

Network Keyboard

Quick Start Guide

V1.1.0

Cybersecurity Recommendations

Mandatory actions to be taken towards cybersecurity

1. Change Passwords and Use Strong Passwords:

The number one reason systems get "hacked" is due to having weak or default passwords. It is recommended to change default passwords immediately and choose a strong password whenever possible. A strong password should be made up of at least 8 characters and a combination of special characters, numbers, and upper and lower case letters.

2. Update Firmware

As is standard procedure in the tech-industry, we recommend keeping NVR, DVR, and IP camera firmware up-to-date to ensure the system is current with the latest security patches and fixes.

"Nice to have" recommendations to improve your network security

1. Change Passwords Regularly

Regularly change the credentials to your devices to help ensure that only authorized users are able to access the system.

2. Change Default HTTP and TCP Ports:

- Change default HTTP and TCP ports for systems. These are the two ports used to communicate and to view video feeds remotely.
- These ports can be changed to any set of numbers between 1025-65535. Avoiding the default ports reduces the risk of outsiders being able to guess which ports you are using.

3. Enable HTTPS/SSL:

Set up an SSL Certificate to enable HTTPS. This will encrypt all communication between your devices and recorder.

4. Enable IP Filter:

Enabling your IP filter will prevent everyone, except those with specified IP addresses, from accessing the system.

5. Change ONVIF Password:

On older IP Camera firmware, the ONVIF password does not change when you change the system's credentials. You will need to either update the camera's firmware to the latest revision or manually change the ONVIF password.

6. Forward Only Ports You Need:

- Only forward the HTTP and TCP ports that you need to use. Do not forward a huge range of numbers to the device. Do not DMZ the device's IP address.
- You do not need to forward any ports for individual cameras if they are all connected to a recorder on site; just the NVR is needed.

7. Disable Auto-Login on SmartPSS:

Those using SmartPSS to view their system and on a computer that is used by multiple people should disable auto-login. This adds a layer of security to prevent users without the appropriate credentials from accessing the system.

8. Use a Different Username and Password for SmartPSS:

In the event that your social media, bank, email, etc. account is compromised, you would not want someone collecting those passwords and trying them out on your video surveillance system. Using a different username and password for your security system will make it more difficult for someone to guess their way into your system.

9. Limit Features of Guest Accounts:

If your system is set up for multiple users, ensure that each user only has rights to features and functions they need to use to perform their job.

10. UPnP:

- UPnP will automatically try to forward ports in your router or modem. Normally this would be a good thing. However, if your system automatically forwards the ports and you leave the credentials defaulted, you may end up with unwanted visitors.
- If you manually forwarded the HTTP and TCP ports in your router/modem, this feature should be turned off regardless. Disabling UPnP is recommended when the function is not used in real applications.

11. SNMP:

Disable SNMP if you are not using it. If you are using SNMP, you should do so only temporarily, for tracing and testing purposes only.

12. Multicast:

Multicast is used to share video streams between two recorders. Currently there are no known issues involving Multicast, but if you are not using this feature, deactivation can enhance your network security.

13. Check the Log:

If you suspect that someone has gained unauthorized access to your system, you can check the system log. The system log will show you which IP addresses were used to login to your system and what was accessed.

14. Physically Lock Down the Device:

Ideally, you want to prevent any unauthorized physical access to your system. The best way to achieve this is to install the recorder in a lockbox, locking server rack, or in a room that is behind a lock and key.

15. Connect IP Cameras to the PoE Ports on the Back of an NVR:

Cameras connected to the PoE ports on the back of an NVR are isolated from the outside world and cannot be accessed directly.

16. Isolate NVR and IP Camera Network

The network your NVR and IP camera resides on should not be the same network as your public computer network. This will prevent any visitors or unwanted guests from getting access to the same network the security system needs in order to function properly.

General






This document mainly introduces keyboard appearance, port and application method.

Models

NKB5000, NKB5000-F

Safety Instructions

The following categorized signal words with defined meaning might appear in the Manual .

Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
 TIPS	Provides methods to help you solve a problem or save you time.
 NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

No.	Version	Revision Content	Release Time
1	V1.0.0	First Release	October, 2017
2	V1.1.0	Update the program	December, 2018

Privacy Protection Notice

As the device user or data controller, you might collect personal data of others, such as face, fingerprints, car plate number, Email address, phone number, GPS and so on. You need to be in compliance with the local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures, including but not limited to: providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact.

About the Guide

- The Guide is for reference only. If there is inconsistency between the Guide and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the Guide.
- The Guide would be updated according to the latest laws and regulations of related regions. For detailed information, see the paper User's Manual, CD-ROM, QR code or our official website. If there is inconsistency between paper User's Manual and the electronic version, the electronic version shall prevail.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the Guide. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, please refer to our final explanation.
- Upgrade the reader software or try other mainstream reader software if the Guide (in PDF format) cannot be opened.
- All trademarks, registered trademarks and the company names in the Guide are the properties of their respective owners.
- Please visit our website, contact the supplier or customer service if there is any problem occurred when using the device.
- If there is any uncertainty or controversy, please refer to our final explanation.

Important Safeguards and Warnings

The following description is the correct application method of the device. Please read the manual carefully before use, in order to prevent danger and property loss. Strictly conform to the manual during application and keep it properly after reading.

Operating Requirement

- Do not place and install the device in an area exposed to direct sunlight or near heat generating device.
- Do not install the device in a humid, dusty or fuliginous area.
- Keep its horizontal installation, or install it at stable places, and prevent it from falling.
- Do not drip or splash liquids onto the device; do not put on the device anything filled with liquids, in order to prevent liquids from flowing into the device.
- Install the device at well-ventilated places; do not block its ventilation opening.
- Use the device only within rated input and output range.
- Do not dismantle the device arbitrarily.
- Transport, use and store the device within allowed humidity and temperature range.



This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules and EMC Directive 2014/30/EU. Operation of this device in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Power Requirement

- Use batteries according to requirements; otherwise, it may result in fire, explosion or burning risks of batteries!
- To replace batteries, only the same type of batteries can be used!
- The product shall use electric wires (power wires) recommended by this area, which shall be used within its rated specification!
- Use standard power adapter matched with this device. Otherwise, the user shall undertake resulting personnel injuries or device damages.
- Use power supply that meets SELV (safety extra low voltage) requirements, and supply power with rated voltage that conforms to Limited Power Source in IEC60950-1. For specific power supply requirements, please refer to device labels.
- Products with category I structure shall be connected to grid power output socket, which is equipped with protective grounding.
- Appliance coupler is a disconnecting device. During normal use, keep an angle that facilitates operation.

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1

Appearance and Keys of Network keyboard

1.1 Product Appearance



For appearance of network keyboard, see Figure 1-1. For details, see Table 1-1.

Figure 1-1 Appearance



Table 1-1 Icon description

No.	Icon	Function
1	Power	Working power indicator light. Green light turns on when working power of network keyboard is normal.
	Network	Network indicator light. Green light turns on when the keyboard is connected to network normally.
	Alarm	Alarm indicator light. Red light turns on in case of alarms.
2		Zoom in/zoom out PTZ lens.
		Increase/decrease the focus of PTZ lens.
		Increase/decrease the iris of PTZ lens.
		Shortcut key to control speed dome light.
		Shortcut key to control speed dome wiper.
3	-	Touch screen, showing keyboard screen menu.
4		Navigation bar.

No.	Icon	Function
		Homepage.
		Return.
5	Fn	Function key. It is line scanning by default.
	Preset	PTZ control, preset point.
	Tour	PTZ control, tour between points.
	Aux	Auxiliary key. It is pattern by default.
6	-	Remote control lever, auxiliary menu and function operation.

