

Tiandy

Easy7 Smart Client Express (Windows)

User Manual



ISO 9001:2008

ISO 14001:2004

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Statement

- Our company will update this manual according to the reinforcement and change of product functions, also regularly improve and update the software and hardware products described in this manual. The updated information will be reflected in the latest version of the manual without further notice.
- The change of product parameters will not be further notified as our company continues to adopt new technologies.
- This manual is only for clients' reference and guidance and cannot be ensured to be exactly the same as real products, real products shall prevail in terms of practical application.
- All words, tables and figure information in this manual is protected by national laws, no private duplication is allowed without permission.
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1. Preface

1. 1. Preparation purpose

This user manual is prepared based on Easy7 video monitoring system. In order to provide brief function instruction of the system and help users to systematically understand operation process, this user manual is prepared for reference.

【Note】 Product real-time update will not be further notified.

1. 2. Terms and abbreviations

N/A

1. 3. Usage Attentions

1. Current monthly largest quantity of human face pictures received from single channel is 1 million. The current upper limit of quantity of human face pictures received from all channels is 5 million. If the quantity exceeds the upper limit, result of intelligent retrieval cannot be acquired.

2. Standalone version can support 500 point locations at most at present.

3. It only adapts to screen of resolution 1080P at present. If resolution of screen exceeds 1080P, a window in size 1080P can be shown.

4. This platform is not compatible with cameras in sky-eye series cameras at present.

5. MAC AIO only supports external microphones.

6. As for the equipment added in P2P account number way, audio sampling frequency shall be set to be 8kHz. Other sampling frequency may cause program failure on standalone version, so please use it cautiously.

7. As for the same NVR and IPC, video playback and video download exist at the same time. 5 channels at most are supported at present. Otherwise, download failure or equipment overload will be reminder in download process and video playback will fail.

8. MAC system authorizes standalone version, such as microphone authority.

Restart the standalone version.

9. As for MAC version, the real-time preview in full screen cannot quit from full screen by pressing ESC (unless equipment list is closed).

10. Firewall of computer may influence some normal functions of standalone version. Please add white list or close firewall.

2. Software overview

2. 1. Software usage

Easy7 Smart Client Express is an application based on MacOS and Windows operation system, which is specially used for managing, previewing and operating network monitoring equipment, suitable for all series of Tiandy NVR, IPC and other devices. The software can realize grouping management of watch points according to different scenarios and customize the group name. It can carry out real-time video browsing, audio preview, voice intercom and other operations based on the device. It can control the equipment PTZ, set preset position and call. It can switch video playback between user-defined groups, support front-end and local video playback, control playback through time axis, and download video files to the client-side. The rich video monitoring business functions of the software are really suitable for the application of various video monitoring scenarios.

2. 2. Software operation

Easy7 Smart Client Express Win64 V8.3.exe can install and operate individually and support Tiandy full series of hard disk video equipment and network video equipment.

2. 3. System configuration

CPU: Intel(R) Core(TM) i5, the 8th generation is recommended

Memory: 8G recommended

System: Support Windows 7 64-bit and Windows10 64-bit system

3. Software installation and uninstallation

3.1 Software installation

Take the installation of "Easy7 Smart Client Express Win64 V8.4.exe" in Windows 10 64-bit system as an example, the installation of other versions is the same.

1) Find the installation file "Easy7 Smart Client Express Win64 V8.4.exe" in installation disk, as shown in the figure below:

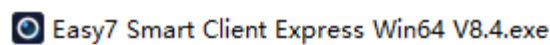


Figure 3.1.1

2) Double click and enter installation program, as shown in the figure below:

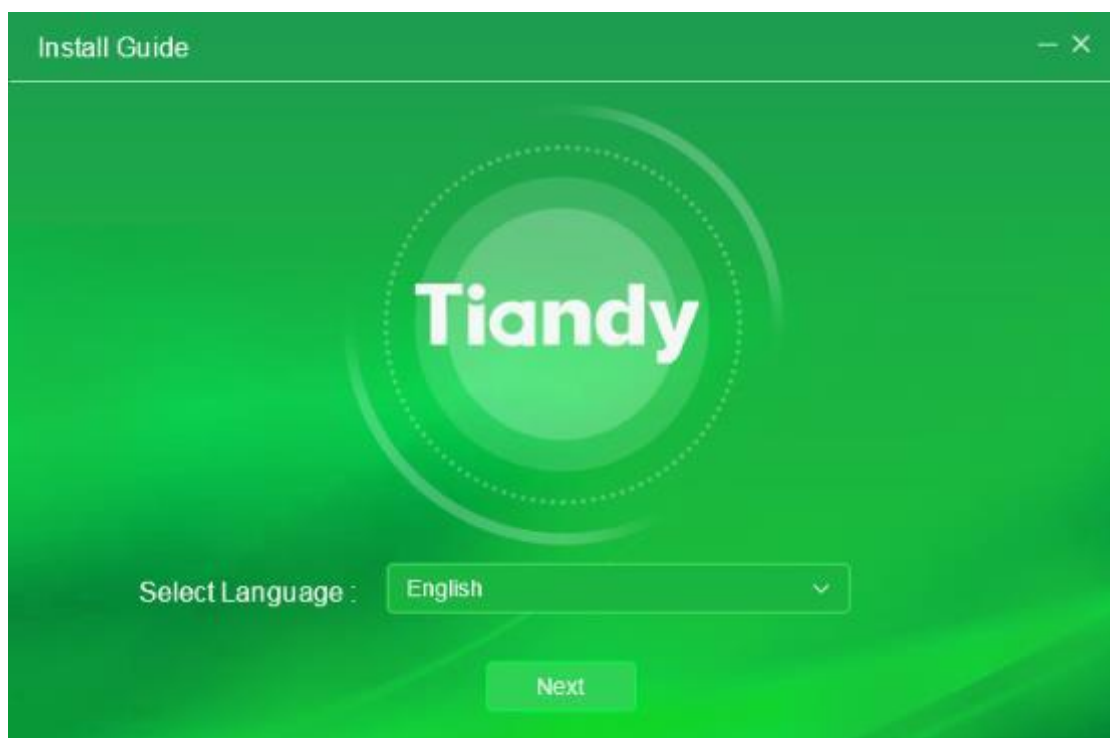


Figure 3.1.2

3) Select installation language, we take English as an example here, select "English", click "Next". It will be installed on Disk C as shown in the figure below:

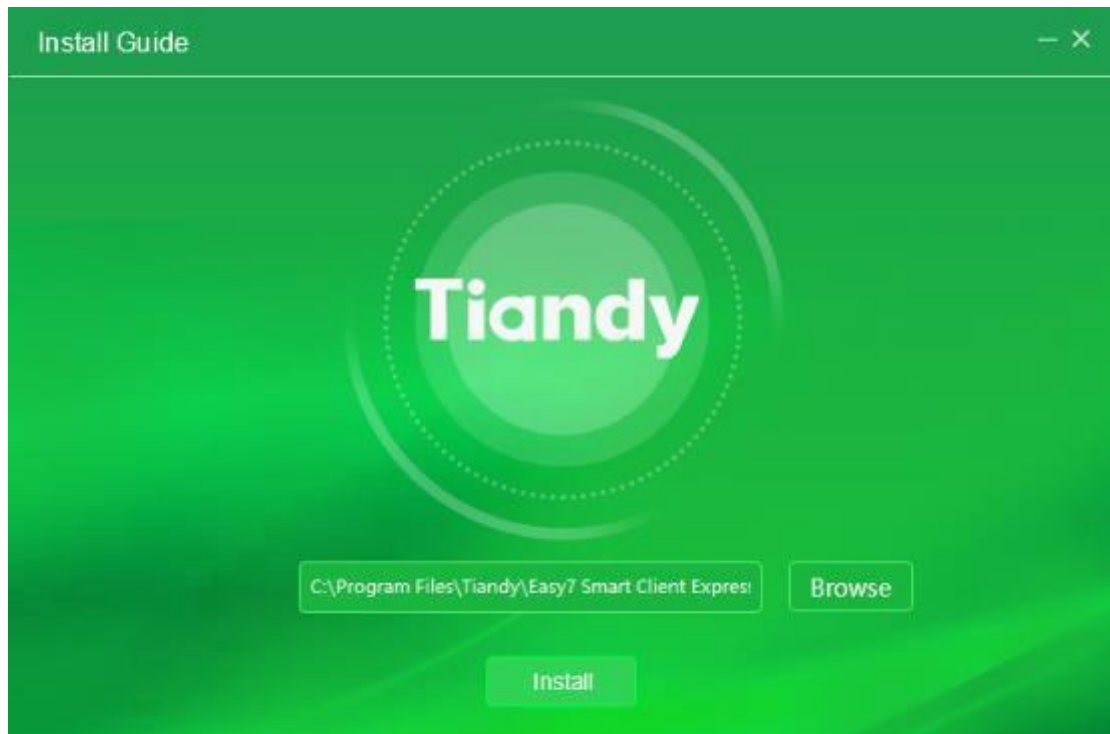


Figure 3.1.3

4) If it's necessary to change installation directory, click "Browse" to select customized installation directory, as shown in the figure below:

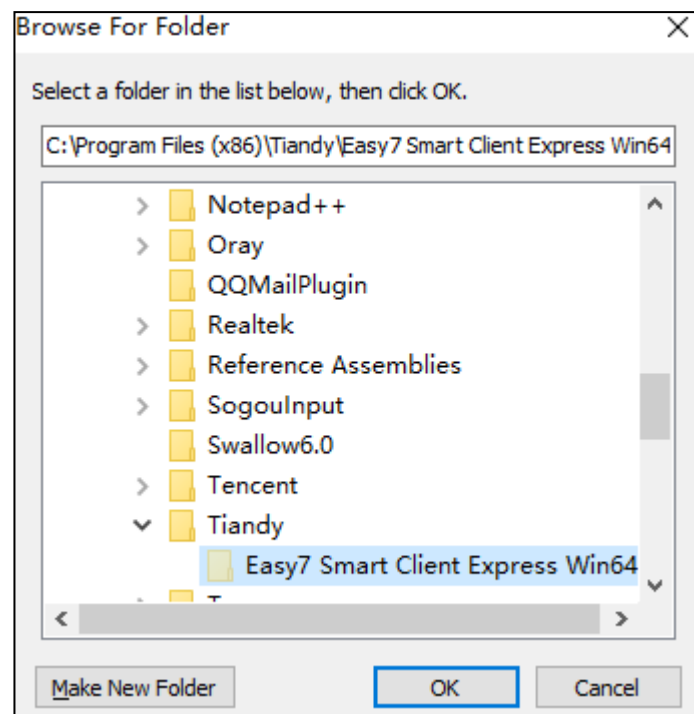


Figure 3.1.4

5) Set installation directory, click "Install" to start installation program, as

shown in the figure below:

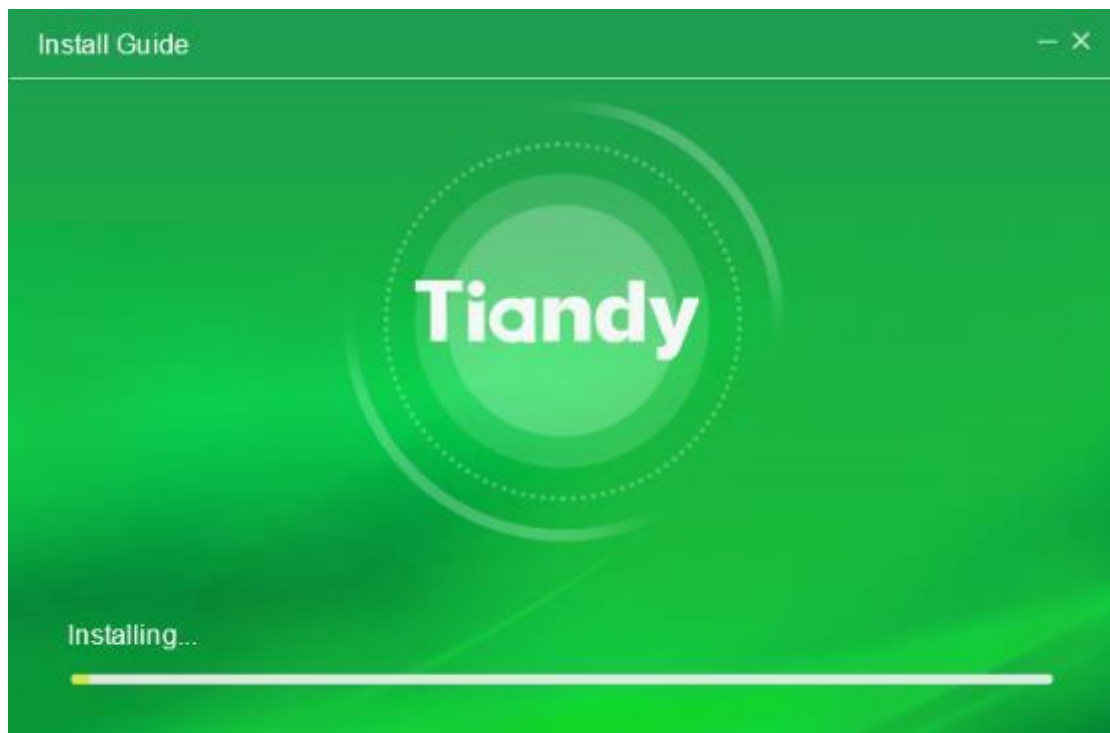


Figure 3.1.5

6) After installation, click "Finish" to complete installation, as shown in the figure below:

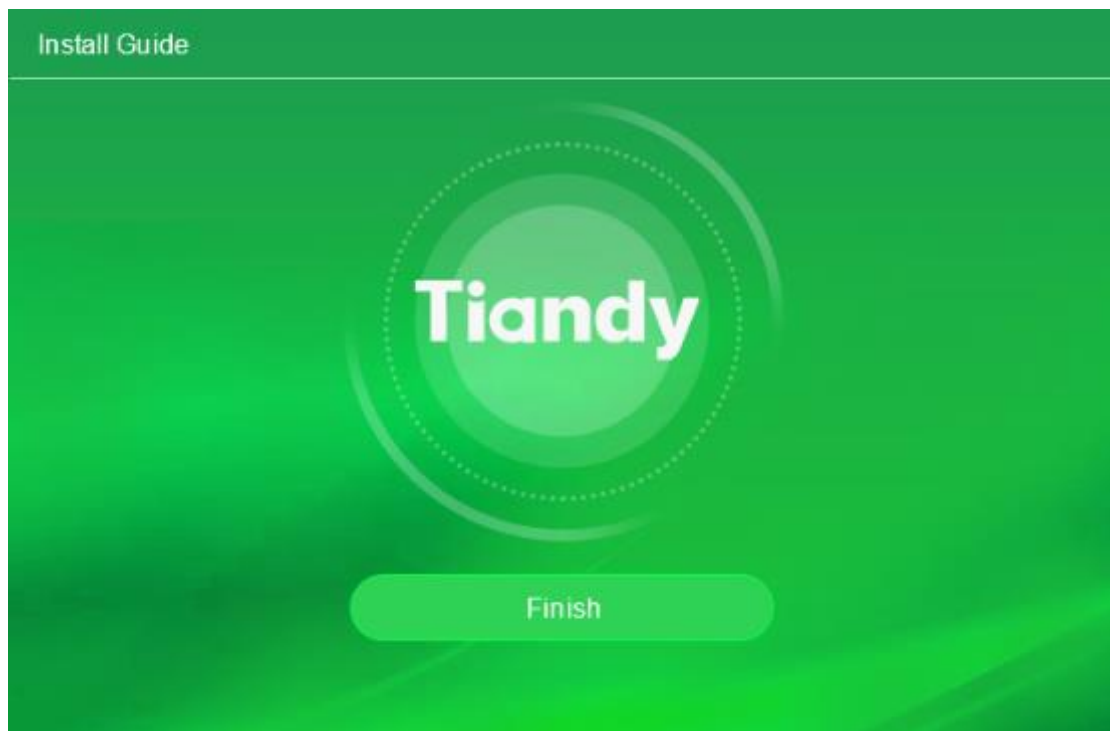


Figure 3.1.6

3.2 Upgrade package installation

Temporarily not available.

3.3 Software uninstallation

Take the uninstallation of "Easy7 Smart Client Express Win64 V8.4.exe" in Windows 10 64-bit system as an example, the uninstallation of other versions is the same.

1) Select "Start" -> "All program" -> "Tiandy" -> "Easy7 Smart Client Express" -> "Uninstall", as shown in below figure:

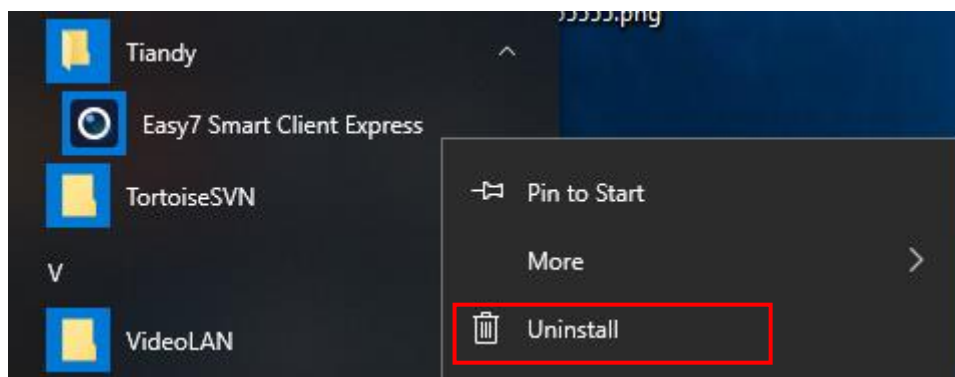


Figure 3.2.1

7) Click "Uninstall", enter control panel, select "Program and feature" -> "Uninstall or change program", then select "Easy7 Smart Client Express", right key to select "Uninstall" or double click, there will display a pop-up for deletion, as shown in below figure:

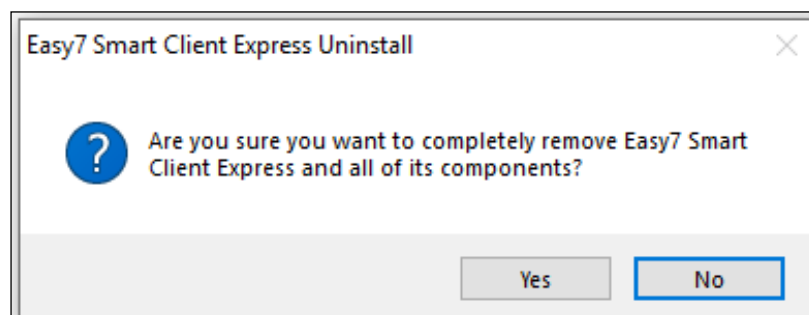


Figure 3.2.2

8) Click "Yes", to uninstall the program will terminate all operating Easy7 related programs and continue uninstallation progress, as shown in the figure below:

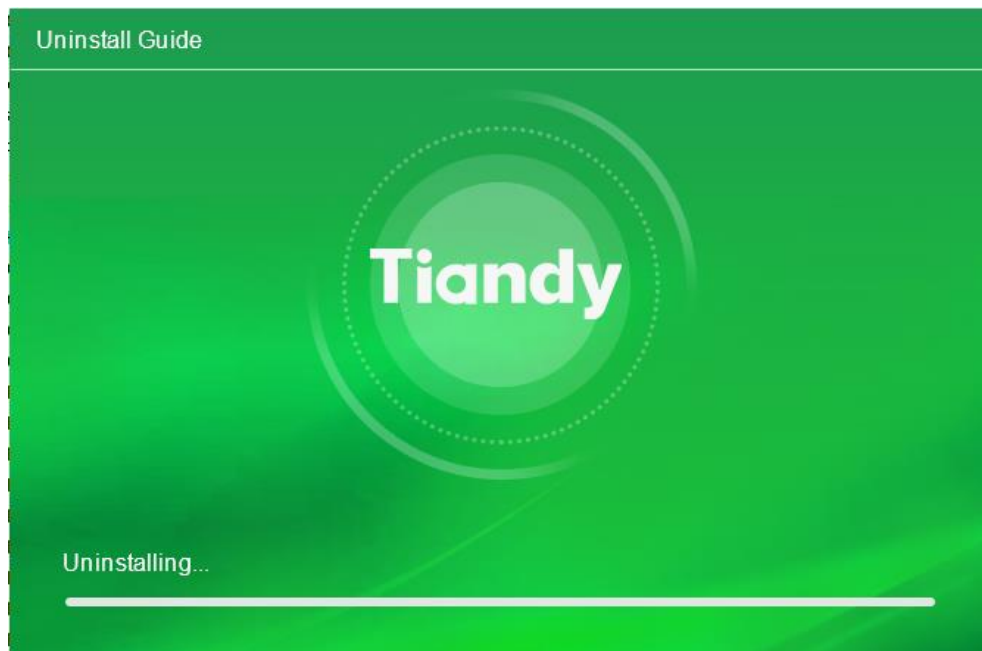


Figure 3.2.3

9) After uninstallation, there will display a pop-up for uninstallation completion, click "Confirm" and the program is completely removed, as shown in the figure below:

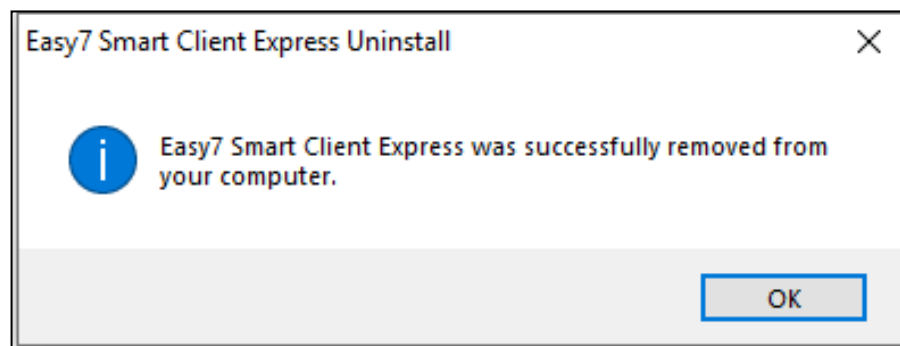
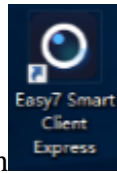


Figure 3.2.4

4. Software login and framework setting

4. 1. Software login



Double click the application icon on the desktop to enter system login interface, an initial password is required to be set for the first-time log in, as shown in below figure:

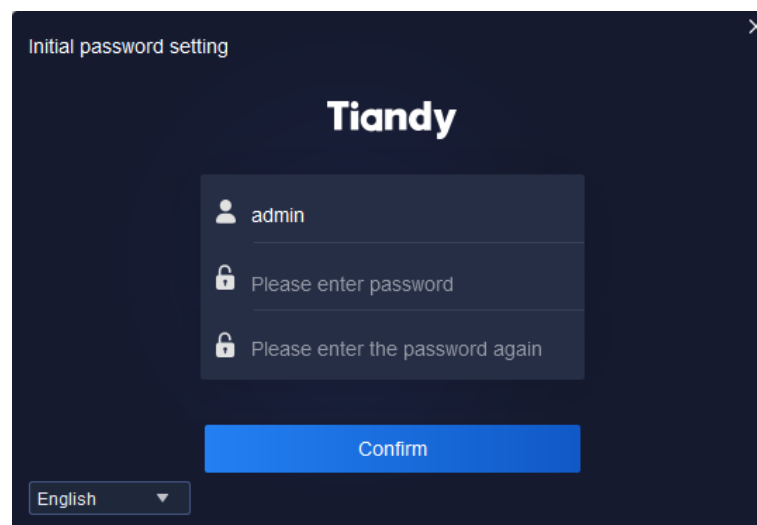


Figure 4.1.1

Note: the password shall be a combination of digits and letters. (Password can be 6-32 characters)

After the initial password is set, enter the password protection setting page, as shown in following figure:

← Password protection

ⓘ Please set the security question

Please choose question one

Please enter the answer to question 1

Please choose the second question

Please enter the answer to question 2

Please choose question 3

Please enter the answer to question 3

Confirm

English

Figure 4.1.2

After the password protection question is set, you will enter the login page, as shown in following figure:

Tiandy

admin

Please enter password

☐ Auto login ☐ Save password [Forgot the password](#)

Login

English

Figure 4.1.3

The information of related parameters in log-in interface is as follows:

Parameter	Description
Auto login	<p>Tick and enable the check box. If the user name and password is correct, there's no need to input user name and password anymore the next time, you may enter automatically.</p> <p>Cancel automatic login: System configuration -> Common Settings->Login Settings->Automatic Login Software.</p>

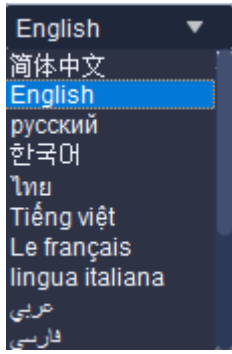

Save password	Tick and enable the check box. If the user name and password is correct, the current password will be saved and it will automatically fill in the password for the next time.
Login	Click and enable it. If the user name and password is correct, you may log in the program.
Forget the password	Click enable and click to enter the password verification page. After the password security question is successfully verified, you can re-enter the initial password setting page to set the password.
	Support shifting between multiple languages.
	Click and enable it. Click to close Easy7 login interface.

Table 4.1.1

4. 2. Framework setting

Input correct user name and password, click "Login" to enter the main program interface of Easy7 Smart Client Express. The default grouping is shown in below figure:

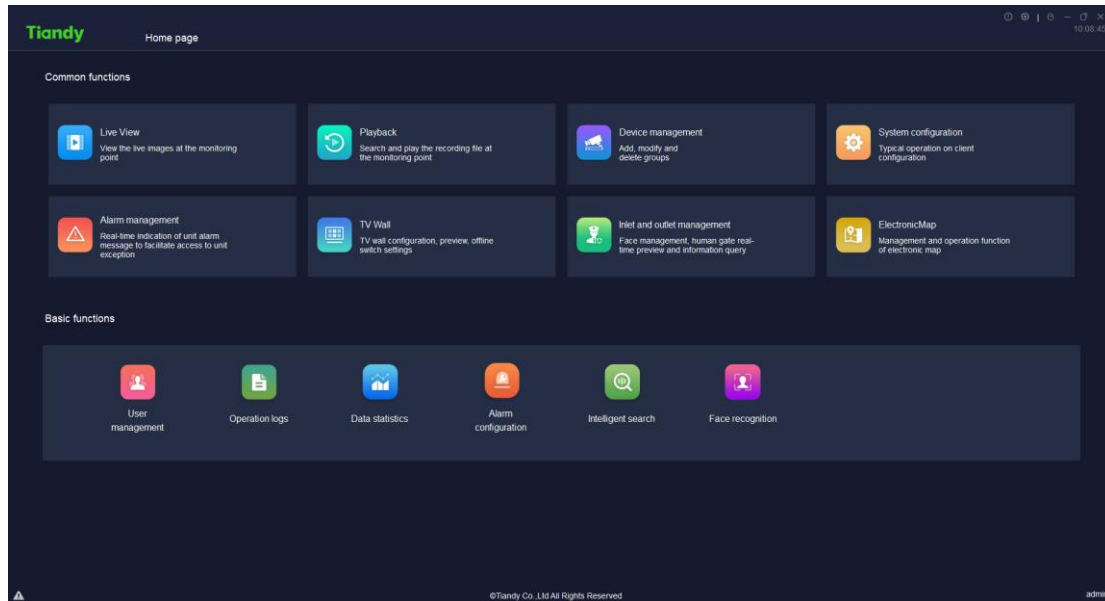


Figure 4.2.1

After entering the interface, click "!" on the right upper corner of the interface to display version information and date, as shown in below figure:

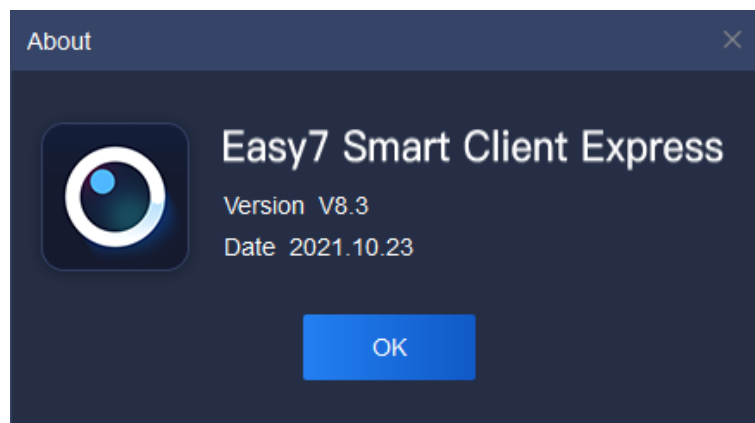


Figure 4.2.2

The mouse slides over "□" on the right upper corner of the interface to display the current CPU occupancy and memory usage, as shown in below figure:



Figure 4.2.3

When connecting video, if CPU utilized rate exceeds 75%, it cannot connect to real-time video. As shown in following figure:

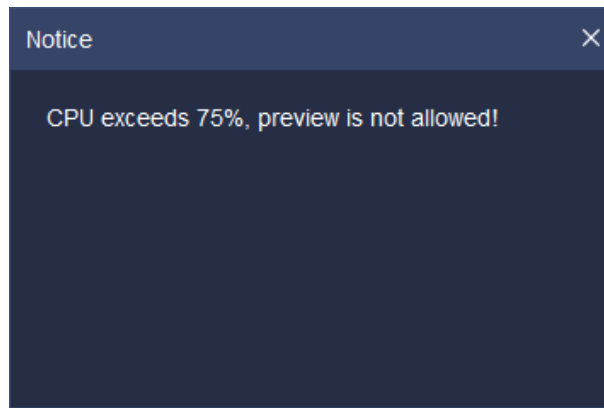


Figure 4.2.4

Click "🔒" on the right corner of the interface to lock the interface. When correct delock password (i.e. login password) is input, the screen will be delocked, as shown in below figure:

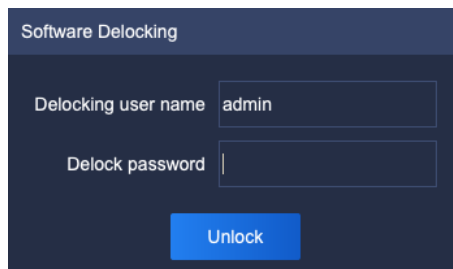


Figure 4.2.5

Only accounts with "system lock-in authority" and "system unlocking authority" are able to carry out delock operation.

Click "—" on the right corner of the interface to minimize the program; click "🖥️/🖥️" on the right corner of interface to restore/maximize the program; click "✖" on the right corner of interface to quit the program.

In order ensure that users may not close the program by mistake in using process, when "✖" is clicked to quick the program, a notice will pop up to confirm whether to quit the program, as shown in below figure:

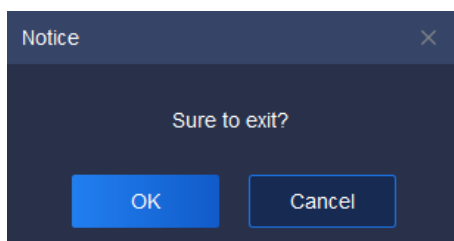


Figure 4.2.6

If "X" is clicked by mistake, click "Cancel" to return to previous operation interface; if you are sure to quit the system, click "OK" to quit.

The right upper corner of the interface will display current system time "13:54:38" to facilitate user to check time at any time.

The navigation menu bar on the top of the interface can be separated from the main interface by dragging the menu, or the position can be exchanged by dragging.

Interface function items are divided into: common functions and basic functions. The module icons in basic and common function area can be dragged separately, and the user can choose the common function for convenience, as shown in below figure:

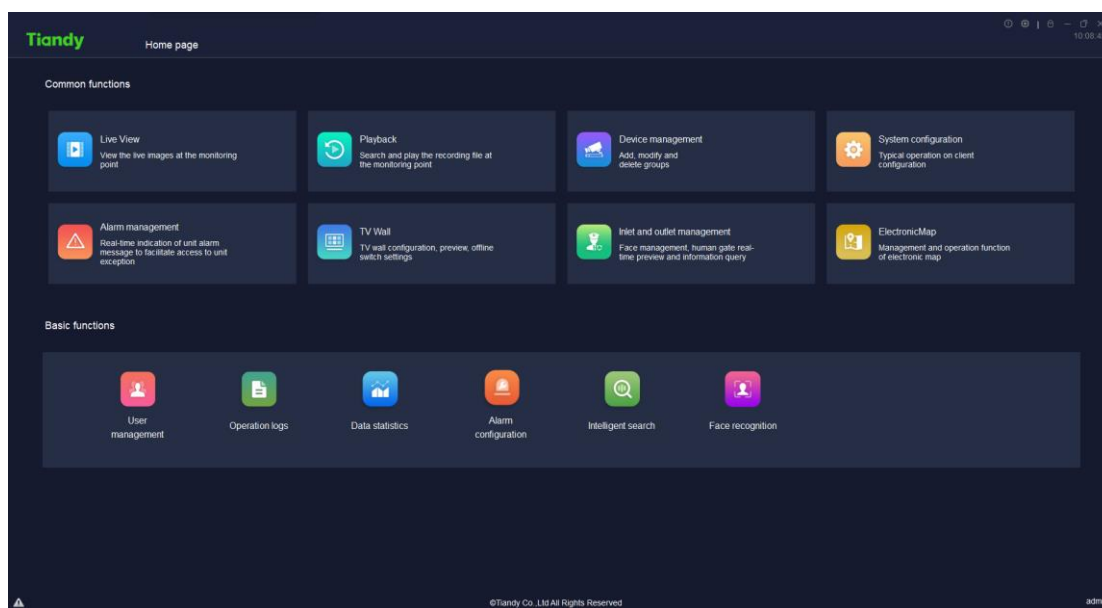


Figure 4.2.7

Real-time preview: View the live images at the monitoring point.

Video playback: Search and play the recording file at the monitoring point.

Equipment management: General management of monitoring devices to facilitate

addition.

System configuration: Typical operation on client configuration.

Alarm management: Real-time indication of unit alarm message to facilitate access to unit exception.

TV Wall: TV Wall configuration, preview, offline switch settings.

Inlet and outlet management: Face management, human gate realtime preview and information query.

ElectronicMap: Management and operation function of electronic map.

Face recognition: Management and distribution of face database.

User management: User password change allowed.

Operation logs: Check the system operations logs to understand the system operation.

