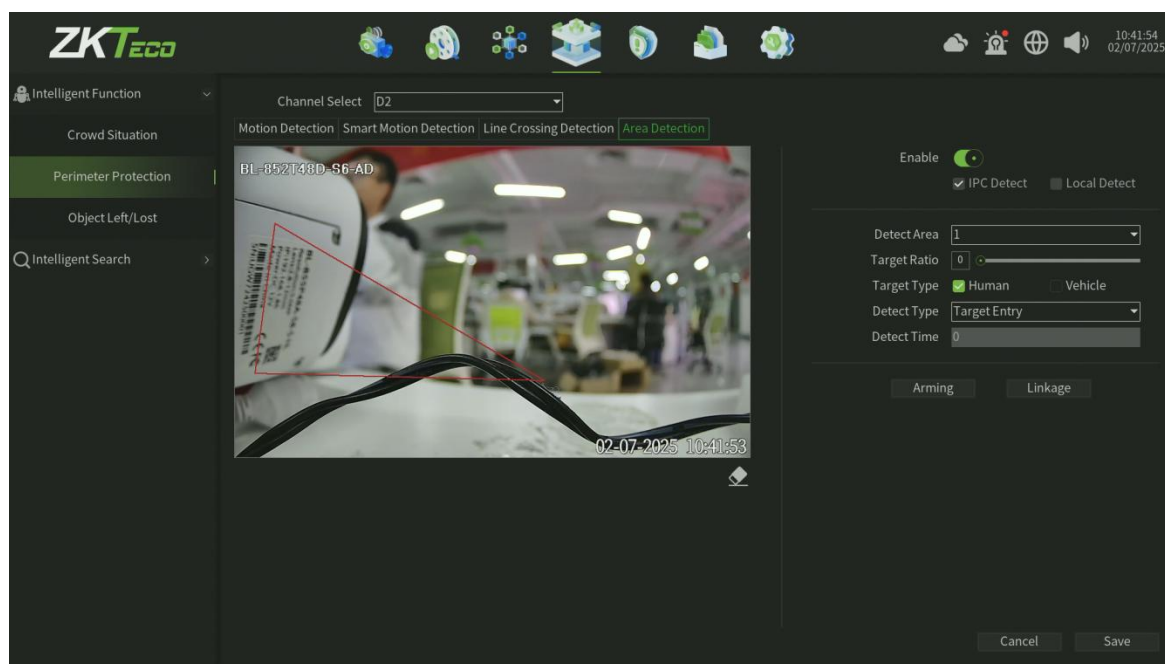


Figure 7.14 Area Detection

Steps:

1. **Channel Select:** Select the channel.
2. **Enable:** Check to enable the Area Detect.
3. **Detect Mode:** The default is "IPC Detect", when NVR support smart (smart detection) can switch mode to "Local Detect".
4. **Detection Area:** Each chan can be set up to four detection lines, directly on the screen drag the left mouse button to draw the line, release the left button, right-click to complete the drawing line, the completion of the detection line on both sides were AB Area, upper side display the statistical results.
5. **Clear all:** One click  to clear the motion detection area on the screen set before.
6. **Target Ratio:** Set the proportion of the target in the whole screen, the default value is 0, which means that any proportion will capture the trigger and is regarded as the most accurate.
7. **Target Type:** The detection based on different algorithms is divided into **Human** shape detection and **Vehicle** shape detection.
8. **Detect Type:** There are "Target Entry", "Target Leave", "Target Entry or Leave", "target Loiter" 4.
9. **Detect Time:** Set the Detect time for Target Loiter function Detect Type.

10. **Arming:** Click Arming button, Setup the Time Setting of the channel, as shown in figure 7.15.



Figure 7.15 Time Setting

11. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 7.16.

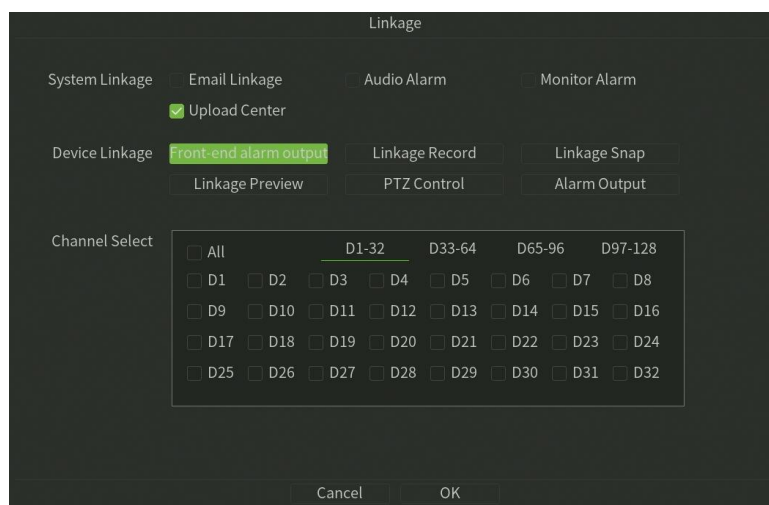


Figure 7.16 Linkage

12. **Save:** Click Save button to save the setting

7.1.3. Object Left/Lost

Purpose:

The purpose of this page is to configure the relevant parameters, so that more than the proportion of objects in the set detection area lost / left over time detection time that goods detection alarm, the following describes the main parameters on the page set method, As shown in figure 7.17.

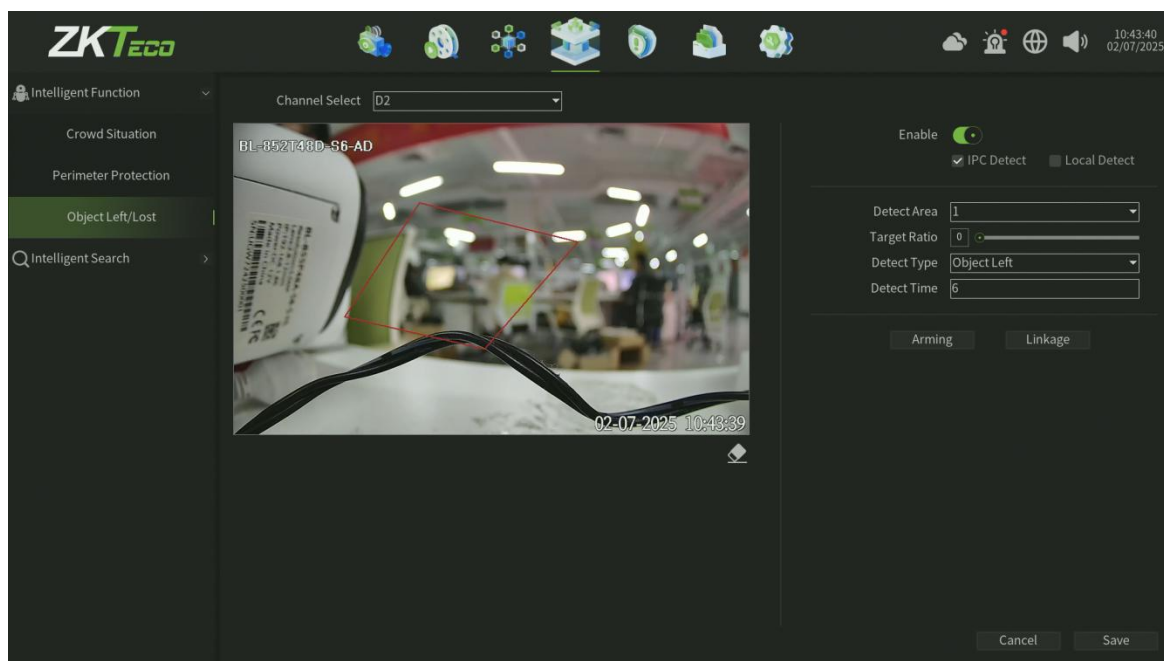


Figure 7.17 Object Left/Lost

Steps:

1. **Channel Select:** Select the channel.
2. **Enable:** Check to enable the Object Left/Lost function.
3. **Detect Mode:** The default is "IPC Detect", when NVR support smart (smart detection) can switch mode to "Local Detect".
4. **Detection Area:** Each chan can be set up to four detection lines, directly on the screen drag the left mouse button to draw the line, release the left button, right-click to complete the drawing line, the completion of the detection line on both sides were AB Area, upper side display the statistical results.
5. **Clear all:** One click  to clear the motion detection area on the screen set before.
6. **Target Ratio:** Set the proportion of the target in the whole screen, the default value is 0, which means that any proportion will capture the trigger and is regarded as the most accurate.
7. **Detect Type:** There are "Object Lost", "Object Left", "Object Lost or Left" three types.
8. **Detect Time:** Set the Detect time for different Detect Types.

9. **Arming:** Click Arming button, Setup the Time Setting of the channel, as shown in figure 7.18.



Figure 7.18 Time Setting

10. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 7.19.

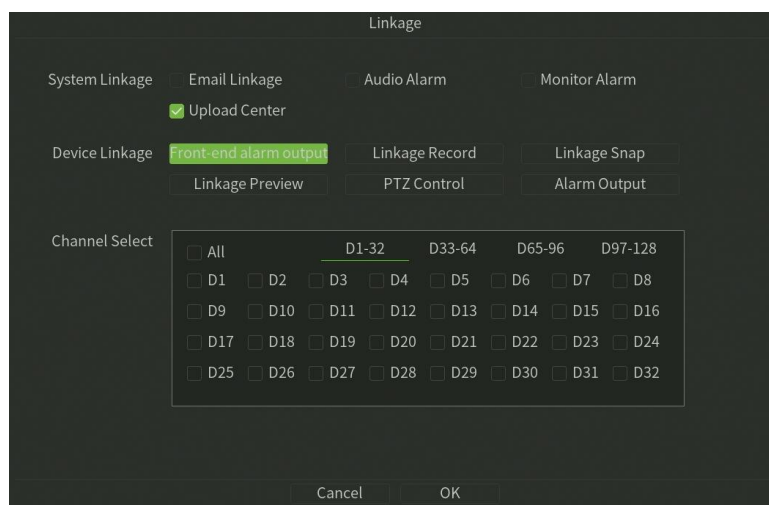


Figure 7.19 Linkage

11. **Save:** Click **Save** button to save the setting.

7.2. Intelligent Search

7.2.1. Record Search

Purpose:

If you want to find the different type record under the specific date, Search the Record in this interface, and the record files can be backup to various devices, such as USB devices (USB flash drives, USB HDDs), as shown in figure 7.20.

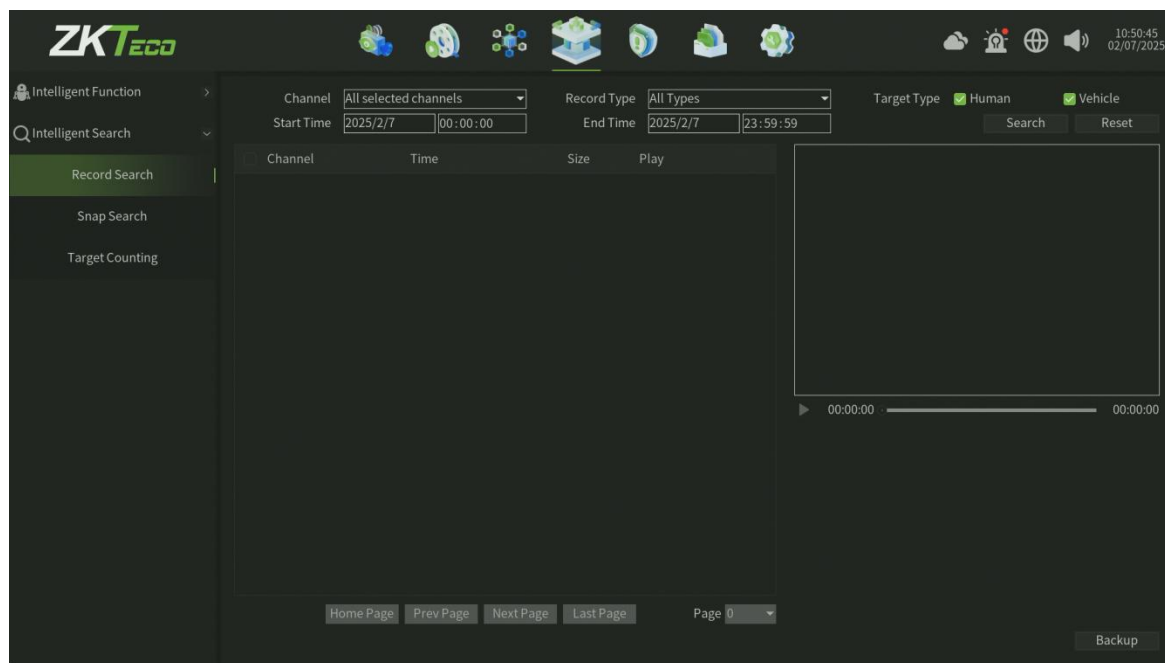


Figure 7.20 Record Search

Steps:

1. Select the **Channel** for Record Search and Backup.
2. Select the **Record Type**.
3. Set the **Start Time** and **End Time**.
4. Select **Target Type**: Human, Vehicle Type optional
5. Click **Search** button to find records and you can view the record on the right window.
6. Click **Reset** button can back to the default parameter of this interface.
7. Click  button can online view the record file.

8. Click **Backup** button to start the backup(Note need plug the USB disk),as shown in figure 7.21 and 7.22.

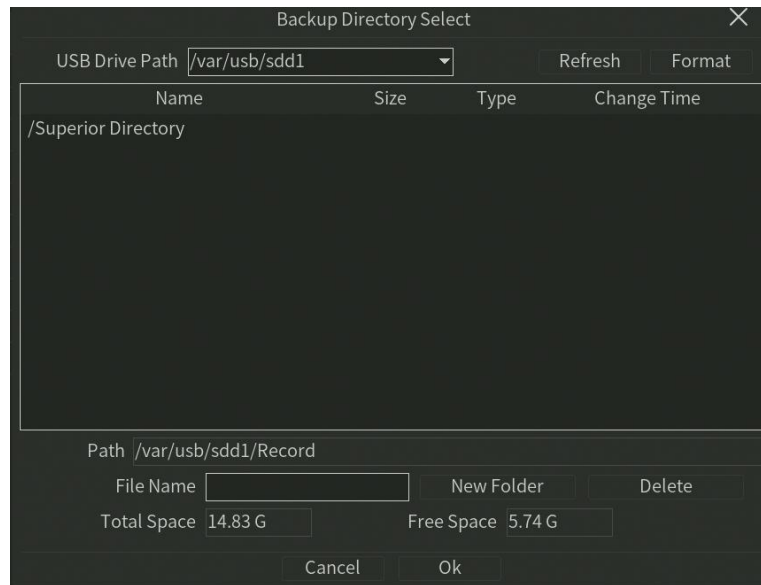


Figure 7.21 Record Backup Setting

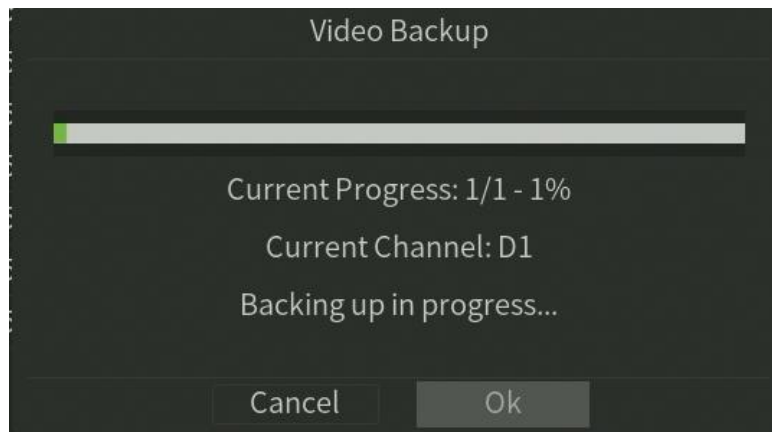


Figure 7.22 Record Backup

7.2.2. Snap Search

Purpose:

If you want to find the capture image under the specific date, Search the capture image in this interface, and the capture files can be backup to various devices, such as USB devices (USB flash drives, USB HDDs), as shown in figure 7.23.

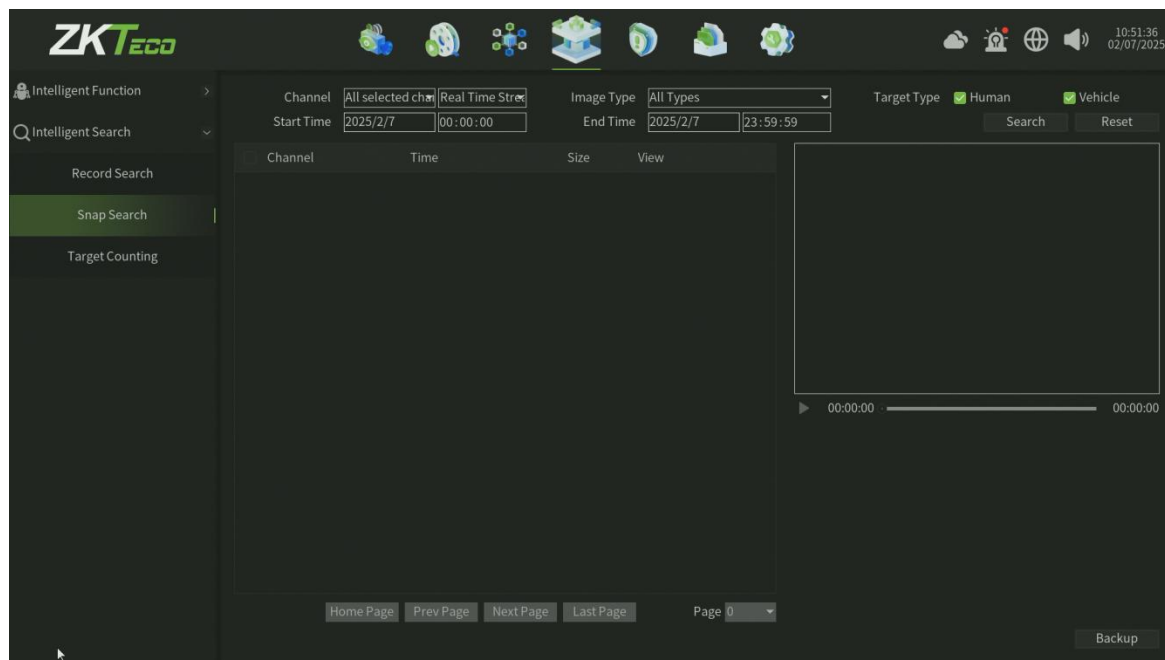


Figure 7.23 Snap Search

Steps:

1. Select the **Channel** for image Search and Backup.
2. Select the **ImageType**.
3. Set the **Start Time** and **End Time**.
4. Select **Target Type**: Human ,Vehicle Type optional
5. Click **Search** button to find image.
6. Click **Reset** button can back to the default parameter of this interface.
7. Click  button can online view the record around the capture time(only 30 seconds).
8. Click **Backup** button to start the backup(Note need plug the USB disk),as shown in figure 7.24 and 7.25.