1.2 Key Module







After key module is connected to network keyboard through USB or Bluetooth successfully, green light at the upper right corner will be on for 10s and then turn off. For appearance of key module, see Figure 1-2. For details, see Table 1-2.

When key module is connected with network keyboard, turn on main switch at the side of key module. For Bluetooth connection, default Wi-Fi network name is "KEYBOARD".

Figure 1-2 Key module



Table 1-2 Key description

Key	Example	Function
F1-F4	Reserved.	Reserved.
Mode	Operation mode switch. It is operation mode at present.	Reserved.
0-9	Number 0-9	-
Screen	123 + screen	Select screen.
Window	3 + window	Focus on the 3 rd window of present screen.
Split	4 + split	Divide present screen into 4 splits.
	Press	Delete 1 digit from number buffer zone. The icon is similar to squares.
 (Camera group)	123 + 	Reserved.
 (Camera)	567 + 	Drag number 567 camera into present window.  0 + camera means to turn off present video source.

Key	Example	Function
Preset	2 + preset	Call number 2 preset point.
Tour	5 + tour	Call number 5 tour.
PTZ	-	In case of USB power supply, press and hold on the button to turn on and off the backlight.
Scan	3 + scan	Call number 3 scan.
Pattern	4 + pattern	Call number 4 pattern.
Rotate	Press	Press it once to start rotation, and press it again to stop rotation.
Exit	-	Reserved.
Confirm	-	Reserved.
⏪ (Switch) previous channel	KEY_ previous channel	Present focus window channel reduces 1. The icon is similar to squares.
⏩ (Next channel)	KEY_ next channel	Present focus window channel adds 1. The icon is similar to squares.
⏮	Playback	Reserved.

1.3 Port Introduction

1.3.1 Rear Panel Ports

For rear panel ports, see Figure 1-3. For details, see Table 1-3.

Figure 1-3 Rear panel port

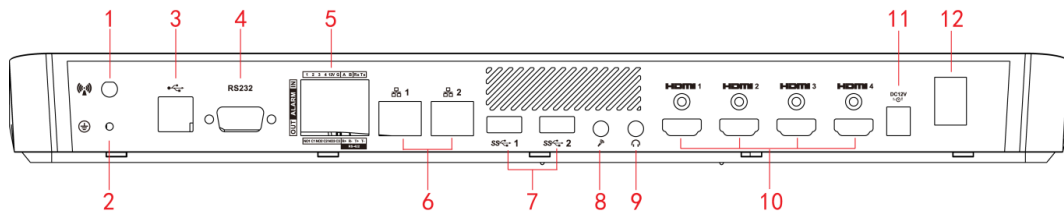


Table 1-3 Rear panel port description

Number	Name	Description
1	Wi-Fi port	Connect Wi-Fi antenna.
2	Grounding stud	Grounding.
3	USB2.0	Connect mouse and USB.
4	RS-232	Connect serial port.
5	Alarm input/output port	For details, see Table 1-4.
6	Network port	Connect the network.
7	USB3.0	Connect mouse and USB.
8	Microphone	Connect microphone.
9	Earphone	Connect earphone.
10	HDMI1-HDMI4	Connect devices with HDMI port, such as display screen.
11	Power port	Connect power cord to supply power.
12	Power on-off key	Turn on and off the power supply.

For alarm input and output port, see Figure 1-4. For details, see Table 1-4.

Figure 1-4 Alarm input and output port

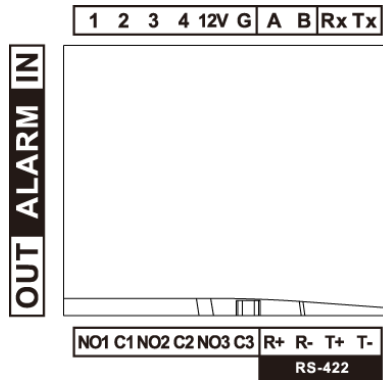


Table 1-4 Alarm input and output port description

Name	Description
1-4	Alarm input port.
12V	DC 12V 1A power.
G	Grounding.
A, B	Connect PTZ.
Rx, Tx	RS-232 receiving and sending port.
NO1C1, NO2C2, NO3C3	3 groups of alarm output port.
R+, R-, T+, T-	RS-422 port.

1.3.2 Side Panel Port

There are three keys on the side panel, including mute key, volume up key and volume down key.

2


Start and Shutdown

2.1 Start

Connect the power in accessories, turn on power on-off key, and boot the network keyboard. The system displays login interface after it is started successfully. Its interface can be operated with touch screen and external mouse.

2.2 Shutdown

Step 1 Shutdown.

- Method 1: Click  at the upper right corner of main interface, select **Shutdown** to exit the system.
- Method 2: Press power on-off key on the rear panel.

Step 2 After exiting the system, unplug the power and turn off the device.

3

Quick Configuration

3.1 Login Interface

After starting, the system enters login interface.

Step 1 Enter password. Default password of the system is admin.

Step 2 Click **Login**.

After successful login, the system enters main interface.

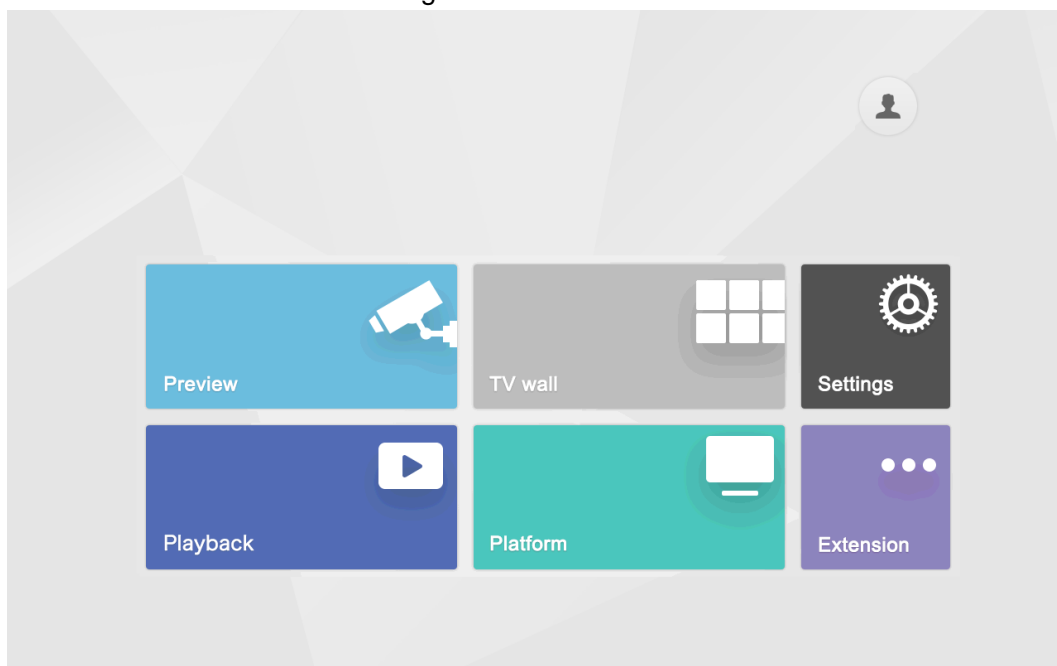


Please modify admin password timely after login.

3.2 Main Interface

Main interface consists of preview, TV wall, playback, platform, settings and extension . See Figure 3-1.

Figure 3-1 Main interface



Refer to Table 3-1.