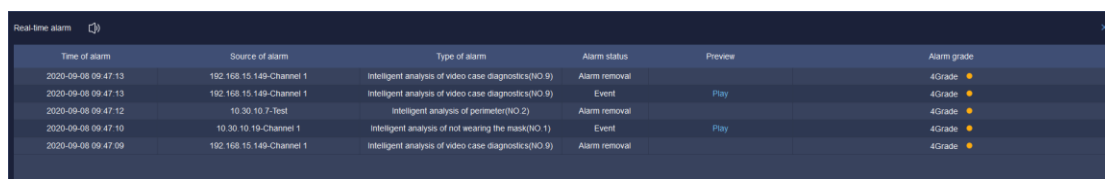
Intelligent search: Intelligent analysis information from search, such as face retrieval, indoor electric vehicle testing and so on.

Data statistics: Total amount.

Alarm configuration: Coordinated configuration of various alarms.

【Note】 After each login, the module icon will return to the default position, and the navigation menu bar position will be saved as the position when you quit last time.

Click "🚨" on the left lower corner of the interface to display real-time alarm information, as shown in below figure:



Time of alarm	Source of alarm	Type of alarm	Alarm status	Preview	Alarm grade
2020-09-08 09:47:13	192.168.15.149-Channel 1	Intelligent analysis of video case diagnostics(NO 9)	Alarm removal		4Grade
2020-09-08 09:47:13	192.168.15.149-Channel 1	Intelligent analysis of video case diagnostics(NO 9)	Event	Play	4Grade
2020-09-08 09:47:12	10.30.10.7-Test	Intelligent analysis of perimeter(NO 2)	Alarm removal		4Grade
2020-09-08 09:47:10	10.30.10.19-Channel 1	Intelligent analysis of not wearing the mask(NO 1)	Event	Play	4Grade
2020-09-08 09:47:09	192.168.15.149-Channel 1	Intelligent analysis of video case diagnostics(NO 9)	Alarm removal		4Grade

Figure 4.2.8

"Real-time alarm" records time, source, type, status, grade and other information of the alarm. When alarm information occurs, click "Play" to check alarm video playback, as shown in below figure:

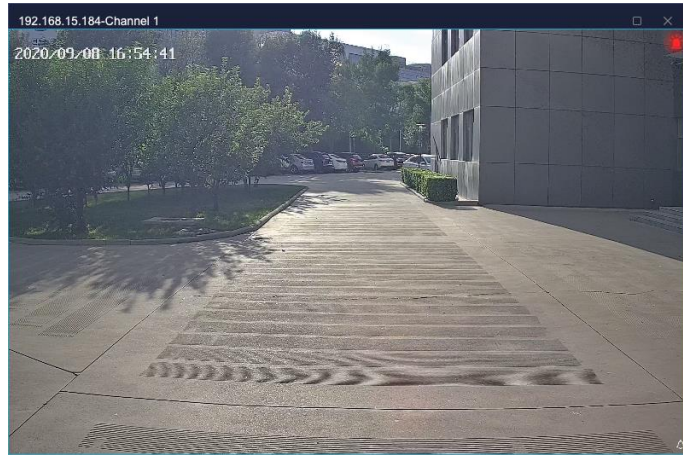


Figure 4.2.9

5. Function operation instruction

5. 1. Equipment management



Click the equipment management icon on home page to enter the equipment management interface.

5. 1. 1. Encode device management

Click "Device" to enter the device management interface. The device interface displays name, device type, IP address, port, video channel, connection status and other basic information of all added device, in which if the connection status is green, it means the device is on-line, and if it is red, it means the device is offline; addition, modification, deletion and other operation of the device can be conducted. As shown in below figure:

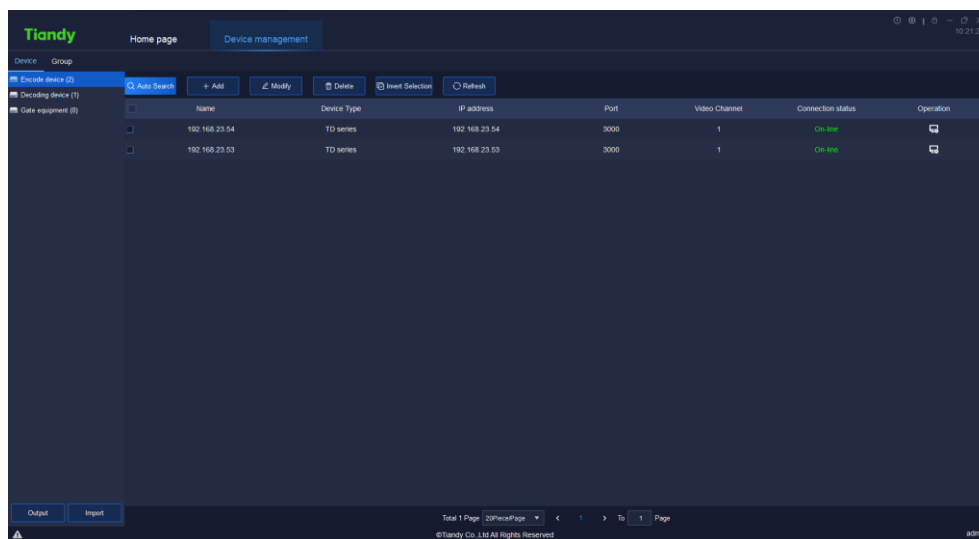


Figure 5.1.1.1


The information of related parameters in the interface is as follows:

Parameter	Description
Auto Search	Automatically search for devices under the same network segment, batch addition supported.
Add	Manually add encode device, support IP method, Standard domain name method, EasyDDNS method , P2P direct

	connection method, P2P account number method to add device.
Modify	Modify information of already added device.
Delete	Delete already added device, batch deletion of device supported.
Output	Select the device, and output the device information in three forms of Equipment List, Organization Chart, and Organization Relationship Table.
Import	Click the device, and input the information in Equipment List, Organization Chart, and Organization Relationship Table, which are contained in the file.
Invert Selection	Select all device that are not selected at that moment.
Refresh	Update the status of device at current interface.
Name	Display the name of all already added device.
Device Type	Display the device type of all already added device, TD series (Tiandy series) supported.
IP Address	Display the IP address of all already added device.
Port	Display the port of all already added device.
Video Channel	Display the maximum number of video channels allowed to play of all already added device.
Connection Status	Display the current connection status of all already added device.
Operation	Click and enable it to open the web user-side interface of the device.

Table 5.1.1.1

5. 1. 1. 1. Auto search of encode device

Click " Auto Search" to enter automatic search interface, as shown in below figure:

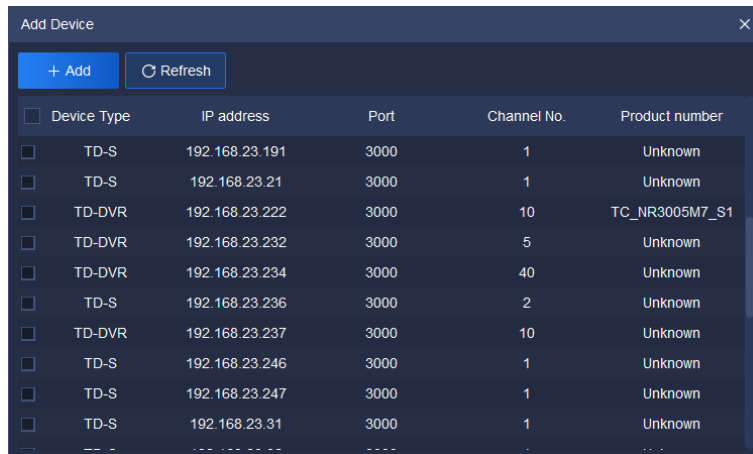


Figure 5.1.1.2

Tick and select one or more device in device column, click "**+ Add**" and a pop-up to add device will display, input the device's user name and password (it's recommended to set unified user name and password for several device, if user name or password is wrong, the batch addition of partial device will fail). If you select to import it into a group, the device will be automatically imported into the group, otherwise you need to manually add to a group, as shown in below figure:

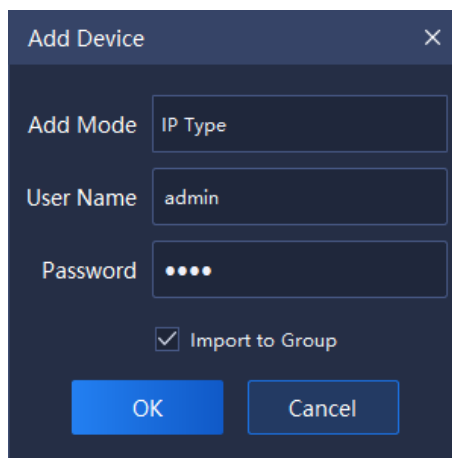


Figure 5.1.1.3

After addition, it will display the number of device successfully and unsuccessfully added, as shown in below figure:

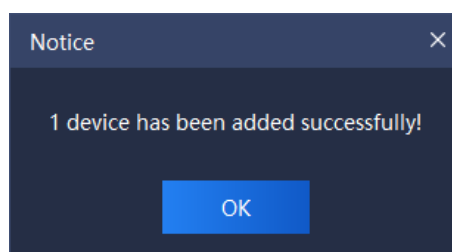
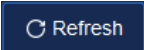


Figure 5.1.1.4

Click " Refresh" to refresh the information of on-line device.

5. 1. 1. 2. Encode device addition

Click " Add" to enter device addition interface, as shown in below figure:

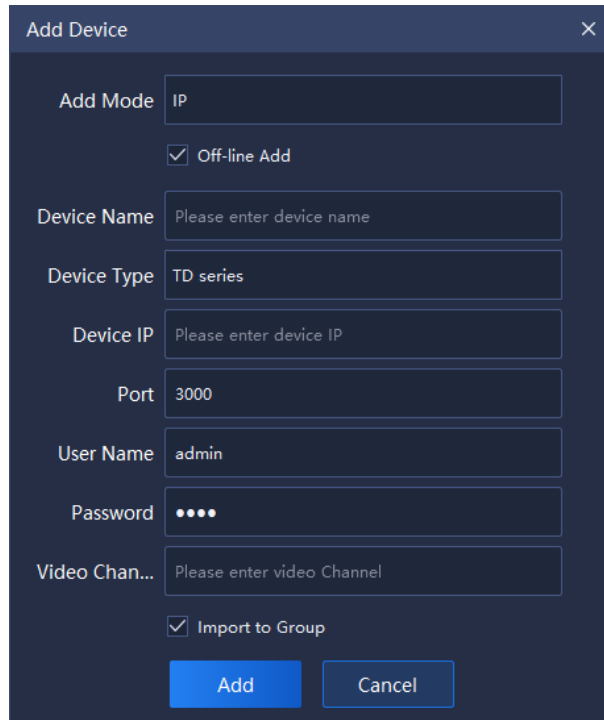
The image shows a 'Add Device' dialog box with a dark blue header and a light blue body. It contains several input fields and checkboxes. The 'Add Mode' field is set to 'IP'. The 'Off-line Add' checkbox is checked. The 'Device Name' field has a placeholder 'Please enter device name'. The 'Device Type' field is set to 'TD series'. The 'Device IP' field has a placeholder 'Please enter device IP'. The 'Port' field is set to '3000'. The 'User Name' field is set to 'admin'. The 'Password' field has four dots. The 'Video Chan...' field has a placeholder 'Please enter video Channel'. The 'Import to Group' checkbox is checked. At the bottom are 'Add' and 'Cancel' buttons.

Figure 5.1.1.5

Select device addition type and fill in corresponding device name, device ID, port, user name, password and video channel, and tick to select whether it's offline device addition and whether needs to import a group according to requirement, the description of related parameter information is as follows:

Parameter	Description
Add Mode	Select different add type: IP type, Standard domain name type, EasyDDNS type , P2P direct connection type, P2P account number.type.
Off-line Add	Tick, then both on-line and offline device can be added. Not to tick, then only on-line device can be added.
Device Name	Add device name. (There's illegal character limit when

	adding device name, following characters are not allowed to be input ~!#\$%^()=[]{},":;'<>?*`+/\&)
Device Type	Optional device type: TD series (Tiandy series).
Device IP	Add device IP.
DNS	Add device DNS.
Device ID	This information needs to be typed in when enabling the P2P direct connection adding model. Find [Device ID] via Device IE->Config->System Config->System Maintenance->System Upgrading->Version Info, or Device IE->Config->Advanced Option->System Settings, then type in the digital characters.
DNS User name	It's necessary to input this information when EasyDDNS type is selected.
DNS Password	It's necessary to input this information when EasyDDNS type is selected.
Port	Add the communication port of device.
User Name	Add the login user name of device.
Password	Add the login password of device.
Video Channel	Add the total number of video channels the device has.
Import to Group	Tick, then the system will automatically add the device to Customized list and create a group (the same as device name).

Table 5.1.1.2

Upon correct information is input, the device will be connected, as shown in below figure:

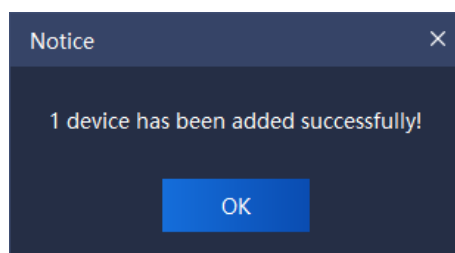
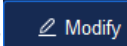


Figure 5.1.1.6

5. 1. 1. 3. Encode device modification

Tick and select the device to be modified, click " Modify" to enter device information modification interface, as shown in below figure:

A dark-themed dialog box titled "Modify Device" with a close button (X) in the top right corner. The dialog contains several input fields with labels to their left: "Add Mode" (value: IP), "Device Name" (value: 192.168.25.48), "Device Type" (value: TD series), "Device IP" (value: 192.168.25.48), "Port" (value: 3000), "User Name" (value: admin), "Password" (value: four dots), and "Video Chan..." (value: 1). At the bottom of the dialog, there are two blue buttons: "Modify" and "Cancel".

Figure 5.1.1.7

Modification of add type, device name, device type, device IP, port, user name and password, video channel and other related information supported. Click "Modify" to complete modification, as shown in below figure:

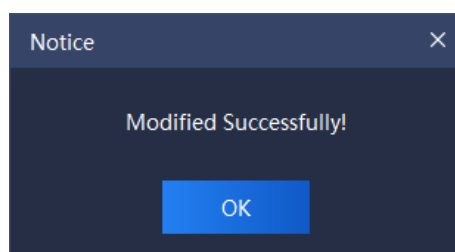



Figure 5.1.1.8

5. 1. 1. 4. Encode device deletion

Select one or more devices to be deleted, click " Delete" to enter device deletion interface, as shown in below figure:

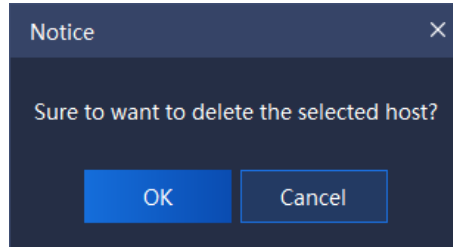
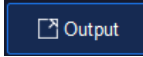


Figure 5.1.1.9

5. 1. 1. 5. Encode device output

Check the device that needs to be added and handled, click the button " Output". Only after the password verification could the device information be output, as is shown in below figure:

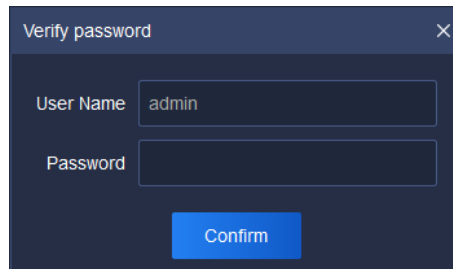


Figure 5.1.1.10

The selected device will be output to the file in three forms of Equipment List, Organization Chart and Organization Relationship Table, as is shown in below figure:

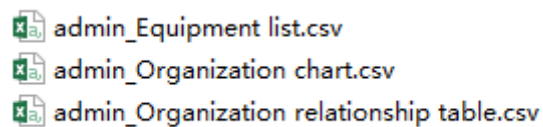


Figure 5.1.1.11

5. 1. 1. 6. Encode device import

Upload the Equipment List, Organization Chart and Organization Relationship Table . The upload result will record the number of host computer, success and failure,

as is shown in below figure:

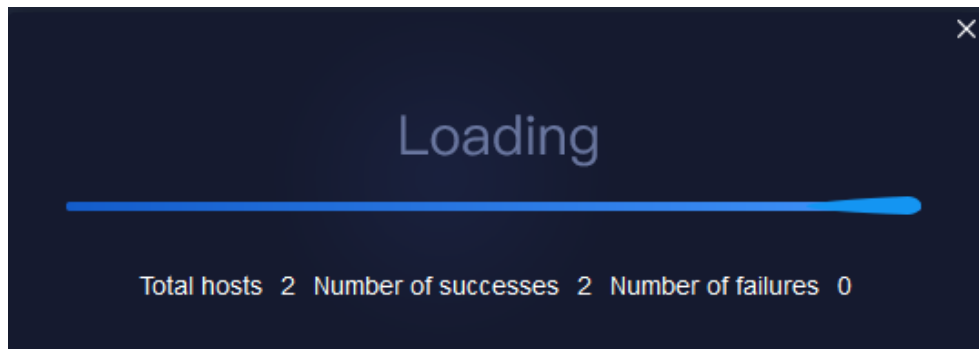




Figure5.1.1.12

5. 1. 1. 7. **Encode device invert selection**

Select one or more devices not to be operated, click " Invert Selection", select all devices not selected at that moment, and conduct on selected devices.

5. 1. 1. 8. **Encode device refresh**

Click " Refresh" to refresh the information of all devices on current page.

5. 1. 2. **Deciding device management**

The operation is the same as 5.1.1 encode device management.

5. 1. 3. **Gate equipment management**

The operation is the same as 5.1.1 encode device management.

Note:

1. The device serial number is the factory number of the gate equipment, such as ID060218100922201900889.

2. When connecting the Tiandy equipment, it should be noted that the port number is 80.

3. If the device is configured as Tiandy PAD, you need to enter PAD backend - > communication settings to configure the server address (this address is the IP address of the platform).

5. 1. 4. **Grouping**

Click "Group" to enter group management interface. Information of all devices

and customized groups in current system will be displayed, as shown in below figure:

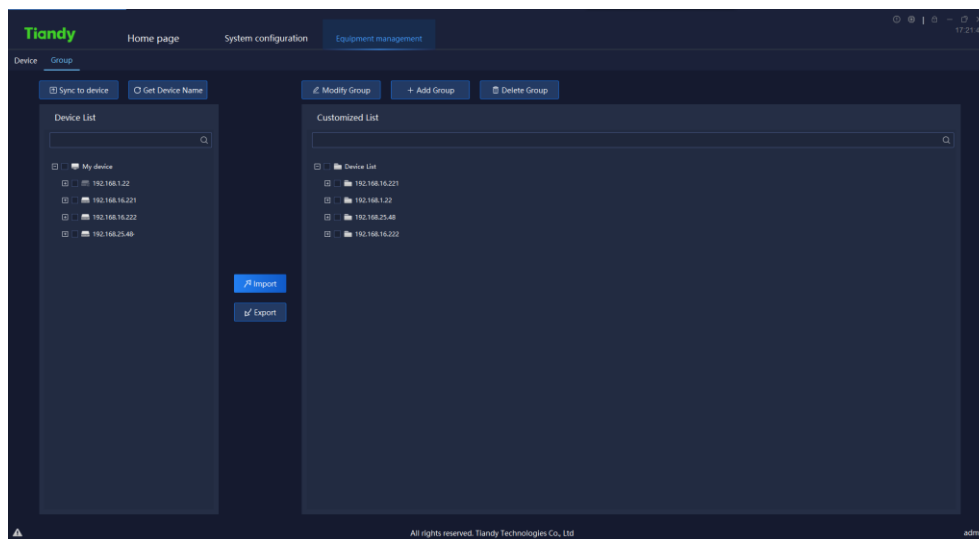









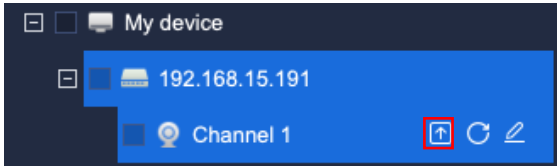

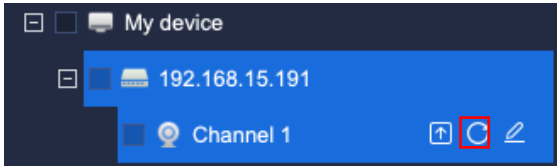

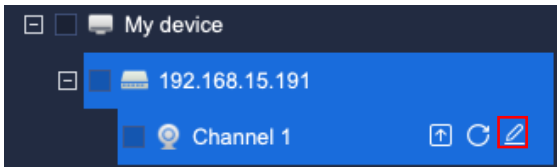

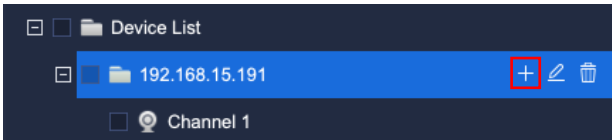



Figure 5.1.2.1

The description of related parameters in this interface is as follows:

Parameter	Description
 Sync to device	Set the channel name on the local device tree synchronously to the front-end channel.
 Get Device Name	Get the front-end channel name of on-line channel in Device list.
 Modify Group	Select a group in Customized list, click to modify the group name.
 Add Group	Select the list needs to create sub-group in Customized list, click to add a group.
 Delete Group	Tick and select a Customized list group, click to delete the group and delete the sub-groups and channels in the group at the same time.
 Import	Tick and select the channel in left Device list, select a group in right Customized list, click to import the device to the customized device list.
 Export	Tick and select the channel in Customized list group, click to export that channel.

	<p>Quick search of channel name, input key information and the channel name including that key information will be displayed in Device list and Customized list.</p>
	<p>Sync to device, move the mouse to Device list channel node, click synchronize the channel name to the front-end channel, as shown in below figure:</p> 
	<p>Get the name, move the mouse to Device list channel node, click to get the front-end channel name of single channel, as shown in below figure:</p> 
 (in Device list)	<p>Modify channel name, move the mouse to Device list channel node, click to modify the channel name, as shown in below figure:</p> 
	<p>Add group, move the mouse to Customized list group, click to add the sub-group of the group, as shown in below figure:</p> 
 (in Customized list)	<p>Modify watch point group, move the mouse to Customized list group, click to modify the name of the watch point group, as shown in below figure:</p>

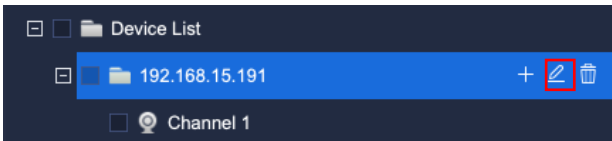

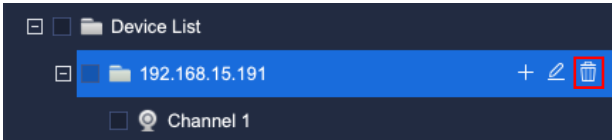
	
	<p>Delete group, move the mouse to Customized list group, click to delete the group, and delete the sub-groups and channels in the group at the same time, as shown in below figure:</p> 

Table 5.1.2

The information in left Device list is the information of all added encode devices and their channels automatically generated by the system. The right Customized list is the group information customized by users themselves. To facilitate user's management, users may add the encode device on the left to the Customized list on the right as necessary. For example, to add all channels of device 10.30.10.12 in Device list to the "Group Test" in customized group of Customized list, the operation steps are:

- 1) Tick and select all channels of 10.30.20.12 in Device list




- 1) Select the customized group to be added in Customized list (highlighted when



- 2) Click "

" to add channels.

Similarly, select corresponding device channel in Customized list, click "

" to delete the device channel from Customized list. (Note: Modules other than equipment management all load Customized list, users need to add used

devices into Customized list.)

If the name of Channel 1 in device 10.30.10.21 in Device list needs to be modified, click "✎" and a pop-up for modifying device name will display (if the video has been encrypted, it can be decrypted here), as shown in below figure:

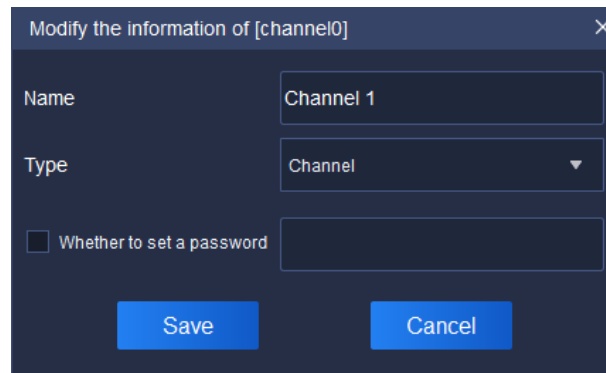


Figure 5.1.2.2

Similarly, select list group in Customized list, click "✎" and a pop-up for modifying watch point name will display, as shown in below figure:

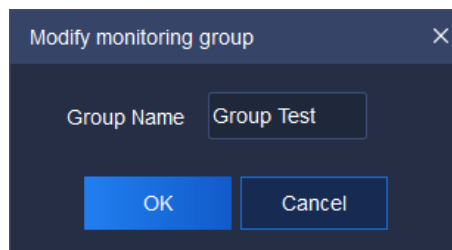


Figure 5.1.2.3

5. 2. Real-time preview



Click the real-time preview icon on the home page to enter real-time preview interface. The main interface consists of Device list, video preview window, View, PTZ control ,Senior and Target Information, as shown in below figure:

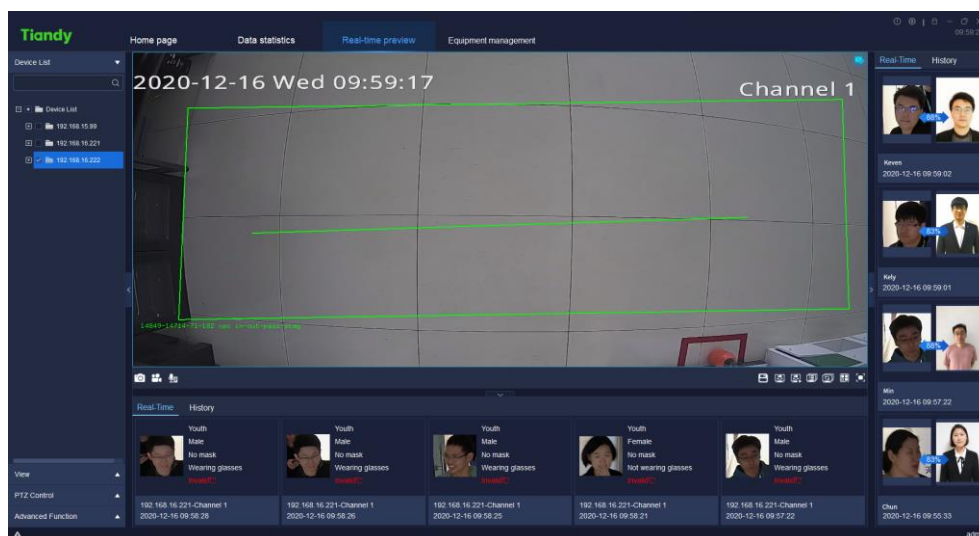


Figure 5.2

5. 2. 1. Device list

Click "Device list" on the left to display all customized group list and input key information in search blank, double click to check device watch point, as shown in below figure:



Figure 5.2.1

5. 2. 1. 1. Right key menu of encode device customized group list

Click right key on the customized group list and the right key menu of customized group list will pop up, as shown in below figure:

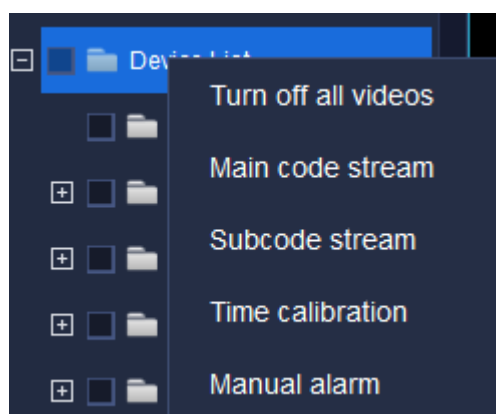


Figure 5.2.1.1

The description of related parameters is as follows:

Parameter	Description
Turn off all videos	Turn off all videos connected at that moment.
Main code stream	All the videos in current list are added and played in main code stream mode (as for the channel being played, the playing code stream will not be changed)
Subcode stream	All the videos in current list are added and played in subcode stream mode (as for the channel being played, the playing code stream will not be changed)
Time calibration	Conduct time calibration on on-line devices in all group lists.
Manual alarm	Cancel the current alarm in the channel in video manually.

Table 5.2.1.1

5. 2. 1. 2. Right key menu of encode device group list

Select a group in Device list and click right key, the right key menu of device group list will pop up, as shown in below figure:

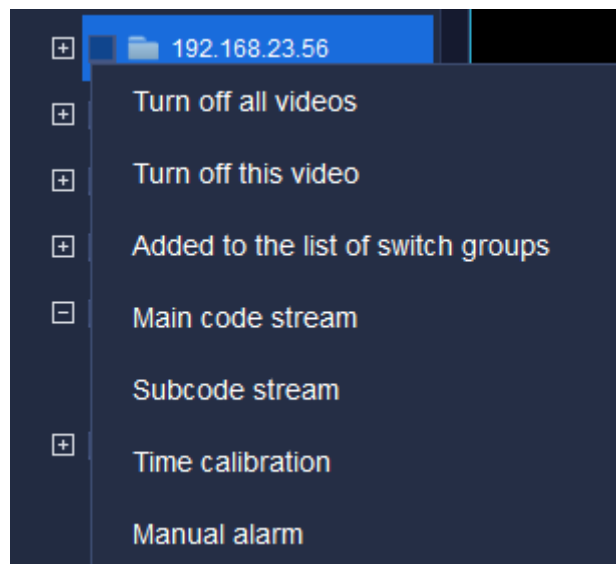


Figure 5.2.1.2

The description of related parameters is as follows:

Parameter	Description
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Turn off all videos	Turn off all videos connected at that moment.
Turn off this video	Turn off all videos connected in current group.
Added to the list of switch groups	Add selected encode device to automatic switch group list.
Main code stream	All the videos in current list are added and played in main code stream mode (as for the channel being played, the playing code stream will not be changed)
Subcode stream	All the videos in current list are added and played in subcode stream mode (as for the channel being played, the playing code stream will not be changed)
Time calibration	Conduct time calibration on on-line devices in selected group lists.
Manual alarm	Cancel the current alarm in the channel in video manually.

Table 5.2.1.2

5. 2. 1. 3. **Right key menu of encode device list**

Select a channel watch point of a device in device list group, click right key, the right menu of device list will pop up, as shown in below figure:

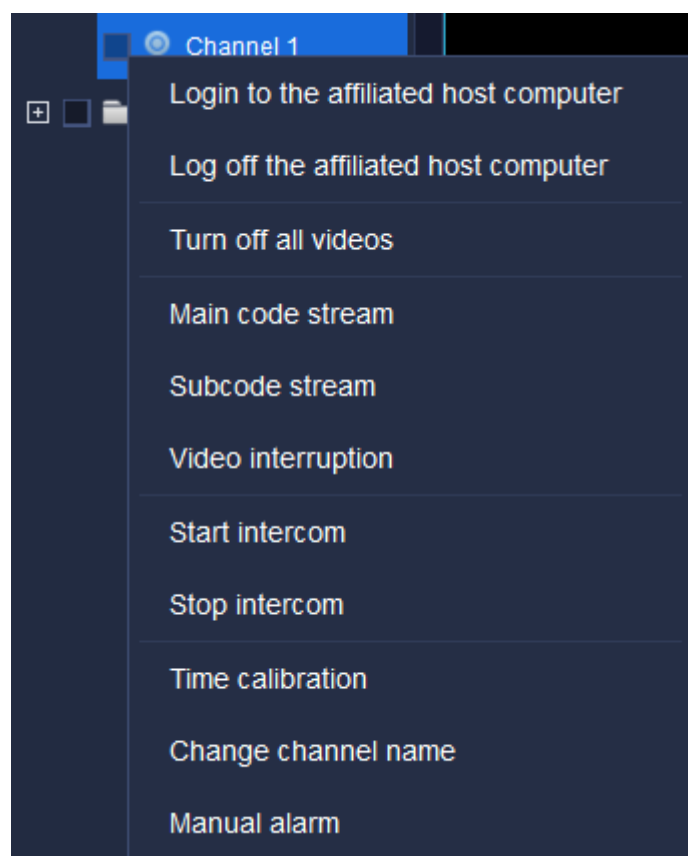




Figure 5.2.1.3

The description of related parameters is as follows:

Parameter	Description
Login to the affiliated host computer	Right click the encode device channel to restore the connection between the device host computer of the channel and Easy7 platform. For example, select Channel 1 in [Device List] in above figure (the affiliated host computer is 192.168.15.191), right click "Login to the affiliated host computer", the connection status of the host computer 192.168.15.191 is on-line, as shown in below figure:

	
Log off the affiliated host computer	<p>Right click the encode device channel to disconnect the connection between the device host computer of the channel and Easy7 platform. For example, select Channel 1 in [New Group] in above figure (the affiliated host computer is 192.168.15.149), right click "Log off the affiliated host computer", the connection status of the host computer 192.168.15.149 is offline, as shown in below figure:</p> 
Turn off all videos	Turn off all videos connected at that moment.
Main code stream	In the channel of login encode device, click this button to connect the main code stream video of the channel.
Subcode stream	In the channel of login encode device, click this button to connect the subcode stream video of the channel.
Video interruption	In the channel connected to video, click this button to disconnect the video of the channel.
Start intercom	In the channel of login encode device, click this button to talk to the video source of the channel. Click this button in the channel

	of DVR/NVR device, the intercom box "Talking to XXXX" will pop up to start talking with DVR/NVR; click this button in the channel of IPC device, the intercom box "Talking to XXX" will pop up to start talking with IPC device.
Stop intercom	In the channel of login encode device, click this button to stop the intercom with video source of the channel.
Time calibration	To conduct time calibration on this on-line device.
Change channel name	Change the name of currently selected channel.
Manual alarm	Cancel the current alarm in the channel in video manually.