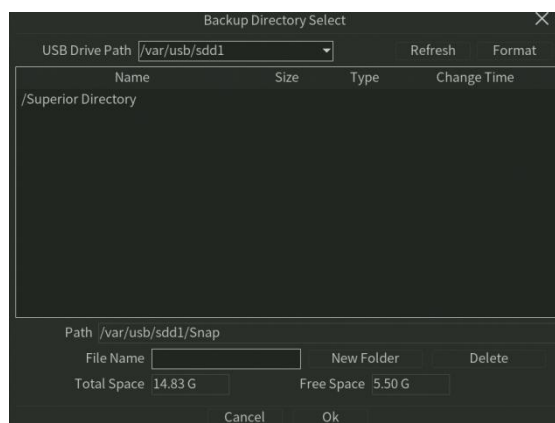


Figure 7.24 Snap Image Backup Setting

7.2.3. Target Counting

Purpose:

If you want to statistics the Target Counting under the specific date and optional Line,Statistics the Target Count in this interface,and the data files can be export to various devices, such as USB devices (USB flash drives, USB HDDs),as shown in figure 7.26.



Figure 7.26 Target Count Statistics

Steps:

1. Select the **Channel** for Target Count Staticstics and Export.
2. Select **Target Type**:Human ,Vehicle Type optional
3. Select the **Statistical Type**: Inquire By Day,Inquire By Week,Inquire By Month,Inquire By Year
4. Select **Target Line**: Optional Line 1,Line 2,Line 3,Line 4.
5. Set the **Statistical Time**.
6. Click **Statistics** button to view Target Count data form.
7. Click **Export** button can export theTarget Count data(Note need plug the USB disk),as shown in figure 7.27 and 7.28.

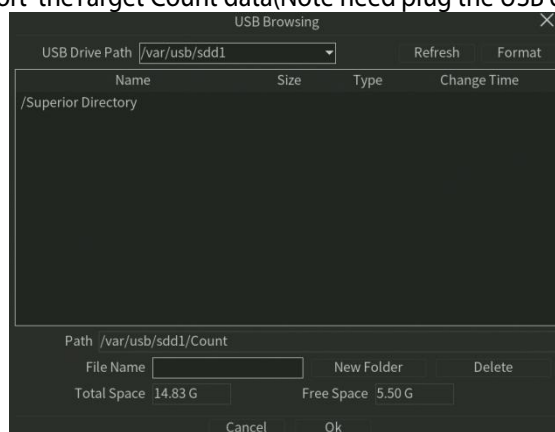


Figure 7.27 Target Count Statistics

8. Alarm

8.1. Alarm Abnormal

The Alarm Abnormal interface, you can enable the alarm different mode for different Abnormal event, as shown in figure 8.1.

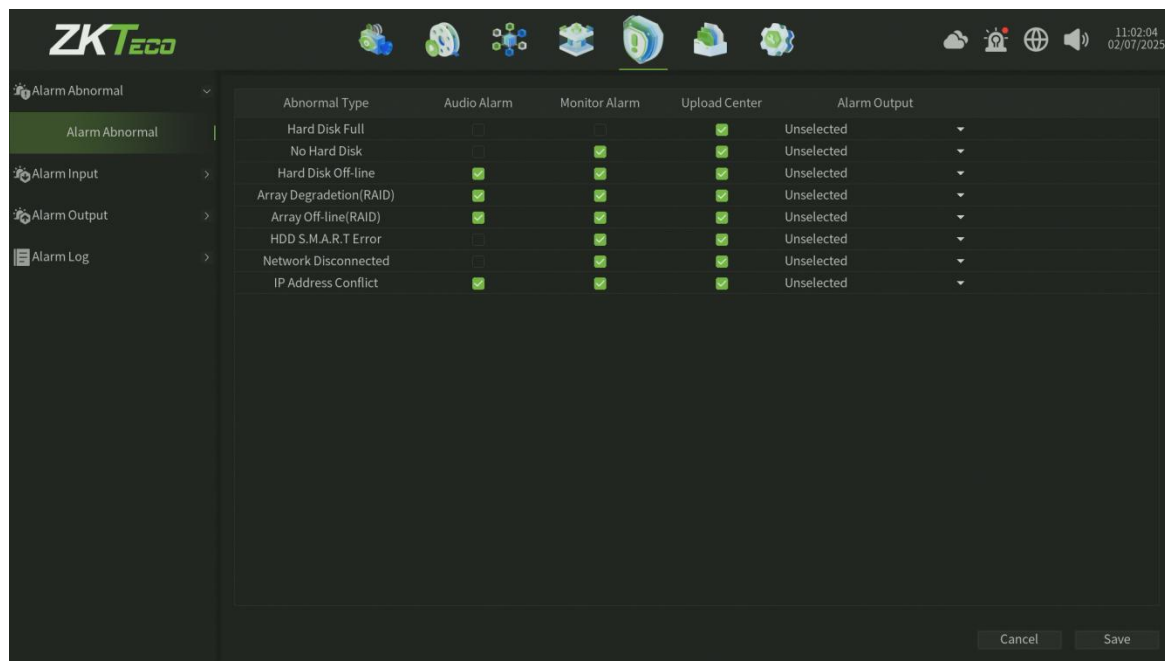


Figure 8.1 Alarm Abnormal Interface

Parameter:

1. **Abnormal Type:** Fixed Abnormal event type for system configuration, such as **Hard Disk Full, No Hard Disk**.
2. **Audio Alarm :** Enable this alarm type, when the corresponding Abnormal event trigger, Device will give an audible alarm.
3. **Monitor Alarm :** Enable this alarm type, when the corresponding Abnormal event trigger, Alarm information will be pushed in the preview alarm pop-up window.
4. **Upload Center:** Enable this alarm type, when the corresponding Abnormal event trigger, Alerts go to a queue of messages that can be pushed or pulled by other platforms.
5. **Alarm Output :** Enable this alarm type, when the corresponding Abnormal event trigger, The alarm effect is triggered by an external alarm device.

8.2. Alarm Input

The Alarm input interface, as shown in figure 8.2.

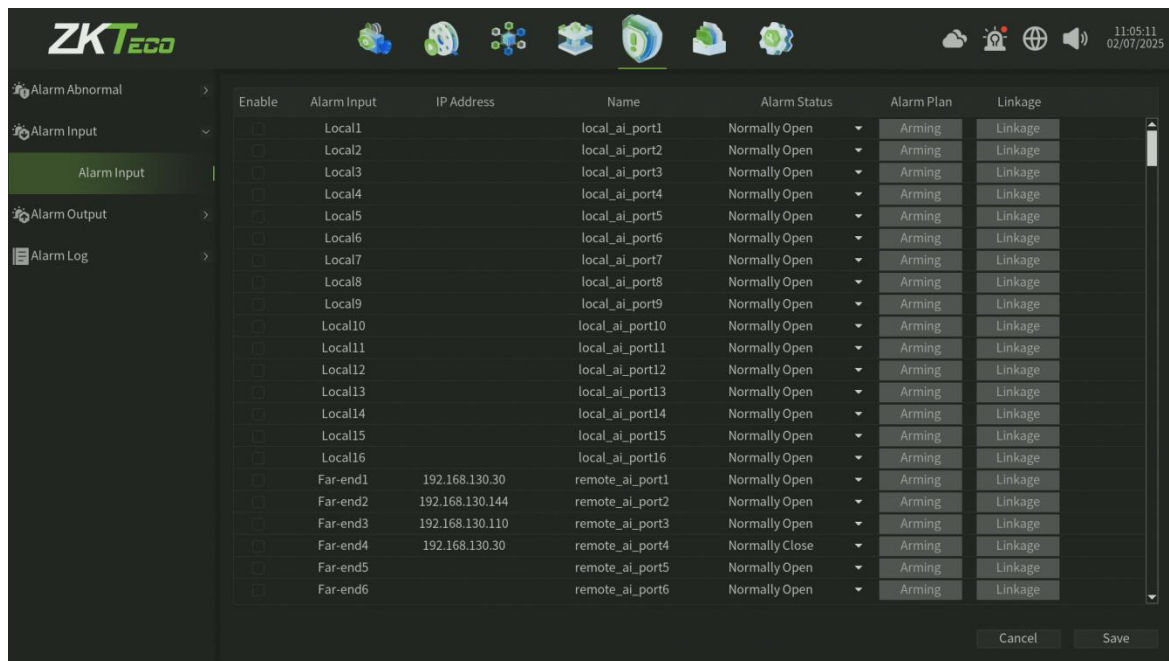


Figure 8.2 Alarm Input Interface

Parameter:

1. **Alarm Input** : Select channel
2. **Alarm Input Name**: Edit alarm name.
3. **Alarm Status**: Set the alarm state, the default value is always open.
4. **Arming Planning**: Set the arming schedule, as shown in figure 8.2.1.



Figure 8.2.1 Arming Schedule

5. **Linkage:** Click Linkage button, Setup the linkage operation of the function, as shown in figure 8.2.2.

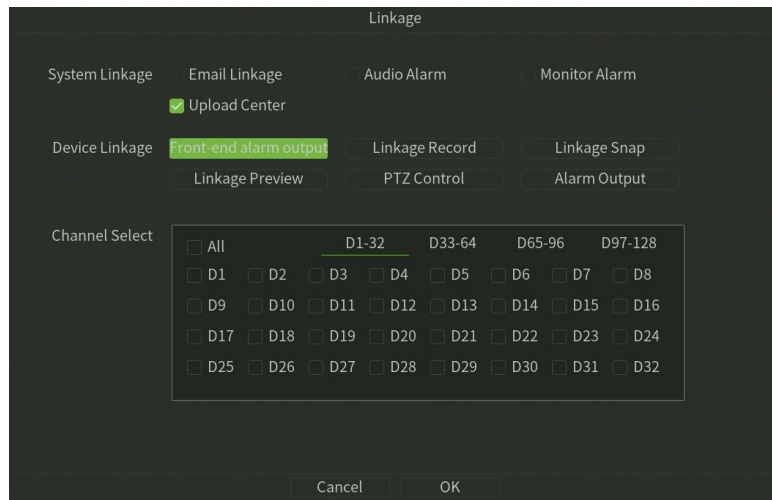


Figure 8.2.2 Arming Schedule

6. **Save:** Click Save button to save the setting.

8.3. Alarm Output

The Alarm input interface, as shown in figure 8.3.

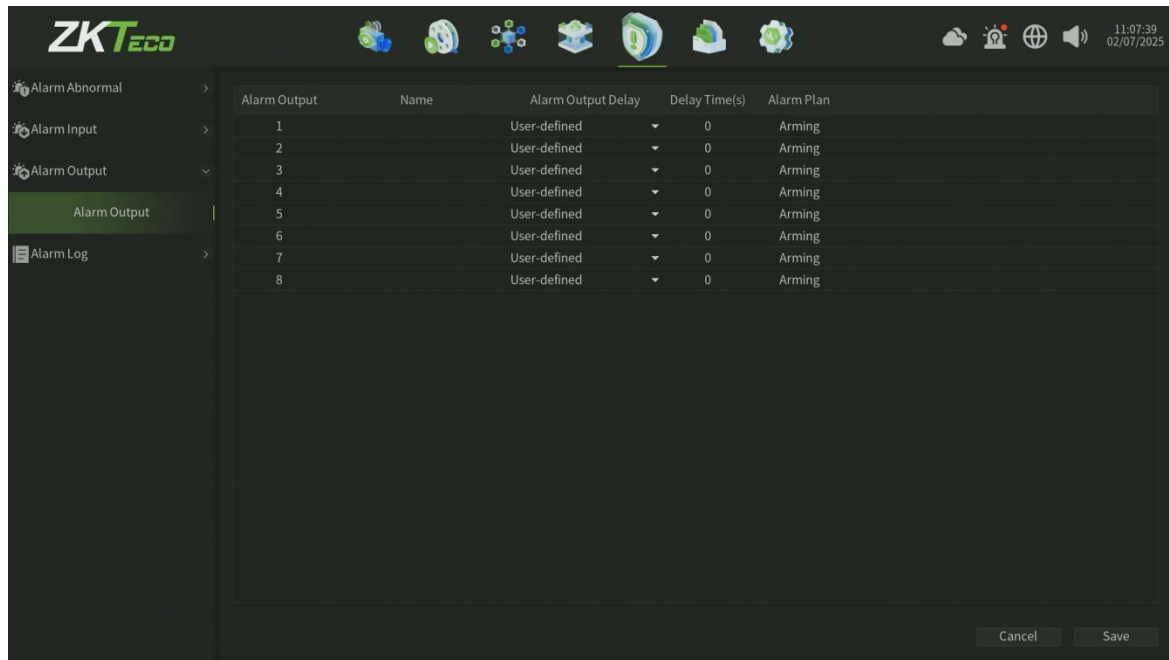


Figure12.5 Alarm Output

Parameter:

1. **Alarm Output**: Edit alarm name.
2. **Alarm Output Delay**: Edit alarm output delay.
3. **Arming Time**: Set the arming schedule.
4. **Save**: Click Save button to save the setting.

8.4. Alarm Log

The Alarm Log interface, you can Search the different alarm event log in this interface, as shown in figure 8.4.

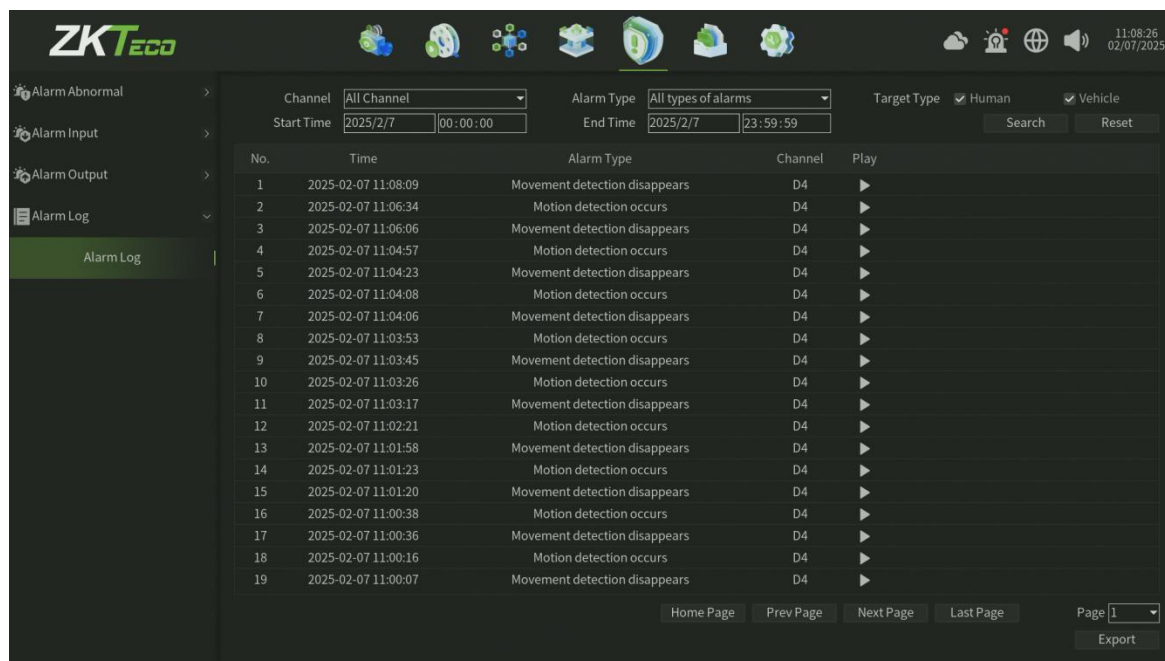


Figure 8.1 Alarm Log Interface

Steps:

1. Select the **Channel** for Alarm Log Search.
2. Select the **Alarm Type**, Such as **All types of alarms**, **Video loss alarm occurs**.
3. Set the **Start Time** and **End Time**.
4. Select the **Target Type** : Human ,Vehicle Type optional.
5. Click **Search** button to find records and you can view the record on the right window.
6. Click **Reset** button can back to the default parameter of this interface.
7. Click  button can online view the record file.
8. Click **Export** button can export the Alarm data(Note need plug the USB disk)

9. Storage Manage

9.1. Disk Manage

9.1.1. Disk Configuration

The Disk Config interface, you can view the disk status and set the disk configuration, as shown in figure 9.1.1.1.

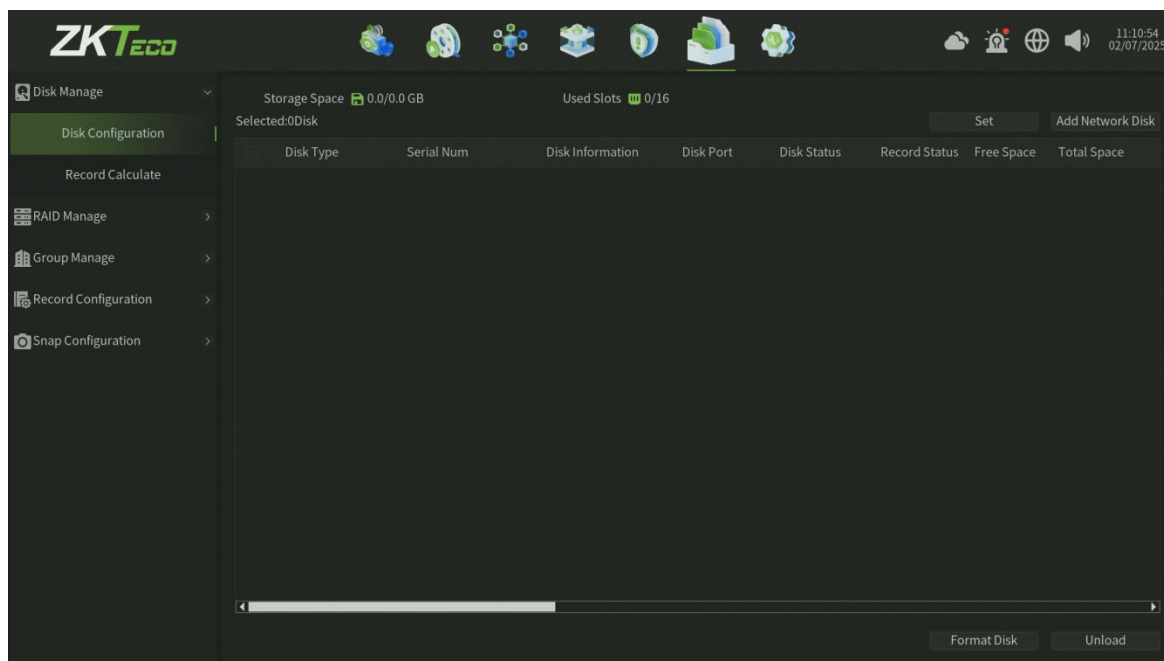


Figure 9.1.1.1 Disk Config

Parameter:

1. **Storage Space** : Display the total space and used sapce.
2. **Used Slot** : Display the total slot count and used slot count.
3. **Set** : Set disk storage mode and stragety ,as shown in figure 9.1.1.2.