Table 3-1 Main interface description

Name	Description
Preview	Decode and preview local encoding devices and corresponding operations.
TV wall	Control decoder/matrix/TV wall.
Playback	Play back videos in local recording device.
Platform	After connecting with the platform, network keyboard is able to control devices on the platform.
Settings	There are four modules, including device, general, account and system.

Name	Description
Extension	Control the devices with direct physical connection with network keyboard. At present, it only supports to control speed dome with RS-485 port.

3.3 Settings Interface

On the main interface, click **Settings** to enter the interface. See Figure 3-2. Refer to Table 3-2.

Figure 3-2 Settings

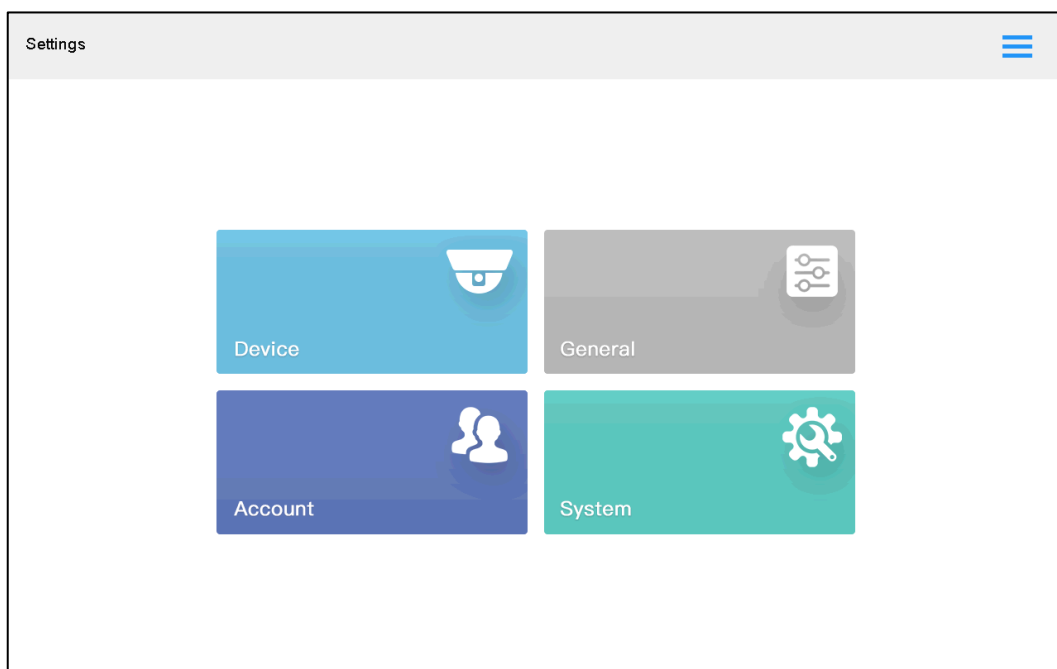



Table 3-2 Settings description

Name	Description
Device	Add, modify and delete devices; view input channel, modify input channel number and so on.
General	Set network, Bluetooth, serial port, date and time.
Account	Display account and modify user password.
System	View program version and upgrade.



Click  at the upper right corner, and a navigation bar appears in the page. With navigation bar, quickly return to preview, device, settings, playback, extension and homepage.

3.4 Network Settings

It includes wired network and Wi-Fi settings.

3.4.1 Wired Network

Configure IP address and DNS server of network keyboard, to connect other devices in the networking.

Precondition

Before setting network parameters, ensure that the network keyboard is connected to network correctly.

Step 1 On the **Settings** interface, click **General**.

The **Network** interface is displayed. See Figure 3-3.

Figure 3-3 Network

Step 2 Set the parameters. See Table 3-3.

Table 3-3 Wired network parameter description

Parameter	Description
Net mode	<p>It includes multi-address, fault tolerance and load balance.</p> <ul style="list-style-type: none"> Multi-address: two Ethernet cards are used independently. During network status detection, if one Ethernet card is disconnected, network is deemed to be disconnected. Fault tolerance: two Ethernet cards use one IP address. Only one Ethernet card works under normal conditions; if the working Ethernet card breaks down, the other Ethernet card starts to work automatically, so as to ensure smooth network. During network status detection, network is deemed to be disconnected only when both Ethernet cards are disconnected. Both Ethernet cards shall be in the same LAN. Load balance: two Ethernet cards use one IP address and work together to bear network load. Their network throughput is basically the same. If one breaks down, the other one still works normally. During network status detection, network is deemed to be disconnected only when both Ethernet cards are disconnected. Both Ethernet cards shall be in the same LAN.


Parameter	Description
Default card	When Net Mode is set to be Fault Tolerance or Load Balance and multiple Ethernet cards are bonded, one Ethernet card can be designated to be default working Ethernet card.
TCP port	It is usually default value.
IP version	It is IPv4 address format by default, which shall not be modified.
Ethernet card	Select Ethernet card.
IP address	Enter numbers to modify IP address, set corresponding Subnet Mask and Gateway.
Subnet mask	
Gateway	
Preferred DNS	IP address of DNS server.
Alternate DNS	IP address of alternate DNS server.

Step 3 Click **Save**.

3.4.2 Wi-Fi

On the **General** interface, click **Wi-Fi** tab to enter the interface.

Automatic Search for Wi-Fi

Click  to enable Wi-Fi function.


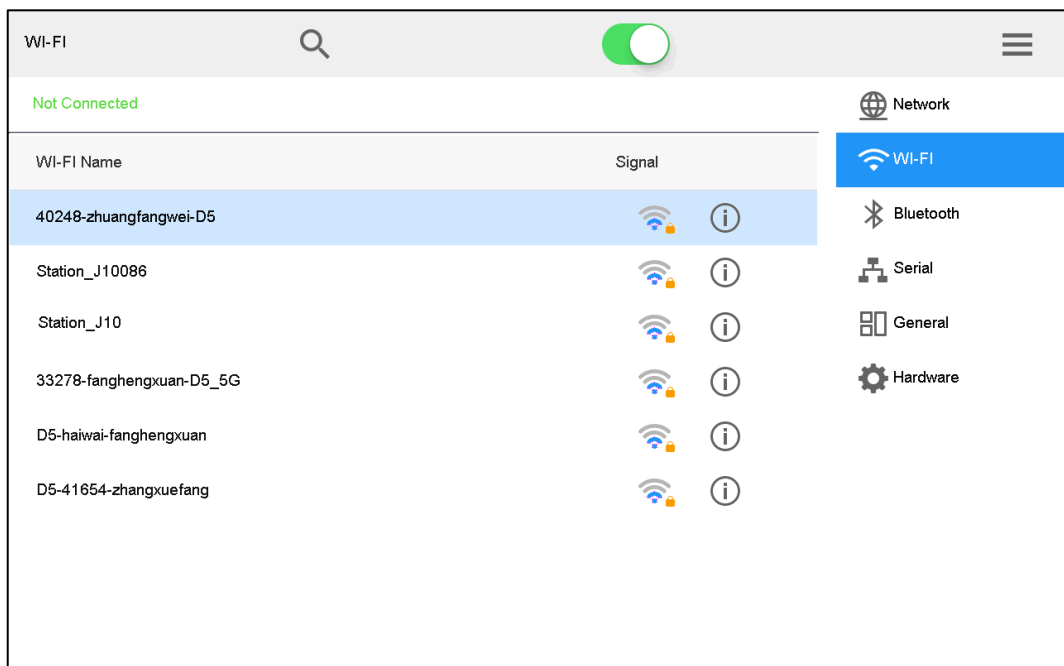
The system will search Wi-Fi automatically and display results. See Figure 3-4. Click  to update the search.