Table 5.2.1.3

5. 2. 2. Video preview window

In video preview window, the video will be displayed in the middle, capture menu, video menu and sound menu are in the left lower part, menus can realize its function respectively. Double click video window to maximize it and double click it again to restore, as shown in below figure:

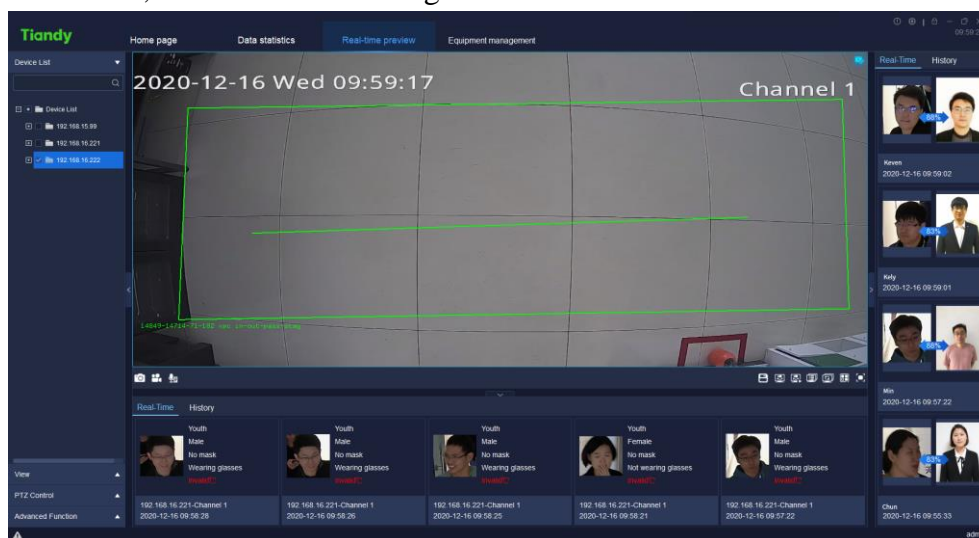


Figure 5.2.2.1

During the video preview, the split screen window will self-adapt to the video according to the number of linked videos, and it supports the real-time video playing of devices added in various ways.

The target bar in the below will display human face information, age, sex,

whether or not wearing a mask, whether or not wearing glasses and physical temperature, etc.

The target bar in the right will display the comparison similarity result with the human face database, and the strangers' face will not be displayed.

When previewing video, the target bar on the right side can display the real-time detected face information.

When previewing video, the status bar at bottom left (in dark color) may display current channel is connecting respectively, audio preview, capture function and channel video recording are supported. The channel name will be displayed at bottom right, when the alert is turned on, the right upper corner of the video window will display the alert icon and not to display it when the alert is turned off, as shown in below figure:

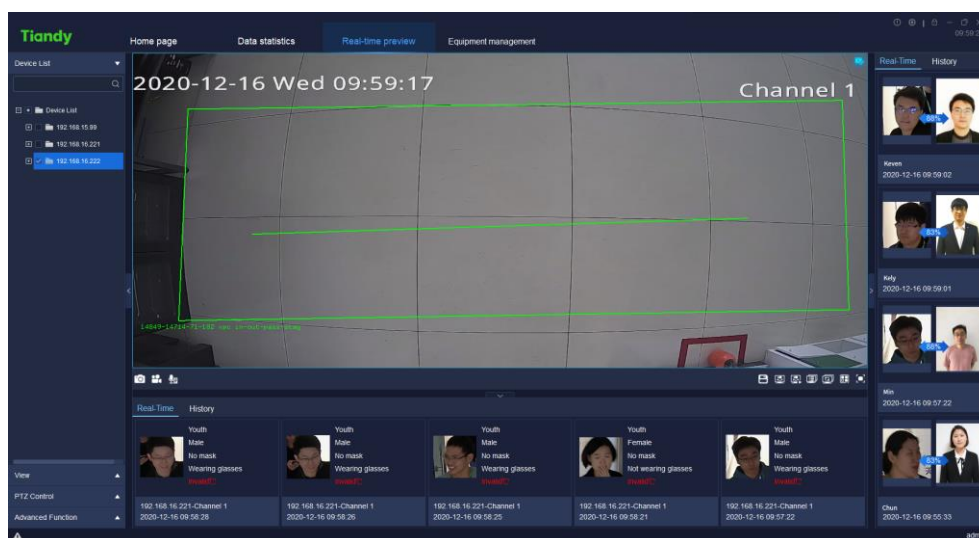
















Figure 5.2.2.2

5. 2. 2. 1. Toolbar in video preview interface

The description of icons in toolbar in video preview interface is as follows:

Icon	
	Capture all, to capture windows of all connected videos at current screen.
	Start all recording, record windows of all connected videos at current screen.

	Intercom list, display current intercom status.
	Save view, users click to save current view information.
	Rotating display plan, allow users to set their own switch mode, so that Easy7 can automatically switch video channels on [Real-time preview] interface for users' convenient browse.
	Start rotating display, automatically switch video channels to preview according to rotating display plan.
	Group switching list, click this button to display group switching list. There will have devices in the list only when right click the device group in customized device list of device list on the left to select and add devices to [Add to group switching list].
	Start/Stop group switching, open video window, click this button to conduct group switching; click again to stop group switching.
	Set number of video views, click and the setting menu of displayer will pop up.
	Full screen, click to display video window at full screen. Click ESC button or right click the video to cancel full-screen display to escape from full-screen model.
	Indicate that the video connecting status is direct connection
	Turn off the video, i.e. disconnect the connection of present video.
	Turn on audio / Turn off audio
	Screen capture, capture the picture of the present video.

	Turn on tape recording / turn off tape recording
---	--

Table 5.1.2.1

5. 2. 2. 2. Right key menu of video preview window

Right click video preview window and the right key menu of video preview window will pop up, as shown in below figure:

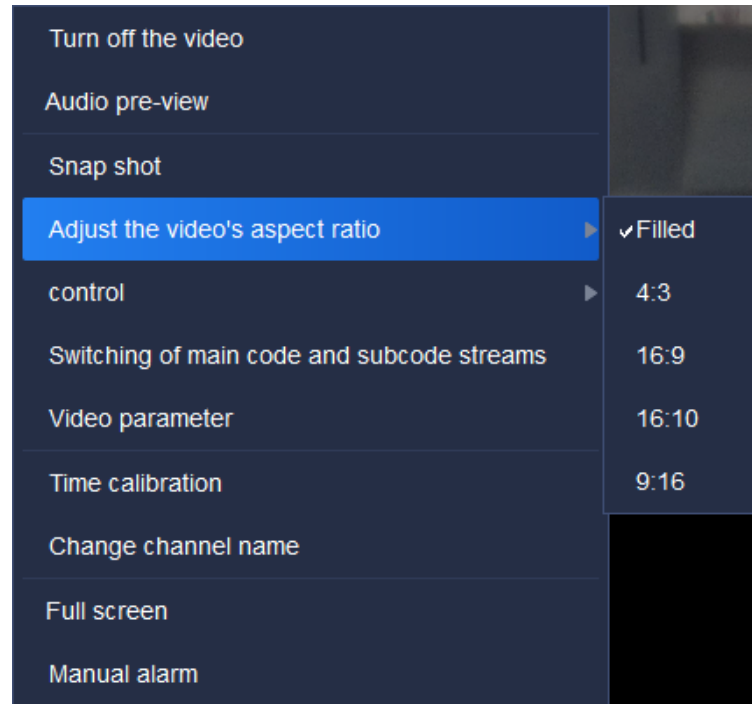



Figure 5.2.2.3

The description of related parameters is as follows:

Parameter	Description
Turn off the video	Click on the single video window of connected video to turn off the video in the window.
Audio pre-view	Click on the single video window of connected video to listen to the audio of video channel in the window.
Snap shot	Click on the single video window of connected video to take snap shot of the window.
Adjust the video's aspect ratio	Adjust the video's aspect ratio, filled, 4:3, 16:9, 16:10 and 9: 16 supported.
Control	Electronic amplification and fast ball 3D control are

	available.
Electronic amplification	After enabling the electronic amplification function, press and hold left button of mouse and move the mouse in video & image area to choose the area you want to amplify (roll the pulley of mouse to amplify the image in the area chosen).
Fast ball 3D control	<p>By clicking mouse, the scenes monitored are adjusted to video center. In detail:</p> <ol style="list-style-type: none"> 1. Click the left button on the point of monitored video and the point will move to center of the video. 2. Press and hold the left button and move the mouse downward and rightward to choose a rectangular area. The center of the rectangular area chosen will move to the center of the video and amplify. 3. Press and hold the left button and move the mouse upward and leftward to choose a rectangular area. The center of the rectangular area chosen will move to the center of the video and shrinks.
Switching of main code and subcode streams	Auto switch between main code and subcode streams. Support simultaneous switch among native video.
Video parameter	Set the display parameter of currently selected video: brightness, contrast, saturation and Hue.
	Modify video parameters of selected video, restore default supported.
Time calibration	Conduct time calibration on the on-line device.
Change channel name	Change the name of currently selected channel.
Full screen	Display video view window at full screen.
Manual alarm	Cancel the current alarm in the channel in video


	manually.
--	-----------

Table 5.2.2.2

5. 2. 2. 3. Rotating display plan

The main function of rotating display plan is to allow users to set their own switch mode, so that Easy7 can automatically switch video channels on [Real-time preview] interface for users' convenient browse.

1) Add view:

After configuring the split screen scheme and the video played, click "  " in preview interface toolbar to save view, as shown in below figure:

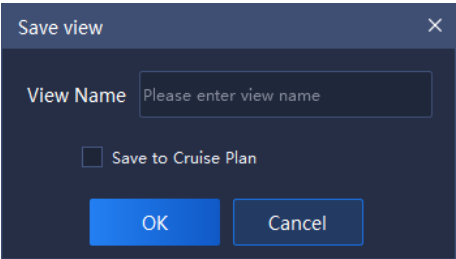


Figure 5.2.2.4

2) Add rotating display plan:

Click view bar on the left and select the view to be added, right click "Add to the regular rotating switch program", as shown in below figure:

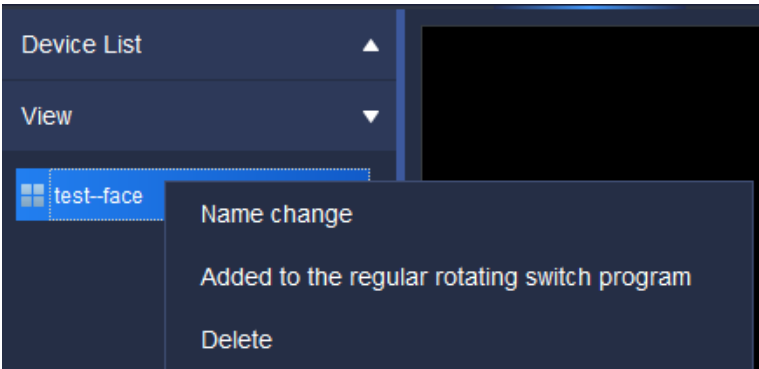



Figure 5.2.2.5

3) Set rotating display plan:

Click "  " in preview interface toolbar in bottom right to enter to List of view rotating display plan interface, as shown in below figure:

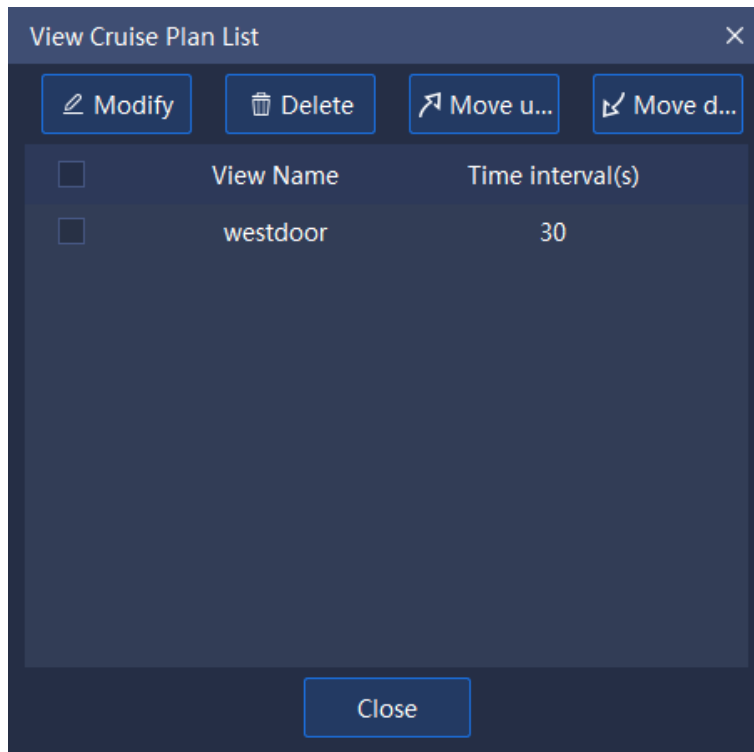



Figure 5.2.2.6

(1) Change the rotating display intervals: tick and select the view to be modified, click "  Modify " too change the rotating display interval (the range of interval value is 30~3600s), as shown in below figure:

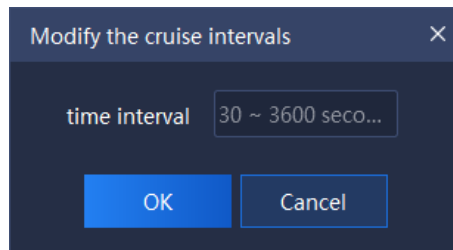



Figure 5.2.2.7

(2) Delete: tick and select the view to be deleted, click "  Delete " to delete the view, as shown in below figure:

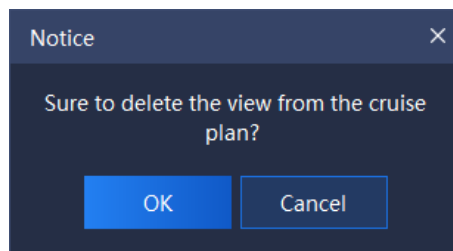
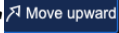




Figure 5.2.2.8

(3) Move upwards/Move down: tick and select the view to be moved, click

" Move upward" Move down" to adjust the view play order.

4) Turn on/Turn off rotating display plan:

Click " " in preview interface toolbar on bottom right to turn on rotating display plan, click again to turn off rotating display plan.

5. 2. 2. 4. **Group switching setting**

1) Add group switching:

Right click a group in "Device list" on the left, click "Add to group switching list" to add group switching, the pop-up notice box is shown as follows:

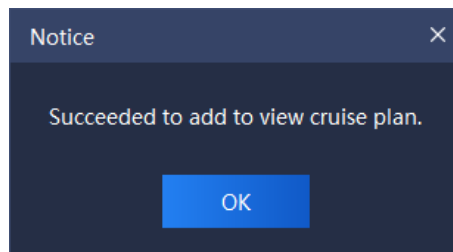



Figure 5.2.2.9

2) Set group switching:

Click " " in preview interface toolbar on bottom right to set interval and group split screen number of group switching, as shown in below figure:

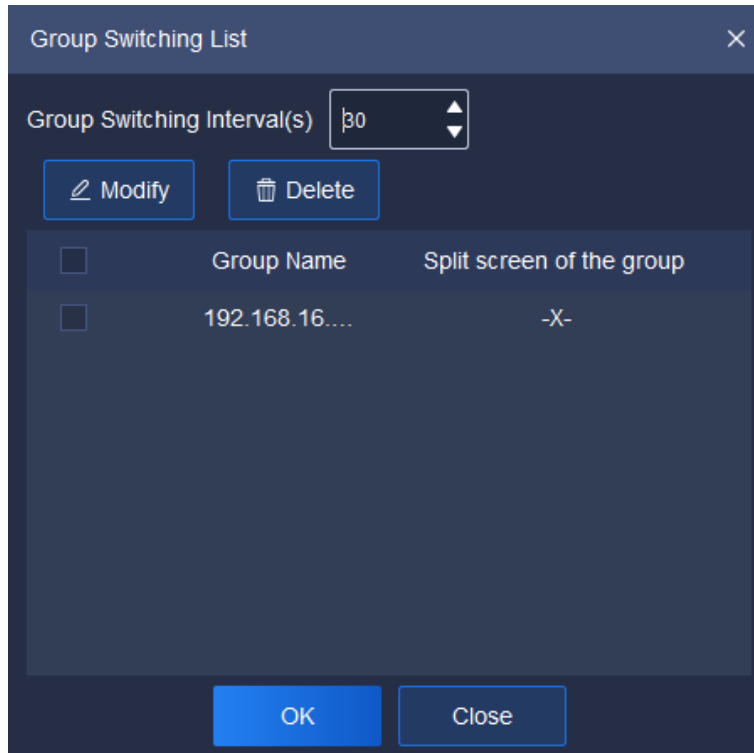
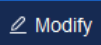


Figure 5.2.2.10

(1) Set group switching interval: set group switching interval in upper part of the interface, the range of interval value is 30~3600s.

(2) Set split screen number, -X- screen (not to change split screen number and keep original split screen number), 1×1 screen and 2×2 screen supported. Two methods can be adopted to change split screen number, explained as follows:

- ① Click "  Modify " to enter Set Split Screen Number interface;
- ② Double click the split screen number in Group Split Screen to set enter Set Split Screen Number interface, as shown in below figure:

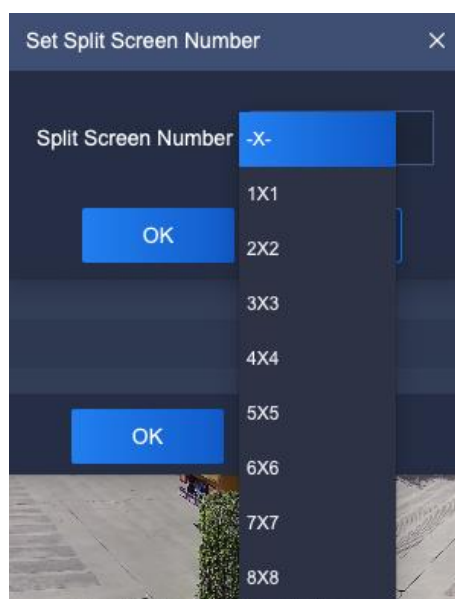



Figure 5.2.2.11

3) Turn on/Turn off group switching:

Click " " on preview interface toolbar on bottom right to turn on group switching, click again to turn off group switching.

5. 2. 2. 5. Target Information

Under and in the right of real-time preview interface, display information of identified persons and the comparison human face database, as is shown in below figure:

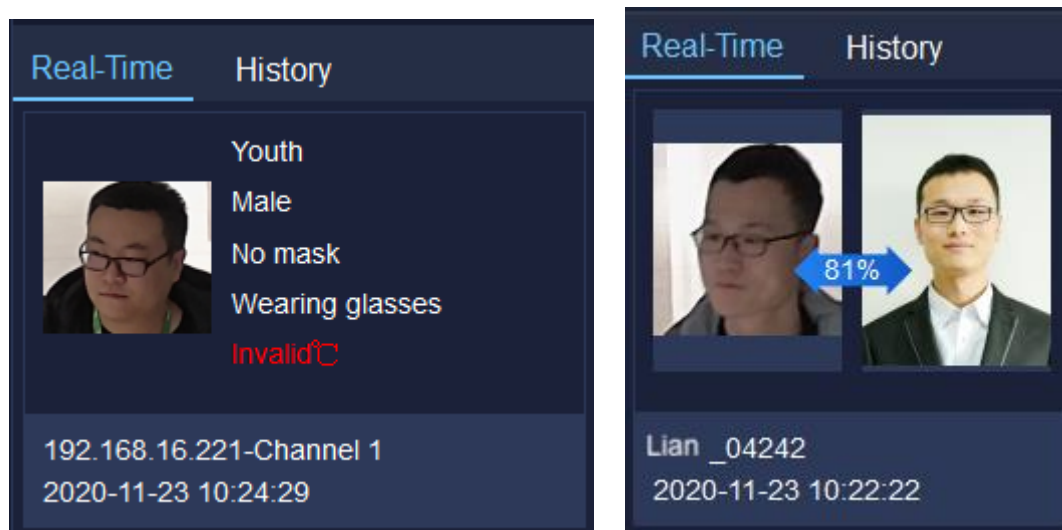


Figure5.2.2.12

The target information can identify the person's age, sex, whether or not wearing

a mask, whether or not wearing glasses, detected physical temperature and detection time in real time. At the same time, it can also identify whether the person matches in the human face database. If yes, it can be compared with the pictures uploaded in the database, and the similarity, the name of the person and the detection time will be displayed, otherwise stranger alarm will be on.

If previous record needs to be checked, shift to “History” to check history information.

5. 2. 3. View

View list shows currently saved view tag, double click to preview the information of this view. Right click this list view node and a menu will pop up, as shown in below figure:

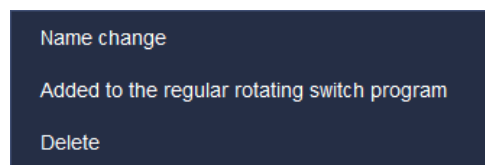


Figure 5.2.3

The description of related parameters is as follows:

Parameter	Description
Name change	Click to change view name.
Add to the regular rotating switch plan	Click to add the view to the regular rotating switch plan list.
Delete	Click to delete this view information node from view list.

Table 5.2.3

5. 2. 4. PTZ control

PTZ control may control PTZ speed, preset, etc., as shown in below figure:

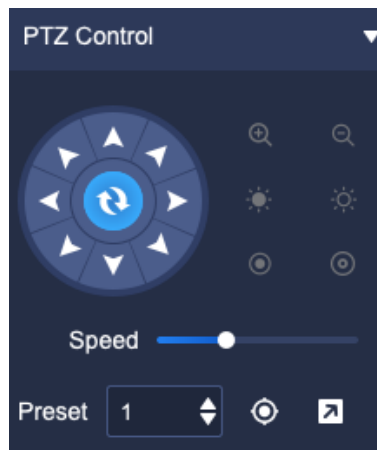






Figure 5.2.4

The description of icons on PTZ control interface is as follows:

Icon	Description
	8-direction key, press corresponding direction key to control PTZ to rotate in the direction accordingly; the center button is scan shortcut key.
	Zoom control button, press "⌕" to control the device to perform zoom-out operation, the field of view angle becomes larger and the scene becomes smaller; press "⊕" control device to perform zoom-in operation, the field of view angle becomes smaller and the scene becomes larger.
	Focus control button, press "⊗" to control the device to perform focusing-in operation, the near scene is clear and the far scene is fuzzy; press "⊕" to control the device to perform focusing-out operation, the far scene is clear and the near scene is fuzzy.
	Aperture control button, press "⊗" to control the device to perform aperture reduction operation, press



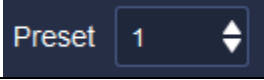


	"  " to control device to perform aperture enlargement operation.
	The slider can adjust the rotation speed of the device.
	Set the preset number for calling.
	Call the preset. Select saved preset, click to call and the screen will jump to the preset part.
	Set the preset. Select the preset number to be saved, adjust the screen to the preset to be saved, click Set to save this position.

Table 5.2.4

5. 2. 5. Senior

Senior may set the light, power and wiper, as shown in below figure:

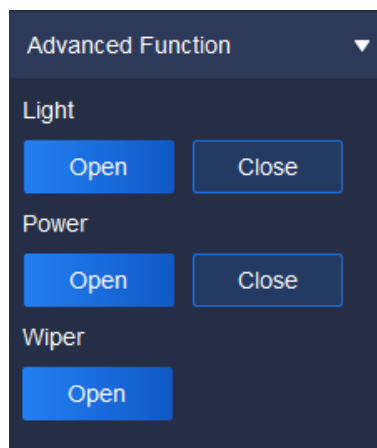




Figure 5.1.5

The description of related parameters is as follows:

Parameter	Description
	Open/close light.
	Open/close power.

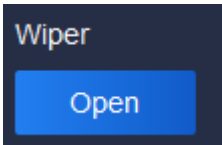
	Open wiper.
---	-------------

Table 5.2.5

5. 3. Video playback



Click the video playback icon on home page to enter video playback interface, query of video recording and time-based video downloading are supported, as shown in below figure:

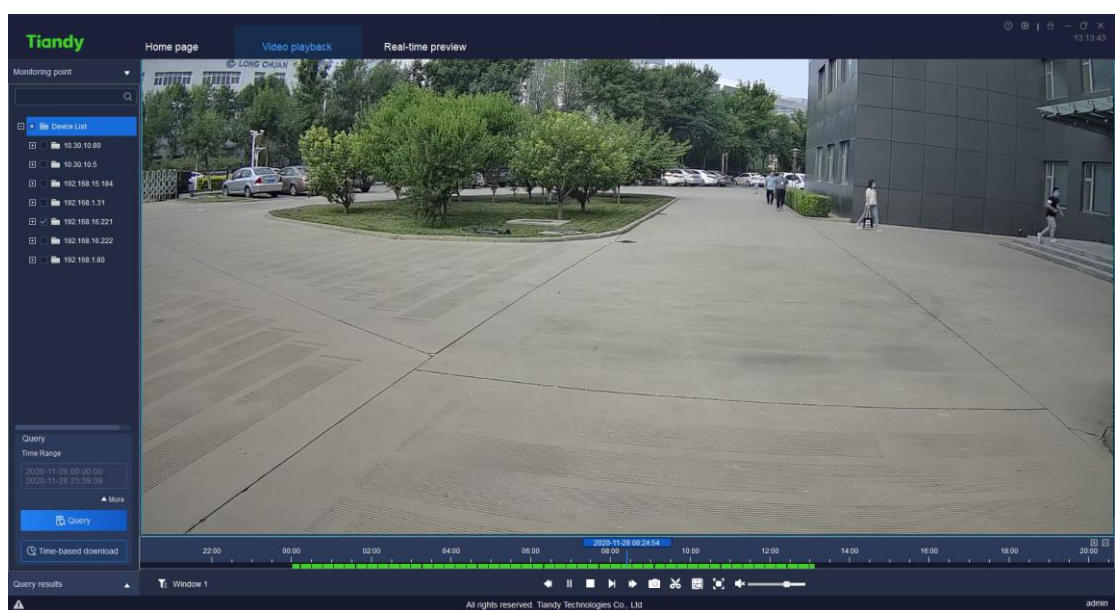


Figure 5.3

5. 3. 1. Video query

In video playback interface, click Watch point on the left, set range of time for query, if more precise query is required, click "**▼ More**" to set storage type, stream type and other screening conditions for query, then click "**▲ More**" again to hide detailed screening condition, as shown in below figure:

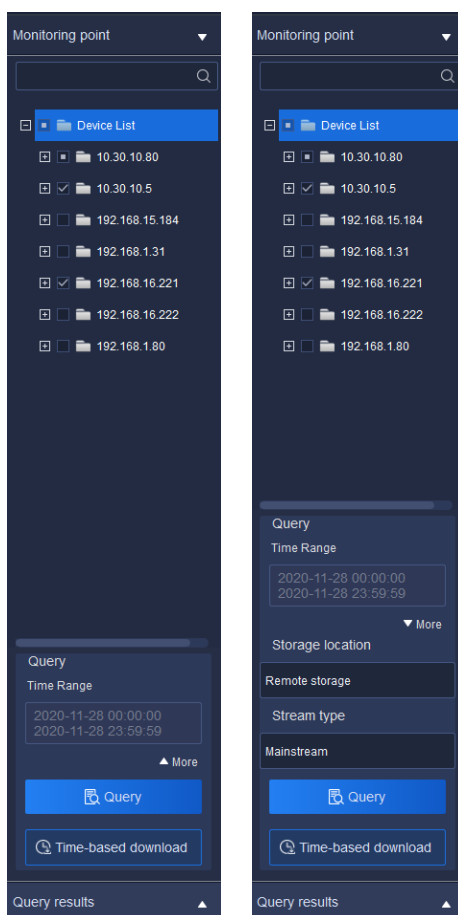


Figure 5.3.1.1

Select range of time, select the start time on the start calendar of the time range and the end time on the calendar for the end time.

When front-end storage is selected in storage type, following stream types can be selected, both main code stream and subcode stream supported.

When conditions are selected, click Query to display query result notice box, as shown in below figure:

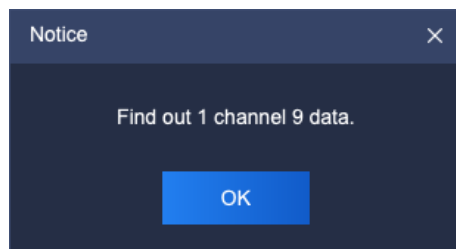


Figure 5.3.1.2

Click "Query results" below to check current query results, the expanded interface is shown in below figure:

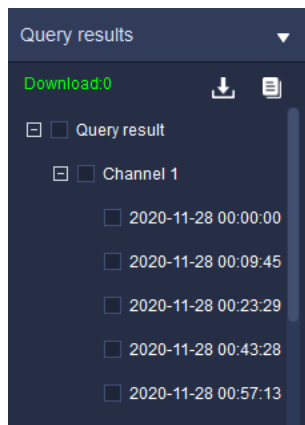



Figure 5.3.1.3

At this time, the query results will be displayed on the progress bar, and users can playback by clicking the time point on the progress bar

5. 3. 2. Video playback

Play mode 1: for queried videos, double click one video file to realize playback of the file.

Play mode 2: select a playback window, click  of playback control to realize video playback on time axis related to selected window.

Play mode 3: select a playback window, directly click the time point in time axis to play back from that time point.

5. 3. 2. 1. Playback control

The playback control menu is shown as follows:

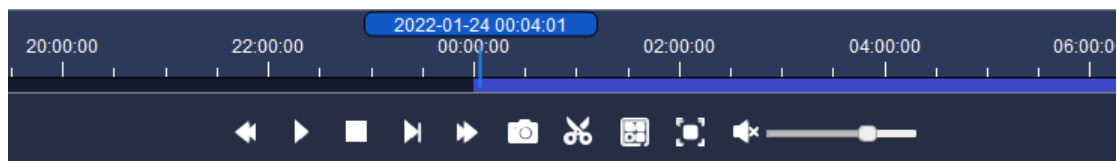













Figure 5.3.2.1

The description of icons on playback control interface is as follows:

Icon	Description
	<p>Slow forward button, click to make the video file play slowly.</p> <p>Note: as for the equipment added by P2P direct</p>

	connection, click the “slow play” button to slow from 4x to 2x and from 2x to 1x. 1x speed is the slowest. 1/2 speed is not supported.
	Fast forward button, click to make the video file play quickly. Note: the equipment added by P2P direct connection supports 4X speed playing at most.
	Play/Pause button, click to control the start/pause of video file.
	Step forward button, click to make the video file play frame by frame.
	Stop button, click to stop the playback of current video file.
	Snap shot button, click to snap shot the selected video file being played.
	Video clip button: click it to start video clip and click it again to finish that. The time axis of clipped section will become red and the target section will be saved. The format of video saved can be modified by setting “system settings -> video -> download video format”; two formats sdv and mp4 are available.
	Set screen number button, click to pop up the menu of playback window split screen.
	1×1 screen playback supported, click and the video playback window will display in single screen.
	1×2 screen playback supported, click and the video playback window will display in two split screens.
	1×3 screen playback supported, click and the video playback window will display in three split screens.







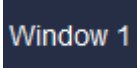

	2×2 screen playback supported, click and the video playback window will display in four split screens.
	3×3 screen playback supported, click and the video playback window will display in nine split screens.
	4×4 screen playback supported, click and the video playback window will display in sixteen split screens.
	Full screen display button, click to display the playback window in full screen. Click ESC or right click to cancel full screen display to turn off full screen display.
	Volume adjustment bar, drag to adjust the sound of video playback. Click on the horn to turn sound on/off.
	Used to adjust the accuracy of time axis.
	Display the current control window number.
	Video type filter button, click to filter the video time axis type, and the time axis of unselected video type will not be displayed. The filter of all types, alarm recording, timing recording and manual recording is supported.

Table 5.3.2.1

5. 3. 2. 2. Right key menu of playback window

In video playback window, right click, and the right key menu of playback window will pop up, as shown in below figure:

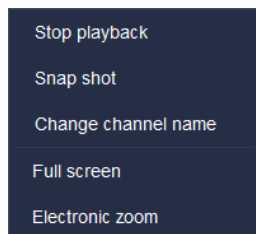


Figure 5.3.2.2

The description of related parameter is as follows:

Parameter	Description
-----------	-------------

Stop playback	Click to stop the playback of current video.
Snap shot	Click to snap shot of selected playback window.
Change channel name	Click to change channel name of selected playback window.
Full screen	Click to display the playback window at full screen. Click again to turn off full screen display.
Electronic zoom	Click the left button of mouse to choose and zoom in the area.


Table 5.3.2.2

5. 3. 3. Video downloading

The downloading is divided into two modes: by file and by time segment.

5. 3. 3. 1. Download by file

1) Batch downloading:

In video playback interface, click query result to check query result interface, tick and select several video files and right click, click "" to conduct batch downloading, as shown in below figure:

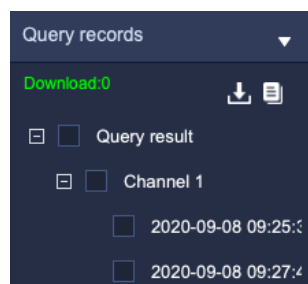



Figure 5.3.3.1

Click "" to enter export progress list interface to check the progress of file downloading, as shown in below figure:

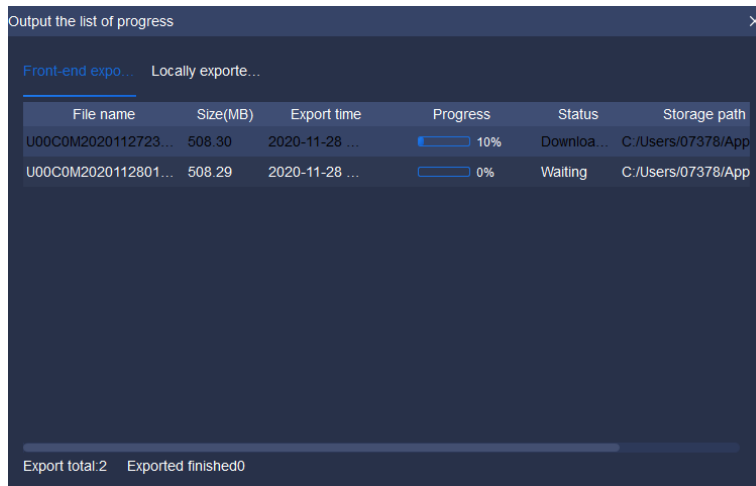


Figure 5.3.3.2

2) Stop export:

In export progress list, select the file needs to stop export, right click this file, select "Stop Export" to stop downloading the file, as shown in below figure:

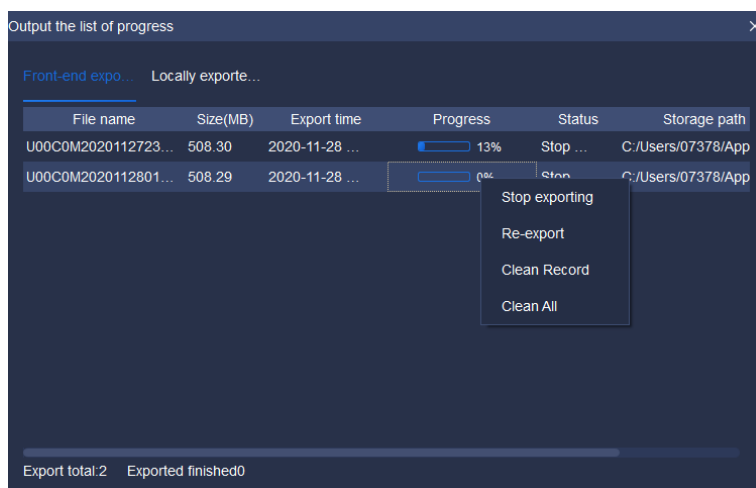


Figure 5.3.3.3


3) ReExport:

In export progress list, select the file needs to re-export, right click this file, select "ReExport" to export this file again to download.