Figure 9.1.1.2 Disk Set

- ✧ **Loop Recording** : One click enable Loop Recording configuration.
- ✧ **Video retention time setting** : One click enable the setting of video retention.
- ✧ **Video Reserve Time** : After enable the video retention time setting option, you can set the specific reserve time of video retention.
- ✧ **S.M.A.R.T Processing** : Set the smart process of the storage abnormal status.

4. **Add network disk** : Manaully add the network disk ,such NAS server or IPSAN server,as shown in figure 9.1.1.3.

Figure 9.1.1.3 Add network disk

- ✧ **Name** : Customize the network disk name.
 - ✧ **Type** : Select the network disk type (NAS and IPSAN optionally).
 - ✧ **IP Address** : Enter into the network disk server ip address,also you can click the serach button to search the network disk server which in the same local network and one-click get the server information .
 - ✧ **Storage Path** : Set and select the directory of folders to store in.
 - ✧ **Port** : Automatiacally get the server port.
 - ✧ **Anonymous** : One click enable the anonymous configuration.
 - ✧ **User Name** : Enter the network disk server user name.
 - ✧ **Password** : Enter the network disk server password.
5. **Disk Type** : Display the disk type information.
 6. **Serial Num** : Display the disk Serial number information.
 7. **Disk Information** : Display the disk basic information.
 8. **Disk Port** : Display the disk port information.
 9. **Disk Status** : Display the disk status information.
 10. **Record Status** : Display the record status information.
 11. **Free Space** : Display the disk free space information.
 12. **Total Space** : Display the disk total space information.
 13. **Format Disk** : Select the Hard disks,and then click the Format Disk button to format the corresponding disk (note: the first time plug the disk need to do the format disk operation) .
 14. **Unload** : Select the Hard disks,and then click the Unload button to unload the corresponding disk

9.1.2. Record Calculate

The Record Calculate interface displays the total channel bitrate, record time, resolution, frame rate and encode format information. You can calculate the record space in this interface, as shown in figure 9.1.2.1.

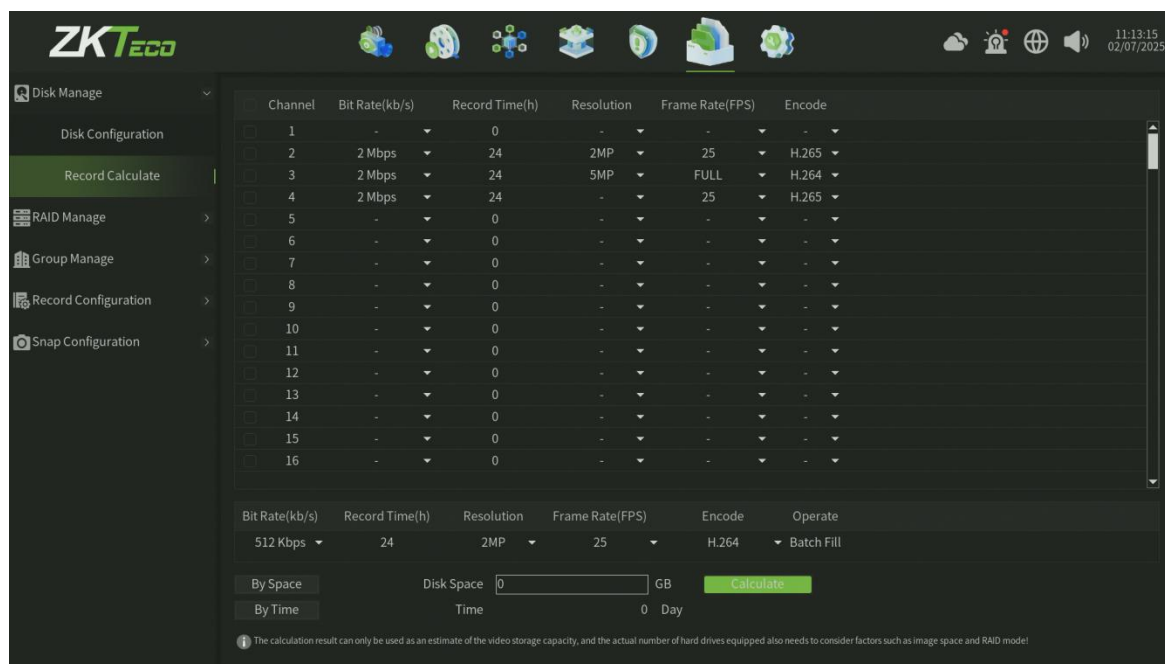


Figure 9.1.2.1 Record Calculate

Parameter:

1. **By Space**: Calculate the time can storage on the base of disk space.
2. **By Time**: Calculate the disk space on the base of the time you wanna storage.
3. **Calculate**: One click to calculate the value by space mode or by time mode.

Note:

The calculation result can only be used as an estimate of the video storage capacity, and the actual number of hard drives equipped also needs to consider factors such as image space and RAID mode!

9.2. RAID Manage

9.2.1. Disk RAID

The Disk RAID interface, you can view the Disk RAID group status and set the disk RAID configuration, as shown in figure 9.2.1.1.

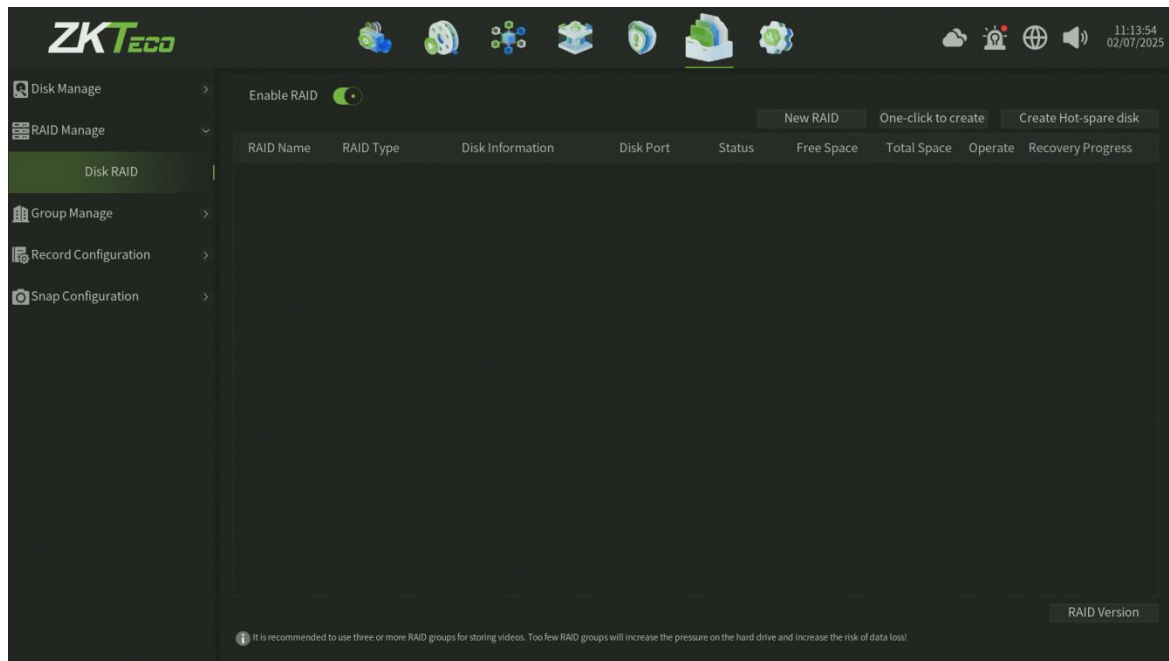


Figure 9.2.1.1 Disk RAID

Parameter:

1. **Enable RAID**: One click enable the Disk RAID configuration, will make the device reboot.
2. **New RAID**: Create a new RAID group, and you can set the specific RAID type and parameter, as shown in figure 9.2.1.2.

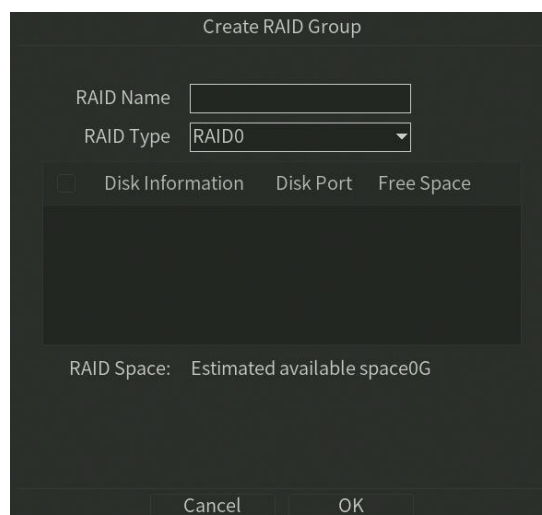


Figure 9.2.1.2 Create RAID Group

- ✧ **RAID Name**: Customize the RAID group name.
- ✧ **RAID Type**: Select the RAID type (RAID0, RAID1, RAID5, RAID6, RAID10 optionally).
- ✧ **Disk Information**: Select the disks according to the RAID type to combine the RAID group.

3. **Once Create RAID :** Once create a new RAID group ,as shown in figure 9.2.1.3.

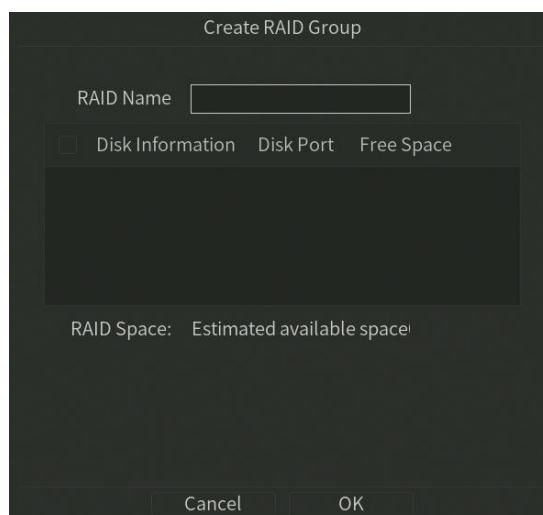


Figure 9.2.1.3 Once Create RAID

- ✧ **RAID Name :** Customize the RAID group name.
 - ✧ **Disk Information :** Select the disks according to the RAID type to combine the RAID group.
4. **Create Hot-Spare Disk :** Once create a new Hot-backup disk ,as shown in figure 9.2.1.4.

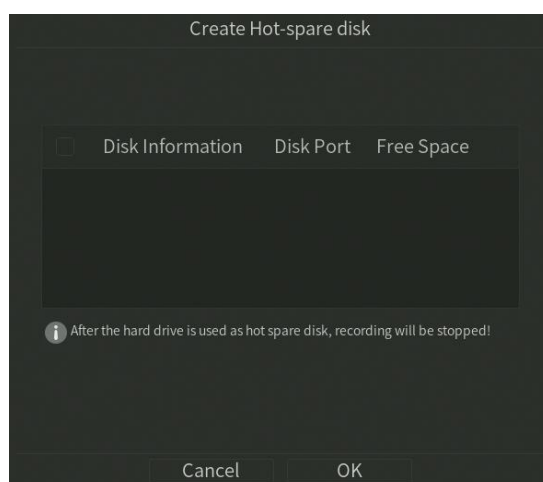


Figure 9.2.1.4 Create Hot-backup Disk

- ✧ **Disk Information :** Select the disks according to the RAID type to combine the RAID group.
5. **RAID Version :** Display the RAID Version information,as shown in figure 9.2.1.5.

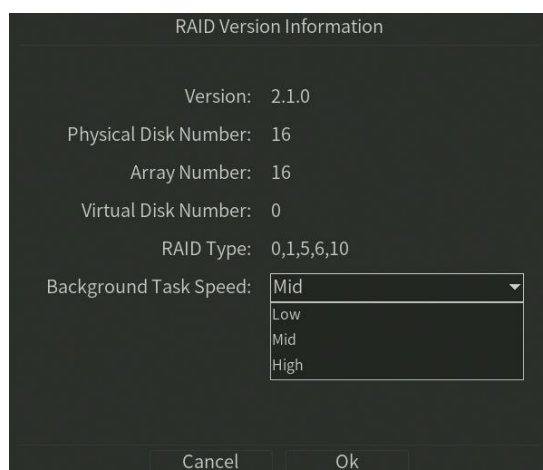


Figure 9.2.1.5 RAID Version

9.3. Group Manage

9.3.1. Disk Grouping

The Disk Grouping interface, you can view the Disk grouping status and manually or automatically set the disk grouping configuration, as shown in figure 9.3.1.1.

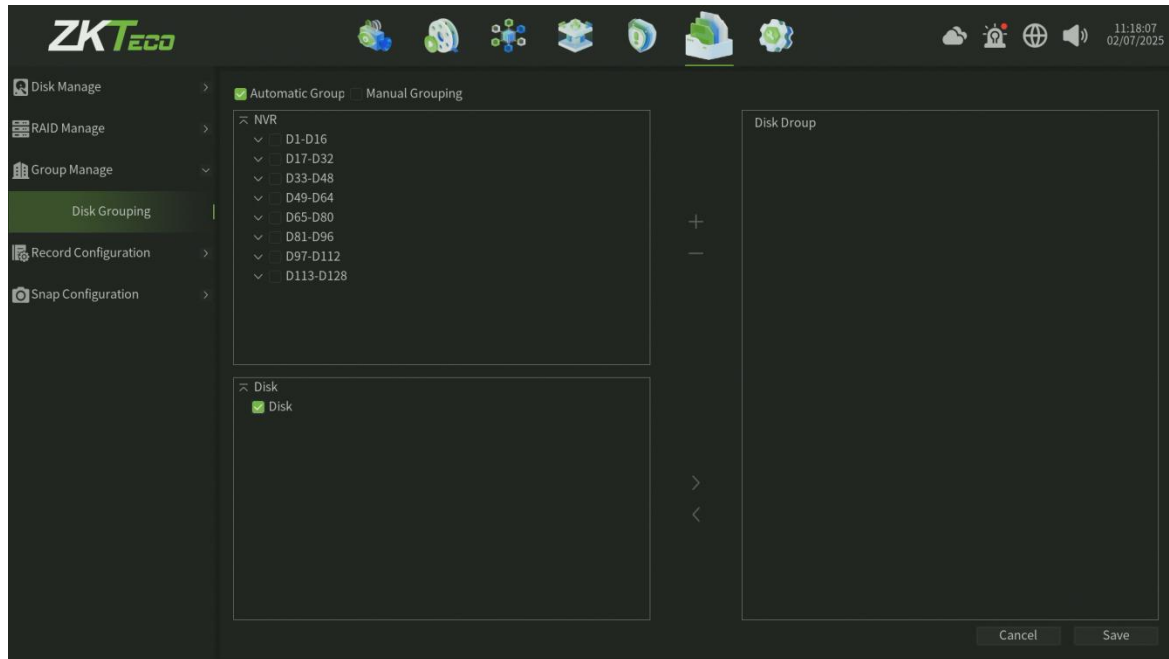


Figure 9.3.1.1 Disk Grouping

Parameter:

1. **Automatic Group** : When you check this option, it will automatically distribute channels to the disk in a group.
2. **Manual grouping** : When you check this option, you need manually to create a group then add a disk to this group, finally select channels in this group (suggestion that one disk be distributed 12-14 channels will be better).
3. Click **Save** button to save the settings.

9.4. Record Configuration

9.4.1. Record Configuration

The Record Configuration interface, you can set the record plan and record format configuration, as shown in figure 9.4.1.1.

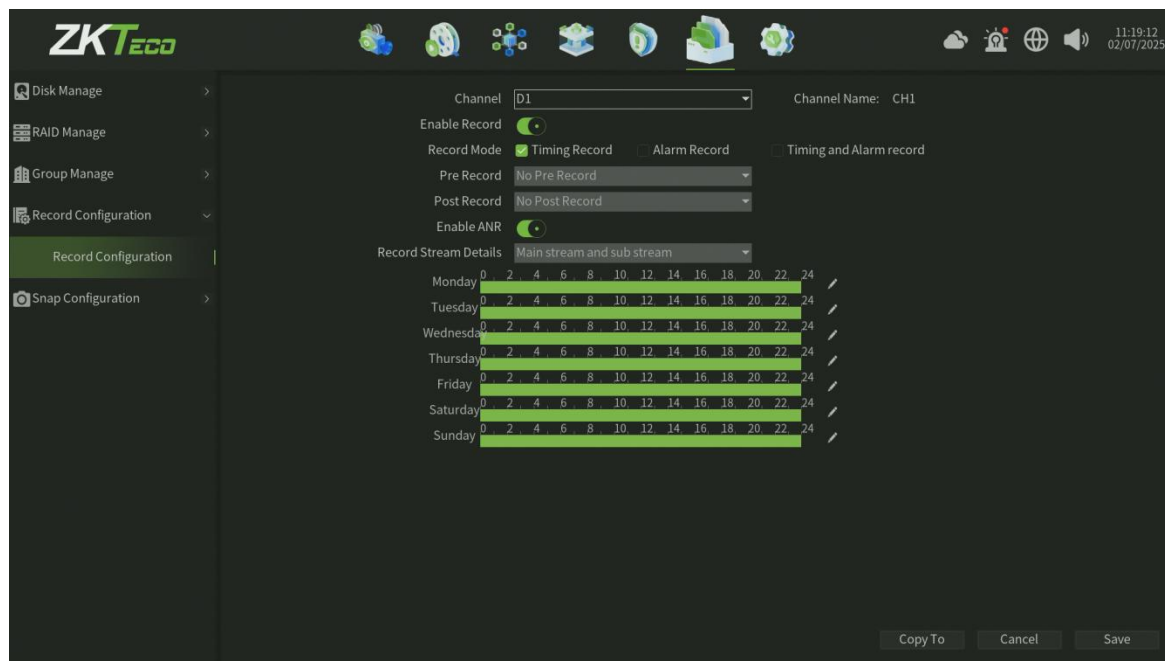


Figure 9.4.1.1 Record Config

Parameter:

1. **Channel** : Select the channel.
2. **Enable Record** : Check to enable the Channel record.
3. **Record Mode** : Select the record mode (Time recording, Alarm recording, Time and Alarm recording three modes optionally).
4. **Pre Record** : After check the Alarm recording or Time and Alarm recording mode, you can set the Pre Record time parameter.
5. **Post Record** : After check the Alarm recording or Time and Alarm recording mode, you can set the Post Record time parameter.
6. **Enable ANR** : When enable ANR interface, the channel record file will recover storage in disk after the camera recover the network connect with NVR.
7. **Record Stream Details** : The default record stream value is Main Stream and Sub Stream, can not be modify.
8. **Schedule** : You can set the record schedule time on the schedule form.
9. **Copy to** : Click the copy to button and select the specific or all channels to copy the record configuration.
10. Click **Save** button to save the settings.