Figure 3-4 Wi-Fi

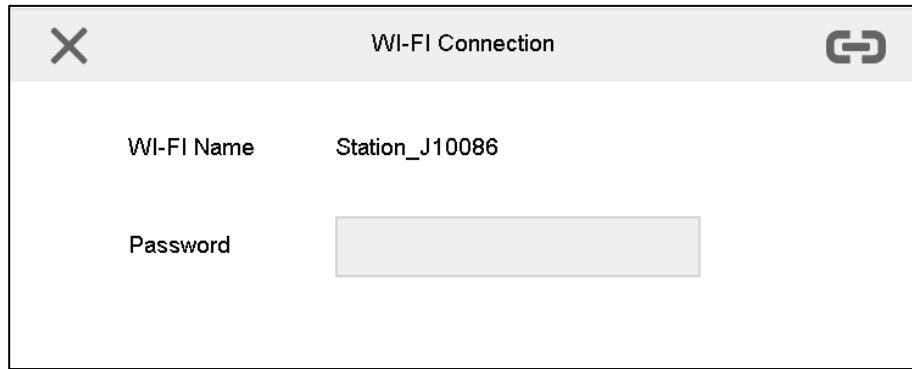


Wi-Fi Connection


Step 1 Double-click Wi-Fi name or signal strength.

The **Wi-Fi Connection** dialog box will pop out. See Figure 3-5.

Figure 3-5 Wi-Fi connection




The dialog box titled "Wi-Fi Connection" has a close button (X) on the top left and a refresh button (circular arrow) on the top right. It contains two fields: "Wi-Fi Name" with the value "Station_J10086" and "Password" with an empty text input field.

Step 2 Enter correct password and click .

In case of successful connection, the connected Wi-Fi Name and **Connected** will be displayed at the upper left corner.

Disconnect Wi-Fi

Click  on the right of connected Wi-Fi and click **Disconnect** in the pop-up dialog box.

3.5 Adding Device

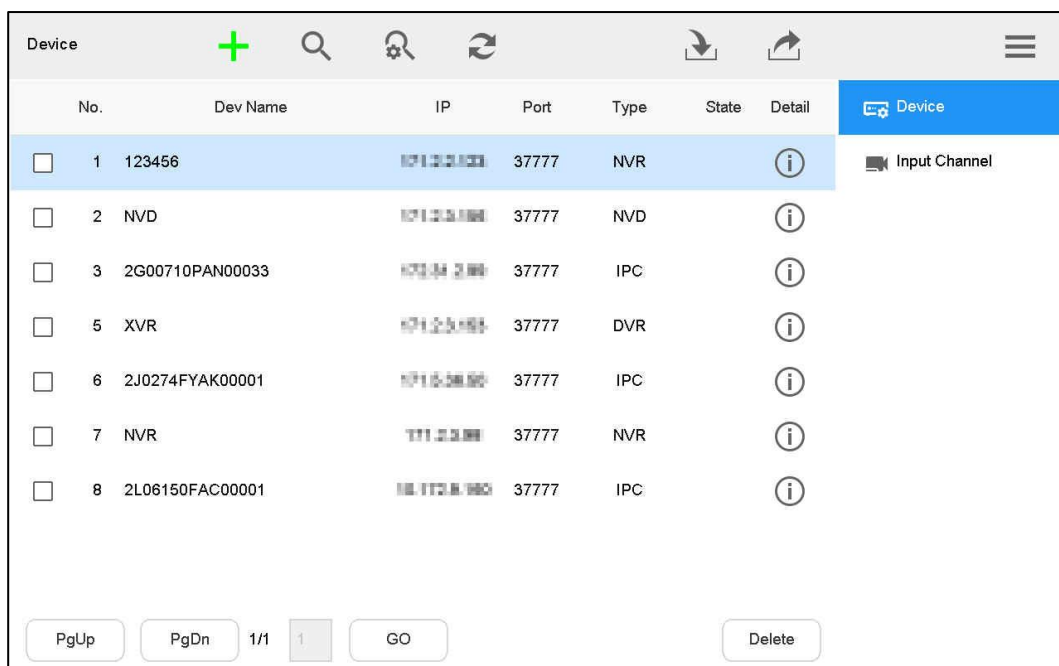
It includes manual adding and auto search.

3.5.1 Entering Device Interface








On the **Settings** interface, click **Device**.

The **Device** interface is displayed. See Figure 3-6.


Figure 3-6 Device



The screenshot shows the "Device" management interface. At the top, there are icons for adding (+), searching (magnifying glass), refreshing (circular arrow), and deleting (trash). Below is a table with columns: No., Dev Name, IP, Port, Type, State, and Detail. The first row is selected. At the bottom, there are navigation buttons: PgUp, PgDn, 1/1, a page number input field with "1", GO, and Delete.

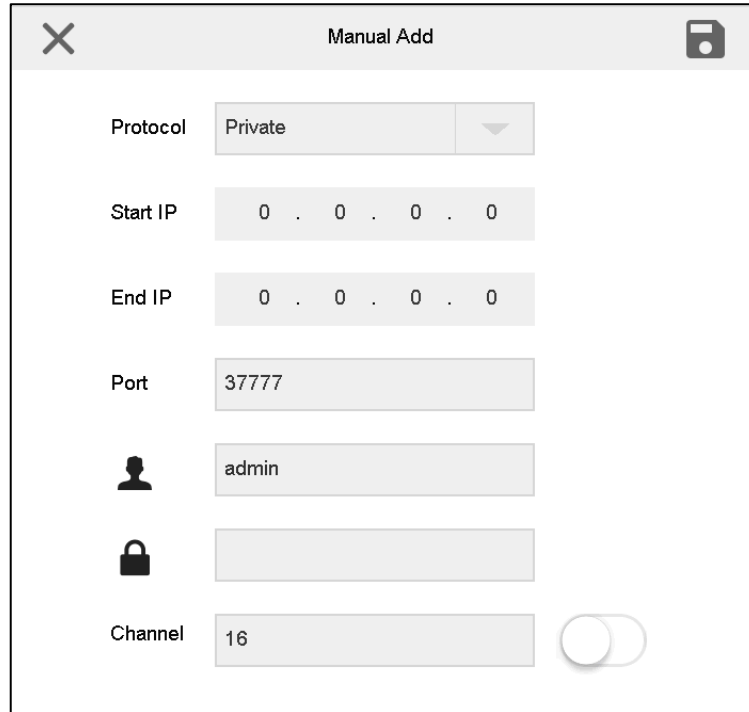
No.	Dev Name	IP	Port	Type	State	Detail
<input type="checkbox"/>	1 123456	192.168.1.1	37777	NVR		
<input type="checkbox"/>	2 NVD	192.168.1.2	37777	NVD		
<input type="checkbox"/>	3 2G00710PAN00033	192.168.1.3	37777	IPC		
<input type="checkbox"/>	5 XVR	192.168.1.5	37777	DVR		
<input type="checkbox"/>	6 2J0274FYAK00001	192.168.1.6	37777	IPC		
<input type="checkbox"/>	7 NVR	192.168.1.7	37777	NVR		
<input type="checkbox"/>	8 2L06150FAC00001	192.168.1.8	37777	IPC		

3.5.2 Manual Add

Step 1 On the **Device** interface, click .



The **Manual Add** dialog box is displayed. See Figure 3-7.

Figure 3-7 Manual add



Step 2 Set the parameters. See Table 3-4.