4) Clean record:

In export progress list, right click a file, select "Clean Record" to delete all downloaded records.

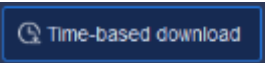
5) Clean all:

In export progress list, right click a file, select " " to delete all downloaded records in the list.

(Note: When downloading front-end storage video files, only one record file can be downloaded at the same time.)

5. 3. 3. 2. By time segment

The video on the front-end storage supports downloading by time segment.

Select the channel you want to download (either through the drop-down menu or by clicking the channel in the tree list), select the time segment you want to download, and then click " ".

5. 3. 4. Recent browsing

Record the latest video and click to preview it , as shown in below figure:

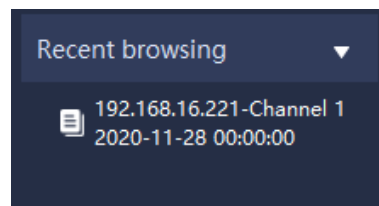


Figure 5.3.4

5. 4. System Configuration

Click the system configuration icon  on home page to enter system settings interface.

5.4.1. Common settings

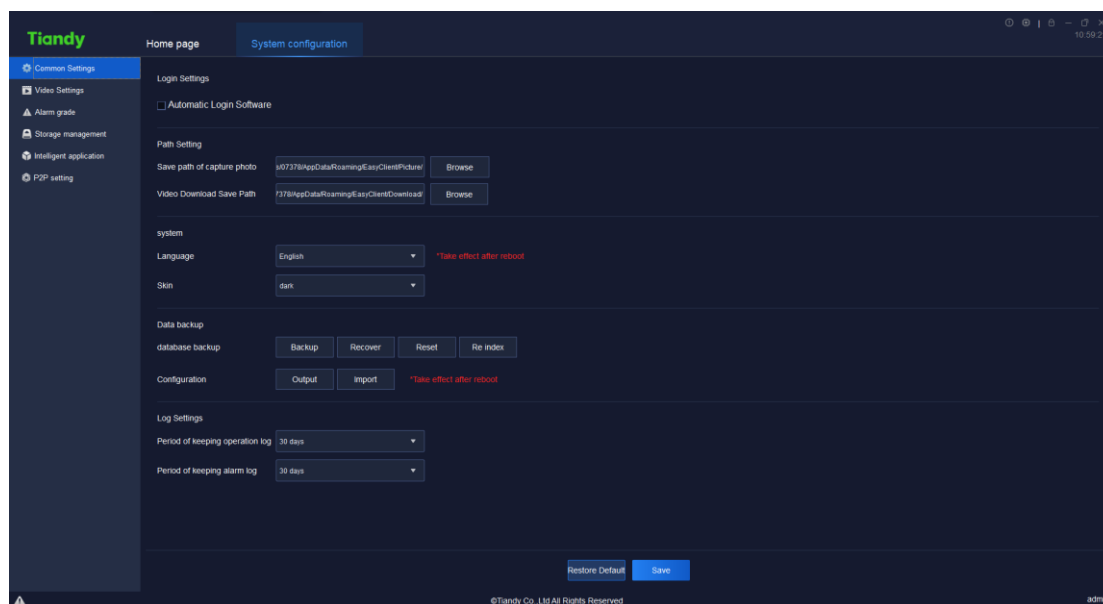


Figure 5.4.1.1

The description of related parameters in the interface is as follows:

Parameter		Description
Login Settings	Automatic Login Software	Tick and select, after fill in correct [User name] and [Password] by users, Easy7 will realize automatic software login function when the operation system starts.
	Save path of capture photo	The save path of capture, preview and playback photo.
Path Setting	Video Download Save Path	The save path of video download.
	Language	Set the language of software system, effective after restart.
System	Skin	Set the skin of software system, effective after restart.
	Data backup path	Back up, recover, clean up and re-index

		software database backup files.
	Configuration	Export equipment list, user right and electronic map by pressing one key, import new configuration files and restart it to take effect.
Log Settings	Period of keeping operation log	Set the save time of each operation log.
	Period of keeping alarm log	Set the save time of each alarm log.
Restore Default		Restore the configuration of current page to the configuration information when initially installed.

Table 5.4.1

5. 4. 2. Video Settings

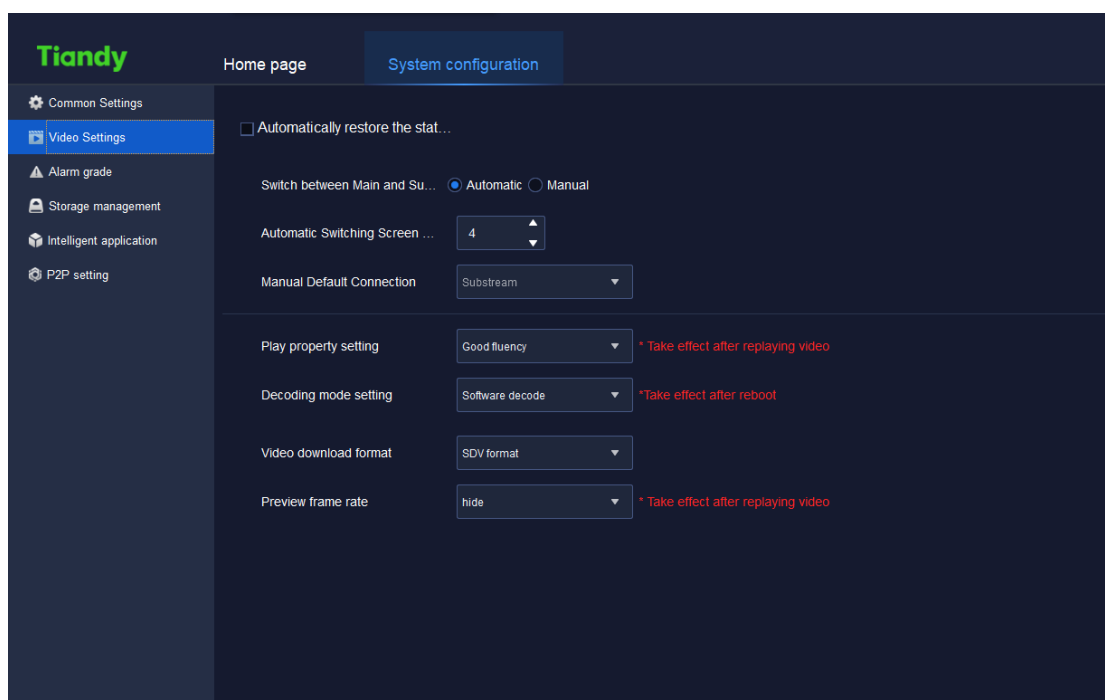


Figure 5.4.2

The description of related parameters in the interface is as follows:

Parameter	Description
-----------	-------------

Automatically restore the state last time you exit from the system	The video connected to video preview, when turns on the software again, the video before turn-off will restore connection.
Switch between Main and Sub Streams, Automatic Switching Screen Number	Set switching screen number, when the number of windows displayed in the client-side video browsing interface is greater than the number of split screens, the connected channel video will default to the subcode stream.
Manual Default Connection	Set the code stream type of default play.
Play property setting	Available to set Good fluency/Minimum delay. Take effect after replaying video.
Decoding mode setting	Software decode and hardware decoding are supported, effective after restart. Take effect after reboot.
Video download format	The download recording may set SDV (private format) and MP4 (general format).
Preview frame rate	Show or conceal frame rate on preview screen. Take effect after accessing video again.

Table 5.4.2

5. 4. 3. Alarm grade

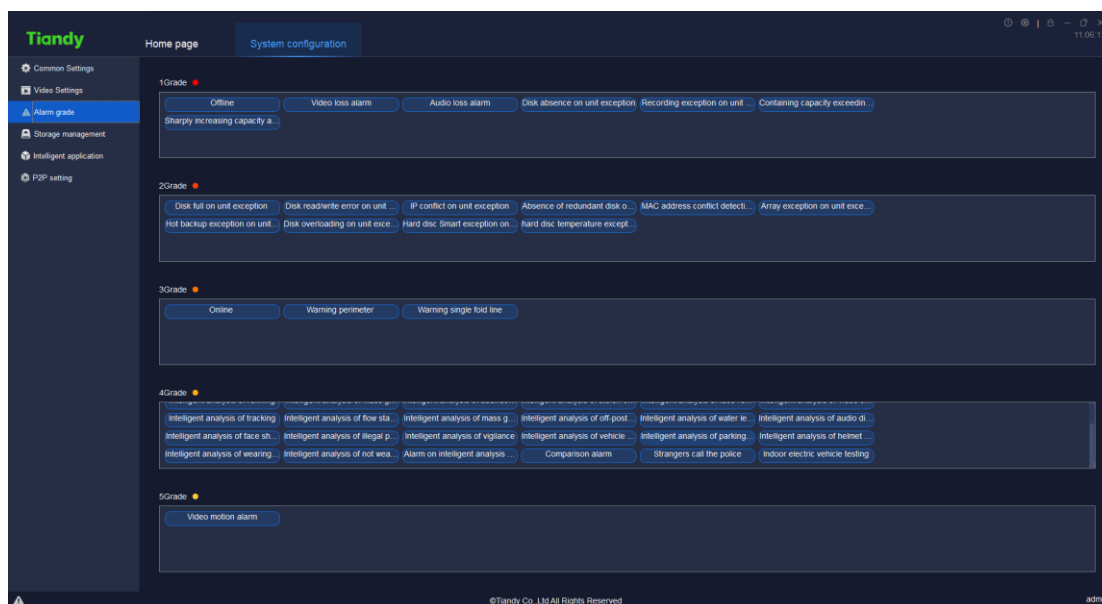


Figure 5.4.3

Drag the alarm type label to other grades to set the type to a new grade. Alarm grade is used for alarm record filter.

5. 4. 4. Storage management

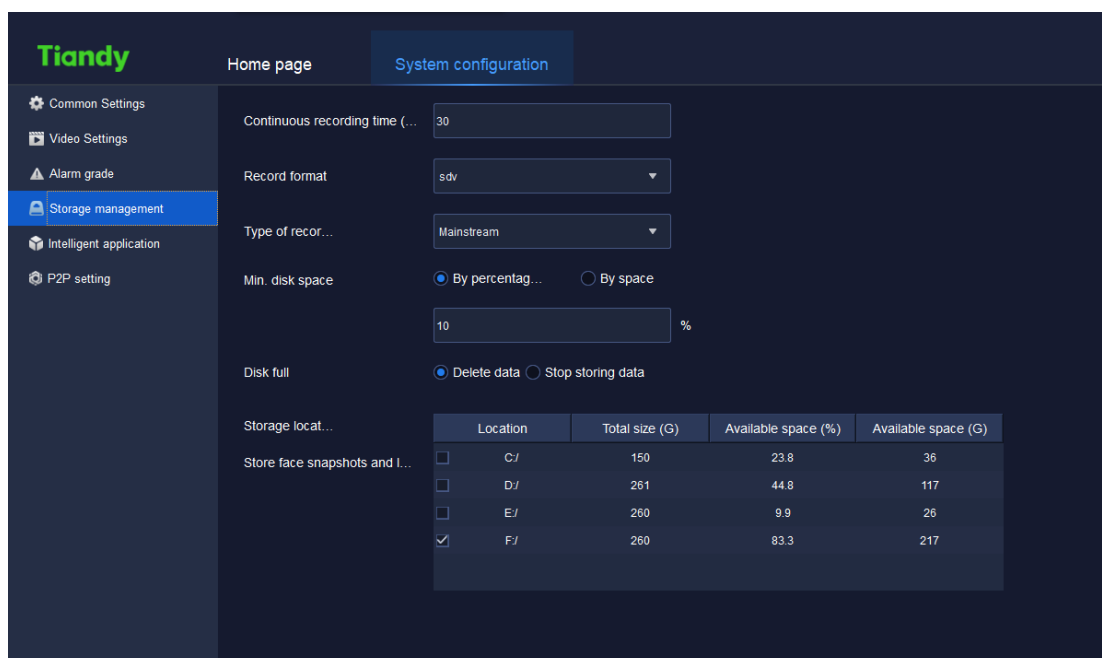


Figure 5.4.4

The description of related parameters in the interface is as follows:

Parameter	Description
-----------	-------------

Continuous recording time (min)	Set the time of continuous recording (recording packaging), the time range is 5~120 min.
Record format	SDV format and mp4 format are supported for recording storage.
Type of record streaming	Main code stream and minor stream supported.
Min. disk space	Supported to set by percentage (%) or by space (G), fill in corresponding parameter in the text box below.
Disk full	Supported to select and delete the earliest local recording or stop recording.
Storage location	Set the storage location of files.

Table 5.4.3

5. 4. 5. Intelligence application

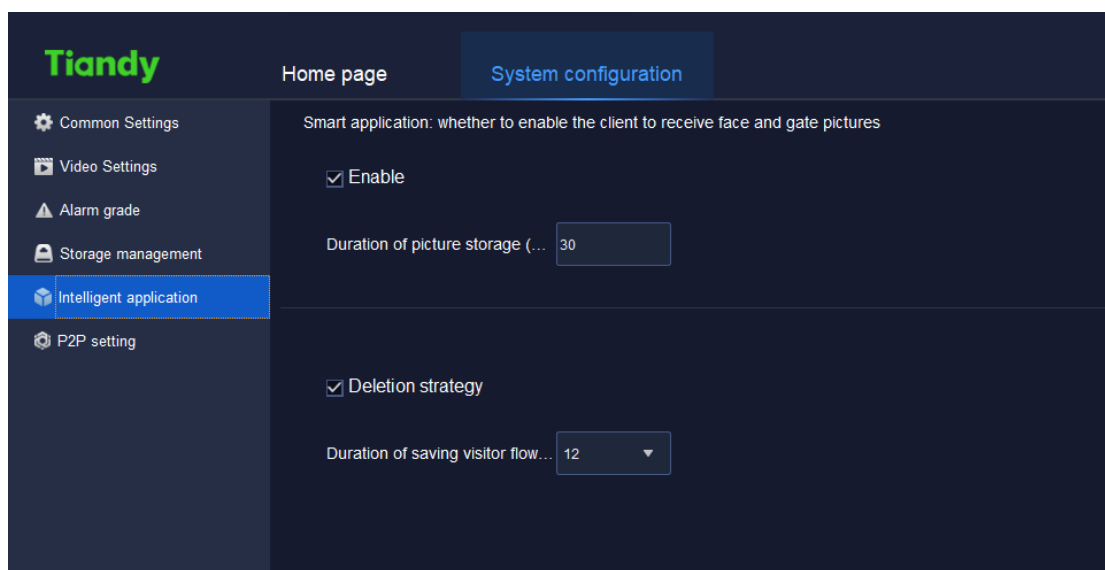


Figure 5.4.5

After ticking “enable intelligent applications”, pictures of human face and man lock can be received. The picture snapshot reserve time can be defined for actual need.

After checking deletion strategy, the strategy can be executed after the upper limit of the stored guest flow duration (6-24 months be supported to choose from) is reached.

5. 4. 6. P2P setting

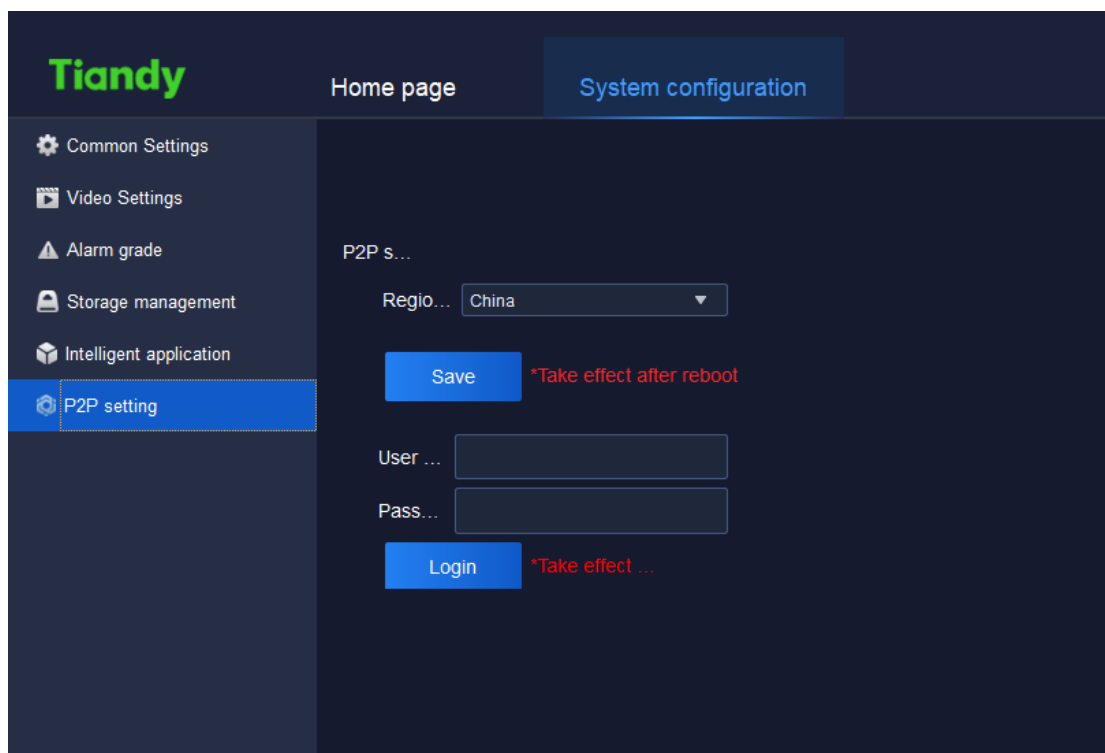


Figure 5.4.6

The description of related parameters in the interface is as follows:

Parameter	Description
Region	The place of P2P equipment configuration
User name	Enter the user name of P2P mobile phone client side
Password	Enter the password of P2P mobile phone client side
Log in	Enter correct user name and password to log in successfully.
Save	Click “save” to save the current configuration. That takes effect after restarting the program.

Table 5.4.6

5. 5. Alarm management

Click the alarm management icon  on home page to enter alarm management interface.

5.5.1. Real-time alarm

Real-time alarm list displays the alarm received after this login. The list will be refreshed automatically, time of alarm, source of alarm, type of alarm, alarm grade and other alarm information will be displayed, as shown in below figure:

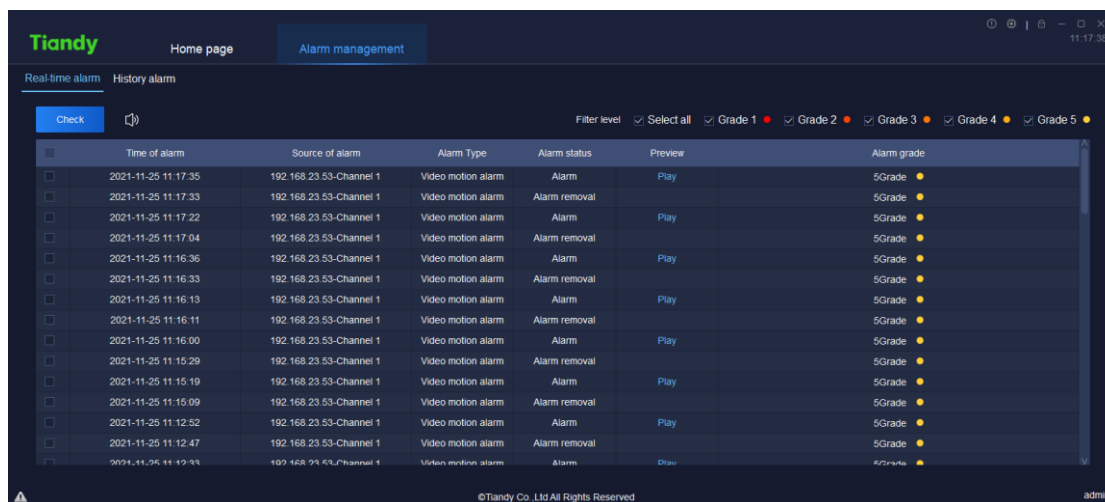


Figure 5.5.1

The description of related parameters in the interface is as follow:

Parameter	Description
Check	Tick and select alarm records need to be checked, click to fill in handling suggestion, the checked alarm records will be removed from real-time alarm, the handling suggestion and checking status will update to the history alarm record of corresponding alarm record.
Audio	Click to turn on/off alarm audio.
Play	Click to play the video 10s before and after the time of alarm, if there's no video, real-time preview will be displayed.
Filter level	Tick and select filter level, the selected level will be displayed in the list, nothing will be displayed if on level selected.

Table 5.5.1

5.5.2. History alarm

History alarm list displays all alarms, including checked and unchecked alarms, as shown in below figure:

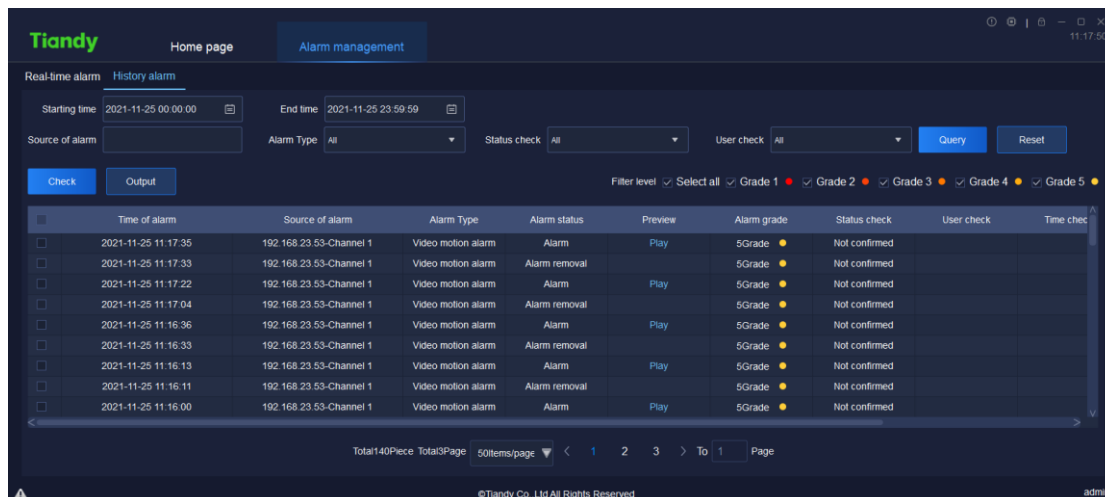


Figure 5.5.2

The description of related parameters in the interface is as follows:

Parameter	Description
Starting time	Available to set the starting time of history alarm query.
End time	Available to set the end time of history alarm query.
Source of alarm	Available to set the source of alarm of history alarm query, search by key word supported.
Status check	Available to set the checking status of history alarm query, including all, unchecked and checked.
User check	Available to set the checking user of history alarm query
Query	Click to search history alarm information conforms to search condition.
Reset	Click to restore to default query condition.
Check	Tick and select alarm records need to be checked, click to fill in handling suggestion. Update verification status, verify users, verify real-time, and process comments after verification.

Output	Click to output query results to local device.
Filter level	Tick and select filter level, the selected level will be displayed in the list, nothing will be displayed if on level selected.
Play	Click to play the video 10s before and after the time of alarm, if there's no video, real-time preview will be displayed.

Table 5.5.2

5. 6. TV Wall



Click the TV wall icon on homepage to enter TV wall configuration interface. There are functions of TV wall configuration, TV wall management and off-line switch settings as shown below.

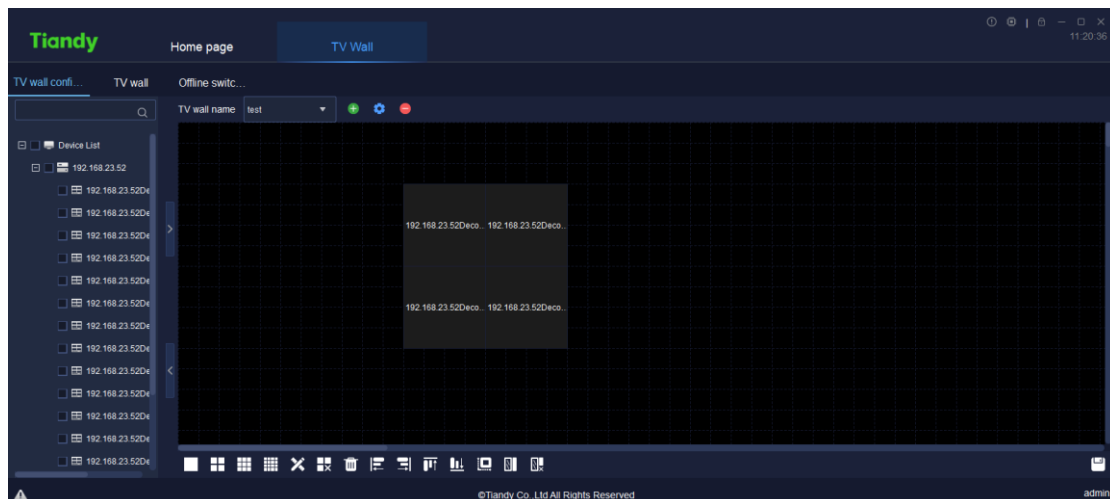



Figure 5.6

5. 6. 1. TV wall configuration

Wall layout can be configured on the TV wall configuration page. Click the button  to enter the name of TV wall layout and then click “OK”. In this way, the name of TV wall layout can be added as shown below:

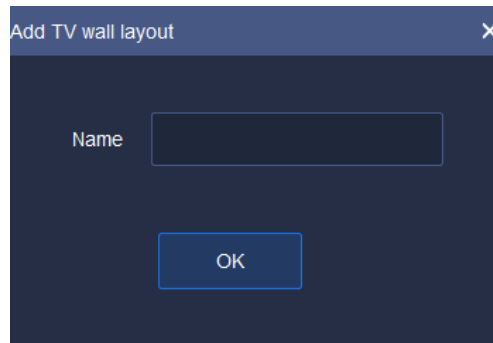



Figure 5.6.1.1

The current name of TV wall layout can be modified by clicking the button . After clicking “OK”, the name of TV wall layout can be modified as shown below:

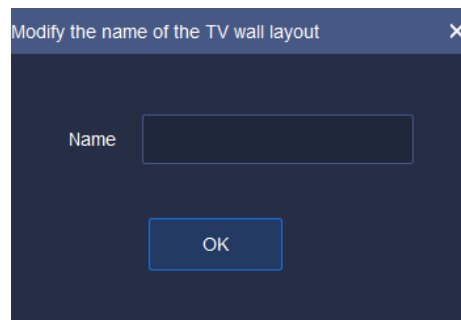



Figure 5.6.1.2

To delete a TV wall layout, choose a layout name and click the button . The layout data cannot be recovered after the layout is deleted. Therefore, there is a prompt box for your confirmation. Click “Yes” button to delete the current TV wall layout; click “Cancel” to retain the TV wall layout, as shown below:

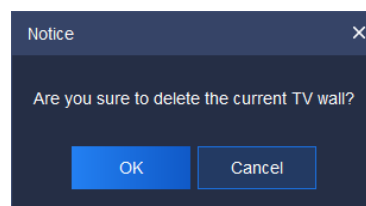


















Figure 5.6.1.3

After setting the name of TV wall, click the lower configuration list to configure TV wall layout. It supports 1 screen, 4 screens, 9 screens, 16 screens and user-defined screen settings. At the same time, every screen can be adjusted, such as left justifying and right justifying. The parameters and description are shown below:

Parameter	Description
	Binding: tick “Decoding output channel” in equipment list, tick TV wall screen on the right and click it to bind the current decoding output channel with the screen.
	Unbinding: choose TV wall screen on the right and click it to unbind the current decoding output channel with the screen.
	Add 1 screen
	Add 4 screens
	Add 9 screens
	Add 16 screens
	Define the rows of screens
	Click to choose the screen to be deleted
	Clear screens: delete all the screens on current TV wall.
	Left justifying: choose two screens at least and click to justify to the left side of the first screen chosen.
	Right justifying: choose two screens at least and click to justify to the right side of the first screen chosen.
	Top justifying: choose two screens at least and click to justify to the top side of the first screen chosen.
	Bottom justifying: choose two screens at least and click to justify to the bottom side of the first screen chosen.
	Equalize size: choose two screens at least and click to equalize size with that of the first screen chosen.
	Splicing: choose two screens at least and bind decoding output channel. The splicing shapes shall be regular (such as rectangle). Click to splice successfully.
	Cancel splicing: choose the spliced screens and click to cancel the splicing.


	Save: Click the button after setting TV wall. In this way, the TV wall screen layout can be saved.
---	--

Table 5.6.1.1

Wall resolution can be configured on TV wall configuration page as shown below. There are three resolutions: 1920×1080 50HZ, 1920×1080 60HZ and 4K 30HZ. If 4K 30HZ is set, decoding can be output from only one route.

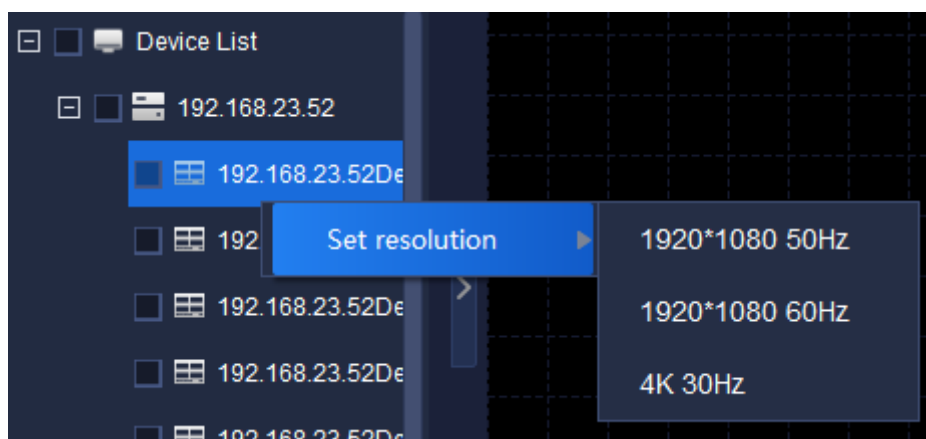


Figure 5.6.1.4

5. 6. 2. TV wall

TV wall interface is mainly used for configuring TV wall video display.

5. 6. 2. 1. TV Wall Video Configuration

Choose TV wall name on TV wall page to show the current TV wall layout. Choose a screen that needs video equipment. Choose the video equipment to be added in the left equipment list. One equipment can be added for only one time.

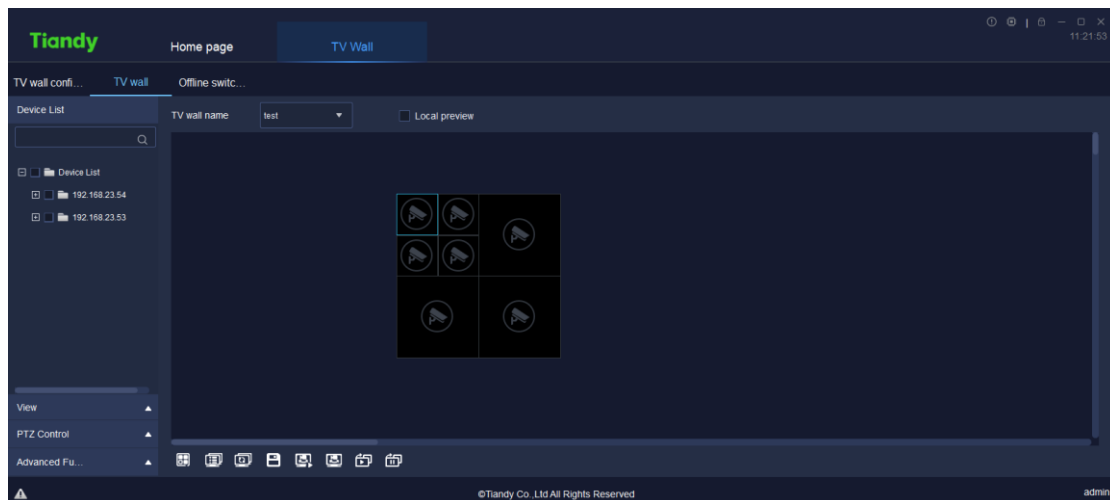







Figure 5.6.2.1

The relevant icons and parameters on the interface are described below:

Parameter	Description
Local preview	After starting preview, videos can be previewed on current TV wall interface.
	Set the quantity of screens. 1 screen, 4 screens, 6 screens, 8 screens, 9 screens, 16 screens, 25 screens and 36 screens can be supported for every decoding output channel. Choose decoding output channel and click screen quantity to set the upper limit of screens of the decoding output channel.
	Click the button to show switch group list. Click the right button to define the equipment group in equipment list on the left, choose [Add to switch group list] to add equipment in the list.
	Start / stop group switch: open video window, click the button to switch group; click it again to stop the group switch.
	Save the view: click to save the current view information.
	View browse plan: users can set suitable switch way and




	Easy7 can switch video channel automatically on page [Real-time preview], which is convenient for users' browse.
	Start view browse and switch video channel automatically for preview according to the view browse plan.
	Start all off-line switch, click to enable and start to watch decoding video of all output channels on decoder.
	Stop all off-line switch, click to enable and start to stop all decoded videos.

Table 5.6.2.1

If splicing function of equipment is started, click the splicing screen with the right button as shown below.