9.5. Snap Config

9.5.1. Snap Config

The Snap Config interface, you can set the Timing Snap plan and Snap image format configuration, as shown in figure 9.5.1.1.

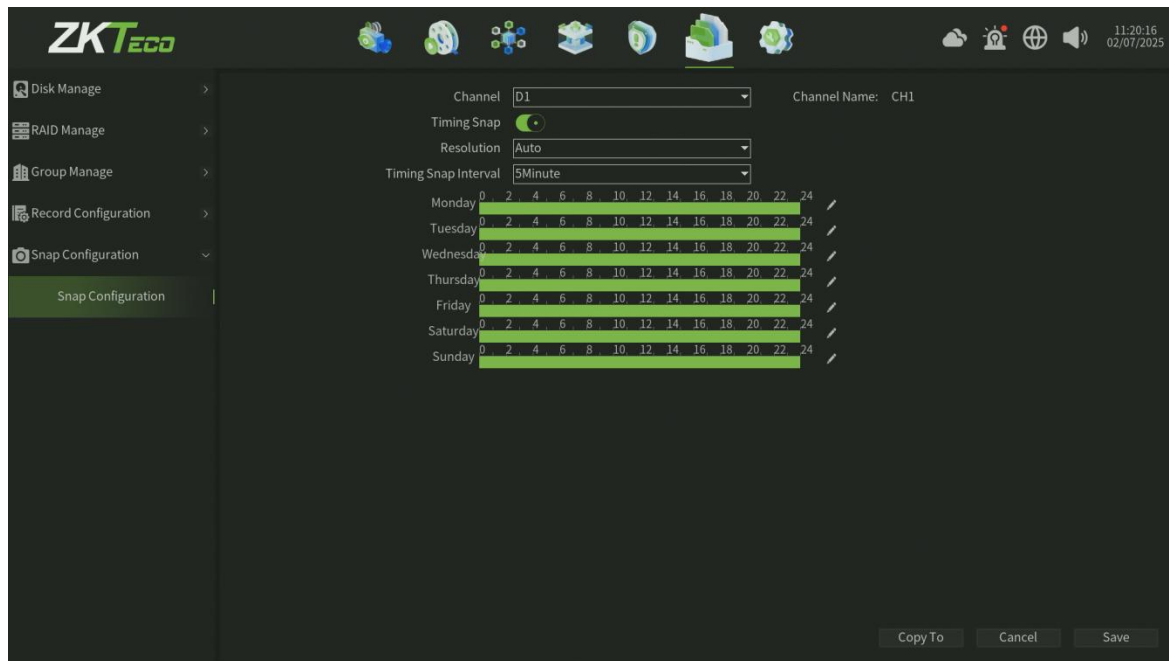


Figure 9.5.1.1 Snap Config

Parameter:

1. **Channel** : Select the channel.
2. **Timing Snap** : Check to enable the Channel Timing Snap.
3. **Resolution** : Set the snap image resolution, default value is auto.
4. **Timing Snap Interval** : Set the Timing Snap interval time, default value is 5 minutes.
5. **Schedule** : You can set the record schedule time on the schedule form.
6. **Copy to**: Click the copy to button and select the specific or all channels to copy the record configuration.
7. Click **Save** button to save the settings.

10. System Manage

Click  icon, enter into the system manage interface, this part includes four parts altogether, note the following instructions, as shown in figure 10.1.

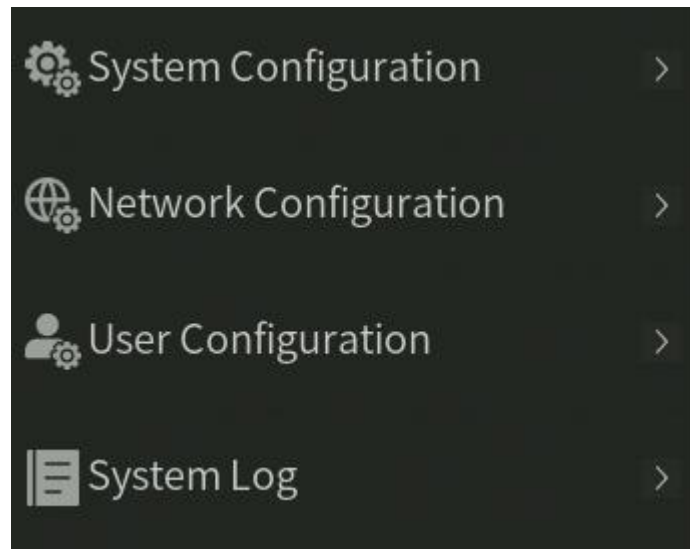


Figure 10.1 System Manage Interface

10.1. System Configuration

This model includes five parts altogether (System Setting, Time Setting, Preview Setting, System Setting, System Information, Security Setting), as shown in figure 10.1.

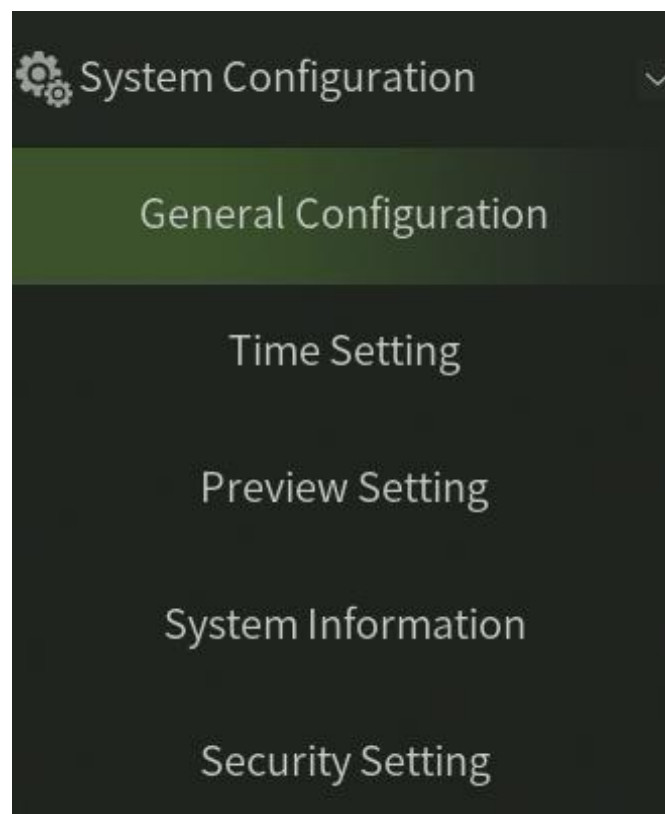


Figure 10.1 System Configuration Interface

10.1.1. System Setting

10.1.1.1. Basic Config

The System Basic Parameter Setting interface, as shown in figure 10.1.1.1.

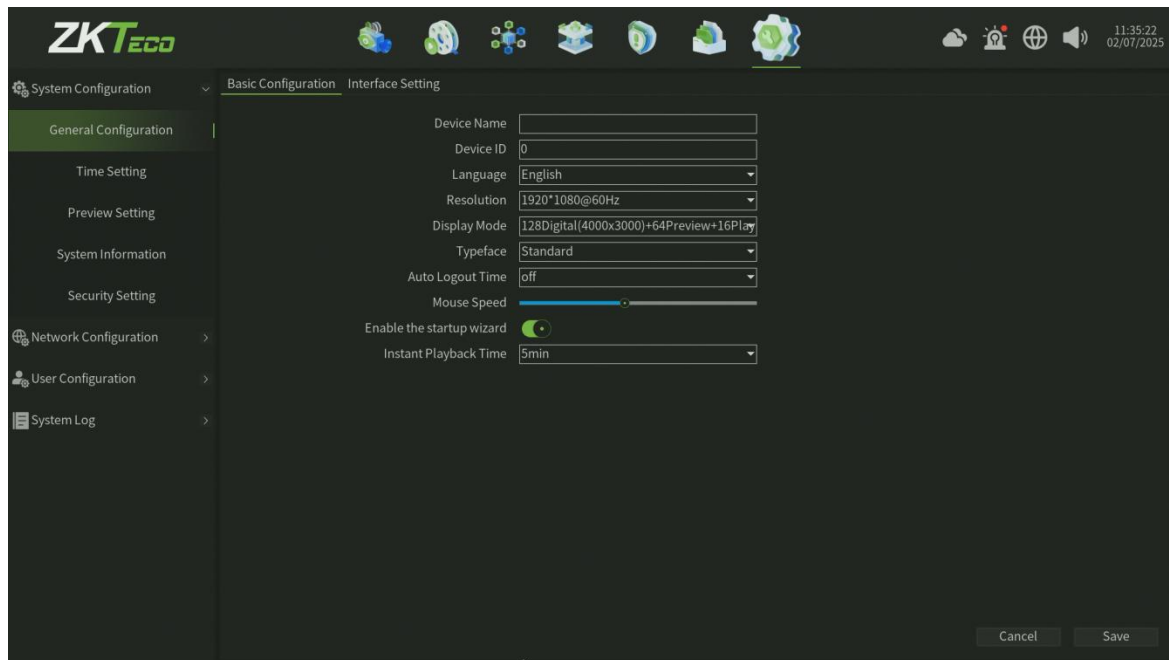


Figure 10.1.1.1 Basic Setting Interface

Parameter:

1. **Device Name** : Edit device name.
2. **Device ID** : Display the device id.
3. **Language** : Set the Language.
4. **Resolution** : Set NVR support resolution and frequency.
5. **Show Mode**: There are different display modes, the preview interface device list refresh in time after modify successfully.
6. **Typeface** : Set the Typeface for NVR.
7. **Auto Logout Time** : Set the Auto Logout Time for NVR.
8. **Mouse Speed** : Adjust the speed of the mouse, it come into effect immediately.
9. **Start the startup wizard** : Enable the StartUp wizard function.
10. **Real Playback Time** : Set the Real Playback Time for NVR.
11. **Save**: Click Save button to save the setting.

10.1.1.2. Interface Setting

The System Interface Setting interface, as shown in figure 10.1.1.2.

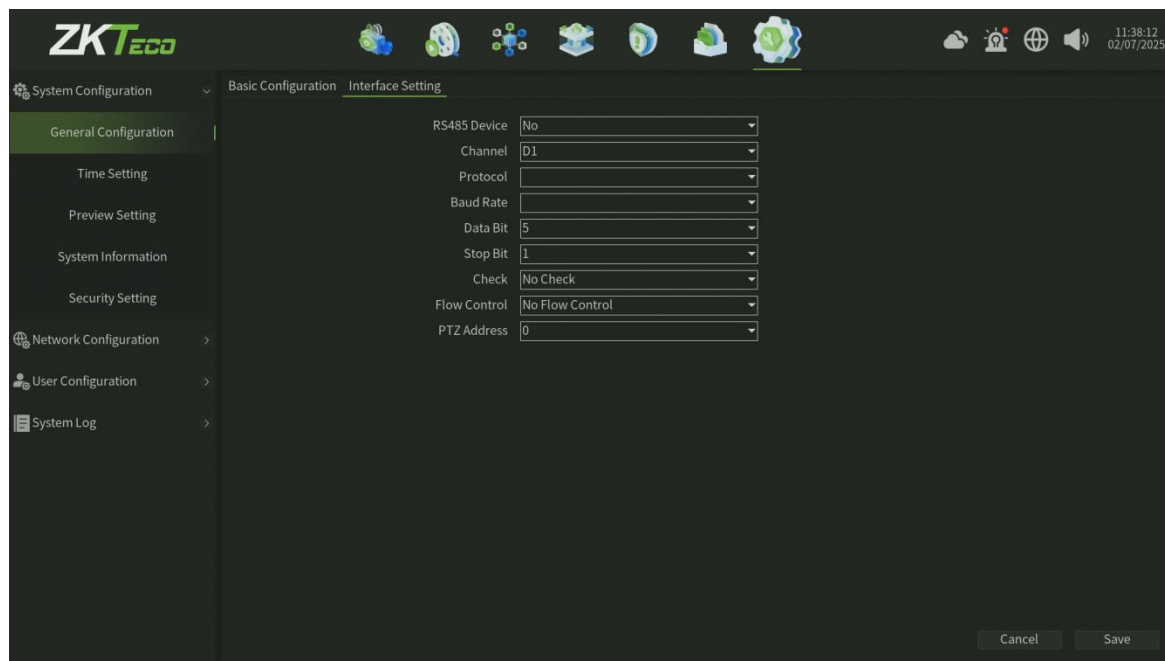


Figure 10.1.1.2 Basic Setting Interface

Parameter:

1. **RS485 Device** : There are three RS485 device type options (No, PTZ Control, RS485 Keyboard), you can select the one of options and device will reboot ,after rebbot you can config the corresponding setting infomation.
2. **Channel** : Select the Channel for configuration.
3. **Protocol** : There are two PTZ protocol options (pelco P and pelco D), you can select the one of options and modify the settings.
4. **BAUD Rate**: Set the Baud Rate for correspongding ptz protocol.
5. **Data Bit** : Set the Data Bit for correspongding ptz protocol.
6. **Stop Bit** : Set the Stop Bit for correspongding ptz protocol.
7. **Check** : There are three Parity mode (No Check , Odd Check and Even-Parity Check), you can select the one of options for corresponding ptz protocol.
8. **Flow Control** : There are three Flow Control mode (No Flow Control, Soft Flow Control and Hard Flow Control), you can select the one of options for corresponding ptz protocol..
9. **PTZ Address** : Select the PTZ Address (up to 255 value)..
10. **Save**: Click Save button to save the setting.

10.1.2. Time Setting

10.1.2.1. Device Time

The Device Time Setting Interface , as shown in figure 10.1.2.1.

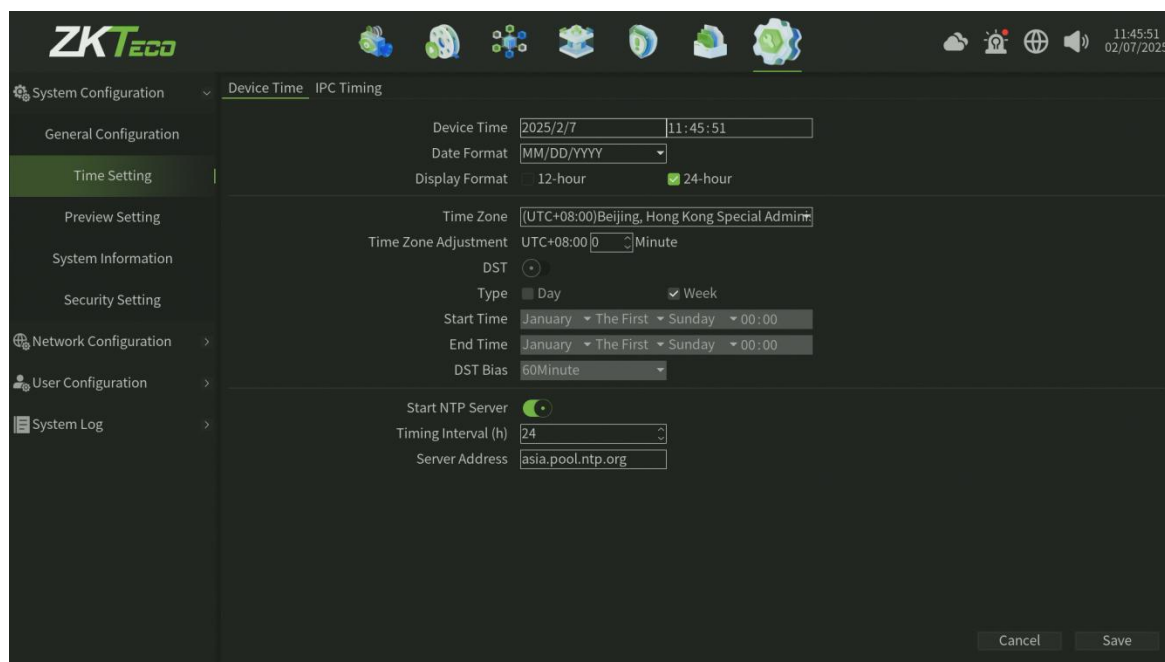


Figure 10.1.2.1 Device Time Setting Interface

Parameter:

1. **Device time:** Can manually modify the device time, set the time, click **Modify**, then save time.
2. **Data Format:** Set the data format.
3. **Time zone:** Switch time zones, the page will pop up a new date and time, there is daylight saving time function part time zone, the time zone is with functions of fine-tuning.
4. **Summer Time:** Enable Summer Time, just need to finish setting the start and end time.
5. **Start NTP Server :** Enable/Disable NTP (the device needs to access network).
6. **Save:** Click Save button to save the setting.

10.1.2.2. IPC Timing

The IPC Timing Setting Interface , as shown in figure 10.1.2.2.

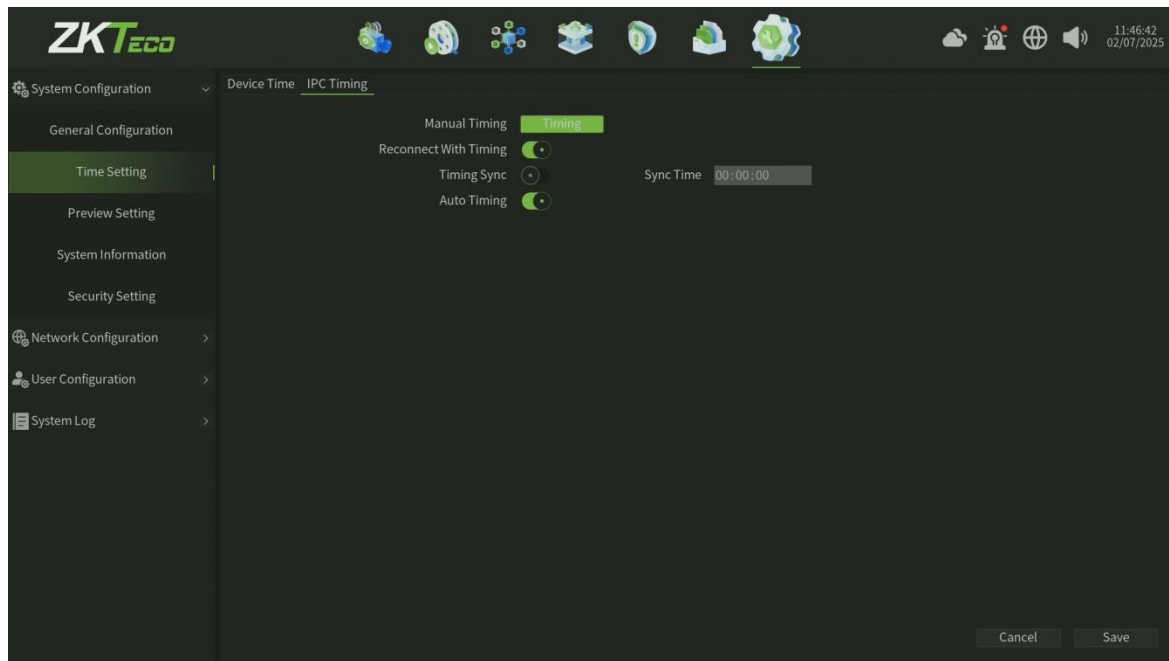


Figure 10.1.2.2 IPC Timing Setting Interface

Parameter:

1. **Manual Timing:** Click **Manual Timing** button, adjust the IPC time as same as device time.
2. **Auto Timing:** Enable the auto timing, the IPC will be timing when it is different to the device time.
3. **Reconnect with Time :** Enable the reconnect timing, the IPC will be timing after reconnect to device.
4. **Timing Sync:** Enable the Timing sync, the IPC will be timing on the time you setting.
5. **Save:** Click Save button to save the setting.