Table 3-4 Manual add parameter description

Parameter	Description
Protocol	Select protocol type. It only supports Private at present.
Start IP and End IP	<ul style="list-style-type: none"> Enter start IP and end IP when one IP segment is added. Enter start IP when one IP is added.
Port	Enter port number. It is usually default value.
Username and password	Enter username and password.
Channel	Enter channel quantity.  means that it is opened, while  means that it is closed. For example, total channel quantity of the device is 48. However, if you want to add 1 st channel –16 th channel, set the channel quantity.

Step 3 Click .

3.5.3 Auto Search

Step 1 On the **Device** interface, click .

The auto search interface is displayed. See Figure 3-8.

Figure 3-8 Auto search setting

Device admin

Network Segment1 192.168.0.1 — 192.168.0.255
 Network Segment2 192.168.0.1 — 192.168.0.255
 Network Segment3 192.168.0.1 — 192.168.0.255
 Network Segment4 192.168.0.1 — 192.168.0.255
 Network Segment5 192.168.0.1 — 192.168.0.255
 Network Segment6 192.168.0.1 — 192.168.0.255
 Port 37777

Default Save Cancel

Step 2 Enter IP segment and tick the check box.

Step 3 Click **Save**.

The auto search results are displayed. See Figure 3-9.



Alternatively, click  to view search results.

Figure 3-9 Auto search result

Device

	Dev Name	IP	Port	State
<input type="checkbox"/>	IPC-HF8249F-FD	192.168.0.80	80	
<input type="checkbox"/>	IP_Camera	192.168.0.17	80	
<input type="checkbox"/>	IPC-HF8249F-FD	192.168.0.240	80	
<input type="checkbox"/>	IPC-HFW8301D	192.168.0.16	80	
<input type="checkbox"/>	IPC-HF8249F-FD	192.168.0.3	80	
<input type="checkbox"/>	HIC5621@DH-FA-V	192.168.250.255	80	
<input type="checkbox"/>	Libra-F	192.168.250.255	8001	
<input type="checkbox"/>	NVS_4K	192.168.0.221	37777	

PgUp PgDn 1/7 1 GO None Add

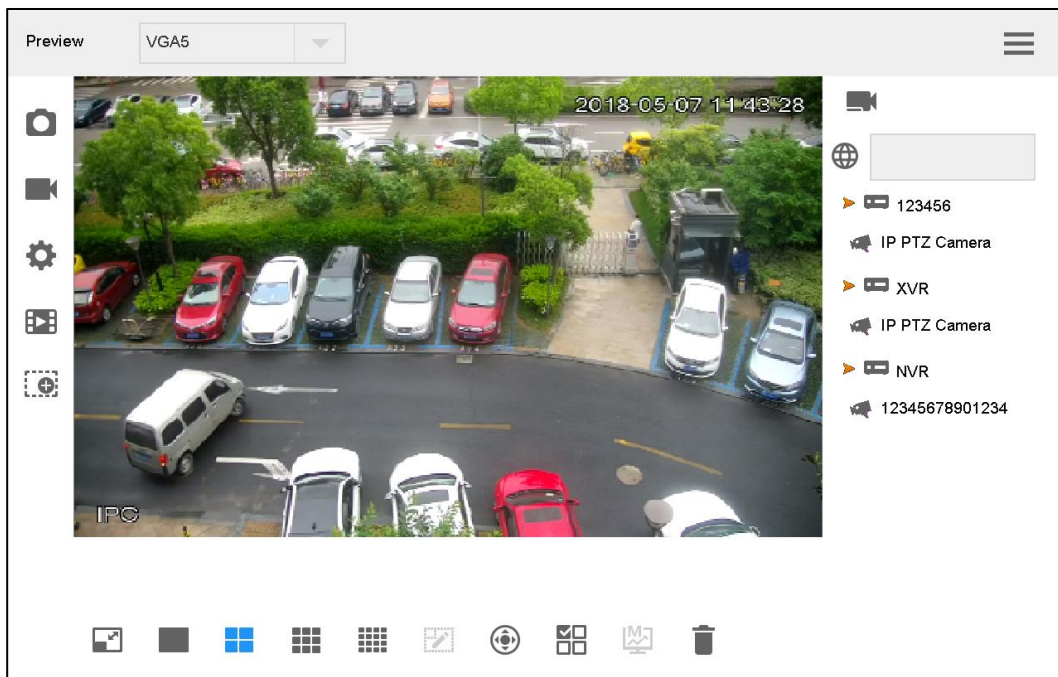
Preview local devices, video on wall, PTZ control, snapshot and recording.

4.1 Entering Preview Interface

Click **Preview** on the main interface.











The **Preview** interface is displayed. See Figure 4-1. There are five modes, including HDMI1 – HDMI4 and VGA5.







Figure 4-1 Preview



4.2 Icons of Preview Interface

Table 4-1 Preview interface icon description

Icon	Description	Icon	Description
	Snapshot Screenshot to flash drive		Manual recording
	Snapshot and recording settings		Play back recording
	Electronic zoom		Maximize and restore the window
	Single split		4-split
	9-split		16-split


Icon	Description	Icon	Description
	Custom split.		PTZ
	Select window/all windows on the screen.  This button is used with delete button.		Smart stream mode
	Delete		

4.3 Video on Wall

Step 1 On the **Preview** interface, select HDMI1–HDMI4 or VGA5 in pull-down dialog box.

Step 2 Select video source on the right, drag it onto TV wall or double-click the video source.

Quick Video on Wall (Optional)






Click , and a dialog box will pop out. See Figure 4-2.

Enter number (such as 1) + , so number 1 device will be displayed on wall quickly.




Refer to "9.1.2 Input Channel" to inquire **Number** in the input channel.

Figure 4-2 Short-cut

7	8	9
4	5	6
1	2	3
	0	
		

Quick Search for Added Device (Optional)


In the input box after , enter keywords of the added device, to search the added device.

Click the pop-up language box. See Figure 4-3. Press Shift key to switch the input method.






Figure 4-3 Language box

!	?	@	#	\$	%	=	+	*	-	_	←	7	8	9
q	w	e	r	t	y	u	i	o	p	/		4	5	6
a	s	d	f	g	h	j	k	l	:	Enter		1	2	3
z	x	c	v	b	n	m	,	.	Shift			0	&	

Maximize and Restore Window



Click  to maximize and restore the window.

Single/4/9/16/Custom Split

Click , , ,  or  respectively, representing single/4/9/16/custom split.

Clear Video Source

Step 1 Select a window.

- Click  to select the focused window.
- Click again and the icon turns into , to select all windows within present operating screen.

Step 2 Click .


Smart Stream Mode

- Main stream goes on wall in case of single split.
- Sub-stream goes on wall in case of 9-split and 16-split.
- In case of 4-split, with HDMI1 and HDMI2 preview mode, main stream goes on wall. In other preview modes, sub-stream goes on wall.


4.4 PTZ Control

Please refer to "8 PTZ Control" for details.

4.5 Snapshot

On the **Preview** interface, insert a flash drive into network keyboard, and click  after checking flash drive.