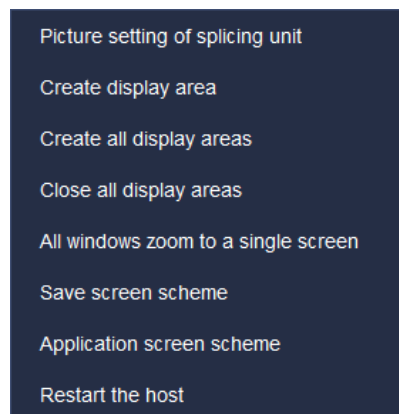
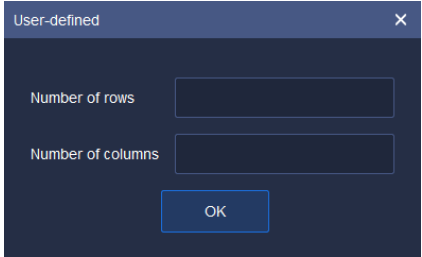
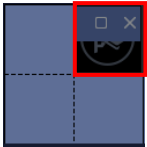
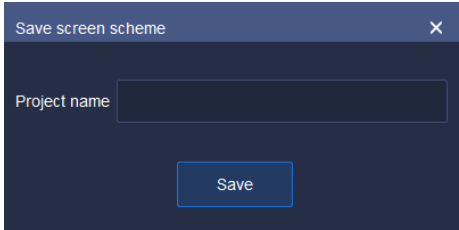
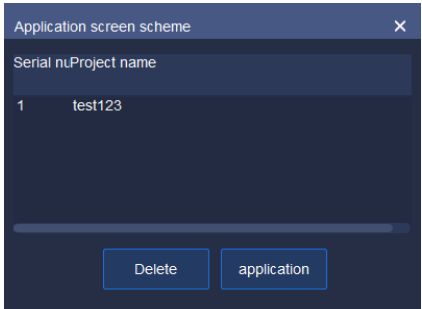


Figure 5.6.2.1

The relevant icons and parameters on the interface are described below:

Parameter	Description
Picture setting of spicing unit	The quantity of screens set by splicing unit can be defined by user.

	 <p>A dialog box titled "User-defined" with a close button (X) in the top right corner. It contains two input fields: "Number of rows" and "Number of columns". Below these fields is an "OK" button.</p>
Create display area	<p>Choose the screen in splicing unit, click the right button to create display area.</p>  <p>A diagram showing a 2x2 grid of squares representing a splicing unit. The top-right square is highlighted with a red border and contains a small icon of a square with a plus sign and a close button (X).</p>
Create all display areas	Click the right button to display the screen areas in all splicing units.
Close all display areas	Click the right button to close the screen areas in all splicing units.
All windows zoom to a single screen	Click the right button to shrink the maximized screen to the original.
Save screen scheme	<p>Click the right button to save the display plan of screens in current all splicing units.</p>  <p>A dialog box titled "Save screen scheme" with a close button (X) in the top right corner. It contains a "Project name" input field and a "Save" button.</p>
Application screen scheme	<p>Click the right button to apply existing screen plan to current splicing unit.</p>  <p>A dialog box titled "Application screen scheme" with a close button (X) in the top right corner. It contains a "Serial nuProject name" input field. Below this, there is a table with one row: "1" in the first column and "test123" in the second column. At the bottom, there are two buttons: "Delete" and "application".</p>

Restart the host	Restart the current decoder.
------------------	------------------------------

Table 5.6.2.2

The display area created by clicking the right button is shown below.

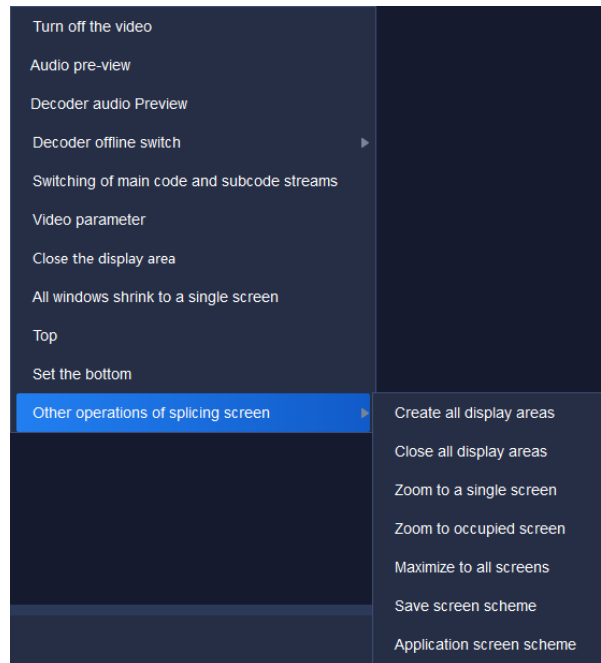
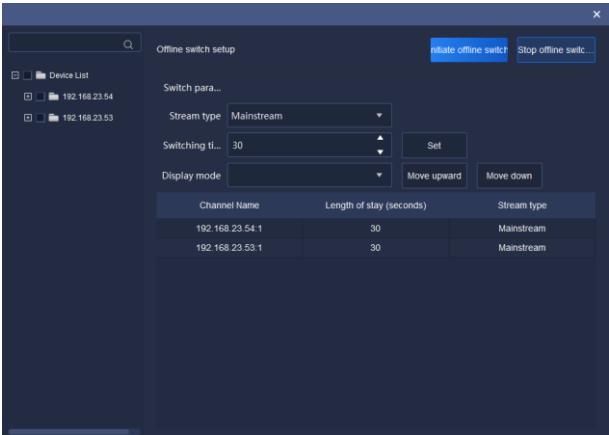



Figure 5.6.2.2

The relevant icons and parameters on the interface are described below:

Parameter	Description
Turn off the video	Close the video preview on current splicing screen.
Audio pre-view	Preview the audio effect of current splicing screen.
Decoder audio preview	Display audio on decoder.
Decoder offline switch	It is permitted to set video switching of current splicing screen window.

	
Switching of main code and subcode streams	Video preview effect can be switched between main code stream and subcode stream
Video parameter	<p>The brightness, contrast ratio, saturability and chroma of video can be modified.</p> 
Close the display area	Close current display area of splicing screen
All windows shrink to a single screen	Shrink all screens to single splicing screens
Set to top / bottom	Choose the screens in splicing unit, click them to set to top layer / bottom layer.
Other operations of splicing screens	As for every splicing screen, create / close display area, shrink to the screen, maximize all screens etc.; screen scheme can be saved and applied.
Create all display areas	Click the right button to display the screen area in all splicing units
Close all display areas	Click the right button to close the screen area in all splicing units

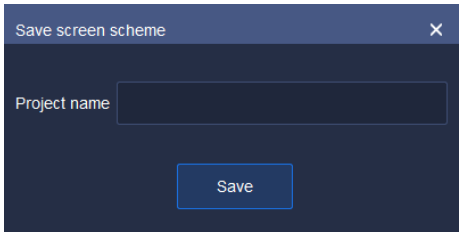
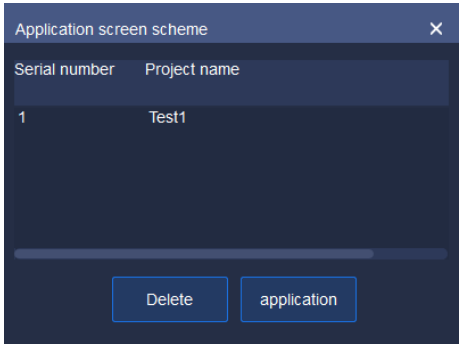
Zoom to a single screen	Choose the screens in splicing unit, click to shrink them to a screen.
Zoom to occupied screen	Choose the screens in splicing unit, click to spread them on the screen fully.
Maximize to all screens	Choose the screens in splicing unit, click to spread them on all splicing units.
Save screen scheme	<p>Click the right button to save display scheme of screen areas in all current splicing units.</p> 
Application screen scheme	<p>Click the right button to apply existing screen scheme to the current splicing unit.</p> 

Table 5.6.2.3

5. 6. 2. 2. **Device list**

Same as Real-time preview.

5. 6. 2. 3. **View**

Same as Real-time preview.

5. 6. 2. 4. **PTZ Control**

Same as Real-time preview.

5. 6. 2. 5. **Advanced Function**

Same as Real-time preview.

5. 6. 3. **Offline switch setup**

Offline switch configuration is used for TV wall screen switch setting on decoder, as shown below. Code stream type, switch time and display mode of every decoding output channel can be set.

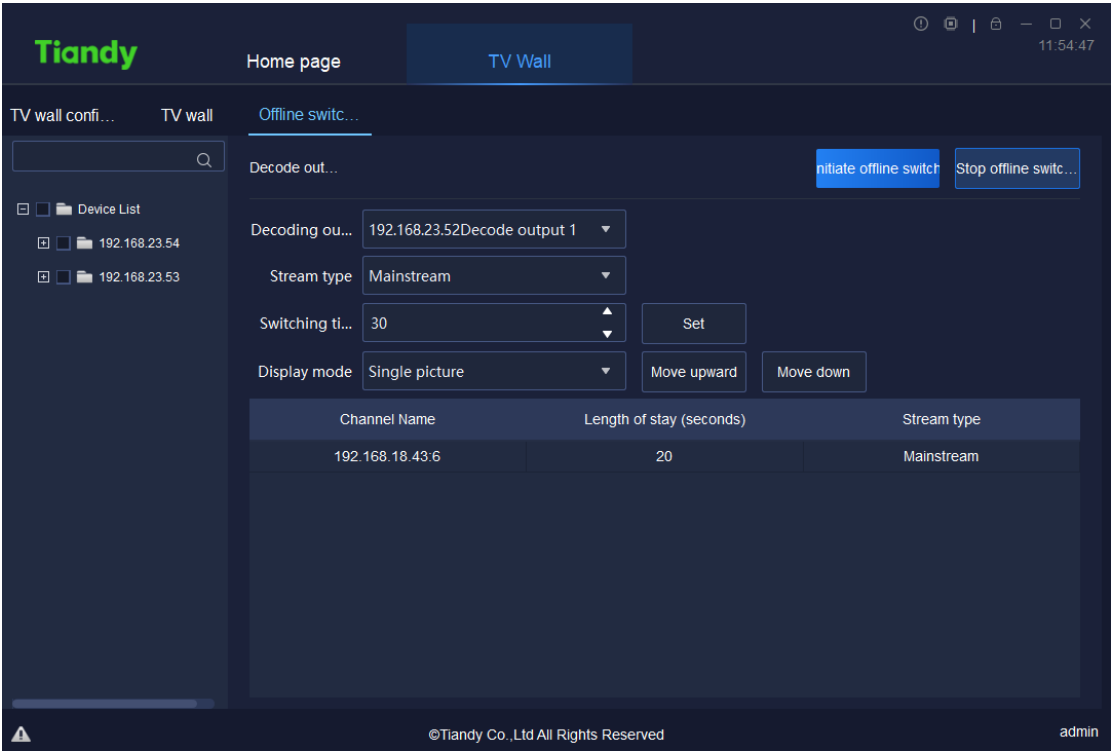


Figure 5.6.3.1

Choose decoding output channel and set display mode (such as sixteen screens) as shown below.

Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type
Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type
Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type
Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type	Channel Name	Length of stay (second)	Stream type

Figure 5.6.3.2

Choose the equipment from the left equipment list for offline switch and drag the equipment to the channel. In this way, equipment can be added to the screen. As shown below, click “initiate offline switch” at top right corner to start offline switching, or click the right button on screen list to start offline switching. One channel cannot be added to any screen repeatedly.

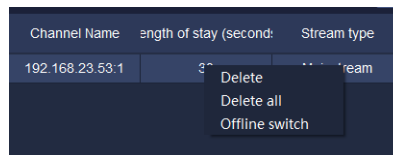


Figure 5.6.3.3

Choose the channels on screen, modify code stream type, switch time and sequence of channels on screen in above decoding output setting.

Relevant parameters on the interface are described below:

Parameter	Description
Initiate offline switch	Click to enable and start it to watch decoding video of the output channel on decoder.
Stop offline switching	Click to enable and start it to stop playing the decoding video.
Decoding output channels	The equipment supports several decoding output channels. Video effect of every decoding output channel can be set for actual need.
Stream type	Set code stream type of channels added to each screen. Choose the channels whose code stream type shall be changed from the following screen list, then choose code stream type from the drop-down box of code stream types. In this way, code stream can be switched. Note: Before changing code stream type, it is necessary to stop offline switching firstly.
Switching time	Set the interval of screen switching (unit: second) in range 10 seconds ~ 1000 seconds. The interval shall be integer.


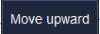
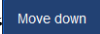

	<p>Choose the channel whose switching time needs to change. After changing switching time, click the button “” to update duration of screen stay.</p> <p>Note: Before changing switching time, it is necessary to stop offline switching firstly.</p>
Display mode	<p>Set the screen display mode of decoding output channel, such as single screen, screen in screen, four screens, 1-5, 1-7, nine screens and sixteen screens. 1-5 screen means 1 large screen and 5 small screens; 1-7 screen means 1 large screen and 7 small screens. The sequence of channel screens is in accordance with the sequence of addition. To change the sequence, choose channel firstly and adjust screen sequence by pressing “” or “” Note: Before changing channel display mode, stop offline switching firstly.</p>

Table 5.6.3.1

5. 7. Face recognition



Click the face recognition icon , on homepage to enter the interface of face recognition for face database management, face database download and face configuration as shown below:

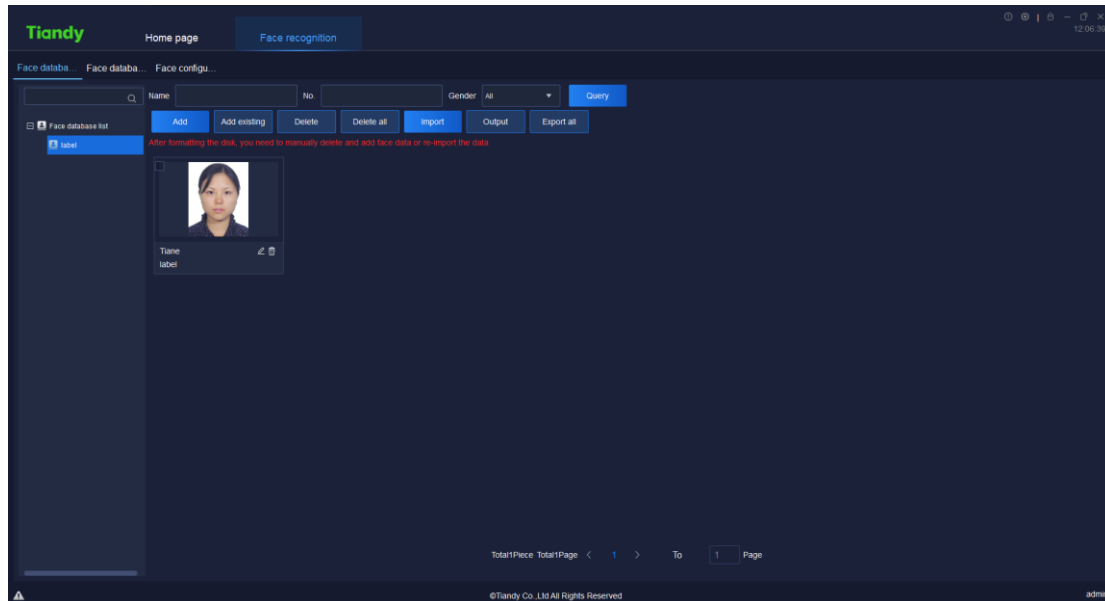


Figure 5.7

5. 7. 1. Face database management

5. 7. 1. 1. Personnel Query

Personnel can be inquired based on name, serial number and gender.

5. 7. 1. 2. Face Database Addition / Modification / Delete

1) Face database addition

Click the right button on left “Face database list”, choose “**Add**” to create a new face database as shown below:

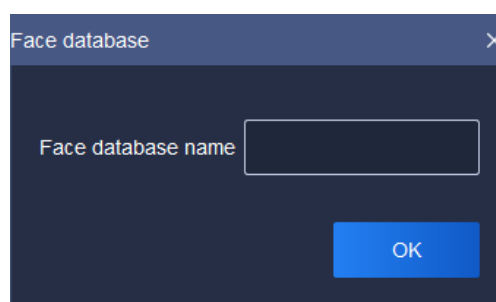


Figure 5.7.1.1

Enter name of face database and click “OK” button to create a new face database. The name of face database is exclusive.

2) Face database modification

Click the right button on the name of face database to be modified, choose

“**Modify**” enter a new name and click “OK” button to complete the modification.

3) Face database delete

Click the right button on the name of face database to be deleted, choose “**Delete**” and click “OK” button to delete the face database.

5.7.1.3. Face Image Addition

Choose the face database that needs face image addition, click “**Add**” to add face image as shown below:

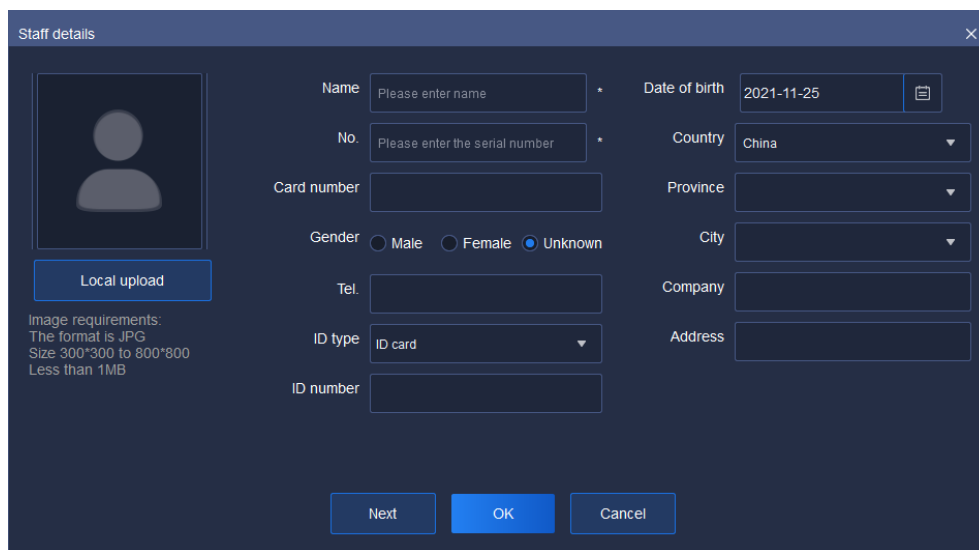
The image shows a 'Staff details' form with a dark blue header and a light blue body. On the left, there is a placeholder for a face image with a 'Local upload' button below it. To the right of the image placeholder, there are input fields for 'Name' (with a hint 'Please enter name'), 'No.' (with a hint 'Please enter the serial number'), 'Card number', 'Gender' (with radio buttons for Male, Female, and Unknown), 'Tel.', 'ID type' (a dropdown menu currently showing 'ID card'), and 'ID number'. To the right of these fields, there are more input fields: 'Date of birth' (with a date picker showing '2021-11-25'), 'Country' (a dropdown menu showing 'China'), 'Province' (a dropdown menu), 'City' (a dropdown menu), 'Company', and 'Address'. At the bottom of the form, there are three buttons: 'Next', 'OK', and 'Cancel'. Below the 'Local upload' button, there is a section for 'Image requirements' which states: 'The format is JPG', 'Size 300*300 to 800*800', and 'Less than 1MB'.

Figure 5.7.1.2

Click “local upload” to upload face image (required item). Image format shall be JPG and the dimensions shall be 300*300~800*800; the size shall not be larger than 1MB. The image shall be clear enough for easy face recognition.

Enter name of the image (required item).

Enter corresponding serial number of the person (required item). The serial number can be 0~ 999999999.

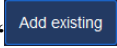

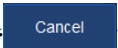
Other items are not required and can be filled in for actual demand.

Click “**Next**” to save information of the current person and create a new page of person information.

Click “**OK**” to maintain current personnel information and close the page.

Click “” to close the current page of personnel information.

5. 7. 1. 4. Add Existing Face Image

Choose a face database, click “” and choose the personnel to be added as shown below; click “” to complete the addition. The page of current personnel can be closed by clicking “”.

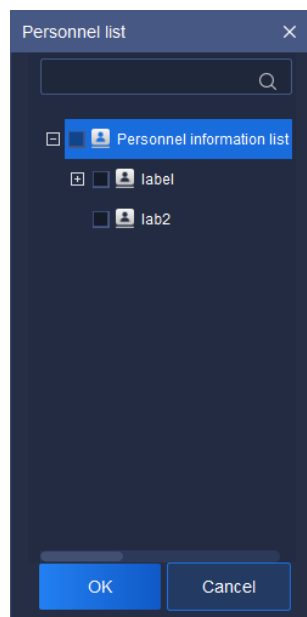
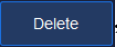
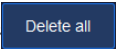


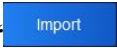
Figure 5.7.1.3

5. 7. 1. 5. Delete (All) Face Image(s)

Choose the face image to be deleted, click “” to delete the chosen image; to delete all face images, click “”.

5. 7. 1. 6. Face Image Import / Export / Export All

1) Import

Click “” to enter the import page as shown below. Click “download import template” to download template of personnel information.

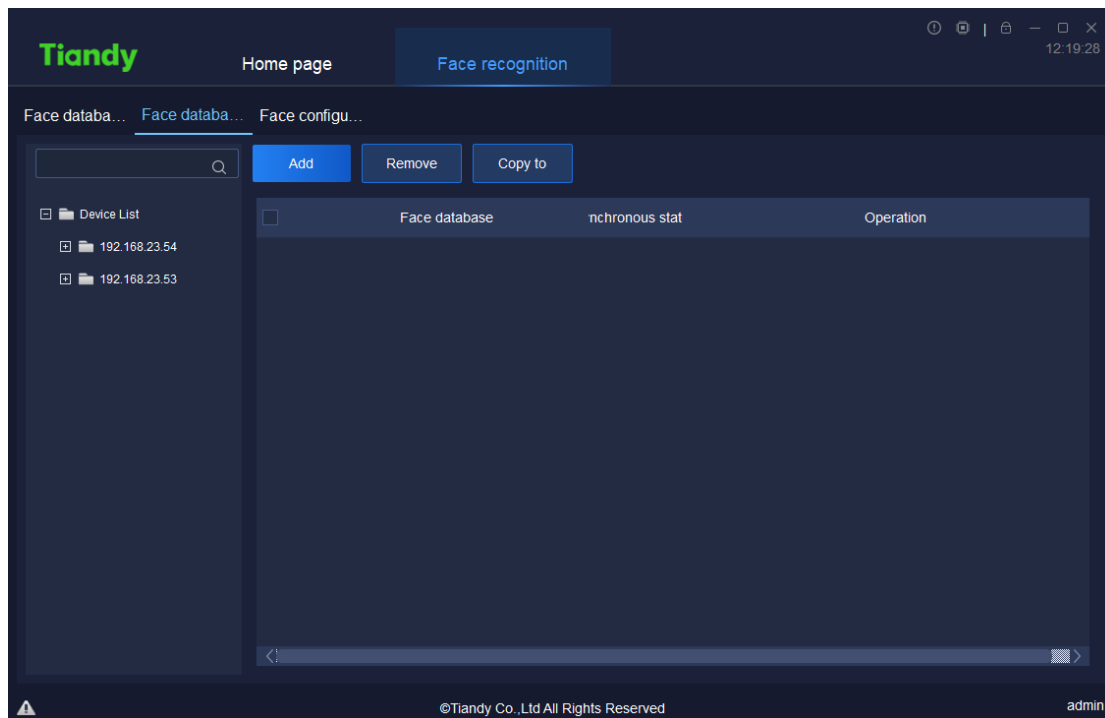


Figure 5.7.2.1

Click “**Add**” to choose a face database to be synchronized, then click “OK” as shown below.

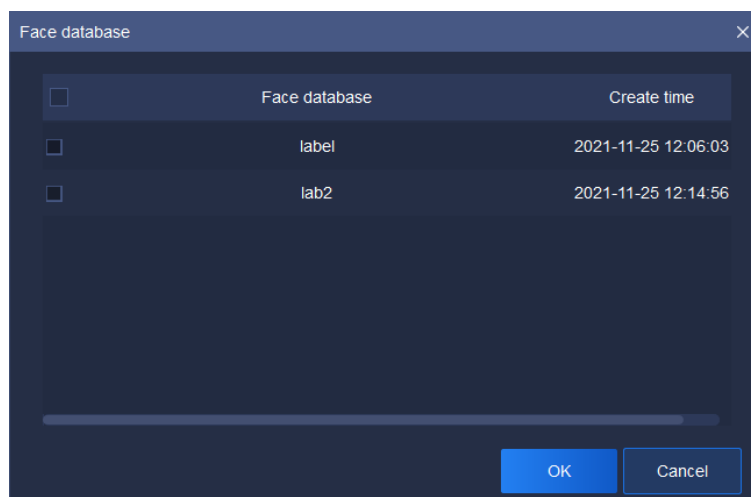


Figure 5.7.2.2

Status and result of synchronization can be seen on current page. If the synchronization fails, click “operation result” on “operation” page to find information of synchronization failure as shown below. If you want to try synchronization again, choose the content to be synchronized and click “**同步**”.

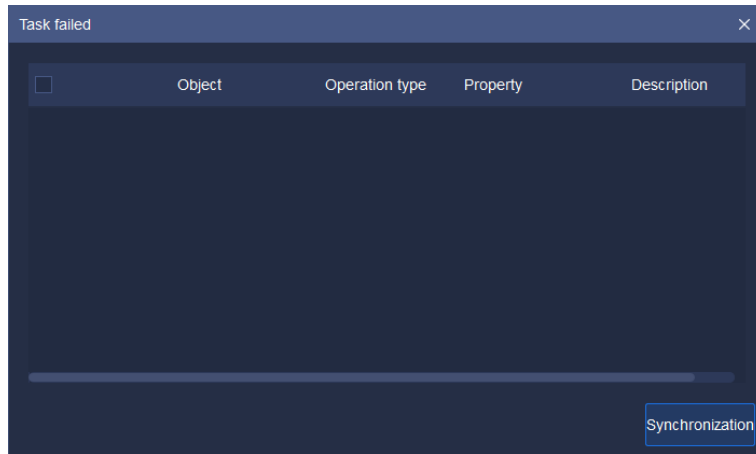


Figure 5.7.2.3

Click “**Remove**” to delete the current face database in current channel.

Click “**Copy to**” to copy it to other channel.

5. 7. 3. Face configuration

On the page of face configuration, face database can be started for current channel; face similarity can be set as shown below.

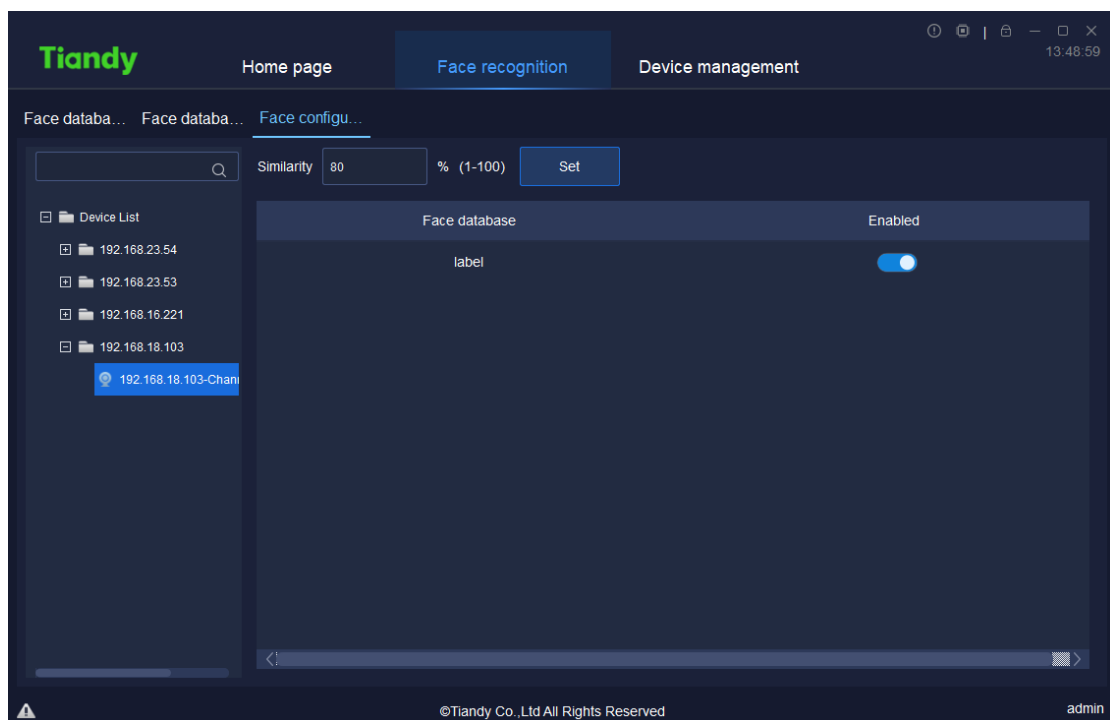



Figure 5.7.3.1

5. 8. Inlet and outlet management



Click the exit / entrance management icon , on homepage to enter exit / entrance management page. Human gate and vehicle gate can be managed as shown below.

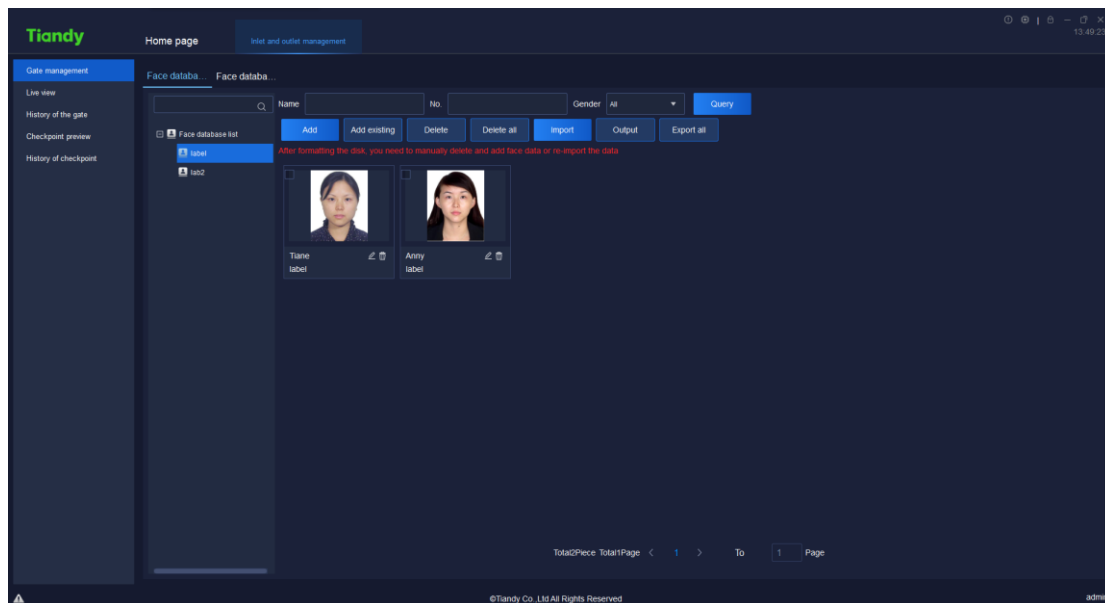


Figure 5.8

5. 8. 1. Gate management

Same as face recognition.

5. 8. 1. 1. Face database management

Same as face recognition.

5. 8. 1. 2. Face database download

Same as face recognition.

5. 8. 2. Live view

The monitored areas can be previewed on the page of preview as shown below.
Equipment gate opening and lifting linkage is supported.

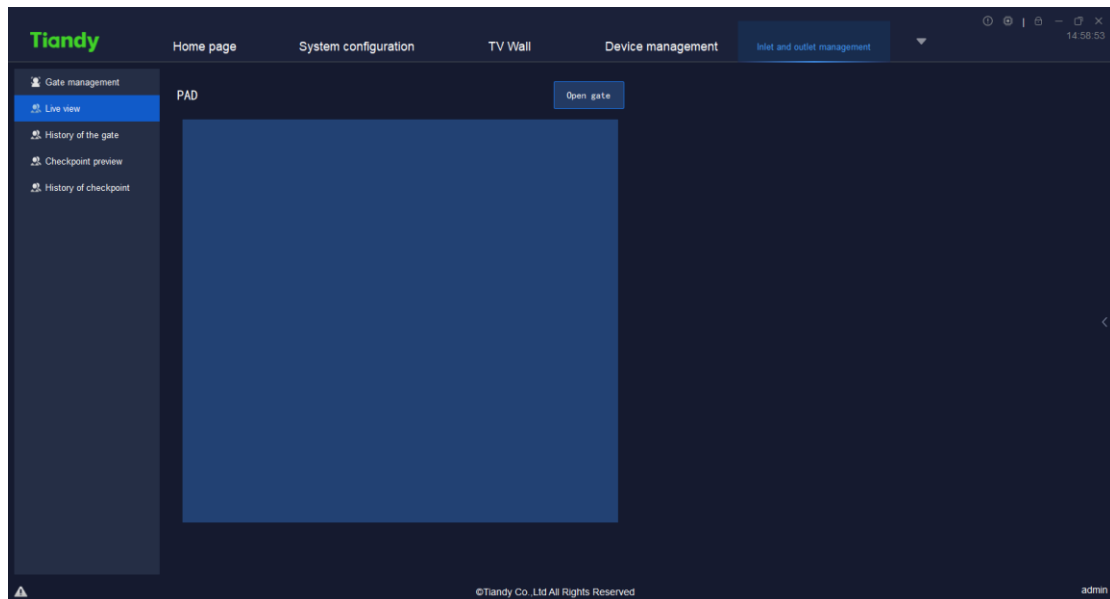


Figure 5.8.2.1

Click the right “<” to unfold equipment list, set real-time equipment preview sequence and the equipment shown. As shown below, choose the equipment to be moved, click “Move upward” or “Move down” to change the sequence.

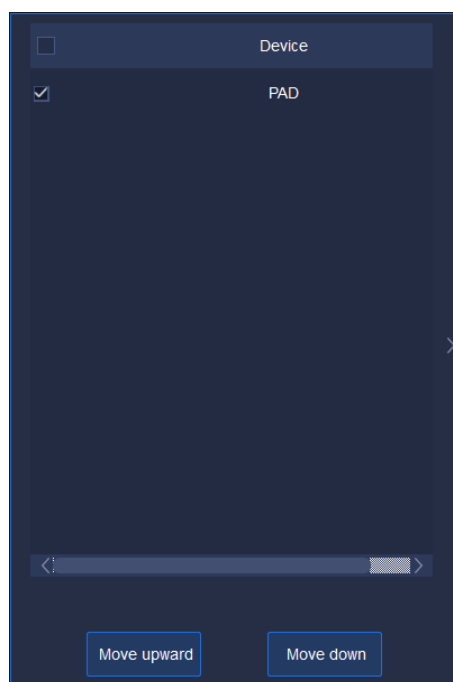


Figure 5.8.2.2

5. 8. 3. History of the gate

On the page of human gate history, access areas, user name and access time can

be searched as shown below.