10.1.3. Preview Setting

10.1.3.1. Screen Setting

The Screen Setting Interface , as shown in figure 10.1.3.1.

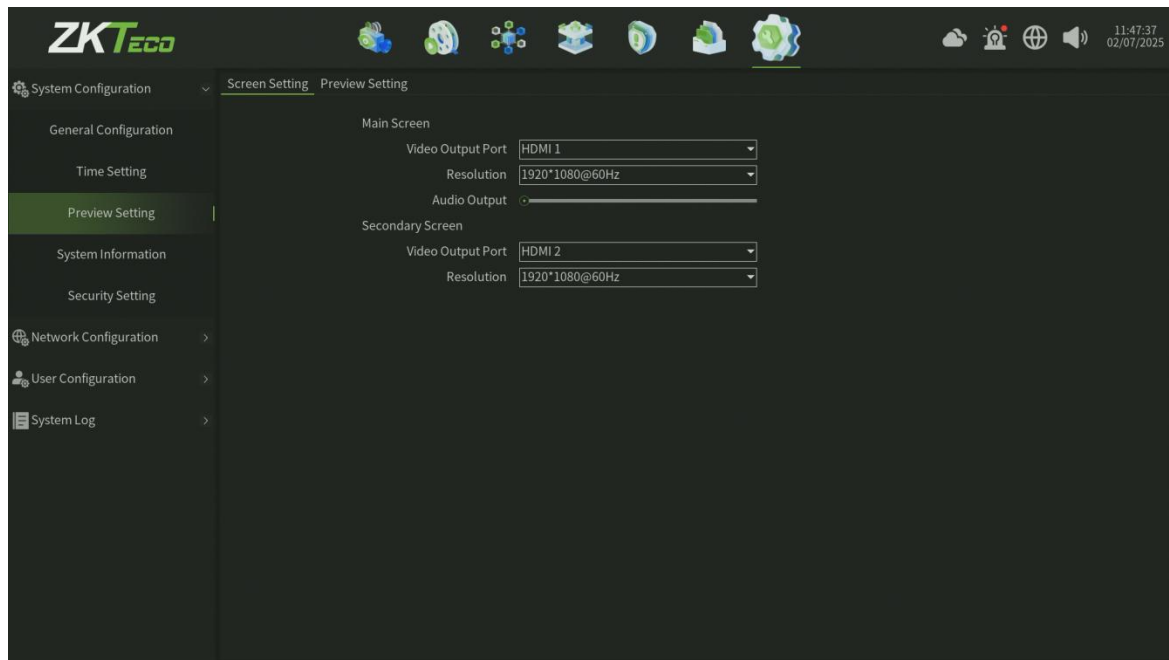


Figure 10.1.3.1 Screen Setting Interface

Parameter:

Main Screen : The Main Screen setting information

1. **Video Output Port** : Select the HDMI 1 or VGA 1 output port ,then you can configure the screen parameters.
2. **Resolution** : Select the Resolution for the Main Screen display.
3. **Audio Output** : Adjust the Audio Output value for Main Screen.

Secondary Screen : The Secondary Screen setting information(It can be configured only under the premise of connecting the secondary screen)

1. **Video Output Port** : Select the HDMI 1 or VGA 1 output port ,then you can configure the screen parameters.
2. **Resolution** : Select the Resolution for the Secondary Screen display.

10.1.3.2. Preview Setting

The Preview Setting Interface , as shown in figure 10.1.3.2.1.

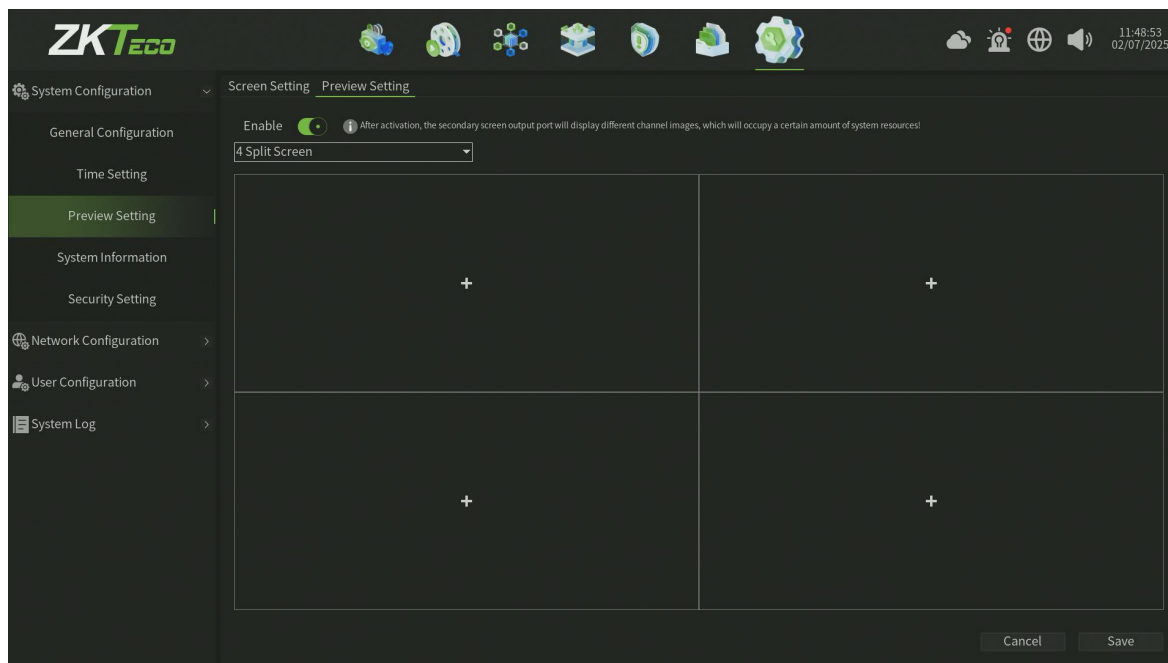


Figure 10.1.3.2.1 Preview Setting Interface

Warn: The parameters you have set will only take effect after restarting.

1. **Enable :** enable the Preview setting,After activation,the secondary screen output port will display different channel images,which will occupy a certain amount of system resources!

Setting

After reataring , you can set the preview screen mode as shown in figure 10.1.3.2.2.

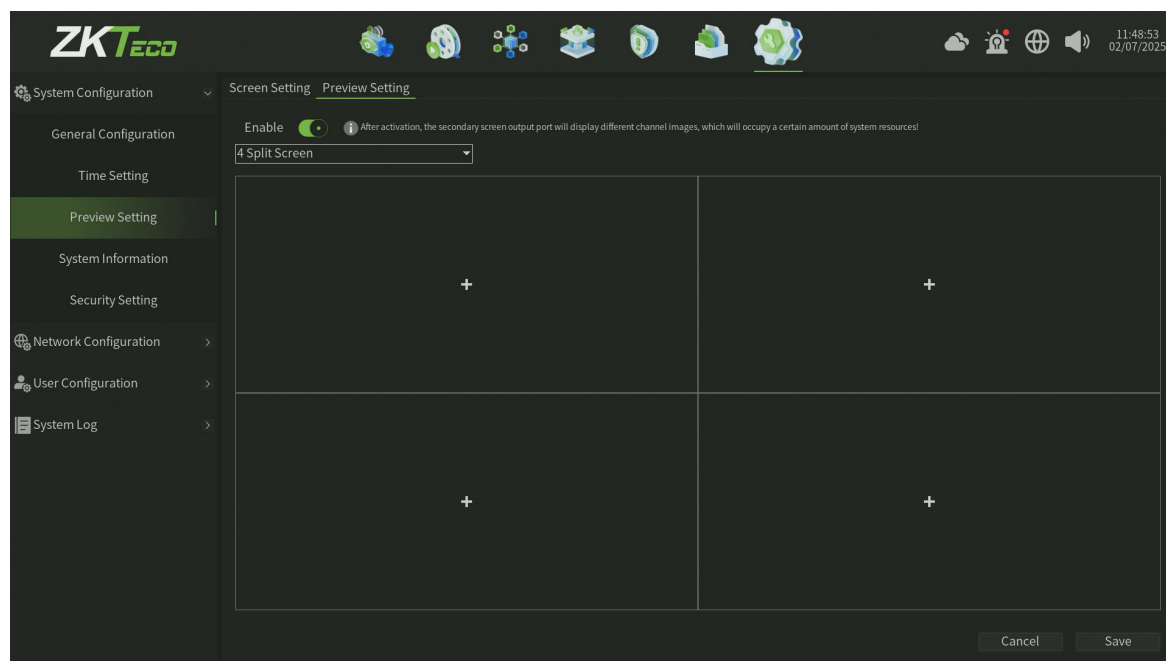


Figure 10.1.3.2.2 Preview Setting

10.1.4. System Information

Can view the device System information, Stream information, System Maintenance, System upgrade and IVA Authorization.

10.1.4.1. System Information

Device System information interface, as shown in figure 10.1.4.1, You can view the basic system information of device and a visual data window on the right side of the page.

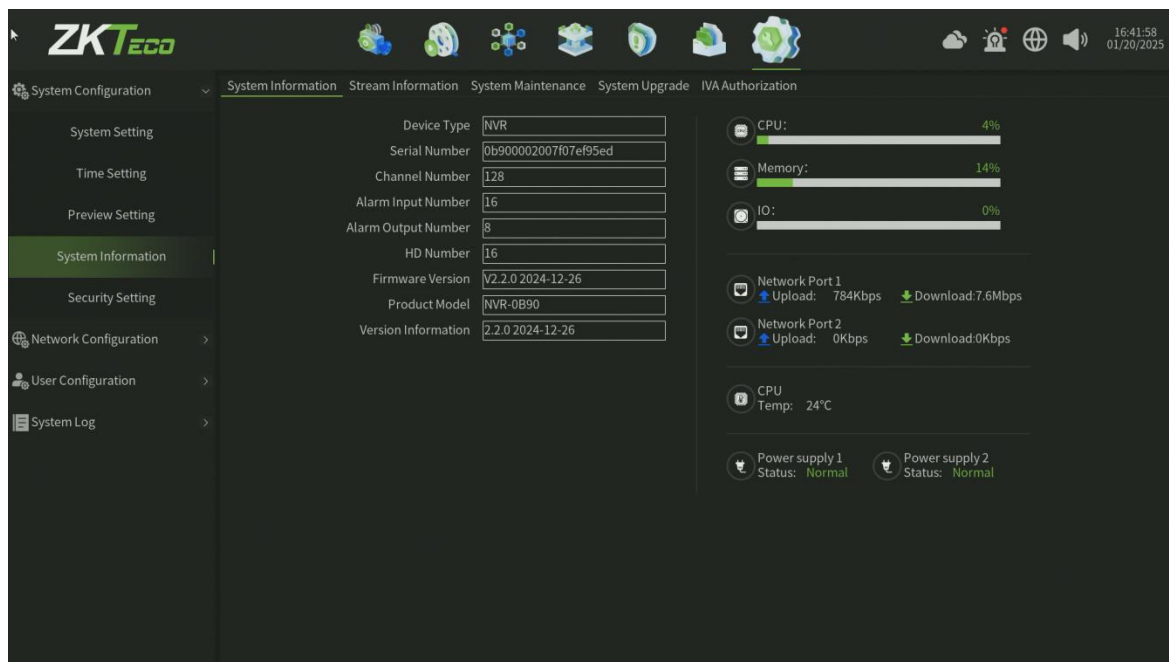


Figure 10.1.4.1 SystemInformation

Parameter:

1. **Device Type** : The default device type value is NVR.
2. **Serial Number** : Display the device Serial Number, this number is unique for device, is important for check something like authorization.
3. **Channel Number** : Display the Max channel number of device adding.
4. **Alarm input Number** : Display the alarm input number of device.
5. **Alarm output Number** : Display the alarm output number of device.
6. **HD Number** : Display the Max HDD number of device compatibility.
7. **Firmware Version** : Display the firmware version of device.
8. **Product Model** : Display the device model.
9. **Version Information** : Display the version information of device.

10.1.4.2. Stream Information

Device Stream information interface, as shown in figure 10.1.4.2, You can view the Total main stream traffic and total substream traffic information of device.

Channel	Main Stream	Sub Stream	Main Stream	Sub Stream
D1	1634kb/s	292kb/s	701MB/H	125MB/H
D2	837kb/s	107kb/s	359MB/H	45MB/H
D3	1639kb/s	100kb/s	703MB/H	42MB/H
D4	0kb/s	0kb/s	0MB/H	0MB/H
D5	1635kb/s	288kb/s	701MB/H	123MB/H
D6	0kb/s	0kb/s	0MB/H	0MB/H
D7	0kb/s	0kb/s	0MB/H	0MB/H
D8	0kb/s	0kb/s	0MB/H	0MB/H
D9	0kb/s	0kb/s	0MB/H	0MB/H
D10	0kb/s	0kb/s	0MB/H	0MB/H
D11	0kb/s	0kb/s	0MB/H	0MB/H
D12	0kb/s	0kb/s	0MB/H	0MB/H
D13	0kb/s	0kb/s	0MB/H	0MB/H
D14	0kb/s	0kb/s	0MB/H	0MB/H
D15	0kb/s	0kb/s	0MB/H	0MB/H
D16	0kb/s	0kb/s	0MB/H	0MB/H
D17	0kb/s	0kb/s	0MB/H	0MB/H
D18	0kb/s	0kb/s	0MB/H	0MB/H
D19	0kb/s	0kb/s	0MB/H	0MB/H
D20	0kb/s	0kb/s	0MB/H	0MB/H
D21	0kb/s	0kb/s	0MB/H	0MB/H

Figure 10.1.4.2 StreamInformation

10.1.4.3. System Maintenance

Can set the maintenance mode ,developer mode and RTSP Authontion, as shown in figure 10.1.4.3. You can select the maintenance mode in this interface. (The default mode is Close).

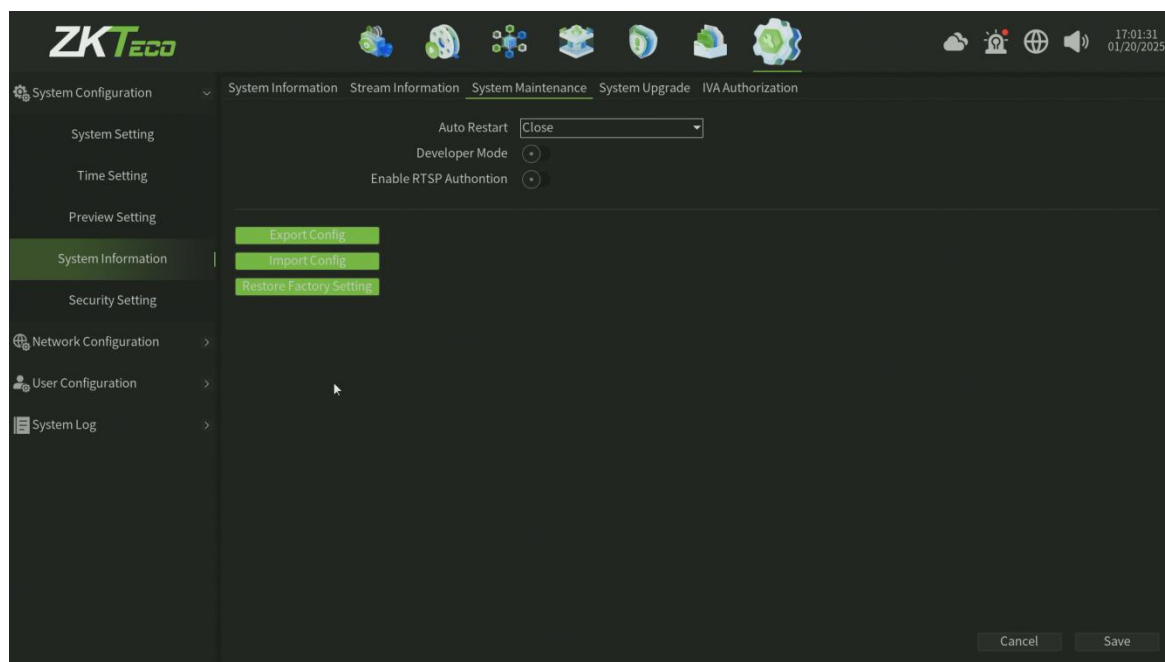


Figure 10.1.4.3 System Maintenance

Parameter:

1. **Auto Restart** : When enable the maintenance function,you can select ONCE ,Every Day ,Weekly and set corresponding time for auto Restarting.
2. **Develpoer Mode**: When enable the developer option,that can enter into device back-end server by Telnet service.
3. **Enable RTSP Authontion** : When enable the RTSP Authontion option,the third-party platform or tool pull the video stream by RTSP stream address need account authontion.
4. **Export Config** : You can export the device configuration information,the file can be annother device migration configuration information by export config file.
5. **Import Config** : You can migration configuration information by import config file from the annother device.
6. **Restore Factory Setting** : You can restore the device for some parts or all configuration.

10.1.4.4. System Upgrade

The System upgrade interface, as shown in figure 10.1.4.4.