4.6 Recording

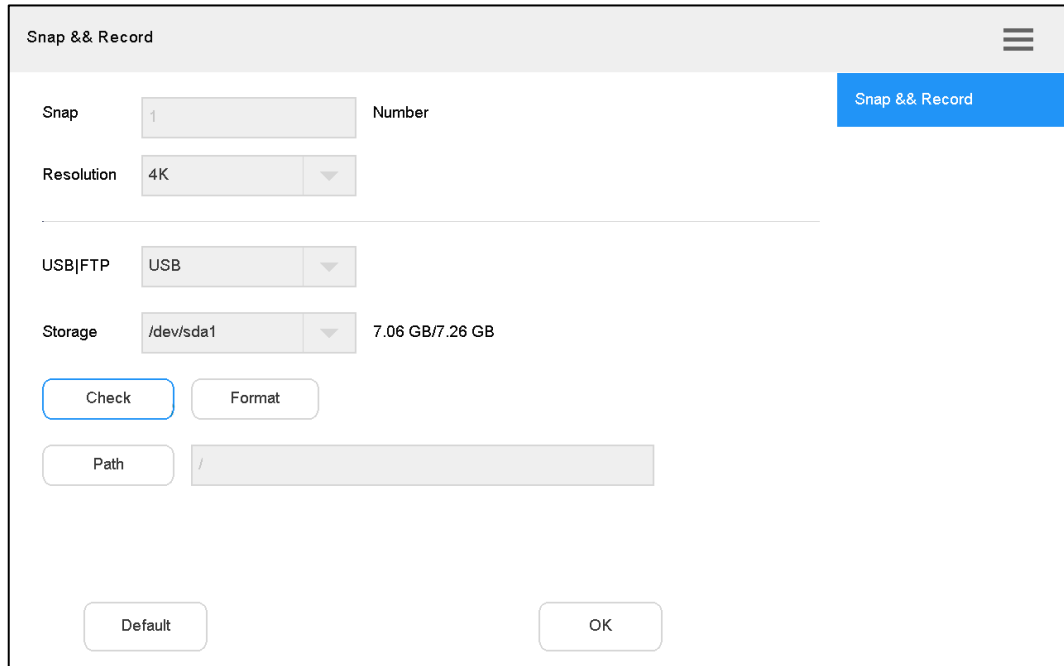
On the **Preview** interface, insert a flash drive into network keyboard, and click  after checking flash drive.

4.7 Snapshot and Recording Settings

Step 1 On the **Preview** interface, click  .

The **Snap & Record** interface is displayed. See Figure 4-4.

Figure 4-4 Snap & record



Step 2 Insert a flash drive into network keyboard.

Step 3 Click **Check**.

The system displays general storage disk name and device capacity.

Step 4 Set the parameters. See Table 4-2.

Table 4-2 Snap & record parameter

Parameter	Description
Snap	It supports only 1 snapshot at present.
Resolution	Select resolution. <ul style="list-style-type: none"> When video resolution is > the set resolution, snapshot image adopts the set resolution. When video resolution is < the set resolution, snapshot image adopts actual video resolution.
USB storage	It is enabled by default.
Format	Click this button to format flash drive.
Path	Click this button to select snapshot storage path.

Step 5 Click **OK**.

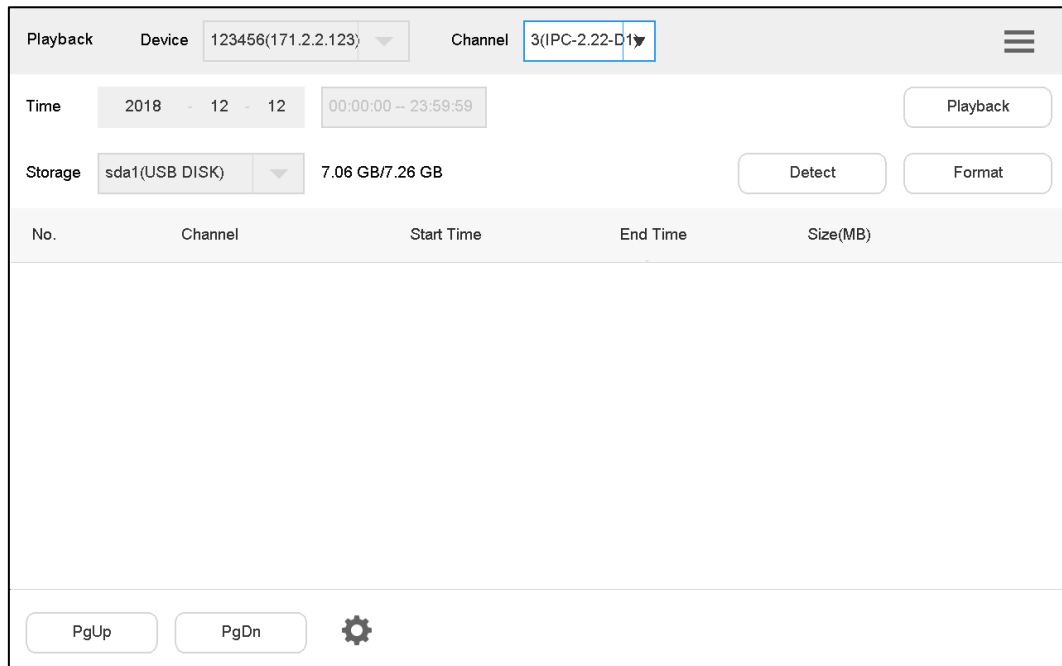
4.8 Playback of Recorded Videos

This function is supported by devices that have recorded videos.

Step 1 On the **Preview** interface, click  .

The **Playback** interface is displayed. See Figure 4-5.

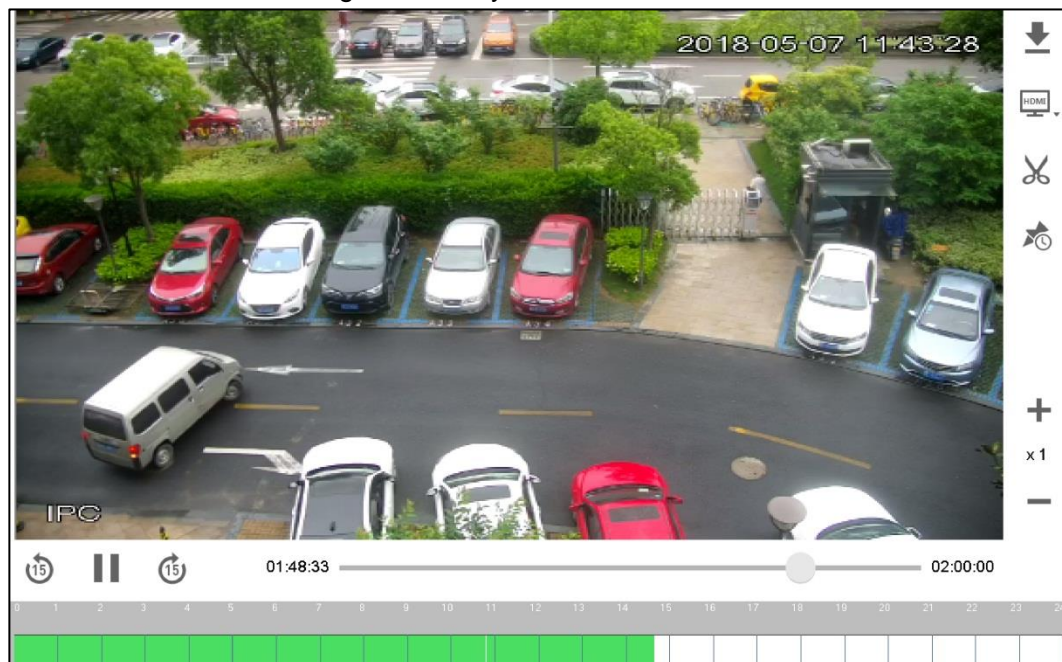
Figure 4-5 Playback



Step 2 Select playback device and channel, configure time and click **Playback**.

The system starts to play back recorded videos. See Figure 4-6.