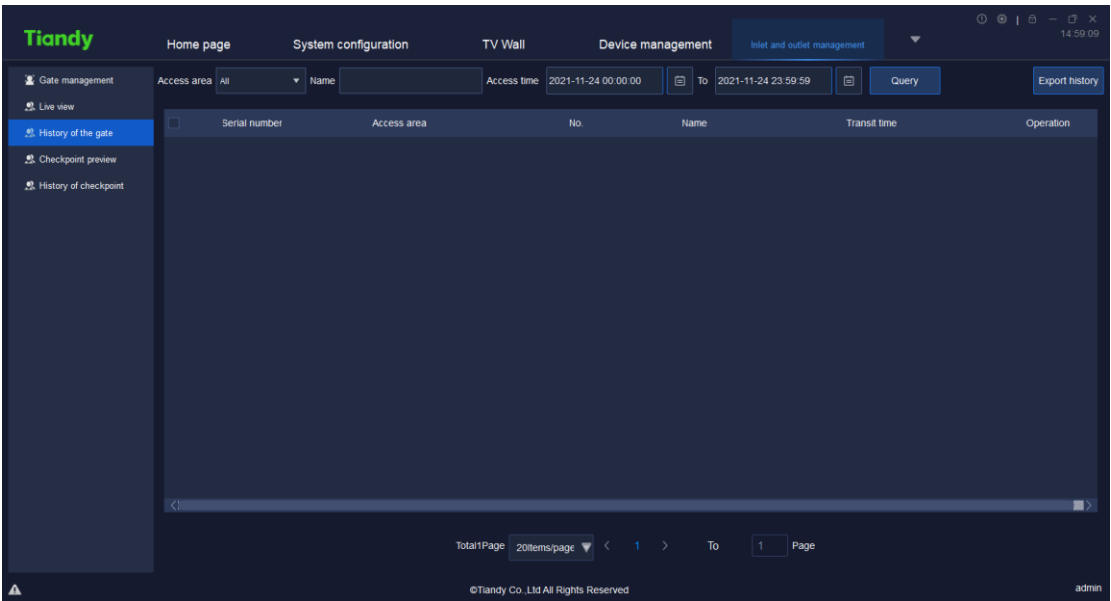


Figure 5.8.3.1

Click “**View**” to find access information of the user as shown below.

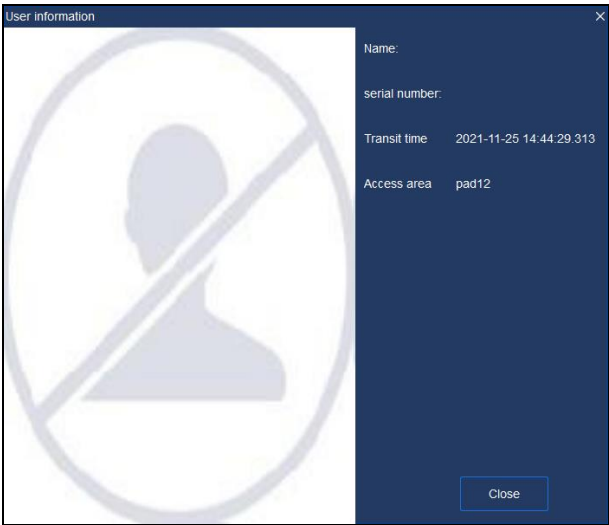


Figure 5.8.3.2

5. 8. 4. Checkpoint preview

Real-time captured image at checkpoint in current monitored area can be seen on the page of checkpoint preview as shown below. Information of vehicle can be found.

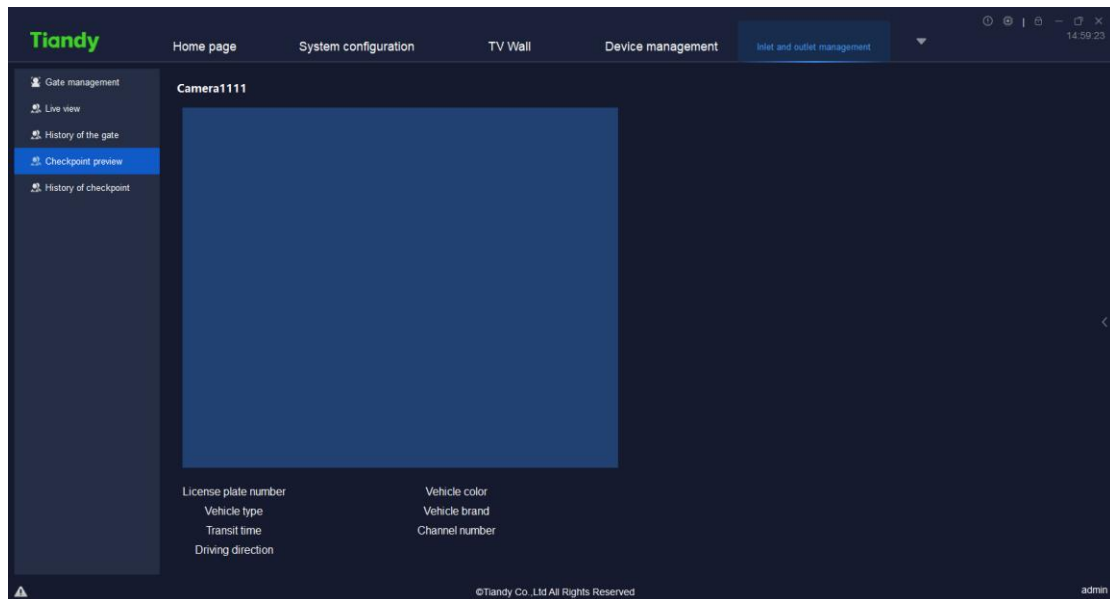


Figure 5.8.4.1

Click the right “<” to unfold equipment list, set real-time equipment preview sequence and the equipment shown. As shown below, choose the equipment to be moved, click “Move upward” or “Move down” to change the sequence.

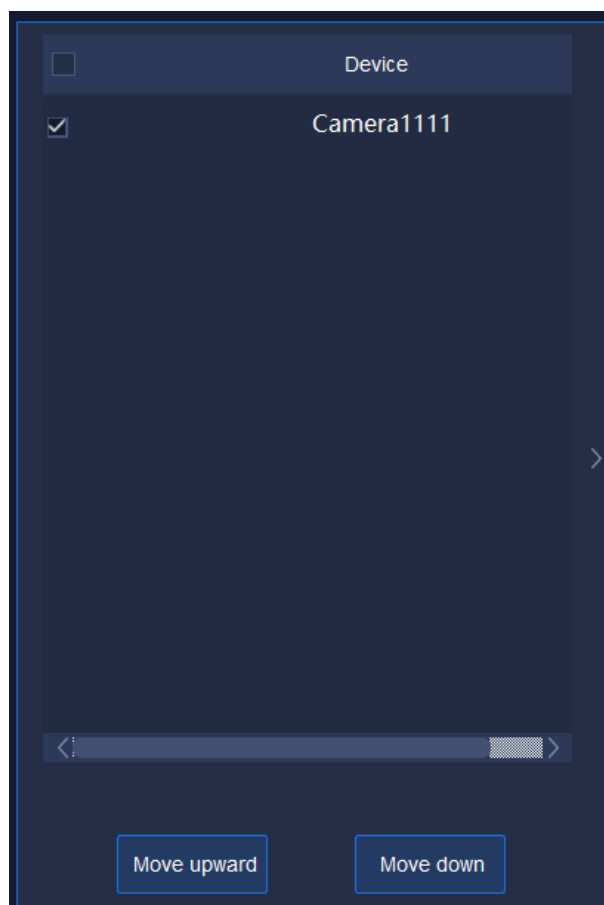


Figure 5.8.4.2

5.8.5. History of checkpoint

Access area, license plate number and access time can be searched on the page of checkpoint history as shown below.

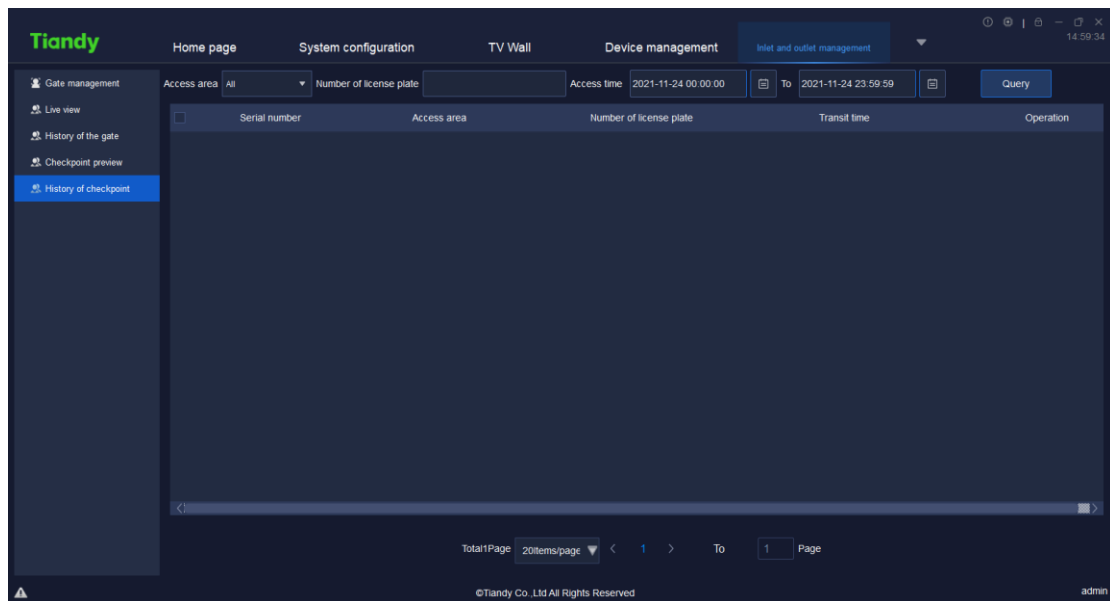


Figure 5.8.5.1

Click “**View**” to find access information of the vehicle as shown below.

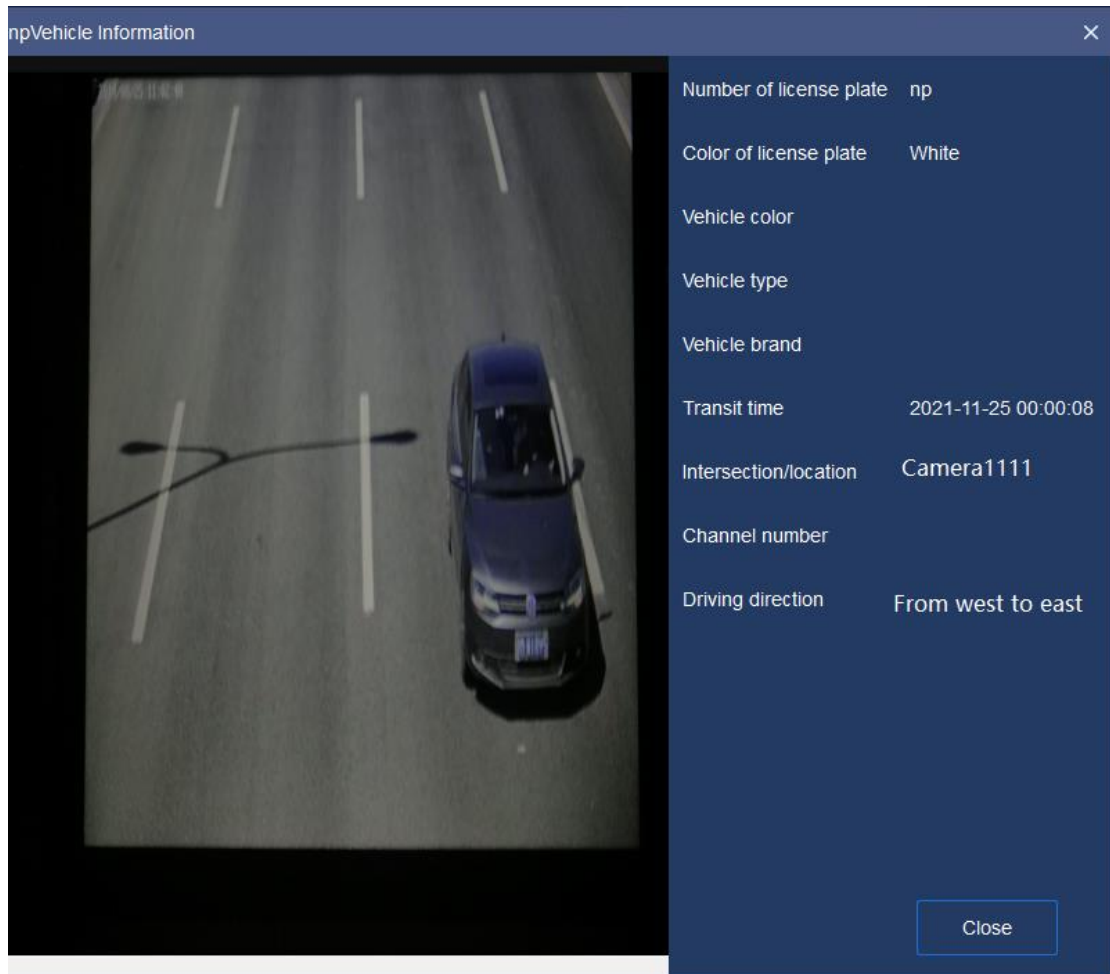


Figure 5.8.5.2

5.9. ElectronicMap



Click the electronic map icon on homepage to enter the page of electronic map management and operation as shown below.

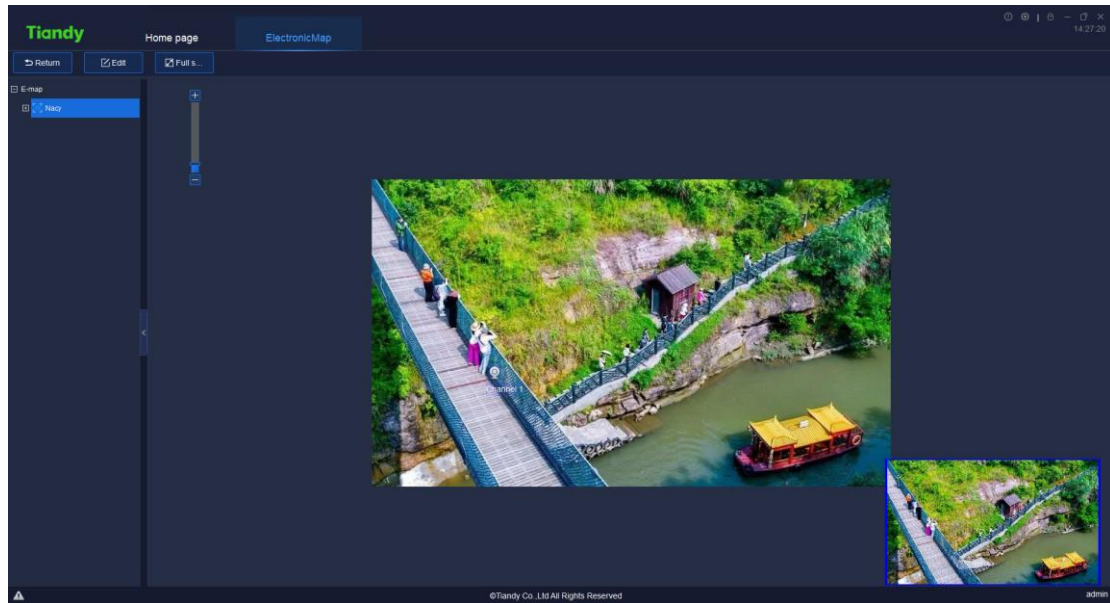
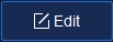


Figure 5.9

Drag the image manually or operate mouse wheel to change position of the image or zoom it in.

5. 9. 1. Electronic Map Configuration

Click “ Edit” to configure the electronic map as shown below:

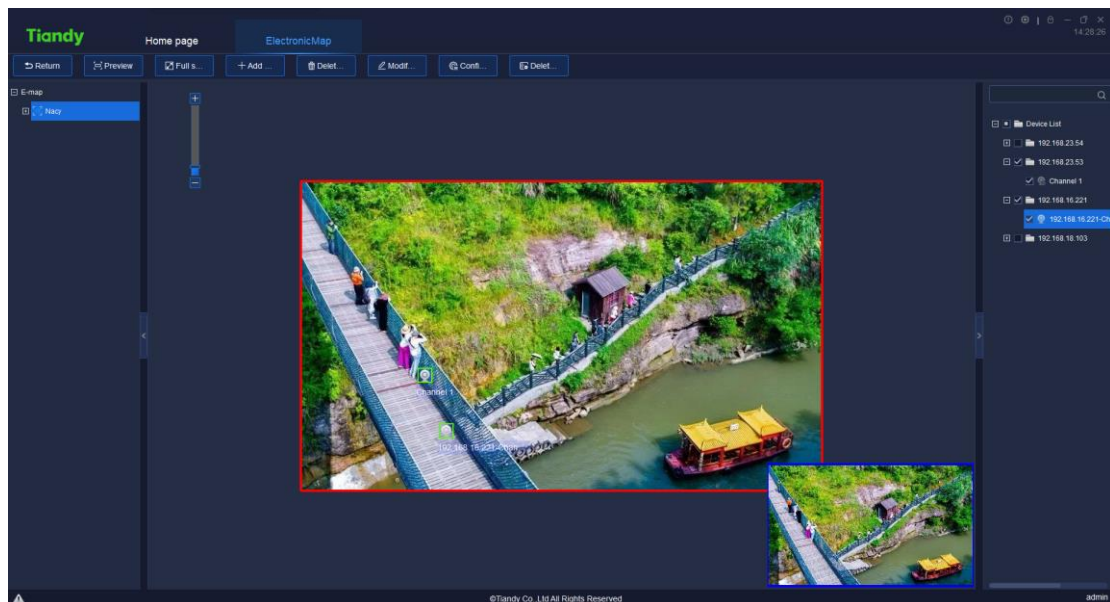
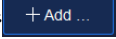


Figure 5.9.1

5. 9. 1. 1. Add Map

Click “ Add ...”, as shown below, enter map name and choose route of map, click “OK” to save the current map; or click “cancel” to close the current page.

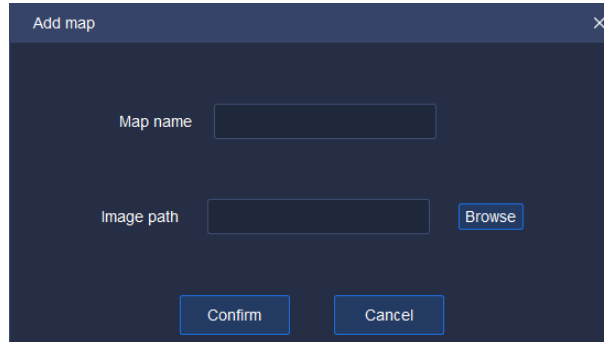
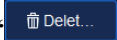
A dark-themed dialog box titled "Add map" with a close button (X) in the top right corner. It contains two input fields: "Map name" and "Image path". To the right of the "Image path" field is a "Browse" button. At the bottom of the dialog are two buttons: "Confirm" and "Cancel".

Figure 5.9.1.1

5. 9. 1. 2. Delete Map

Choose an electronic map from right list of maps, click “ Delet...” and there will be a prompt dialog box as shown below. Click “Yes” to delete the electronic map; or click “cancel” to close the prompt dialog box and the map will not be deleted.

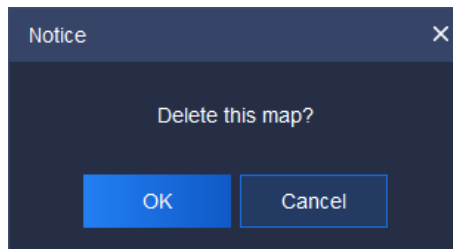
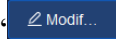
A dark-themed dialog box titled "Notice" with a close button (X) in the top right corner. It contains the text "Delete this map?". At the bottom are two buttons: "OK" and "Cancel".

Figure 5.9.1.2

5. 9. 1. 3. Modify Map

If you want to modify map name or the base map, you can click “ Modif...” , as shown below, click “OK” to save the current map; or click “cancel” to close the current page.

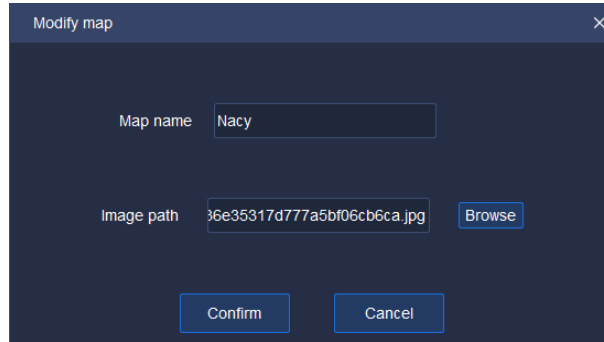

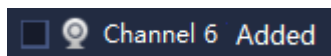


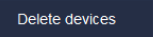

Figure 5.9.1.3

5. 9. 1. 4. Add / Delete Equipment


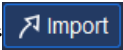


In the self-defined equipment list on the right of edit interface, choose the equipment to be added to the electronic map, drag it to the area that needs the equipment. In this way, data collection channel can be added. Drag channel equipment icon “” to change addition position.

If the equipment was added, “added already” will be prompted as shown below.



To delete equipment, choose the equipment and click the right button on “” ; or choose the equipment in the left list of electronic maps, click “” to delete the equipment on the current electronic map.

5. 9. 1. 5. Configure Hot Zone

Click “” to link other electronic maps on the current electronic map as shown below. Tick the left electronic map and click “” to add the electronic map to the right linked area; or click “” to move back electronic map from right linked area to area of electronic map. Click “OK” to show the hot zone icon “” on current electronic map. Drag it to set position of hot zone anew. Or click “cancel” to close the current page.

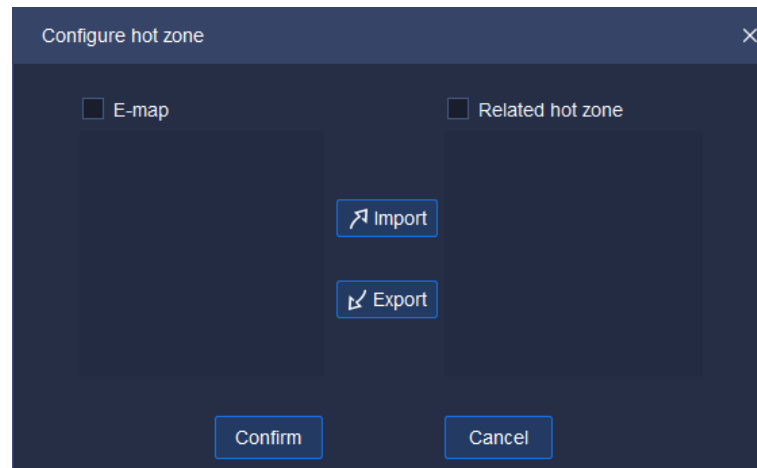


Figure 5.9.1.4

To delete the hot zone, choose it and click right button on “Delete hot zone”. In this way, the hot zone can be deleted from current electronic map.

5.9.2. Electronic Map Preview

Click “Preview” to preview current electronic map as shown below.

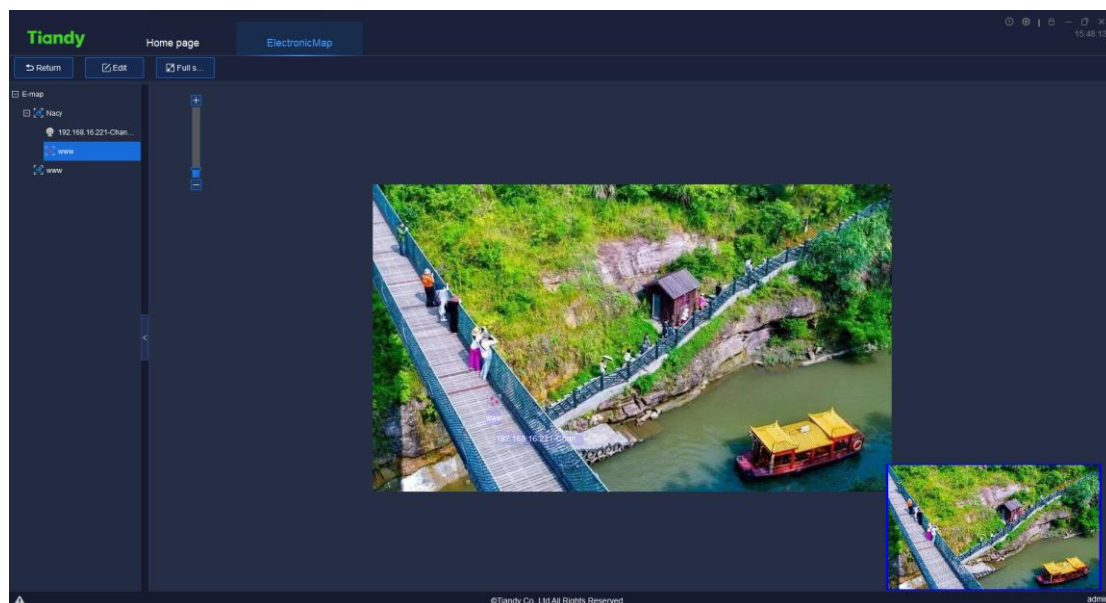


Figure 5.9.2.1

On the page of electronic map preview, the image can be dragged manually to change its position; or operate mouse wheel to zoom in.

Click “Full S...” to preview the image on the whole screen.

Click “Return” to return to the last step.

5. 10. User management



Click the user management icon on home page to enter user management interface. The interface will display the basic information of all added users at that moment, as shown in below figure:

User Name	User type	Description
admin01	Administrator	
test	Operator	
admin	Super Administrator	

Figure 5.10

【Note】 Only admin-super administrator account has the authority to enable this function.

5. 10. 1. Add user



Click "Add" to enter Add user interface, as shown in below figure:

The screenshot shows the 'Add Users' window. At the top, there are input fields for 'User level' (set to 'Administrator'), 'Password' (with a hint 'Please enter 6-32 digits password'), 'User Name', 'Confirm password', and 'Validity' (set to '2031-11-25 15:50:02'). Below these is a 'Descrip...' field. The bottom half of the window is divided into two panels. The left panel, 'User authority', has a checked checkbox and a list of 13 permissions, all of which are checked. The right panel, 'Permissions', has a search bar and a tree view showing a 'Device List' folder and several sub-folders (IP addresses) and a 'pad' folder, all of which are checked. At the bottom are 'OK' and 'Cancel' buttons.

Figure 5.10.1

The description of related parameters in the interface is as follows:

Parameter	Description
User level	Set administrator or operator for current system.
User name	Users to fill in any name. 【Note】 There's illegal character limit when adding user name, following characters are not allowed to be input ~!#\$%^()=[]{},":;<>?*`+/\&.
Password	To set password for newly added user.
Confirm password	Needs to be the same as input "Password".
Validity	Set the expire date of the authority for users.
Description	Supplement and describe user information.
User authority	Set the user authority of administrator or operator, such as the authority of video browsing, PTZ control, video playback, video download, system lock, system delock, intercom, alarm check, etc.

Permissions	Set devices permit user authority to apply.
-------------	---

Table 5.10.1

5. 10. 2. **Edit user**

Select the user needs to be edited, click "**Edit**" to enter Change users interface, as shown in below figure:

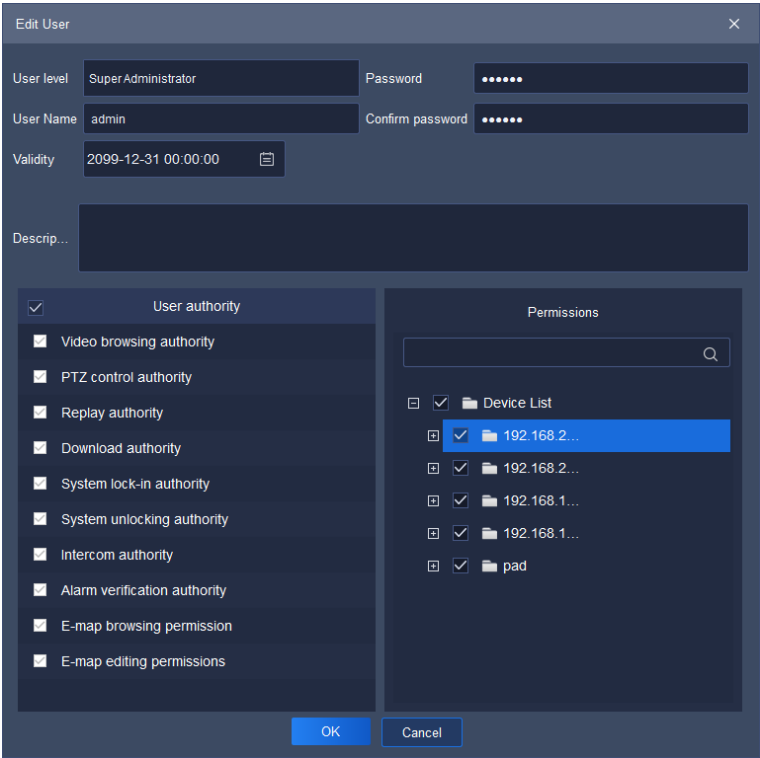


Figure 5.10.2

In the editing interface, the related information of the user can be changed, including user level, user name, validity, password, description, user authority and permissions. Admin-super administrator can only change password.

5. 10. 3. **Delete user**

Select the user needs to be deleted, click "**Delete**" and a notice box will pop up, as shown in below figure:

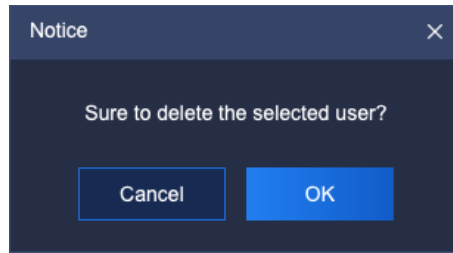


Figure 5.10.3

Click "OK" to delete the selected user; click "Cancel" to cancel deletion.

【Note】 Several users can be deleted at the same time.

5. 11. Intelligent search



Click the intelligence retrieval icon on home page to enter the intelligence retrieval interface.

5. 11. 1. Face retrieval

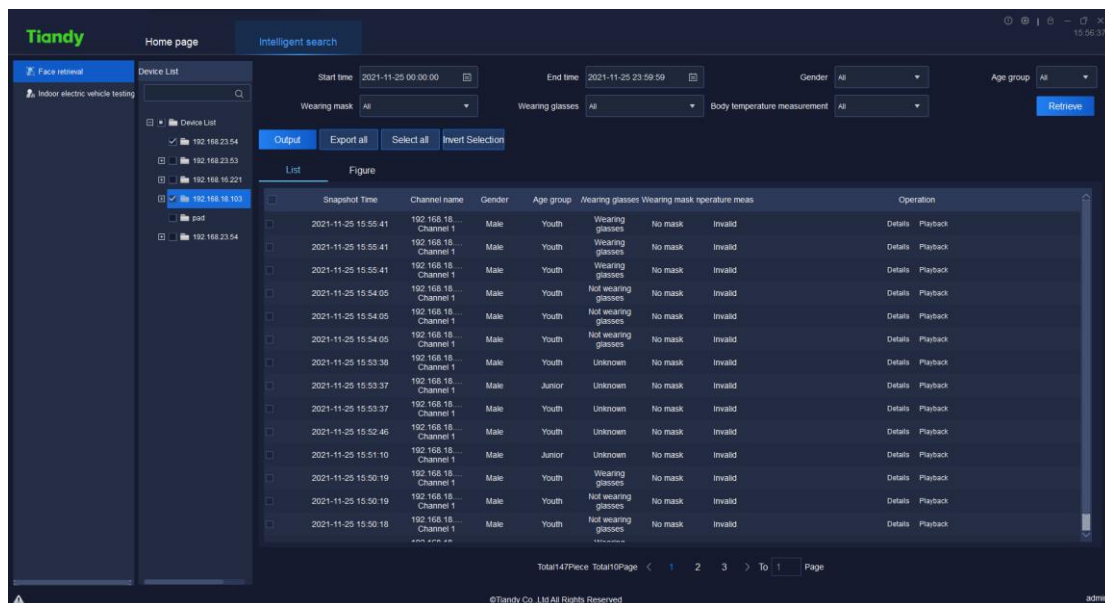


Figure 5.11.1

Retrieve by starting and end time, by gender, by age group, by whether wearing mask, by whether wearing glasses and by body temperature measurement are supported.

Users may select any channel among watch points on the left, set query condition and click "Retrieve" to retrieve the detailed information recorded by this watch point in the time period, both list and figure display form are supported.

Click "List" and the retrieval result will be displayed in list, including capture time, channel name, gender, age group, whether wear mask, whether wear glasses and body temperature measurement; click "Details" to check the detailed information of captured picture, as shown in below figure, click "Playback" to check playback video.