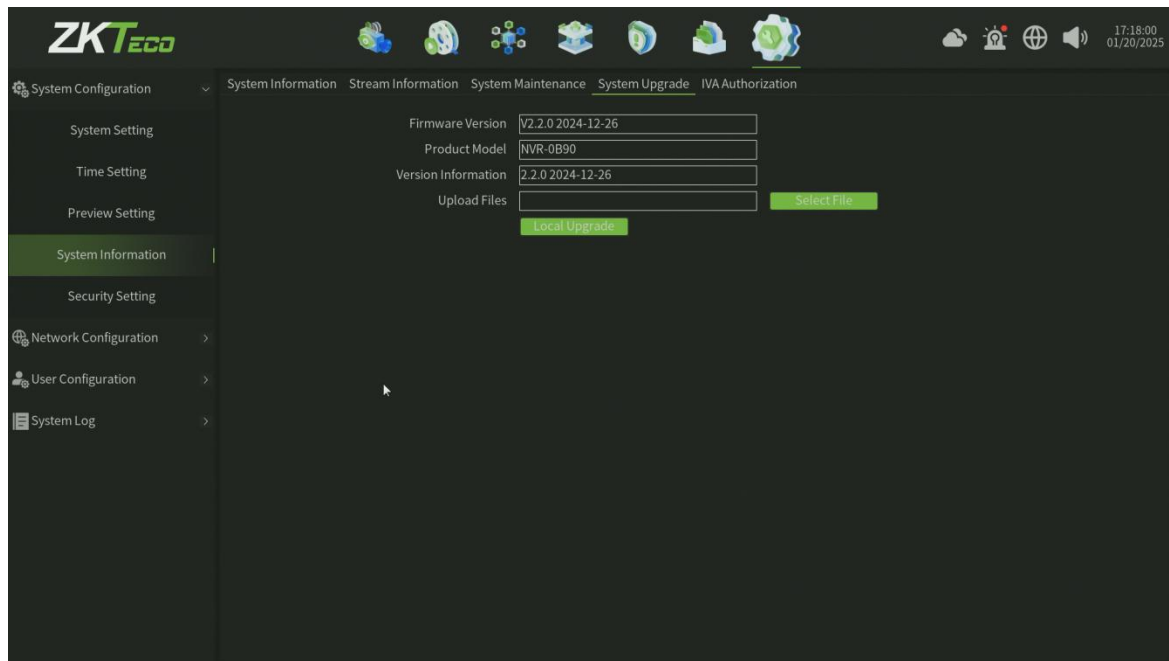


Figure 10.1.4.4 System Upgrade

Steps:

1. **Local Upgrade :** Click **Select File**, and then click local upgrade, the system will automatically restart after upgrading.
2. **After upgrading :** you will view the new version information of Firmware version, product Model and Version information.

10.1.4.5. IVA Authorization

The IVA Authorization interface, as shown in figure 10.1.4.5.

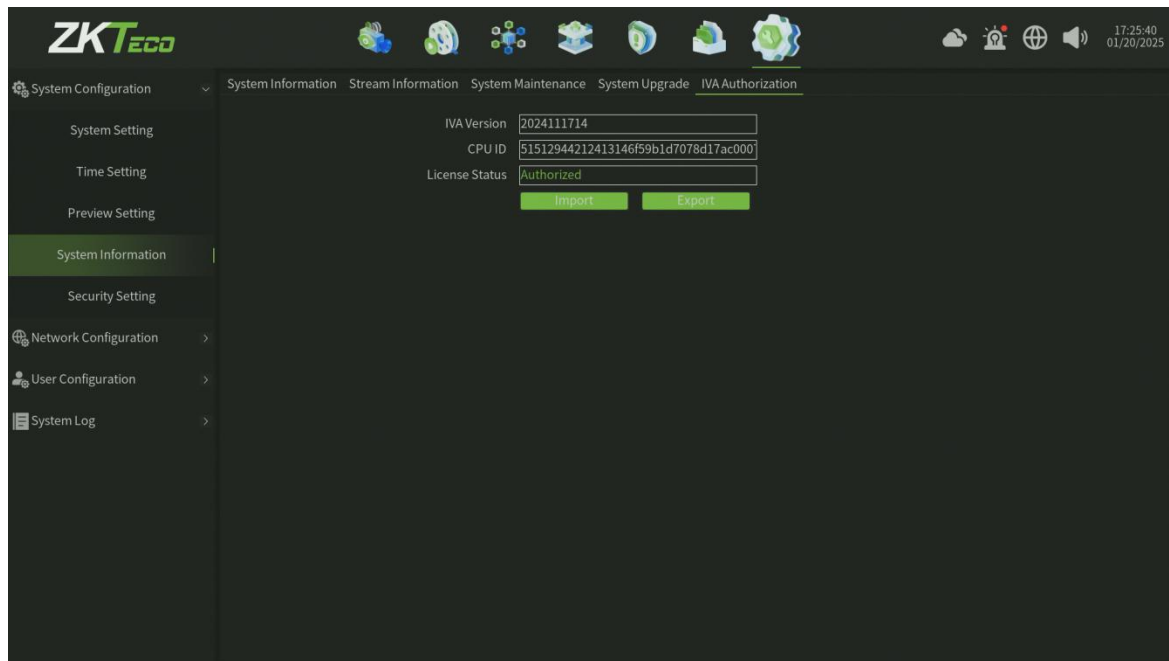


Figure 10.1.4.5 IVA Authorization

Steps:

1. Click **Import**, and then select the authorization file, the system will automatically restart after importing.
2. Also after authorization, you can export the authorization file.

10.1.5. Security Setting

You can configure the Security Setting information, as shown in figure 10.1.5.

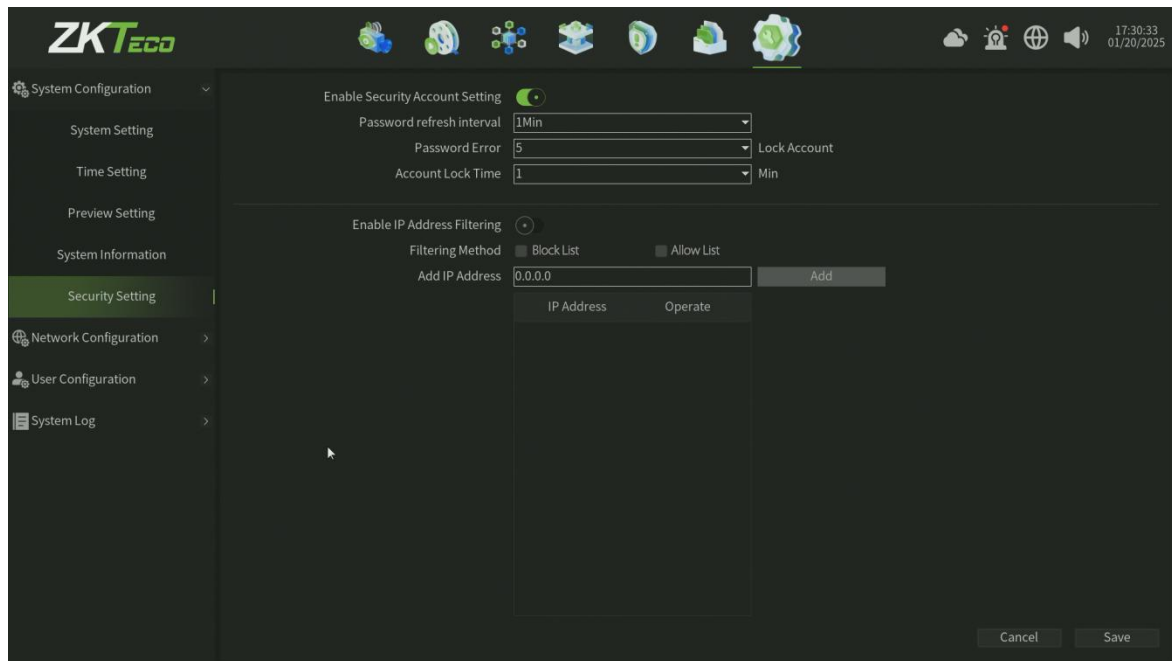


Figure 10.1.5 Security Setting

Parameter:

1. **Enable Security Account Setting** : After enable the account setting, you can configure the account setting.
 - **Password refresh interval**: You can set this value between 1 to 5 mins.
 - **Password Error**: You can set the errpr time between 5 to 10 times before Locking Account.
 - **Account Lock Time**: You can set the lock time in 1, 5, 10, 15, 30, 60 mins.
2. **Enable IP Address Filter** : You can add the ip address in block list and allow list.
 - **Filtering Method** : There are two options (Block List and Allow List) you can select.
 - **Add IP Address** : You can add the ip address for different filtering list.
3. **Save**: Click Save button to save the setting.

10.2. Network Configuration

This model includes five parts altogether (Basic Setting,Advanced Setting,Platform Setting,Network Monitoring, Network Testing).

10.2.1. Basic Setting

10.2.1.1. TCP/IP

The Network TCP/IP Parameter Setting interface, as shown in figure 10.2.1.1.

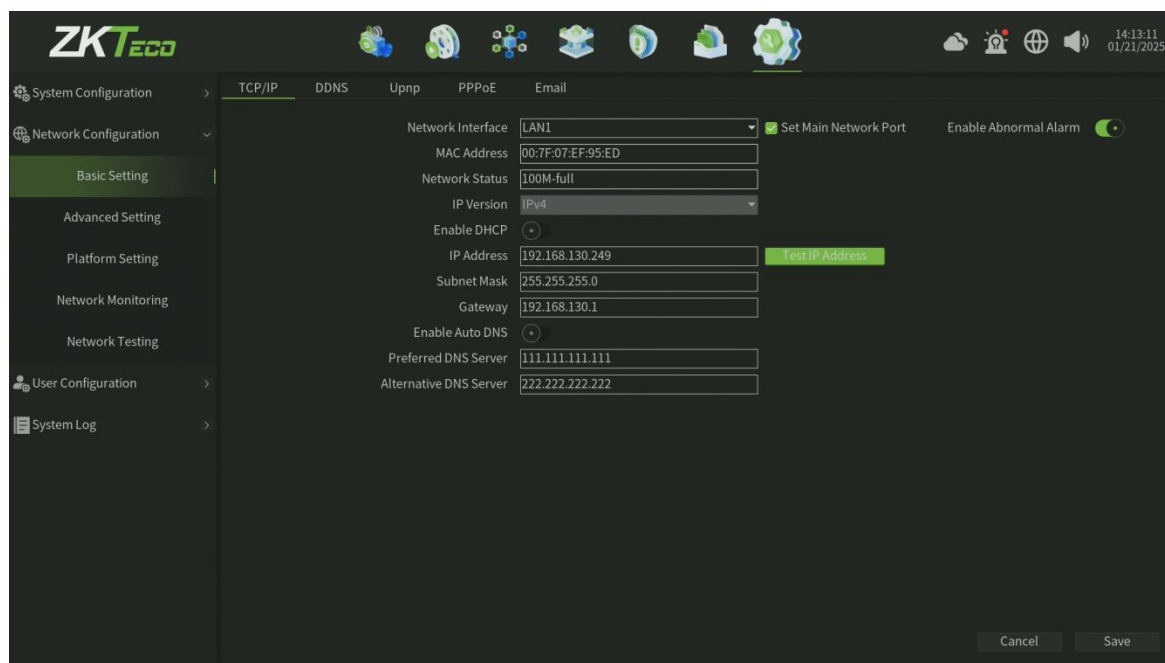


Figure 10.2.1.1 TCP/IP Service

Parameter:

1. **Network Interface** : According to the need can choose a different network card type.
2. **MAC Address** : Show the physical address of the current network interface, unchangeable.
3. **Network Status** : Show the corresponding to network card bandwidth.
4. **IP Version** : Show the IP protocol version,default value is IPV4.
5. **Enable DHCP** : When open it, IP/mask/the gateway cannot be set, if the current DHCP is effective, then it will obtain new IP/mask/gateway the router assigned (remote login need to use the new IP address), if it doesn't take effect, IP/mask/gateway will still show the previous address (can use the old IP address to remotely login equipment).
6. **IP Address** : Set the IP address, the default IP of the network card 1 is 192.168.1.188, the default IP of the network card 2 is 192.168.2.188.
7. **Subnet Mask**: Set the subnet mask.
8. **Gateway**: Set the gateway address.
9. **Enable Auto DNS** : One click enable the auto dns service.
10. **Preferred DNS Server** : Set the Preferred DNS Server ip address.
11. **Alternative DNS Server** : Set the Alternative DNS Server ip address.

10.2.1.2. DDNS

The default is disable status, each set column cannot be set, it needs to switch to the "Enable DDNS" status, as shown in figure 10.2.1.2, note that, this function need to ensure that device can normal access network when using.

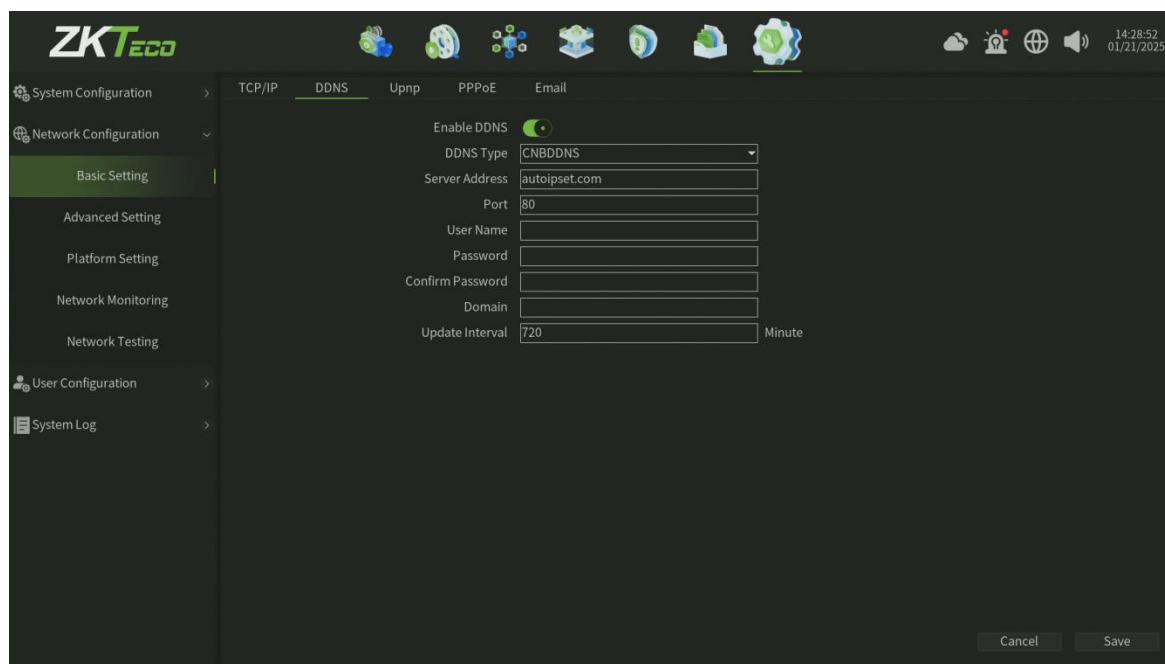


Figure 10.2.1.2 DDNS Service

Parameter:

1. **Enable DDNS** : One click to enable DDNS service.
2. **DDNS Type** : There are 11 types of the defaulted list.
3. **Server Address** : Each server type is corresponding to the existing default server domain name;
4. **Port** : Each server type is corresponding to the existing default port.
5. **User Name** : Manually enter the correct user name.
6. **Password** : Manually enter the correct password.
7. **Confirm Password** : Enter the correct password again.
8. **Domain** : Manually enter the correct domain name (After the function is OK, you can use the domain name remote access device).
9. **Update Interval** : Set the update interval time.
10. **Save** : Click Save button to save the setting.

10.2.1.3. Upnp

The Network Upnp Service Setting interface, as shown in figure 10.2.1.3.

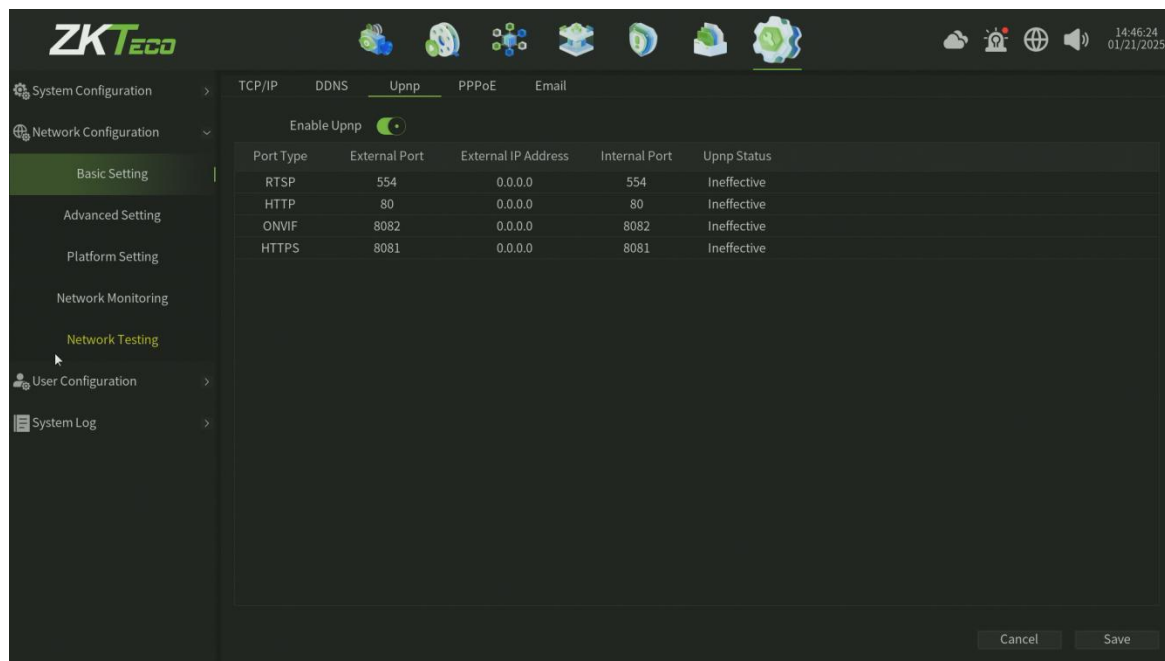


Figure 10.2.1.3 Upnp Service

Parameter:

1. **Port Type** : Display the different protocol service type.
2. **External Port** : You can set the corresponding export port.
3. **External Address** : Display the external address.
4. **Internal Port** : Display the Internal Port.
5. **Upnp Status** : Display the Upnp service status.
6. **Save**: Click Save button to save the setting.

Note :

Defaulted RTSP , HTTP, HTTPS and ONVIF port numbers are respectively 554, 80, 8081 and 8082, port numbers can be modified (modifying the internal port need to restart the device to take effect), UPnP status is defaulted to ineffective state, it will obtain the external IP address after take effect.

10.2.1.4. PPPoE

The Network PPPoE Service Setting interface, as shown in figure 10.2.1.4.