Figure 4-6 Playback of recorded video



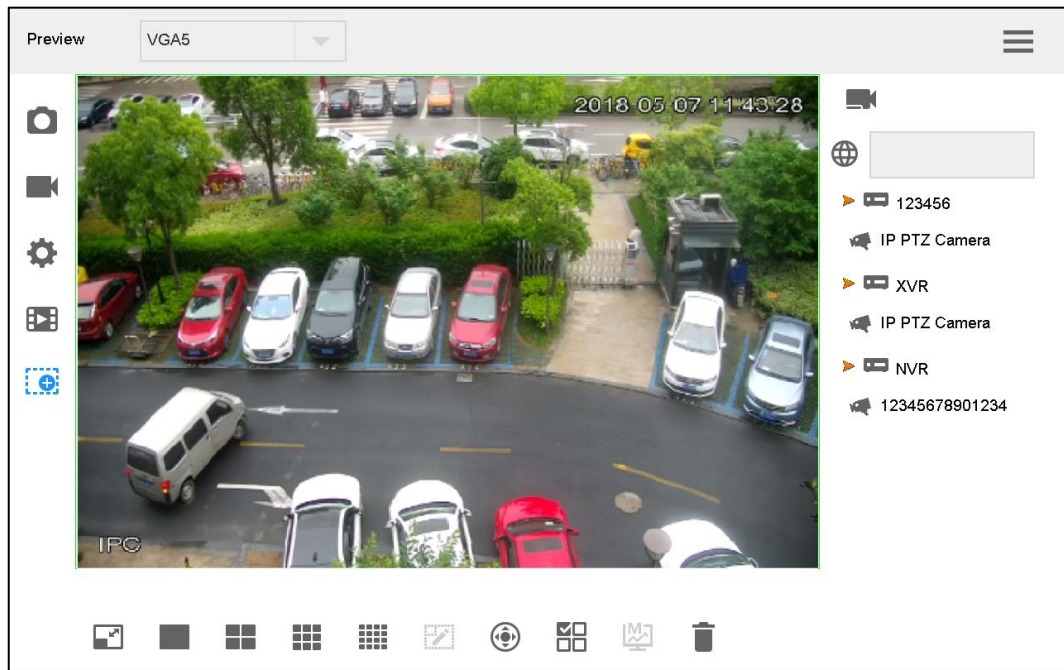
4.9 Zoom

You can enlarge some parts of preview interface with the joystick.

Step 1 On the **Preview** interface, click .


The **Zoom** interface is displayed. See Figure 4-7.

Figure 4-7 Zoom



Step 2 Enable or disable zoom function by rotating the joystick clockwise or anticlockwise.
The picture is enlarged or restored by centering on the cursor.



Click  again, to return to general preview mode.

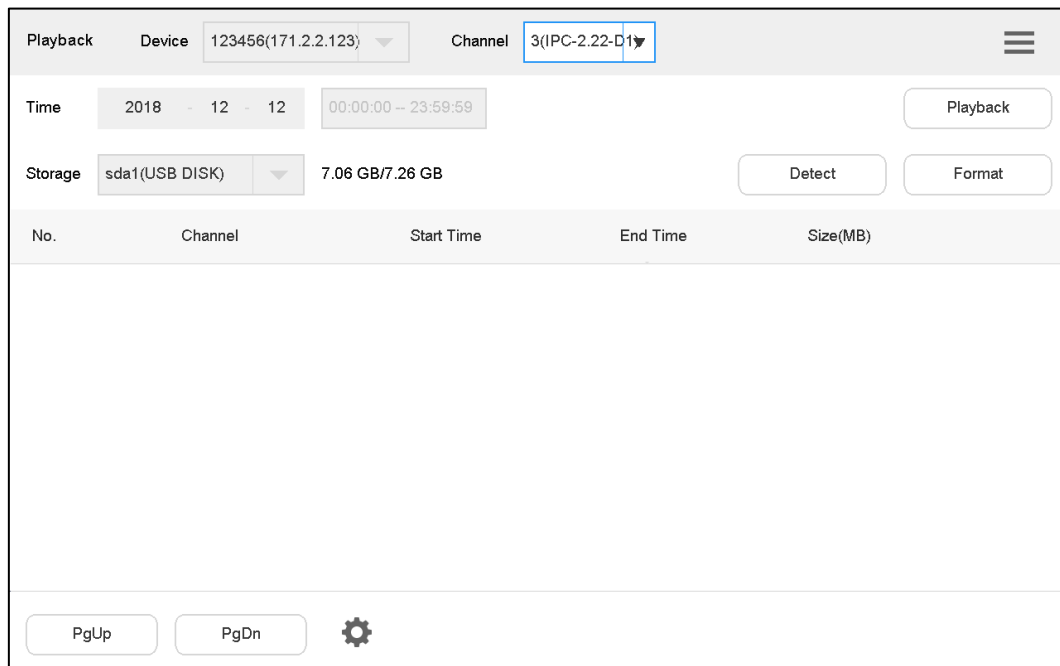
5 Playback

Play back the recorded videos.

Step 1 On the main interface, click **Playback**.

The **Playback** interface is displayed. See Figure 5-1.

Figure 5-1 Playback

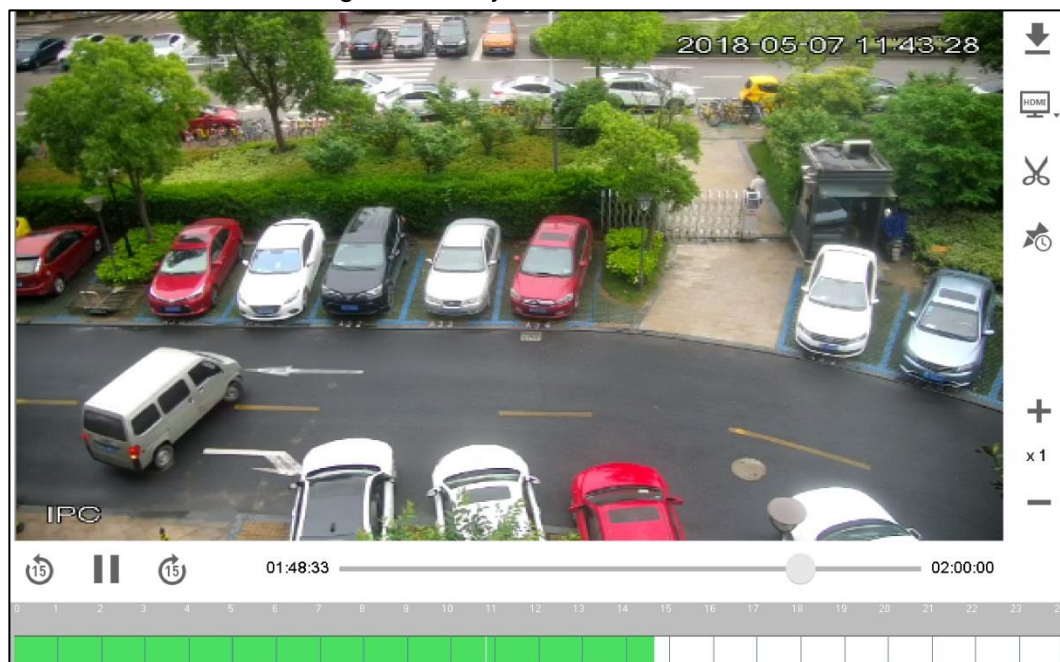


Step 2 Select device and channel, and configure time.

Step 3 Click **Playback**.









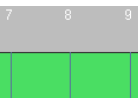
The system starts to play back recorded videos. See Figure 5-2.


Figure 5-2 Playback of recorded video



During playback, you can control the playback speed, download the recorded videos and display them on the TV wall. See Table 5-1 .