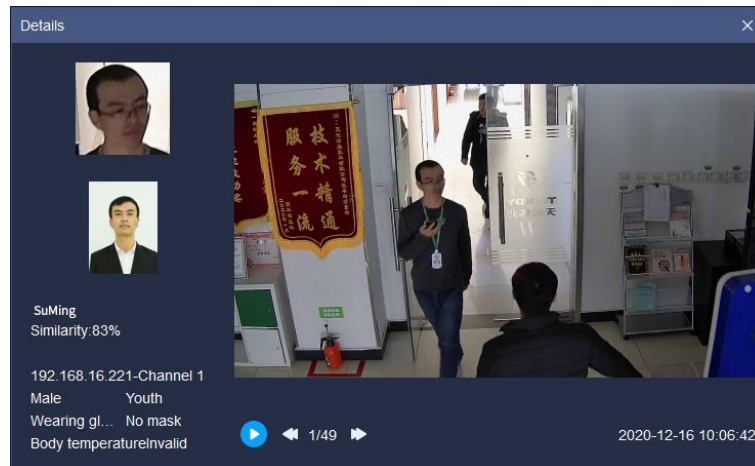


Figure 5.11.2

Click "Figure" and the retrieval result will be displayed in figure, the detailed information of captured picture and playback information will be checked, as shown in below figure:

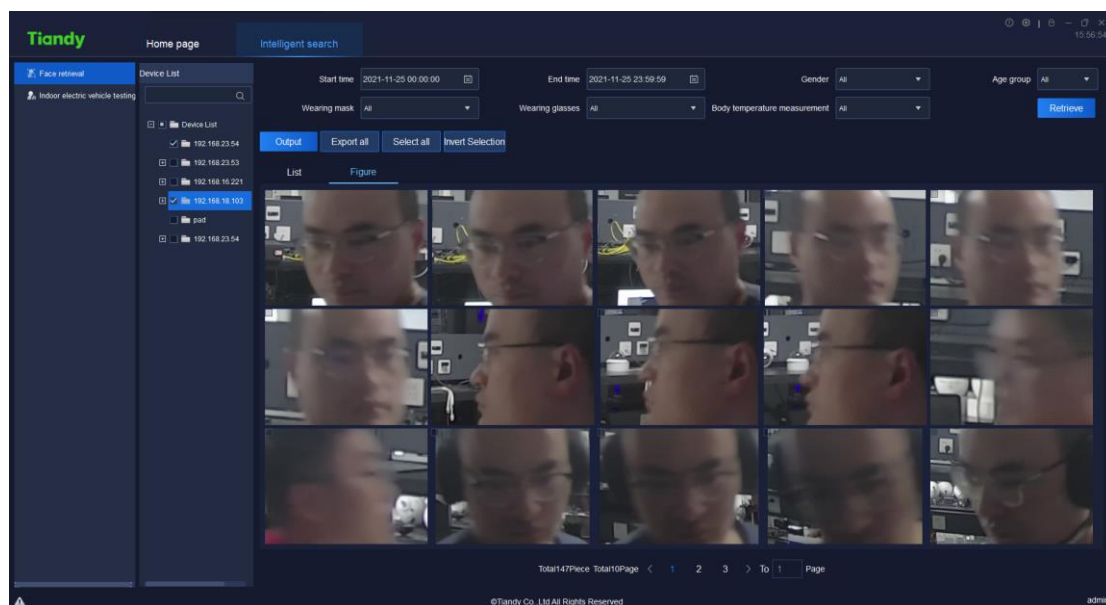


Figure 5.11.3

Select any data in the retrieval result and click " **Output** " to download this data result to local device, the exported result is shown as in below figure:

Snapshot	Channel	rGender	Age group	Wearing g	Wearing m	Body temp	Big picture	Small picture path
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Female	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Junior	Wearing g	Wearing m		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Not wear	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Not wear	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Wearing g	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Middle ag	Not wear	No mask		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Not wear	Wearing m		0 E:/Test/eE:/Test/easy7/FacePic/20	
2020-11-21	192.168.1	Male	Youth	Not wear	Wearing m		0 E:/Test/eE:/Test/easy7/FacePic/20	

Figure 5.11.4

Click " **Export all** " to export all retrieved results.

5. 11. 2. Indoor electric vehicle testing

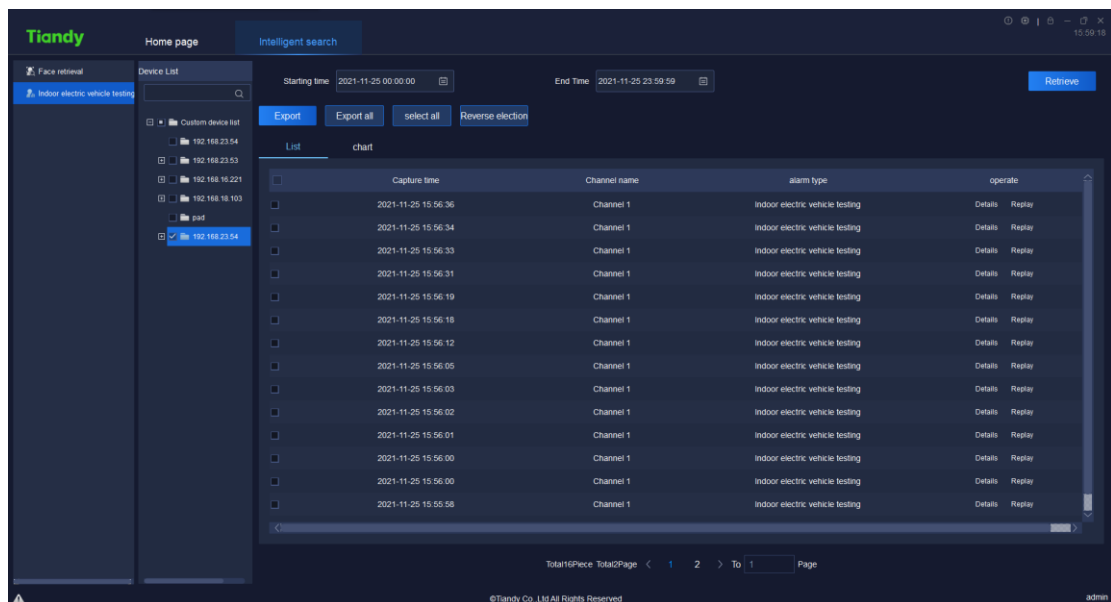


Figure5.11.2.1

Search can be based on beginning and ending time.

Users can choose equipment that supports the algorithm from left monitoring points, set query conditions and click " **Retrieve** " to find all recorded detailed information of the monitoring point during the time. The information can be presented in list format or graph format.

Search result can be presented in list format by clicking " **List** ", including capture time, channel name, alarm type etc. The detailed information of captured

image can be seen by clicking “**Details**” as shown below. Click “**Replay**” to watch playback.

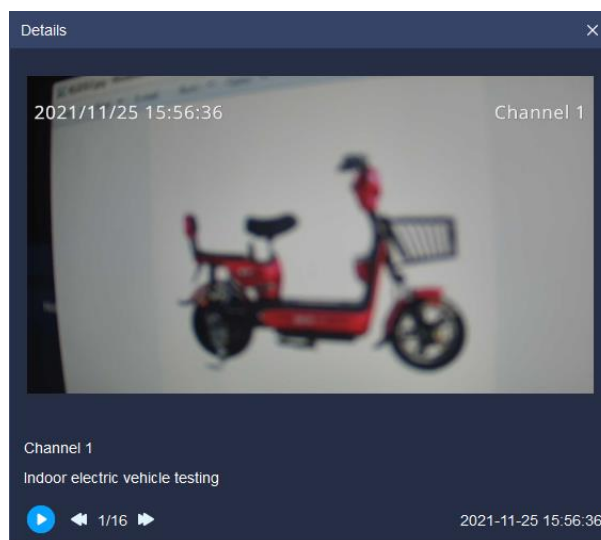


Figure5.11.2.2

Search result can be presented in graph format by clicking “**chart**” Detailed information of captured image and playback information can be seen as shown below.

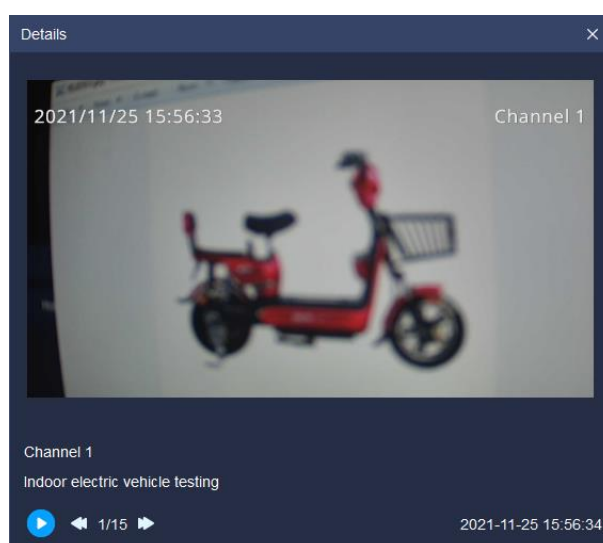


Figure5.11.2.3

Choose any datum from search result and click “**Export**” to download the data; or click “**Export all**” to export all search results.

5. 12. Data statistics



Click the data statistics icon on home page to enter the data statistics interface.

5. 12. 1. Face statistics

Face statistics supports to carry out statistics by age group, by gender, by the number of people, by whether wear glasses, by whether wear mask and by body temperature measurement.

5. 12. 1. 1. Statistics by age group

According to age group, the face statistics can be divided into junior, youth, middle age and old age to display. The platform supports list and graphic display, as shown in below figure.

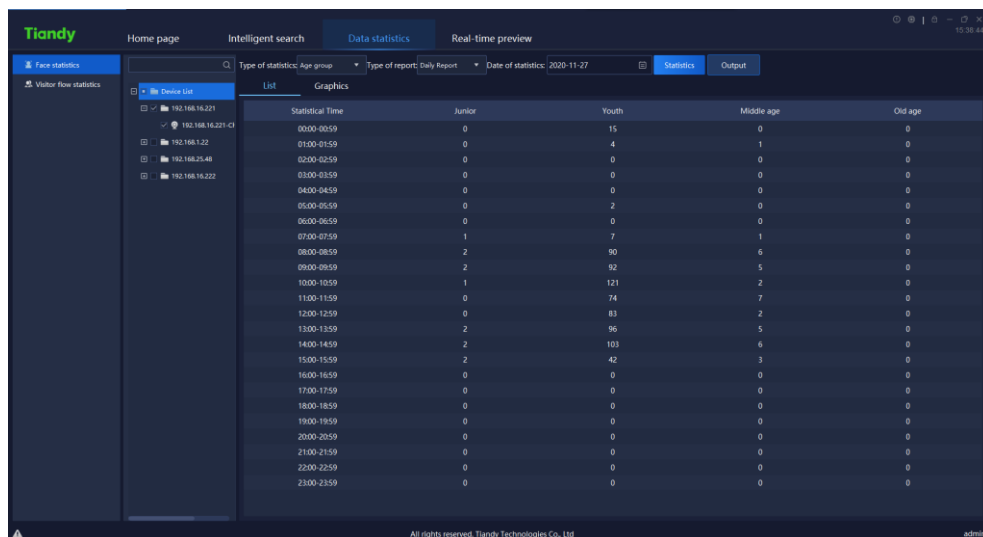


Figure 5.12.1.1

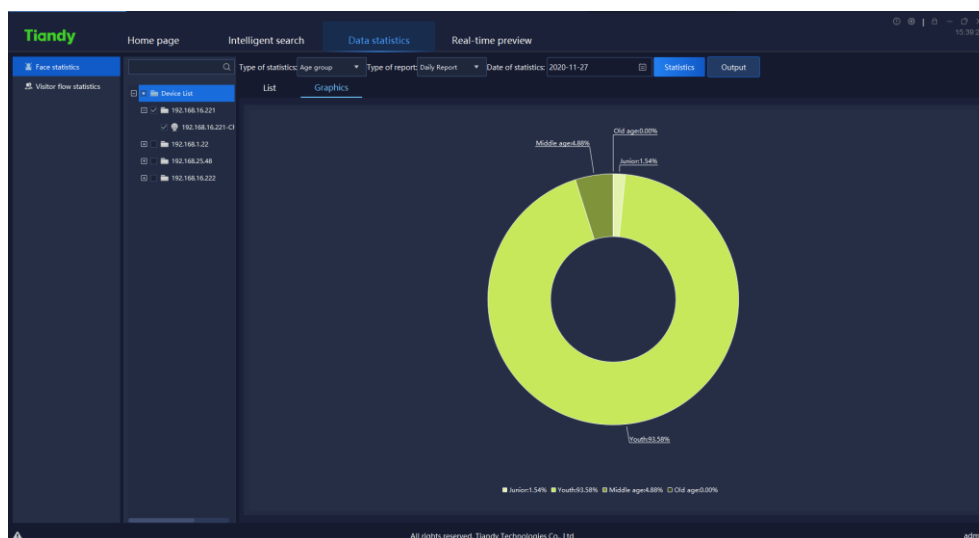


Figure 5.12.1.2

5.12.1.2. Statistics by gender

According to gender, the face statistics can be divided into male, female and unknown to display. The platform supports list and graphic display, as shown in below figure.

【Note】:When the device detects people shape but does not detect face, it will display "unknown".

The screenshot displays the Tandy system's 'Data statistics' section, showing a table of gender statistics for the date 2020-11-27. The table has four columns: 'Statistical Time', 'Female', 'Male', and 'Unknown'. The data is organized by time intervals from 00:00-00:59 to 23:00-23:59. The interface includes a sidebar with 'Face statistics' and 'Visitor flow statistics', and a top navigation bar with 'Home page', 'Intelligent search', 'Data statistics', and 'Real-time preview'.

Statistical Time	Female	Male	Unknown
00:00-00:59	2	13	0
01:00-01:59	0	5	0
02:00-02:59	0	0	0
03:00-03:59	0	0	0
04:00-04:59	0	0	0
05:00-05:59	0	2	0
06:00-06:59	0	0	0
07:00-07:59	3	6	0
08:00-08:59	29	69	0
09:00-09:59	16	83	0
10:00-10:59	30	94	0
11:00-11:59	18	63	0
12:00-12:59	32	53	0
13:00-13:59	18	85	0
14:00-14:59	10	101	0
15:00-15:59	13	76	0
16:00-16:59	0	0	0
17:00-17:59	0	0	0
18:00-18:59	0	0	0
19:00-19:59	0	0	0
20:00-20:59	0	0	0
21:00-21:59	0	0	0
22:00-22:59	0	0	0
23:00-23:59	0	0	0

Figure 5.12.1.3

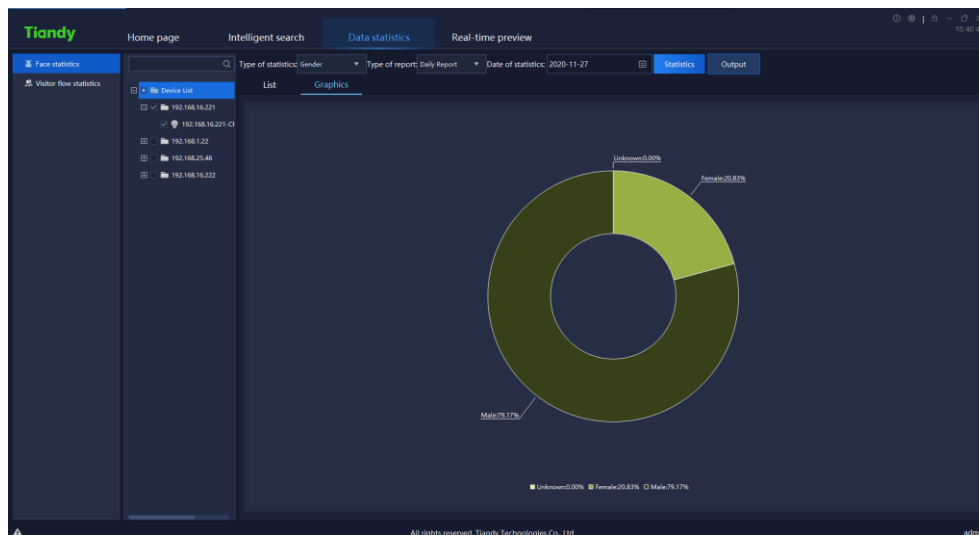


Figure 5.12.1.4

5. 12. 1. 3. Statistics by the number of people

The statistics of the number of people every hour in face statistics. The platform supports list and graphic display, as shown in below figure.

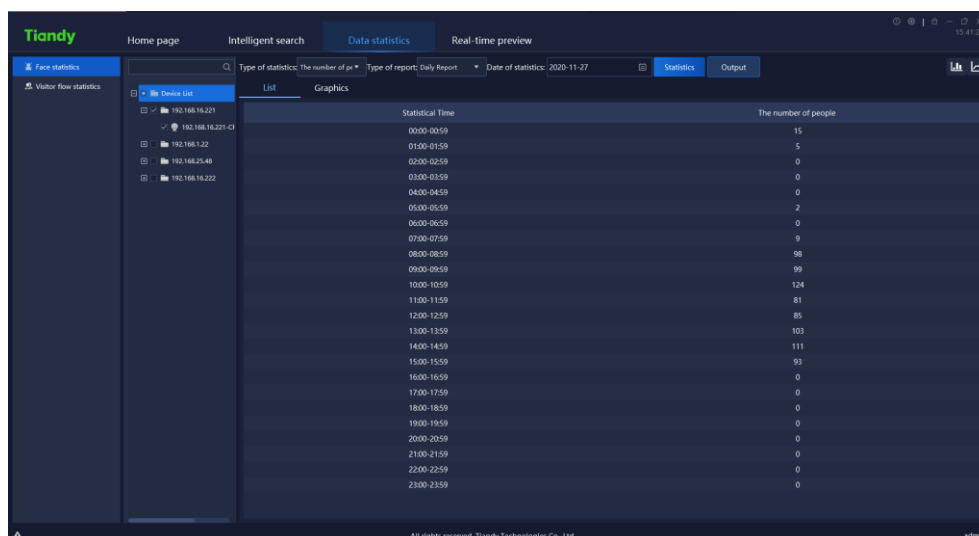


Figure 5.12.1.5



In graphic interface, click " " to switch to line chart display, click " " to switch to bar graph display.



Figure 5.12.1.6



Figure 5.12.1.7

5. 12. 1. 4. Statistics by whether wearing glasses

The statistics of whether wearing glasses in face statistics, can be divided into not wearing glasses and wearing glasses to display. The platform supports list and graphic display, as shown in below figure.

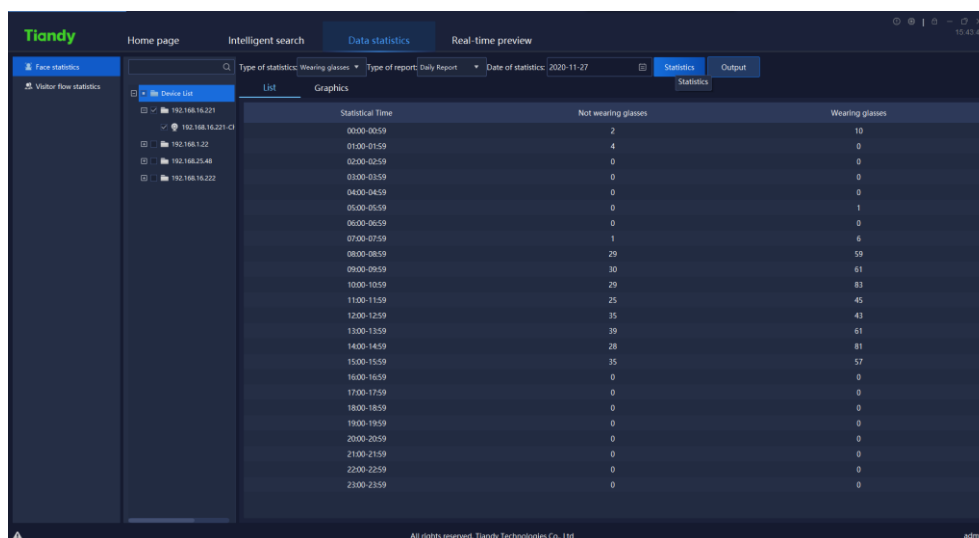


Figure 5.12.1.8

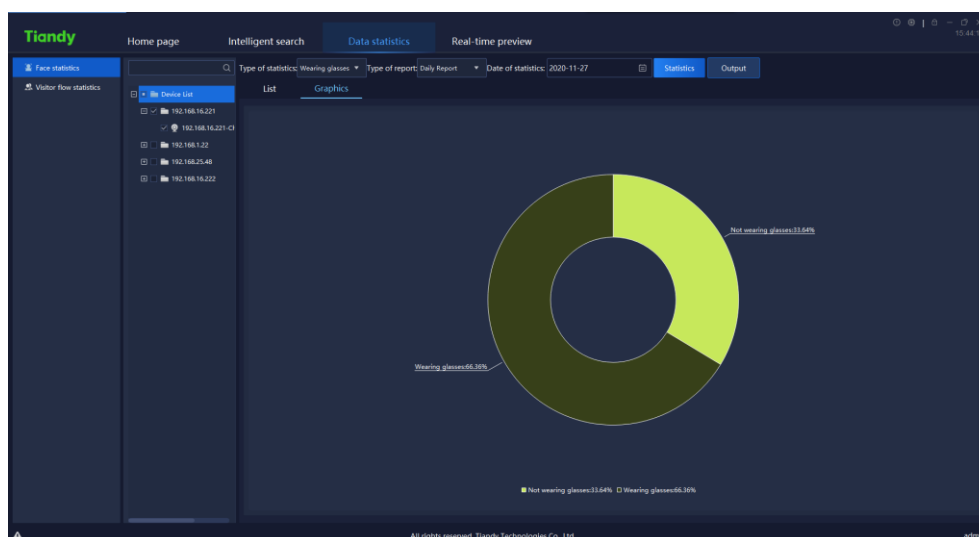


Figure 5.12.1.9

5. 12. 1. 5. Statistics by whether wearing mask

The statistics of whether wearing mask in face statistics, can be divided into no mask and wearing mask to display. The platform supports list and graphic display, as shown in below figure.

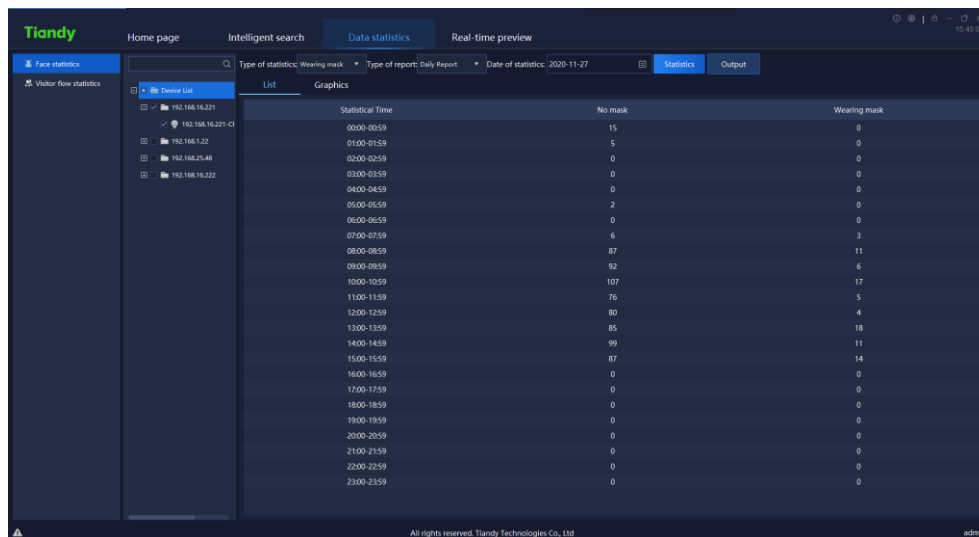


Figure 5.12.1.10

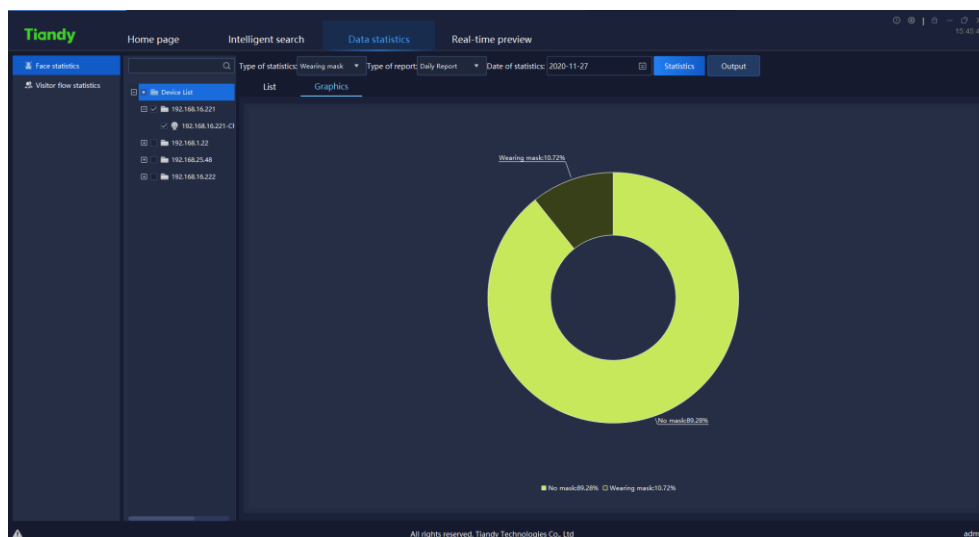


Figure 5.12.1.11

5. 12. 1. 6. Statistics by body temperature measurement

The face statistics will conduct statistics of the number of people with abnormal body temperature every hour by time. The platform supports list and graphic display, as shown in below figure.

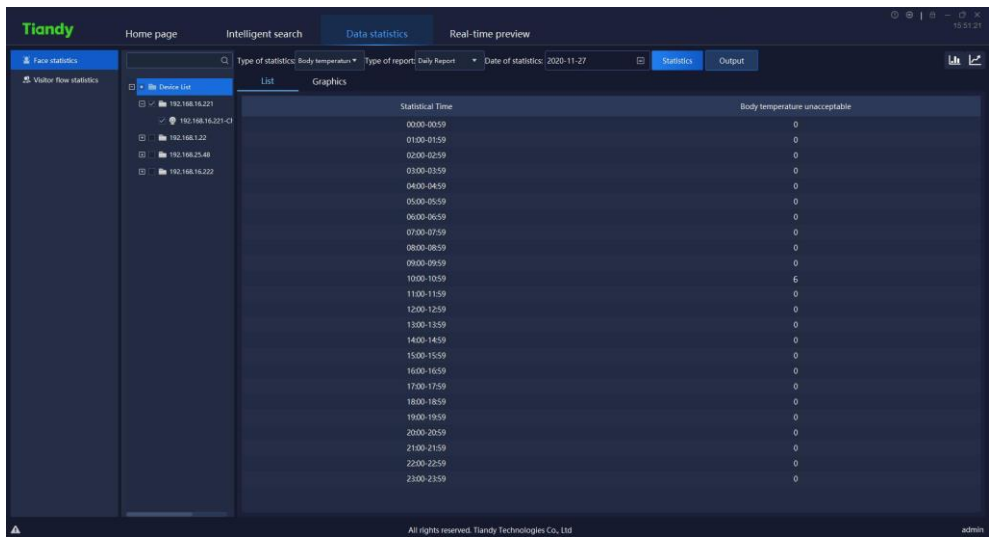


Figure 5.12.1.11



Figure 5.12.1.12

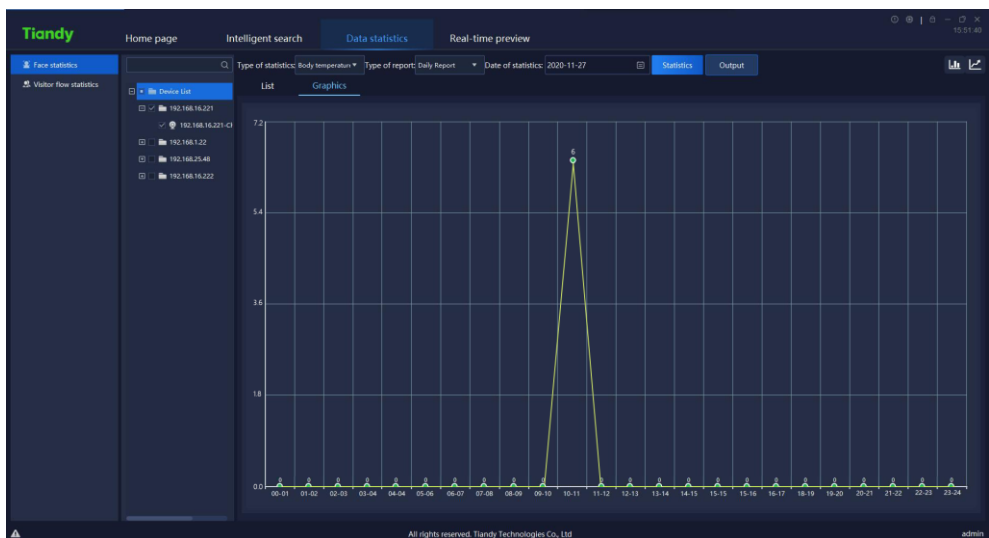


Figure 5.12.1.13

5. 12. 2. Visitor flow statistics

Guest flow statistics supports two methods namely real-time statistics and report statistics. Real-time statistics can monitor the real-time guest flow according to the established area, and give an alarm when the number of person hikes too much; the report statistics can count the number of people entering, leaving and passing by in the established area, and display them with a list or a graph, as is shown in below figure:



Figure5.12.2.1

5. 12. 2. 1. Real-timeStatistics Device List

Enter the device list bar, type in the key information in the search box, and double-click to locate the guest flow equipment, as is shown in below figure:

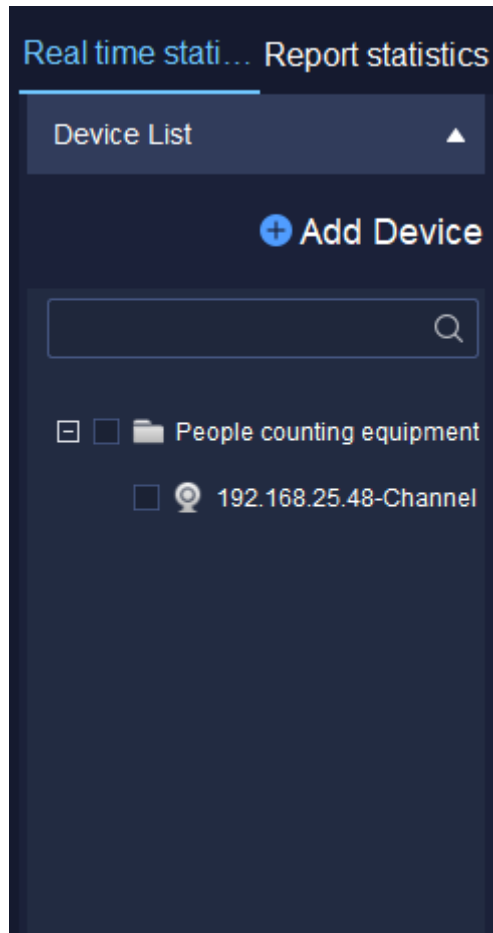


Figure5.12.2.2

Select the device in the guest flow device list and right-click to pop up the right-click menu of guest flow device list, as is shown in below figure:

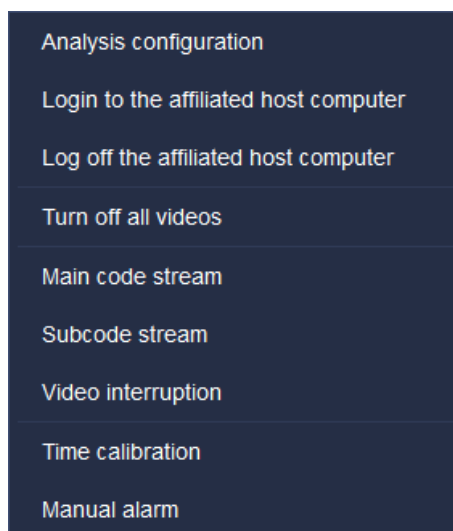


Figure5.12.2.3

Select “ Analyse Config.” to enter configuration tool page to view the configuration of each present channel, as is shown in below figure:

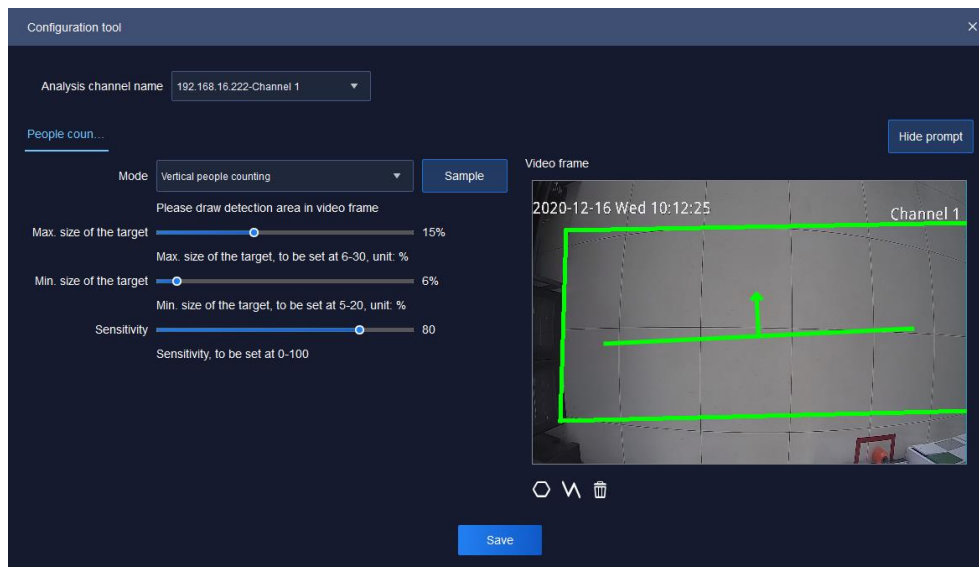


Figure 5.12.2.4

Relative parameters explanation of the interface is as below:

Parameters	Explanation
Analysis channel name	Switch channels and analyse the configuration of each channel.
Mode	Read the algorithm supported by the front-end device and draw it in the right video frame or directly in the video frame.
Sample	Display the effect sketch shown in the video box.
Max. Size of the target	Display the maximum size of the target, and the range can be set from 6% to 30%
Min. Size of the target	Display the minimum size of the target, and the range can be set from 5% to 20%
Sensitivity	Set the detection sensitivity. The higher the sensitivity, the more sensitive it is. The range can be set from 0 to 100.
Video frame	Display the video and its algorithm under the channel.
Hide prompt	Hide the prompts in the configuration information on the left.




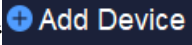
	Redraw the statistical area in the video graph.
	Redraw the statistical lines in the video graph.
	Eliminate the lines.

Table 5.12.2.1

Other right-click menu button 5.2.1 device list.