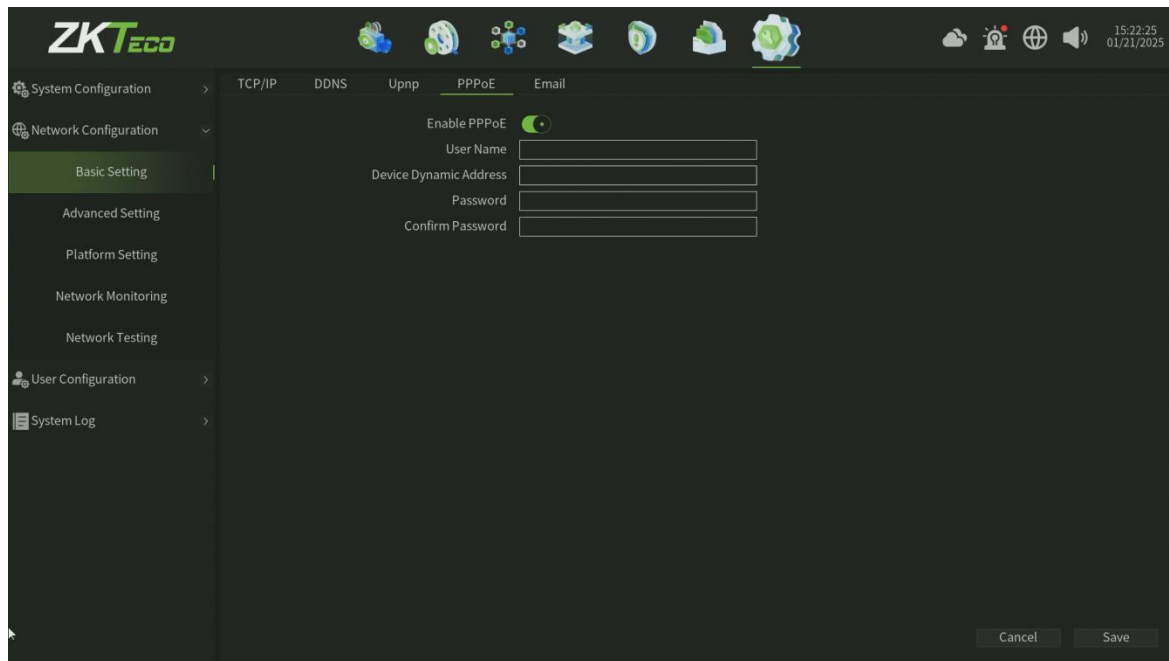


Figure 10.2.1.4 Email Service

Parameter:

1. **Enable PPPoE** : One click to enabel the PPPoE service.
2. **User Name** : Enter the PPPoE user name.
3. **Device Dynamic Address** : set the Device Dynamic Address.
4. **Password** : Enter the PPPoE user name.
5. **Confirm Password** : Enter the correct password again.
6. **Save**: Click Save button to save the setting.

Note :

Need to fill in the correct PPPoE user name and password, if the network connect, can obtain the dynamic address of the device.

10.2.1.5. Email

The settings in this page is used with "Email Linkage" in the "Linkage Setting ", the sender email address and password, the recipient email address, SMTP server address and port information need to input correctly in the corresponding field according to the requirements of the format, here are other additional features on the page, as shown in figure 11.4.

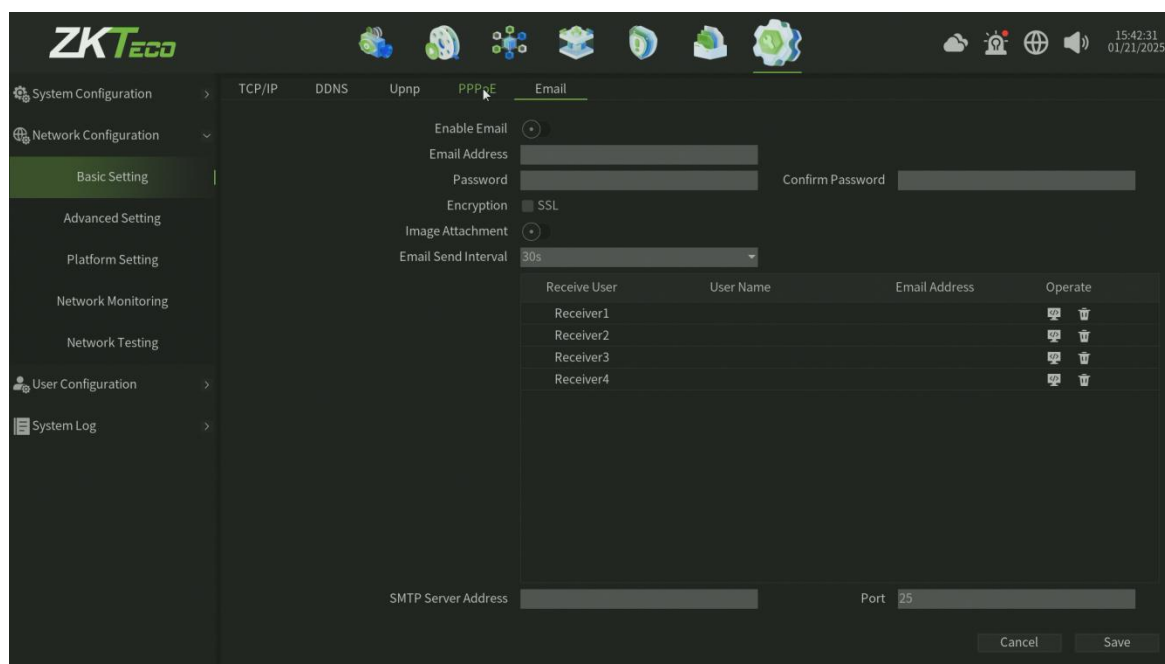


Figure 10.2.1.5 Email Service

Steps :

1. Fill in the multiple recipient mailbox, the sender email address will send E-mail to multiple recipients' mailbox at the same time.
2. Check ☒ Image Attachment function, the mail the recipient received in his mailbox is with attachments, the attachment content is linkage capture file of the corresponding channel (zip format).
3. Click the "test mail" corresponding field  icon, Let the sender mailbox to send mail to the recipient's mailbox, the success or failure will pop-up tips.

Note :

Use Email linkage function need to ensure a good network environment, then the device can smoothly access external network.

10.2.2. Advanced Setting

10.2.2.1. HTTPS

The Network HTTPS Service Setting interface, as shown in figure 10.2.2.1.

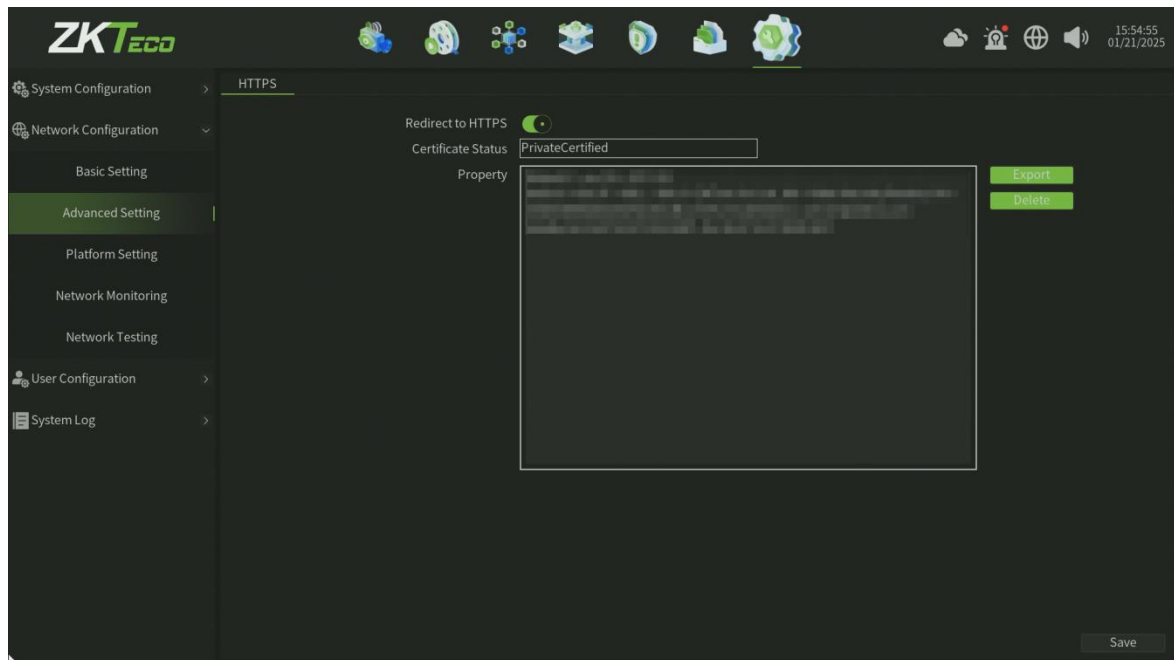


Figure 10.2.2.1 HTTPS Service

Parameter:

1. **Redirect to HTTPS** : One click to enable the HTTPS service and redirect the HTTP service to HTTPS.
2. **Certificate Status** : Display the HTTPS certificate status.
3. **Property** : Display the HTTPS certificate property.
4. **Export** : One click to export the certificate file.
5. **Delete** : One click to delete the certificate Property.
6. **Save**: Click Save button to save the setting.

10.2.3. Platform Setting

10.2.3.1. Platform Setting

The Platform Setting interface, as shown in figure 10.2.3.1, Defaulted to enable P2P and Web Server protocol (Support the device remotely login).

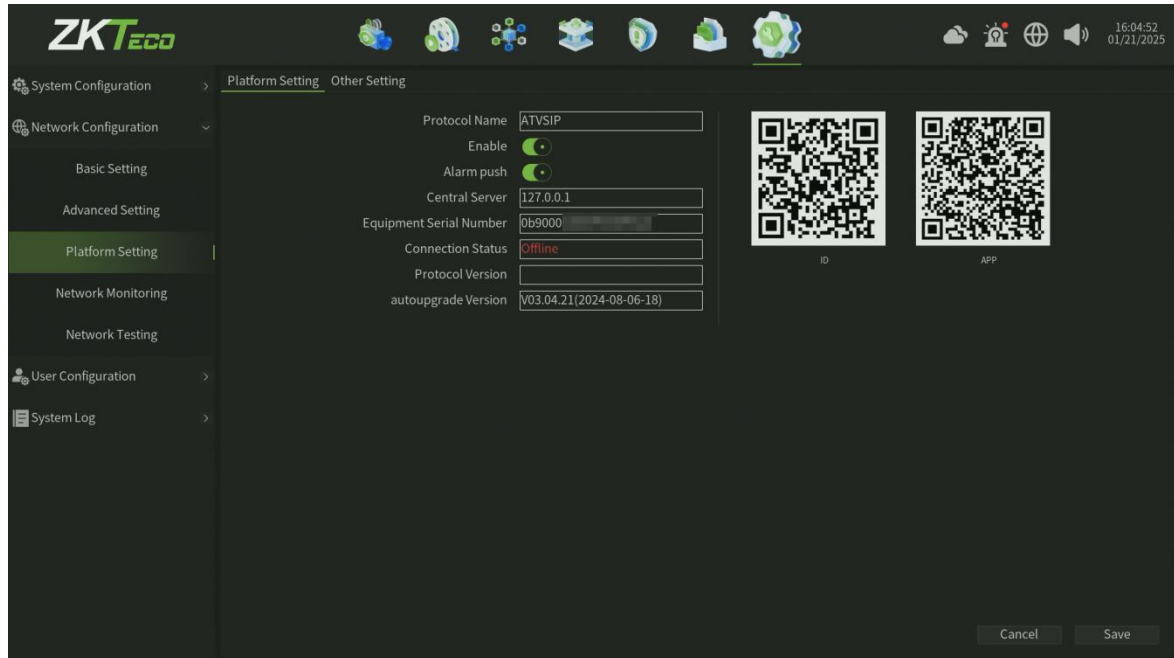


Figure 10.2.3.1 Platform Setting

Parameter:

1. **Protocol Name** : Default value is ATVSIP.
2. **Enable** : One click to Enable P2P service (Only enable the p2p interface on device, this service also need device could access public network).
3. **Central Server** : Default Central Server is local host, value 127.0.0.1.
4. **Protocol Version** : Display the Protocol version.
5. **Autoupgrade Version** : Display the current P2P service version.

Steps :

1. Using mobile phone scan the APP QR code to download and install the Mobile Application.
2. Register and log in the application.
3. Scan the ID QR code in the application.
4. Enter the device user name and password.
5. After connect success, then you can preview and manage the device in the application.

10.2.3.2. Other Setting

The Platform Other Setting interface, as shown in figure 10.2.3.2.

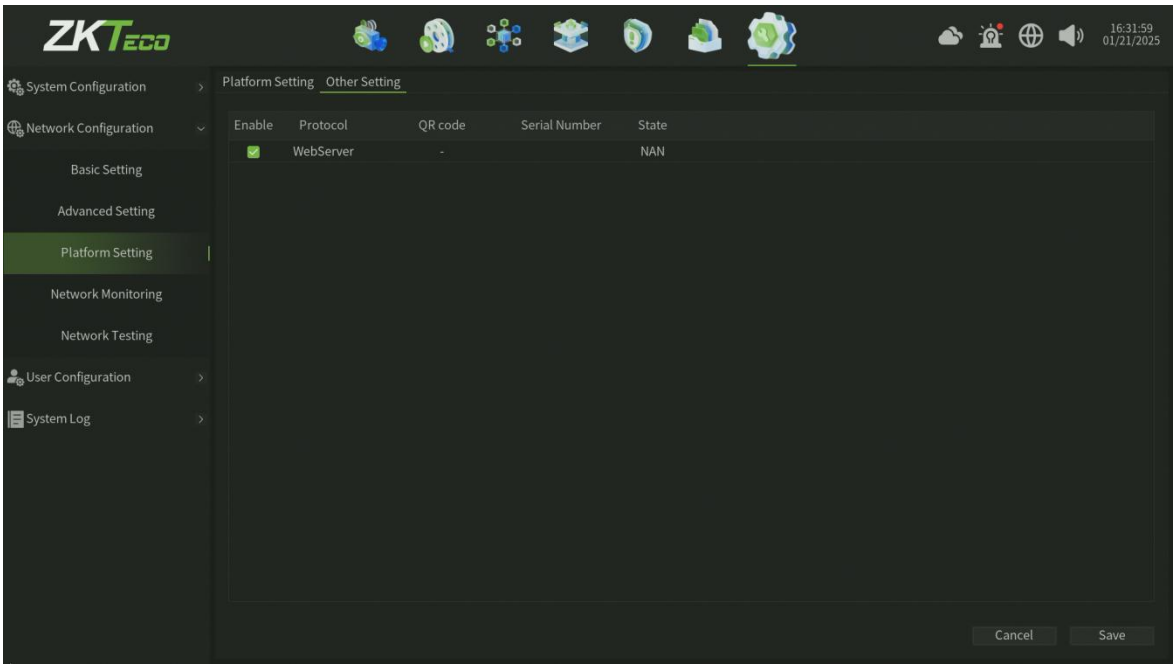


Figure 10.2.3.2 Platform Other Setting

Note:

Other services enable according to the need. Note that, enable/disable parts of service need to restart the device.



10.2.4. **Network Monitoring**

As shown in figure 10.2.4, can monitor the network traffic of the current device.

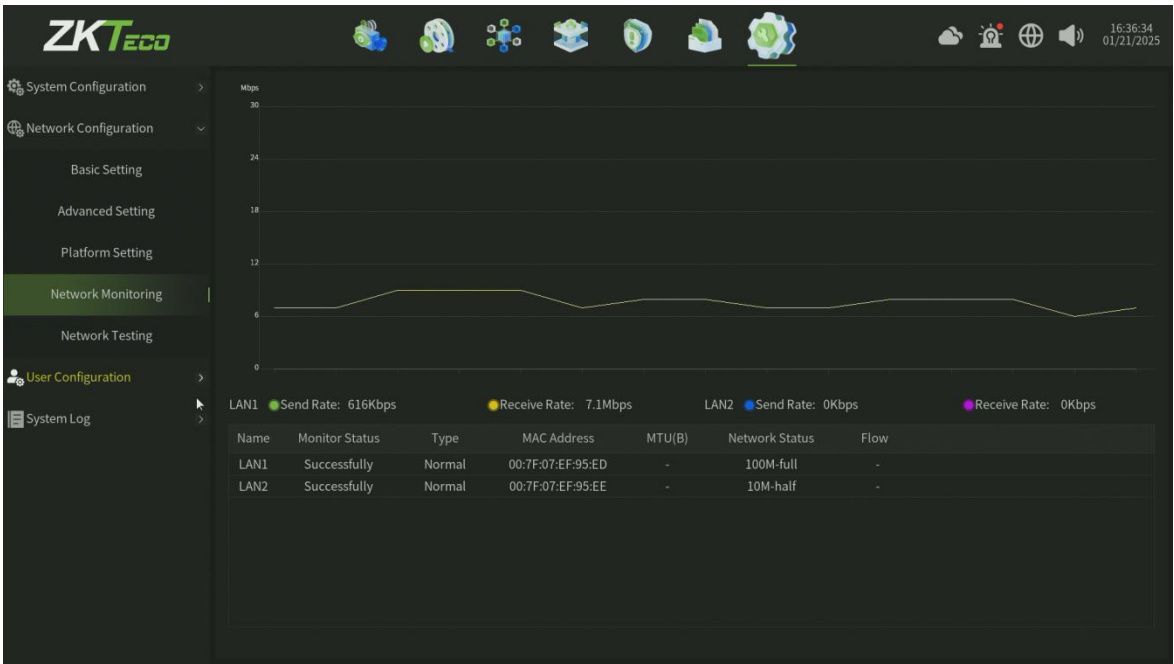


Figure 10.2.4 Network Monitoring

Note:

Real time monitor and display the network flow data for each network card.



10.2.5. Network Testing

The Network Testing interface, as shown in figure 10.2.5.

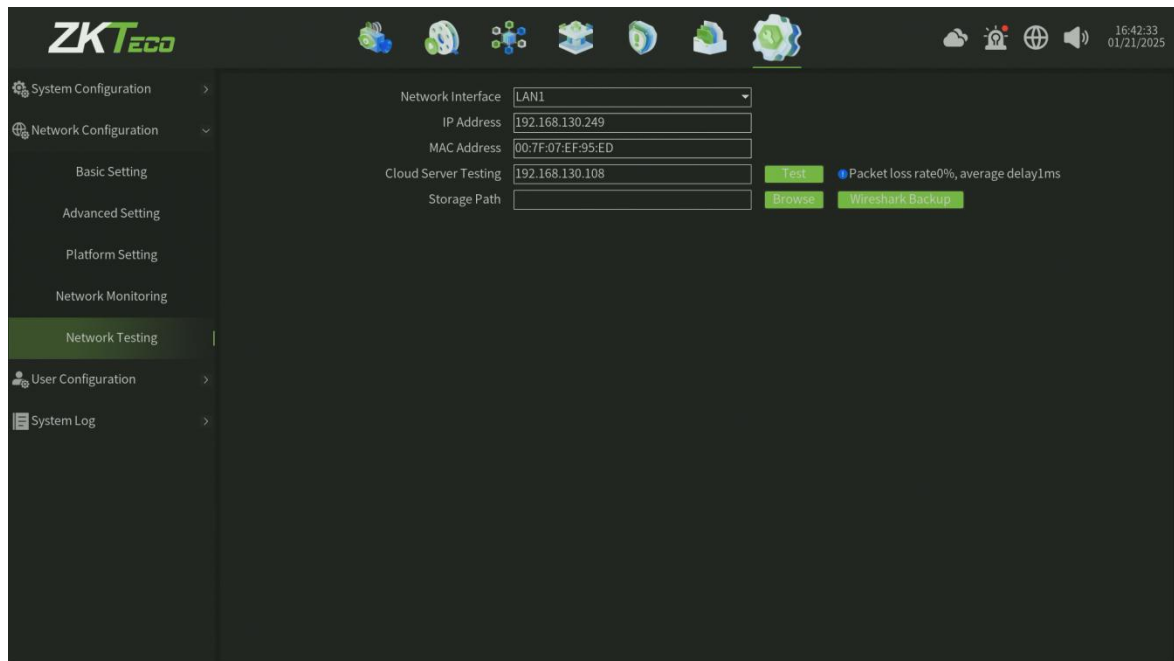


Figure 10.2.5 Network Testing

Parameter:

1. **Network Interface:** Select the network card (LAN1 or LAN2).
2. **IP Address :** Display the device current ip address.
3. **MAC Address :** Display the device mac address.
4. **Cloud Server Testing :** Enter into the target ip address or domain, then click test button, will get a response to judge the network connectivity status.
5. **Storage Path :** Click **browse**, set up storage paths, click **Wireshark backup**, then complete the backup.