Click“ Add Device” in device list to enter guest flow camera configuration page, as is shown in below figure:

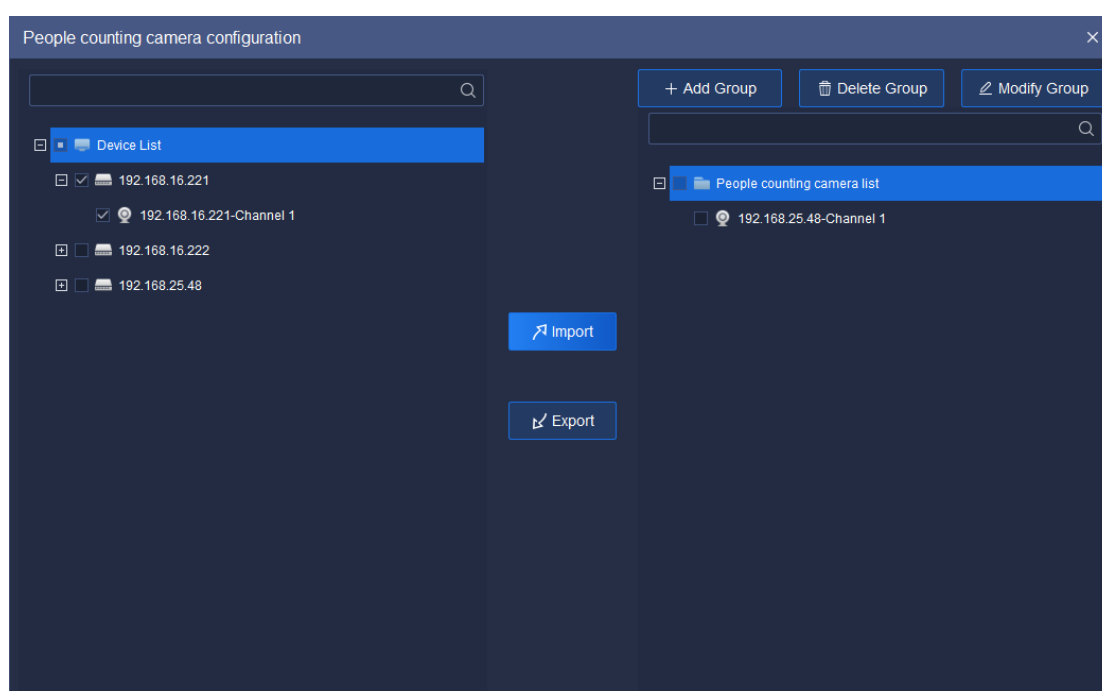




Figure 5.12.2.5

Relative parameters explanation of the interface is as below:

Parameters	Explanation
	In the left device list, select the device or device channel. In the right guest flow camera list, select a group, and click to add the device or device channel to the guest flow camera group.
	In the right guest flow camera list, select a group or device channel, and click to delete the group and its device channel or device channel from the guest flow camera list.

+ Add Group	In the right guest flow camera list, select the node and click to add the guest flow group.
🗑 Delete Group	In the right guest flow camera list, select a group and click to delete the guest flow group.
✎ Modify Group	In the right guest flow camera list, select the node and click to modify the guest flow group name.

Table 5.12.2.2

5. 12. 2. 2. Real-time Statistics Area List

Enter the area list to shift area scene, as is shown in below figure:

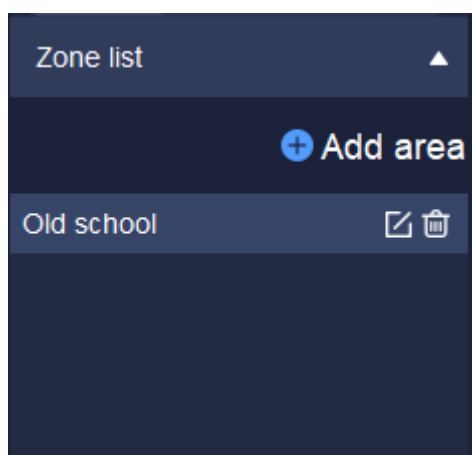


Figure5.12.2.6

In the area list, click “🗑” to delete established area, click “✎” to update the configuration information of present area, click “+ Add area” to enter the area configuration page to set information of area detection time, capacity, number of people surge, whether or not to enable alarm, detection device channel, etc, as is shown in below figure:

Area configuration

Area name

Old school

Start time

00:00:00

End time

23:59:59

☒ Enable alarm

People capacity

1

*

(Upper limit of people capacity)

☒ Enable alarm

Rapidly increase...

1

/

Hour

*

(Upper limit of increased number of people)

Alarm interval

10

(Minute)

Number of people staying

1

(Current number of people)

Add

Delete

☐ Channel Name

☐ 192.168.25.48-192.168.25.48-Channel 1

Confirm

Cancel

Figure 5.12.2.7

Relative parameters explanation of the interface is as below:

Parameters	Explanation
Area name	Set the name of the detection area to facilitate the rapid positioning of the area.
Start time/End time	Set the time of starting and finishing of statistics.
People capacity	Set the upper limit of the capacity. This is required.
Rapidly increased number of people	Set the upper limit of the increase of the number of people in the unit time (10 minutes, 30 minutes, 1 hour, 2 hours). This is a required field.


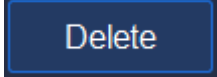
Alarm interval	Set alarm interval, supporting 10, 20, 30, 40, 50, 60 minutes.
Number of people staying	Set the current number of existing people.
	Set the detected channel video to be detected. Multiple channel videos adding is possible.
	Select the channel video to be deleted. Multiple channel videos deletion is possible.

Table 5.12.2.3

5. 12. 2. 3. Real-time Data of Real-time Statistics

Select the area to be viewed in the area list, and the configuration information of the area can be viewed at the bottom of the interface, as is shown in below figure:



Figure 5.12.2.8

Relative parameters explanation of the interface is as below:

Parameters	Explanation
Recount	Click to eliminate the recorded number of people.
Peak	Record the maximum number of people in current area.
Current number of people	Record the number of people at current time. If the number exceeds the one that can be accommodated, it will turn into a red box; otherwise, it will be a green box.
Enter/Leave/Passing	Record the number of people in three status namely entering / leaving / passing by. At the same time, the color of each case is distinguished. Red colour represents entering, green leaving, and blue passing by.
Real-time Line Chart	The number of people is displayed in real time according to

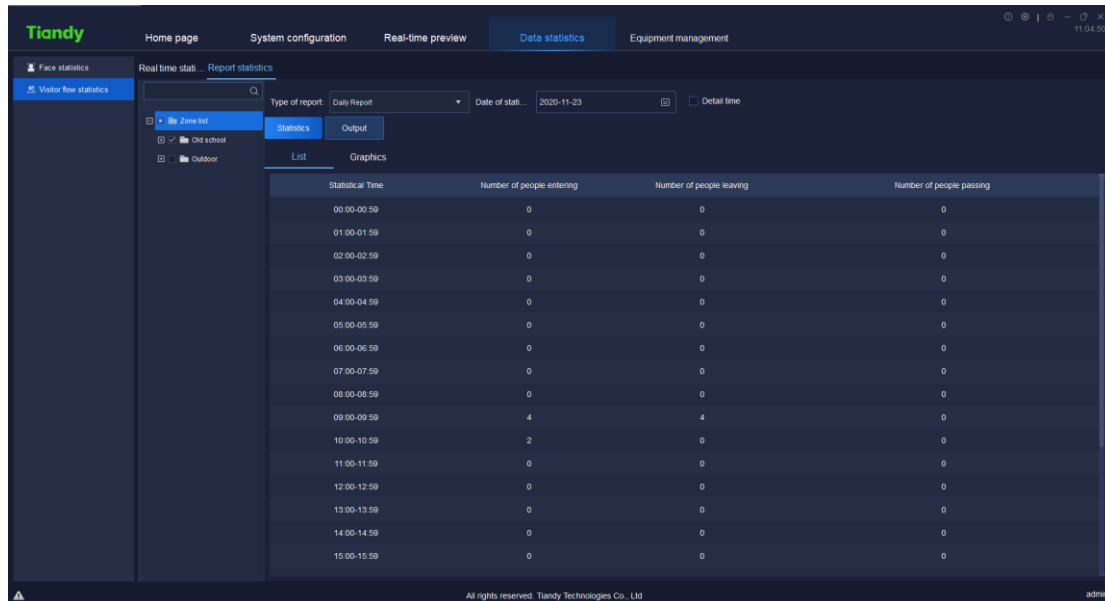


Figure 5.12.2.10

Select the report type and statistical time. If statistics need to be made according to the detailed time, enable the "detailed time" check box, and the statistics of the number of people in the detailed period will be displayed during the statistics. Click "export" to export the statistical data to the machine, as is shown in below figure.

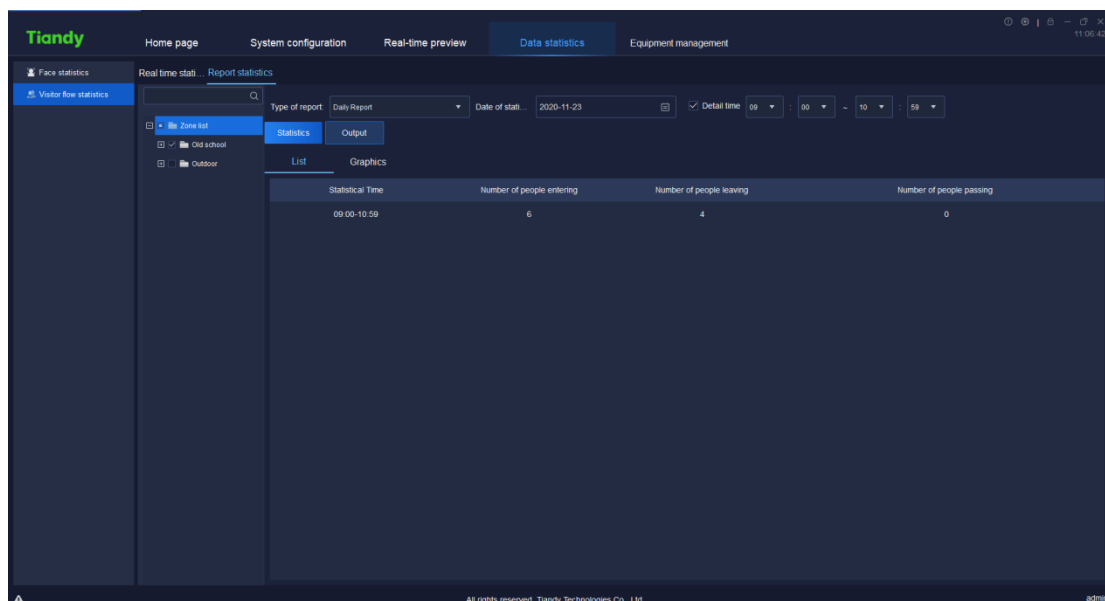


Figure 5.12.2.11

The data can be displayed in the two forms namely list or graph. The graphic form supports line chart and bar chart, as shown in below figure:

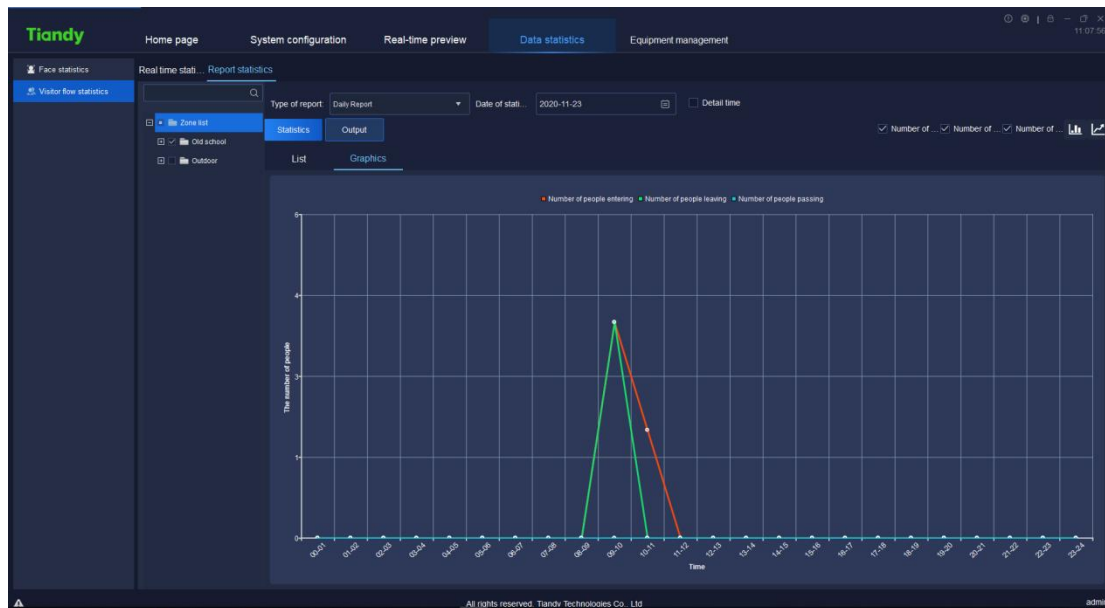


Figure 5.12.2.12

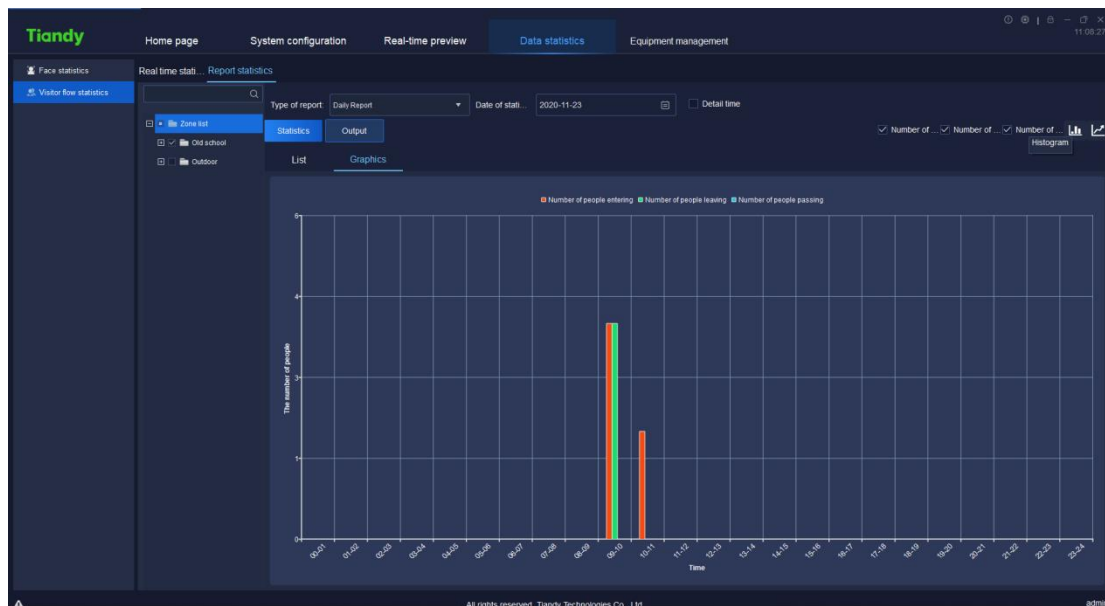


Figure 5.12.2.13

5. 13. Alarm configuration



Click the alarm configuration icon on home page to enter the alarm configuration interface. To conduct alarm configuration on watch point and device respectively is supported.

5.13.1. Alarm configuration of watch point

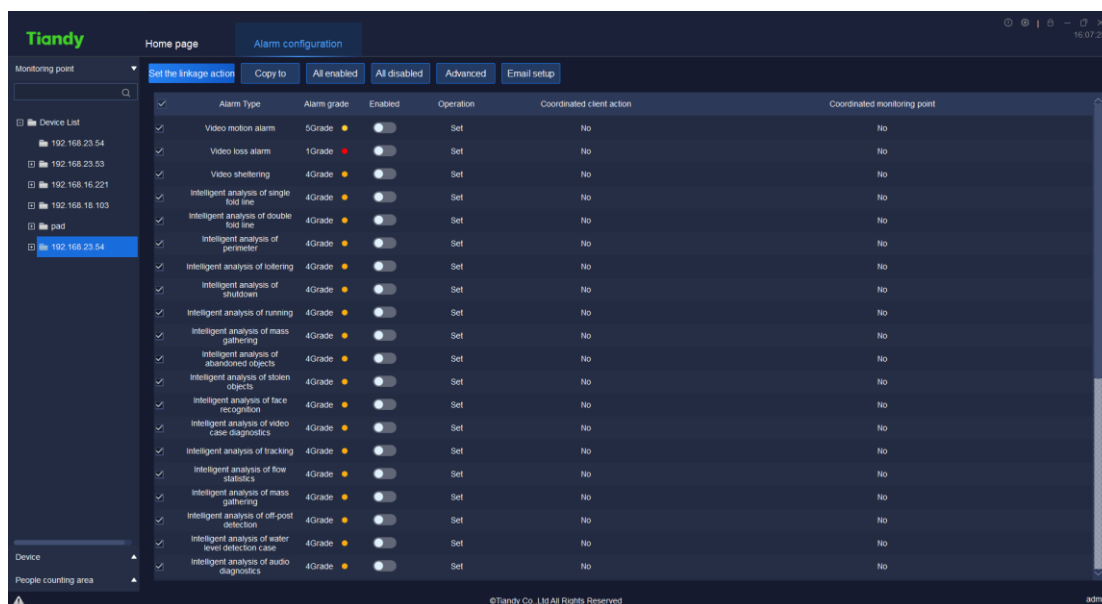



Figure 5.13.1.1

Select the channel needs alarm configuration in the watch point on the left, tick and select required alarm type, set whether to enable "", click "set" or "Set coordinated action" to set the operation of coordinated alarm or coordinated recording in corresponding alarm type, as shown in below figure:

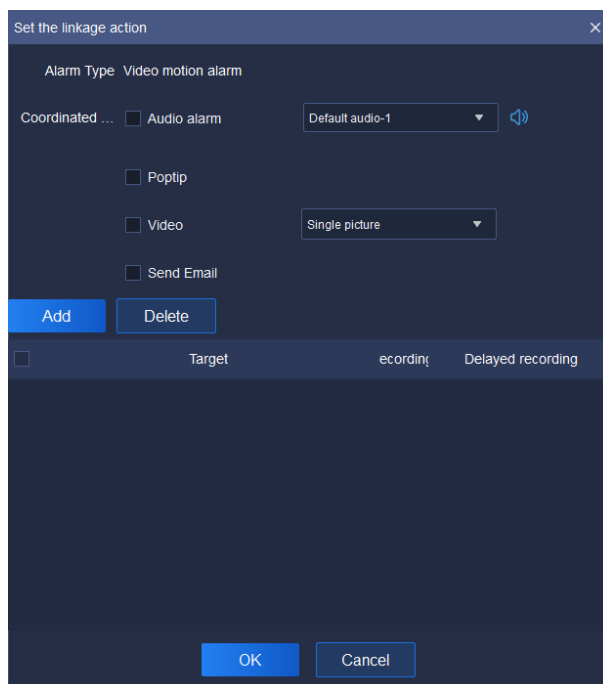


Figure 5.13.1.2

5.13.1.1. Set coordinated alarm

Tick and select the check box ahead of "Audible alarm", select alarm audio effect in the drop-down list, customized alarm audio supported (supported audio format is .wav), alarm audio audition supported.

5.13.1.2. Set coordinated recording

Click Add and set "Coordinated monitoring point", as shown in below figure:

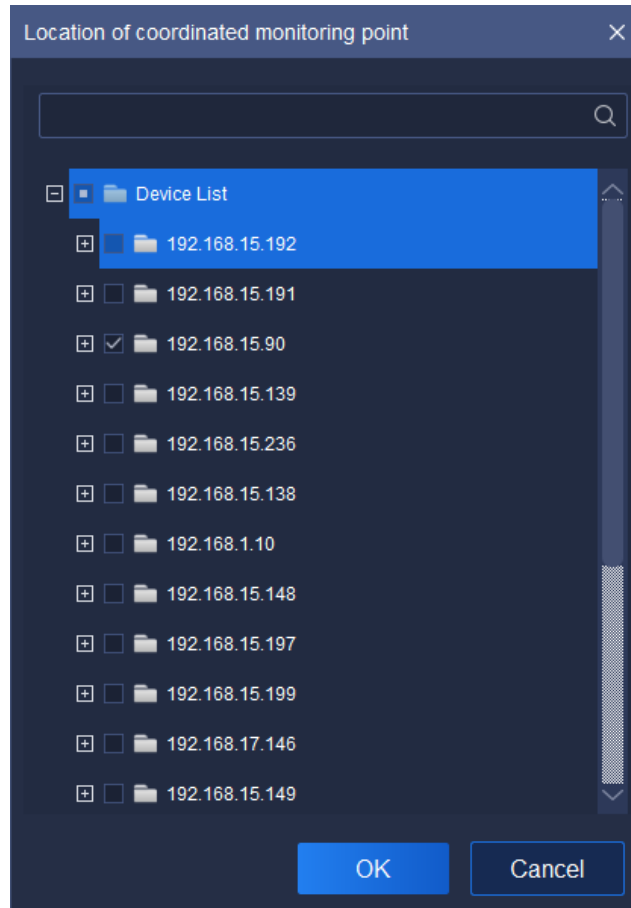


Figure 5.13.1.3

Select the channel needs to set recording, click "OK" to add the target channel of coordinated recording, click "Cancel" to restore to last parameter setting. Click the number below or "Advanced" to continue to set "Pre-recording" and "Delayed recording" time, as shown in below figure:

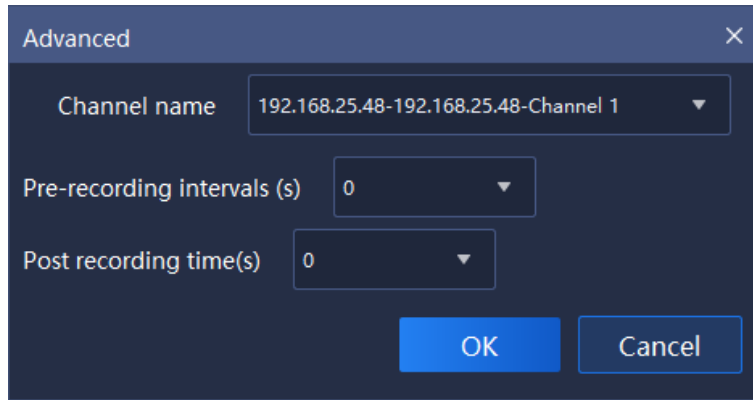


Figure 5.13.1.4

Pre-recording and delayed recording interval supports the time setting of 0s, 5s, 10s, 15s, 25s and 30s, click "OK" to save time setting, click "Cancel" to restore to last parameter setting.

5.13.1.3. Copy to other channel

Click and select the type of alarm, click "Copy to" to copy the parameter of Enabled status, Coordinated client action and Coordinated monitoring point of the selected copy to other channel, as shown in below figure:

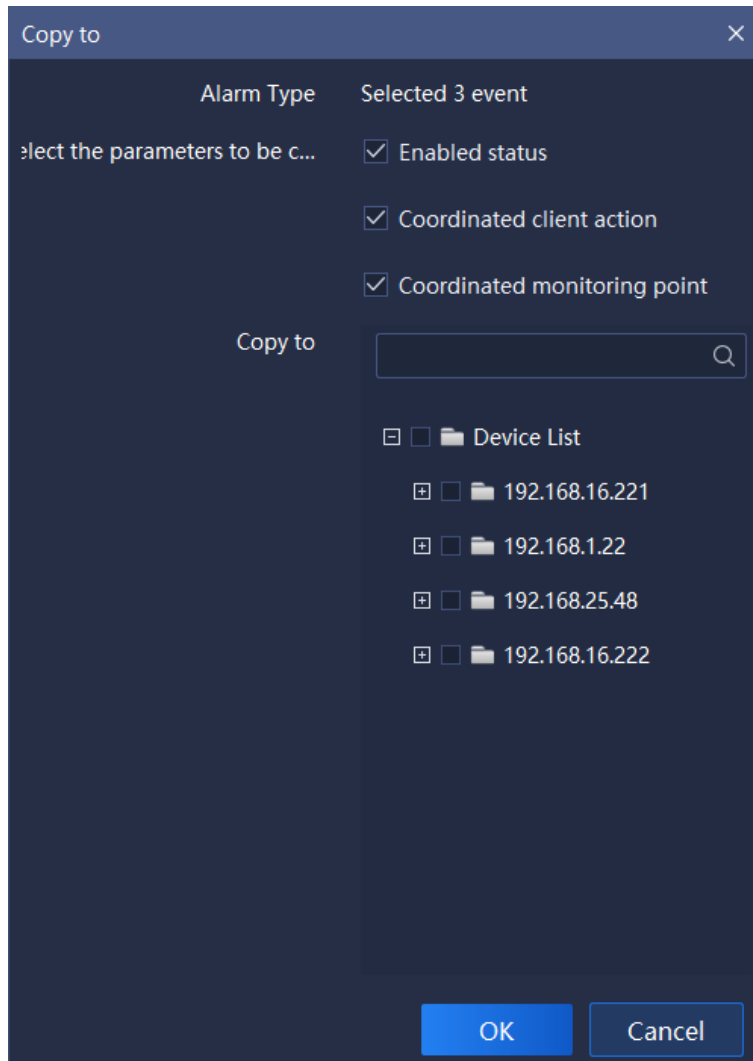


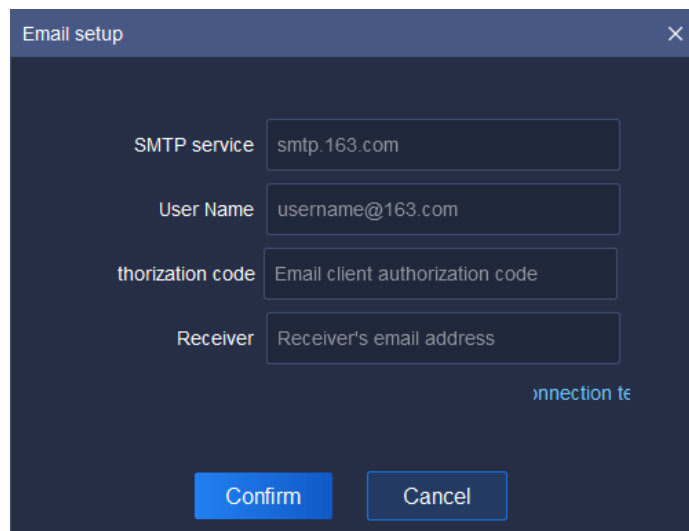
Figure 5.13.1.5

5. 13. 1. 4. All enabled/All disabled

Click "All enabled" or "All disabled" to enable/disable all types of alarm in the channel.

5. 13. 1. 5. Email setup

Click "Email setup" button, and the E-mail can be configured. After the configuration is successful, the email alarm can be linked. As shown in the figure below:



The 'Email setup' dialog box contains the following fields and buttons:

- SMTP service:** smtp.163.com
- User Name:** username@163.com
- thorization code:** Email client authorization code
- Receiver:** Receiver's email address
- Connection testing:** A link to test the connection.
- Buttons:** Confirm and Cancel.

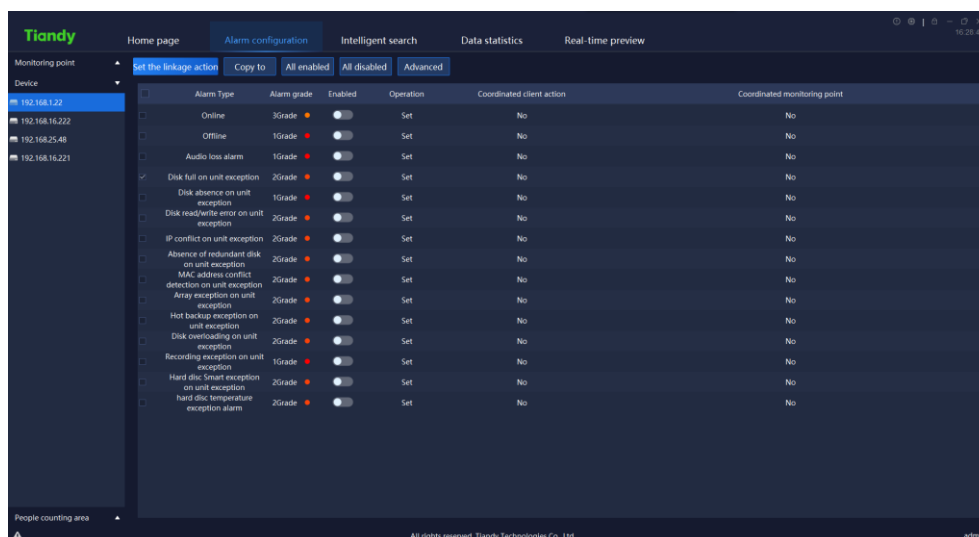
Figure5.13.1.6

Relative parameters explanation of the interface is as below:

Parameters	Explanation
SMTP service	Configure the E-mail server address.
User name	Configure sender E-mail name.
Thorization code	Configure sender E-mail authorization code.
Receiver	Configure the recipient E-mail address.
Connection testing	Verify that this method can connect successfully.

Table 5.13.1

5. 13. 2. Alarm configuration of the device



The 'Alarm configuration' interface shows a list of monitoring points and their associated alarm types. The table below represents the data shown in the interface:

Monitoring point	Alarm Type	Alarm grade	Enabled	Operation	Coordinated client action	Coordinated monitoring point
192.168.1.22	Online	3Grade	Enabled	Set	No	No
192.168.16.222	Offline	1Grade	Enabled	Set	No	No
192.168.25.48	Audio loss alarm	1Grade	Enabled	Set	No	No
192.168.16.221	Disk full on unit exception	2Grade	Enabled	Set	No	No
	Disk absence on unit exception	1Grade	Enabled	Set	No	No
	Disk read/write error on unit exception	2Grade	Enabled	Set	No	No
	IP conflict on unit exception	2Grade	Enabled	Set	No	No
	Absence of redundant disk on unit exception	2Grade	Enabled	Set	No	No
	MAC address conflict detection on unit exception	2Grade	Enabled	Set	No	No
	Array exception on unit exception	2Grade	Enabled	Set	No	No
	Hot backup exception on unit exception	2Grade	Enabled	Set	No	No
	Disk overloading on unit exception	2Grade	Enabled	Set	No	No
	Recording exception on unit exception	1Grade	Enabled	Set	No	No
	Hard disc Smart exception on unit exception	2Grade	Enabled	Set	No	No
	Hard disc temperature exception alarm	2Grade	Enabled	Set	No	No

Figure 5.13.2.1

The specific operation is the same as the alarm configuration of monitoring point.

5. 13. 3. **Alarm configuration of people counting area**

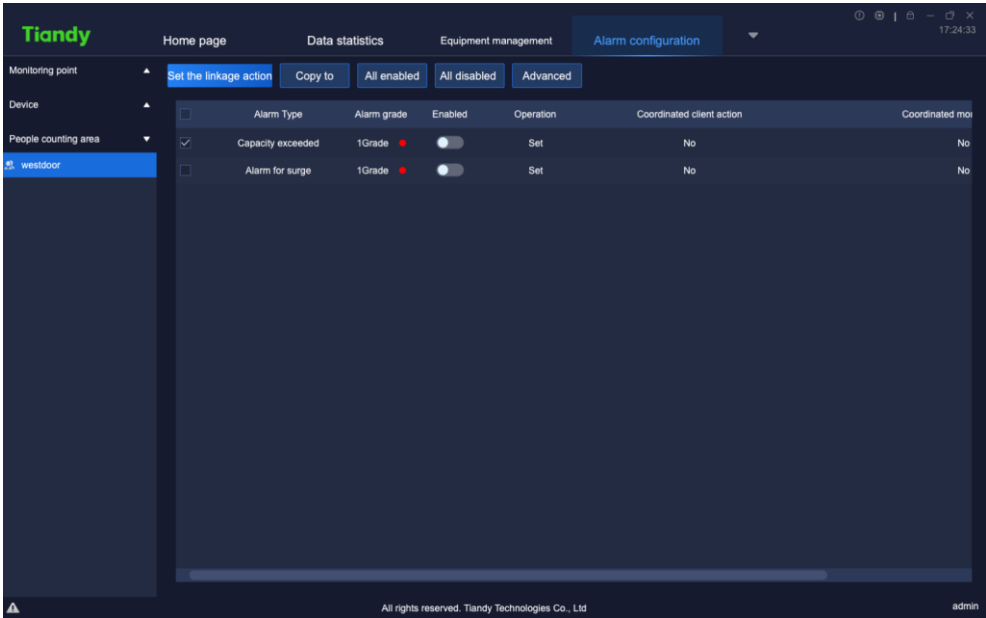


Figure 5.13.3.1

The specific operation is the same as the alarm configuration of monitoring point.

5. 14. **Operation logs**



Click the operation log icon on home page to enter the operation log interface. Login log, operation log and configuration log query supported, as shown in below figure:

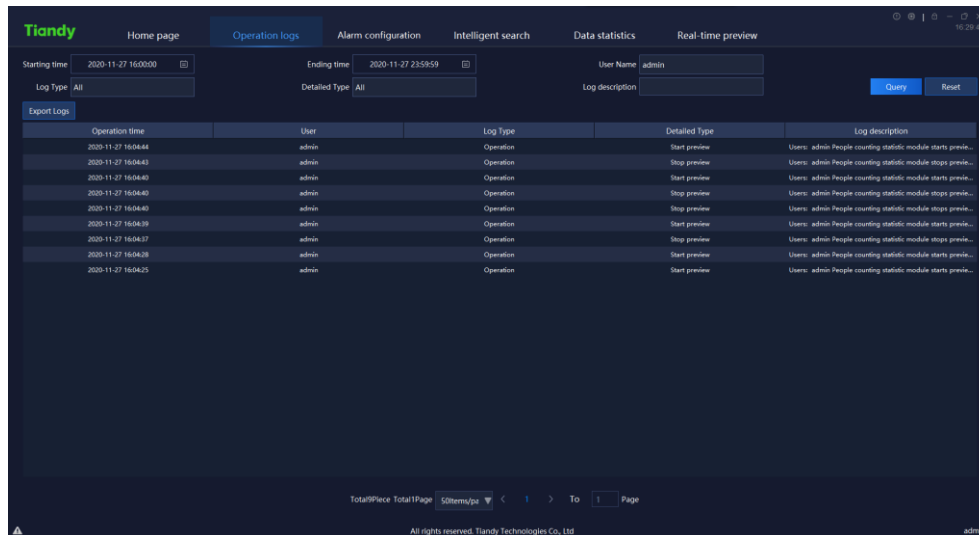


Figure 5.14

The description of related parameter in the interface is as follows:

Parameter	Description
Starting time	Available to set the starting time of log query.
Ending time	Available to set the ending time of log query.
User name	Available to query the operation record of one user. Admin-super administrator user may check the operation record of all users.
Log Type	Available to query logs by type, including all, login, operation and configuration.
Detail Type	Available to conduct detailed classified query of all, login, operation and configuration by type.
Log description	Search key word to query log information.
Export Logs	Click Export Logs, available to output and save logs.
Query	Click Query, available to query logs according to query conditions.
Reset	Click Reset, to restore query conditions to default status.
Total X Pages	Display how many pages does the query result has.
To X Page	Select a page to jump to the log record on that page.

Table 5.14