10.3. User Configuration

This model includes two parts altogether (User Management , Online User).

10.3.1. User Management

The User Management interface, as shown in figure 10.3.1.

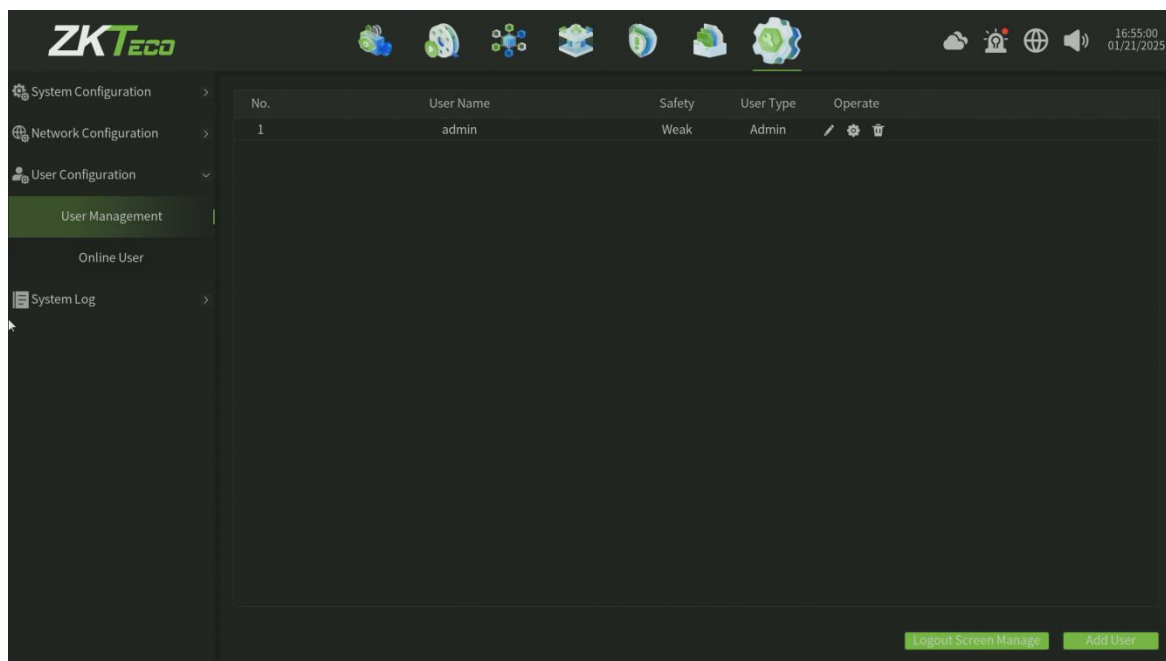
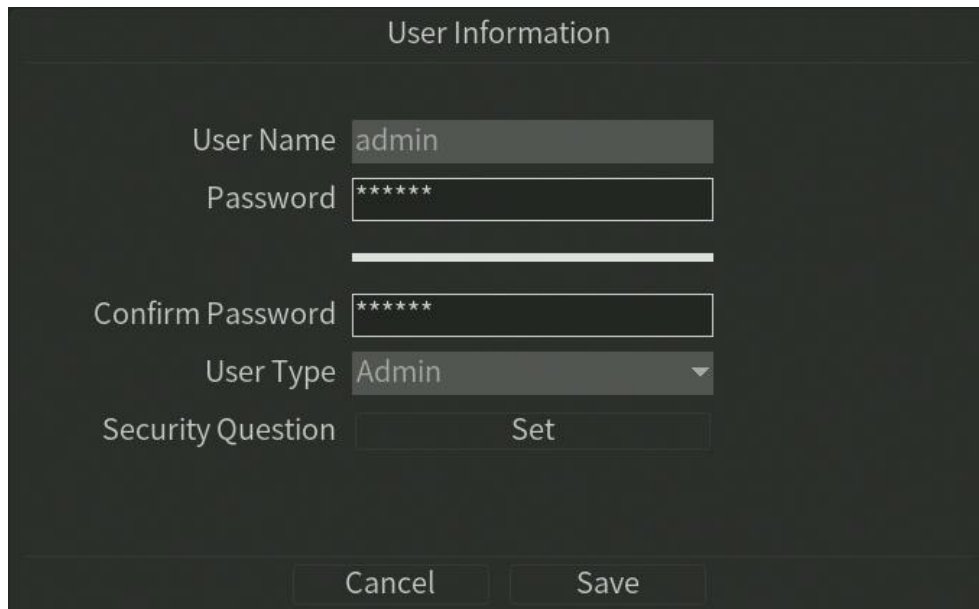


Figure 10.3.1 User Management

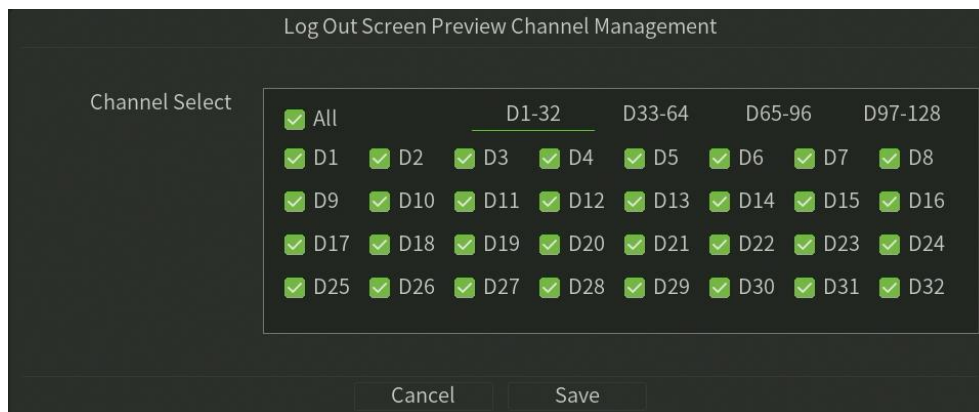
Parameter:

1. : Edit button,click this button can edit the user rights.
2. : Config button,click this button can get and modify the user information,as shown in figure 10.3.1.1.
3. : Delete button,click this button can delete the user (can not delete administrator).
4. **Logout Screen Manage** : Click this button,then select the channel which you want display and preview when the user logout,as shown in figure 10.3.1.2.
5. **Add user** : Click this button, then enter into the user information to add a new user,as shown in figure 10.3.1.3.



The 'User Information' window is a dark-themed dialog box for configuring a user. It contains the following fields and controls:

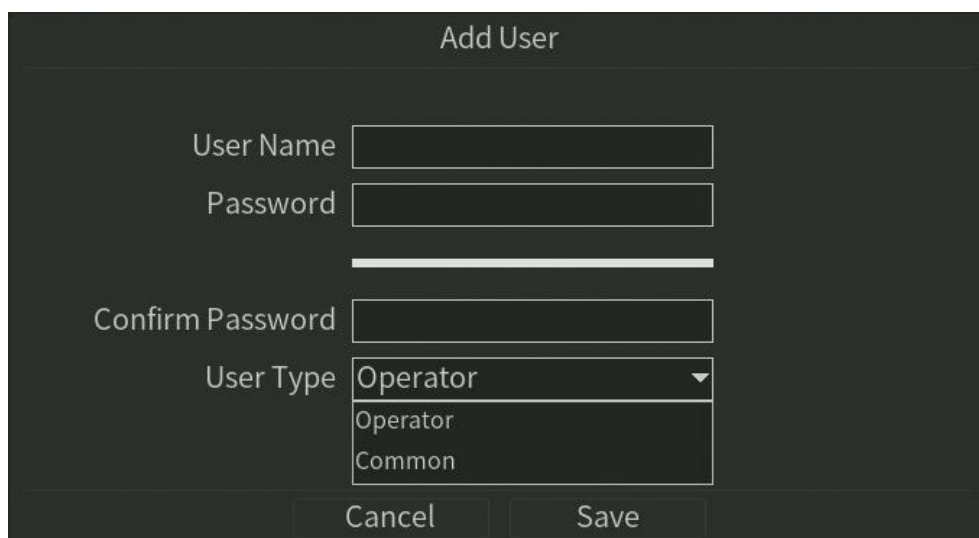
- User Name:** A text input field containing the value 'admin'.
- Password:** A text input field containing six asterisks '*****'.
- Confirm Password:** A text input field containing six asterisks '*****'.
- User Type:** A dropdown menu currently showing 'Admin'.
- Security Question:** A text input field containing the word 'Set'.
- Buttons:** 'Cancel' and 'Save' buttons are located at the bottom right.

Figure 10.3.1.1 User Configuration

The 'Log Out Screen Preview Channel Management' window is a dark-themed dialog box for selecting channels. It features a 'Channel Select' section with a grid of checkboxes:

Channel Select		D1-32		D33-64	D65-96	D97-128	
☒ All							
☒ D1	☒ D2	☒ D3	☒ D4	☒ D5	☒ D6	☒ D7	☒ D8
☒ D9	☒ D10	☒ D11	☒ D12	☒ D13	☒ D14	☒ D15	☒ D16
☒ D17	☒ D18	☒ D19	☒ D20	☒ D21	☒ D22	☒ D23	☒ D24
☒ D25	☒ D26	☒ D27	☒ D28	☒ D29	☒ D30	☒ D31	☒ D32

'Cancel' and 'Save' buttons are at the bottom right.

Figure 10.3.1.2 Logout Screen Preview Channel Management

The 'Add User' window is a dark-themed dialog box for adding a new user. It contains the following fields and controls:

- User Name:** An empty text input field.
- Password:** An empty text input field.
- Confirm Password:** An empty text input field.
- User Type:** A dropdown menu currently showing 'Operator'. The dropdown list is open, showing 'Operator' and 'Common' as options.
- Buttons:** 'Cancel' and 'Save' buttons are located at the bottom right.

Figure 10.3.1.3 Add User

10.3.2. Online User

The Online User interface, as shown in figure 10.3.2.

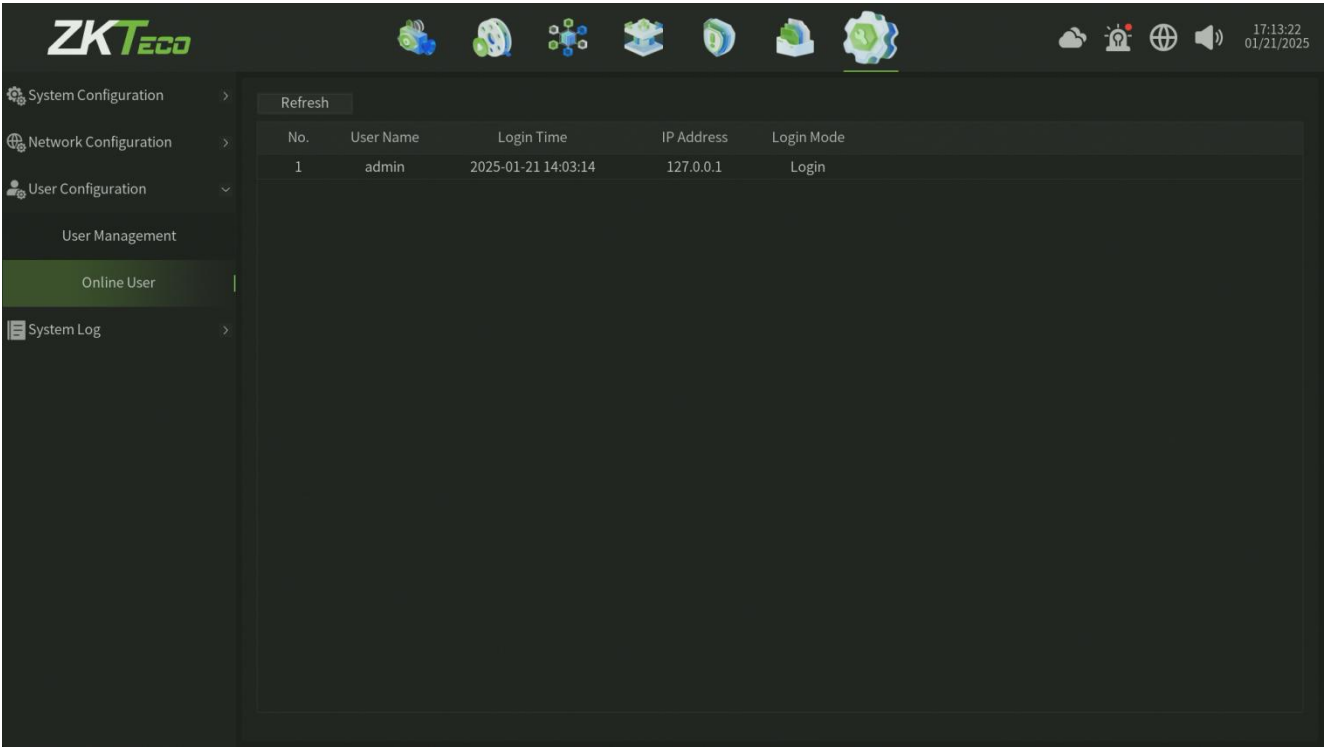


Figure 10.3.2 Online User

Note:

Display the Online User information in this page,Click Refresh can refresh the online user list infomation.



10.4. System Log

This model includes only one part (System Log).

10.4.1. System Log

The System Log interface, as shown in figure 10.4.1.

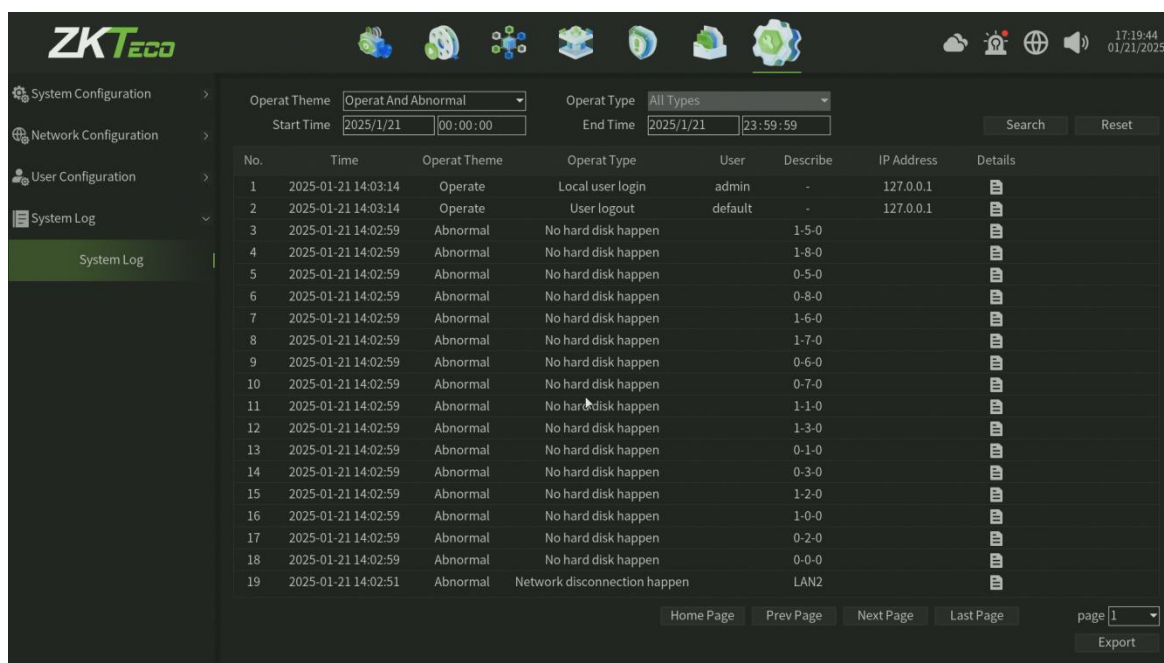


Figure 10.4.1 System Log

Steps:

1. Select the **Operat Theme** for System Log Search.
2. Select the **Operat Type**, Such as **User Logout**, **Restart**.
3. Set the **Start Time** and **End Time**.
4. Click **Search** button to find logs and you can click  button to view the detail on the pop window, as shown in figure 10.4.1.1.
5. Click **Reset** button can back to the default parameter of this interface.
6. Click **Export** button can export the Alarm data (Note need plug the USB disk).

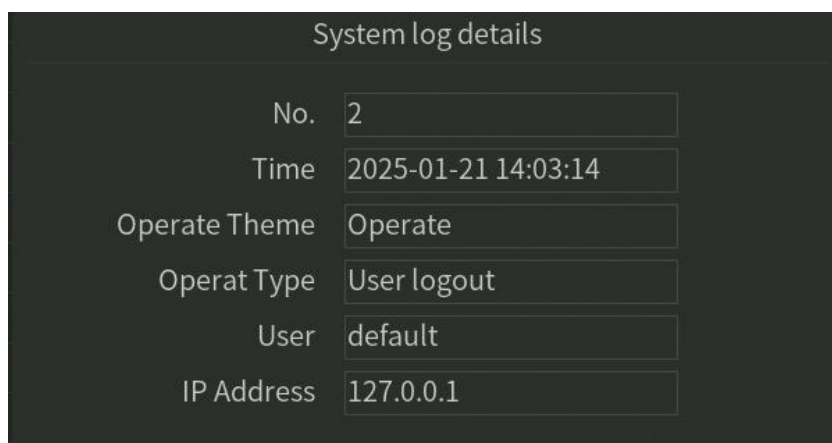


Figure 10.4.1.1 System Log Detail Information

ZKTeco Industrial Park, No. 32, Industrial Road,
Tangxia Town, Dongguan, China.
Phone : +86 769 - 82109991
Fax : +86 755 - 89602394
www.zkteco.com