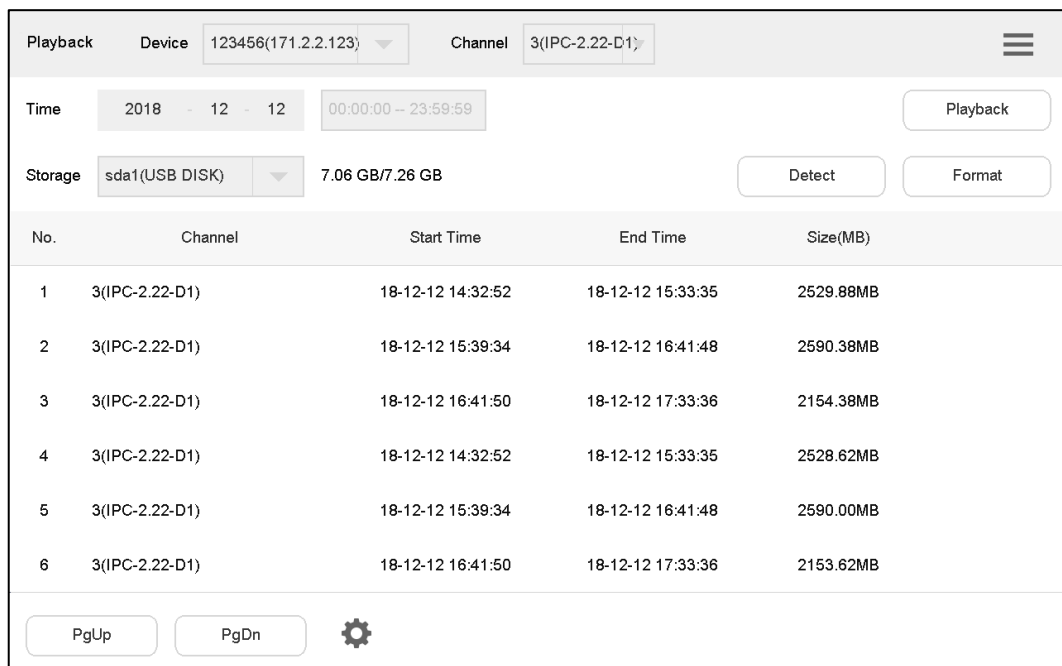
Table 5-1 Playback icon description

Icon	Description	Icon	Description
	Download the recorded video to flash drive.		With HDMI port, display and view the recorded video.
	Clip and save the recorded video to flash drive. The playback pauses during clipping.		Configure play time.
	During playback, click this icon to enter fast forward mode. For example, switch x2, x4 and so on.		During playback, click this icon to slow down the video. For example, switch x1/2, x1/4 and so on.
	Play/pause During playback, click this icon to play/pause.		Play back 15s/fast forward 15s
	Click green area at the bottom of the screen, to adjust play period.	-	-

Step 4 Click  on the panel of network keyboard.

The system returns to **Playback** interface. See Figure 5-3.

Figure 5-3 Playback



- Click **Detect** to search the connected flash drive.
- Click **Format** to format the storage device, and all its files will be cleared. Operate cautiously.

Control decoder/matrix/TV wall.

Devices can be added only through WEB client. For details, refer to "6.1 Adding TV Wall through Matrix WEB Client" and "6.2 Adding TV Wall through Decoder WEB Client".

There are two ways to add TV wall through WEB client:

- Matrix WEB (support multiple TV walls)
- Decoder WEB (only one TV wall)

TV walls can be added in TV wall configuration of keyboard. Please refer to "6.8 Configuring TV Wall" for details.

6.1 Adding TV Wall through Matrix WEB Client

This part takes matrix WEB client as an example.



- This part is operated at matrix WEB client.
- For more specific configurations, refer to matrix user's manual.
- This part also applies to TV wall device.

6.1.1 Entering Matrix WEB Login Interface

Step 1 Enter IP address of matrix at address bar of the browser, and press Enter. Matrix login interface is displayed. See Figure 6-1.

Figure 6-1 Matrix login interface

The screenshot shows a web browser window displaying the Matrix login interface. The title bar of the browser is not visible. The page has a dark header with the text "WEB SERVICE" in a light, bold font. To the right of the header is a small image of a TV wall. Below the header, there are two input fields. The first is labeled "Username:" and contains the text "admin". The second is labeled "Password:" and is empty. Below these fields are two buttons: "Login" and "Cancel".

Step 2 Enter username and password.

Step 3 Click **Login** to enter WEB interface.

6.1.2 Adding Network Signal

Search or add network signals manually.

Step 1 Select **Settings > Signal > Registration**.

The **Registration** interface is displayed. See Figure 6-2.

Figure 6-2 Registration

The screenshot shows the 'Registration' interface. At the top, there is a title bar 'Registration'. Below it, there is a section for 'Abnormal' settings with three fields: 'Abnormal Mode' set to 'Last Frame', 'Reserved Status' set to 'Always Reserved', and 'Time Setting' with a text input field and '(5~120)s' next to it. An 'OK' button is located below these fields. Below the settings is a large empty table with a header row containing 'No.', 'IP Address', and 'Port'. At the bottom of the interface, there are two buttons: 'Device Search' and 'Add'. Below these buttons is a table with the following data:

No.	Connection Status	IP Address	Port
1	Successful	171.2.2.11	37777
2	Successful	171.2.2.25	37777

Step 2 Add network signals.

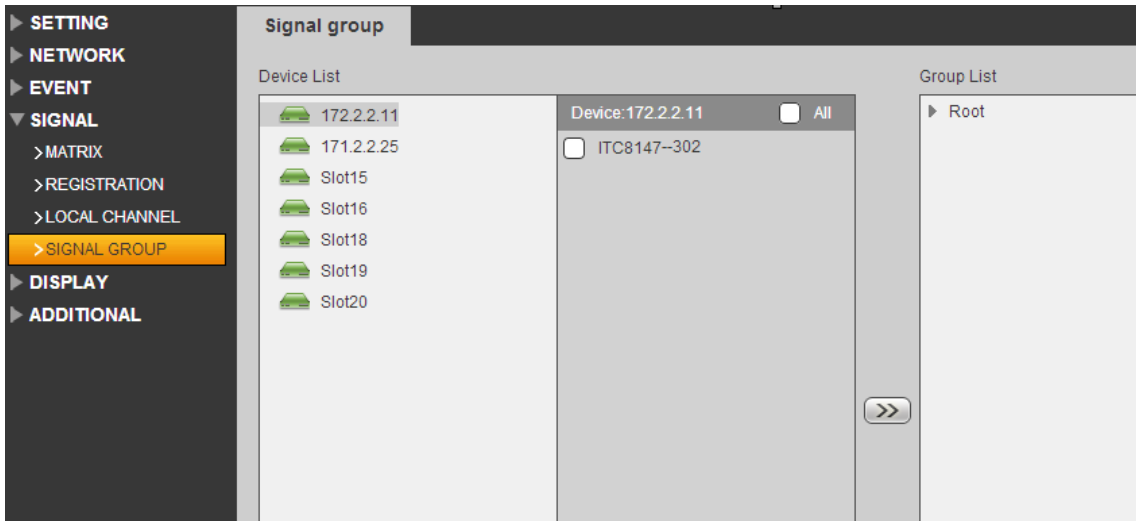
- Click **Device Search** to show search results, select the needed device and click **Add**.
- Click **Add** to set parameters in the pop-up dialog box.

6.1.3 Signal Group

Select **Settings > Signal > Signal Group**.

The **Signal Group** interface is displayed. See Figure 6-3. Devices in the device list can be added to group list.

Figure 6-3 Signal group

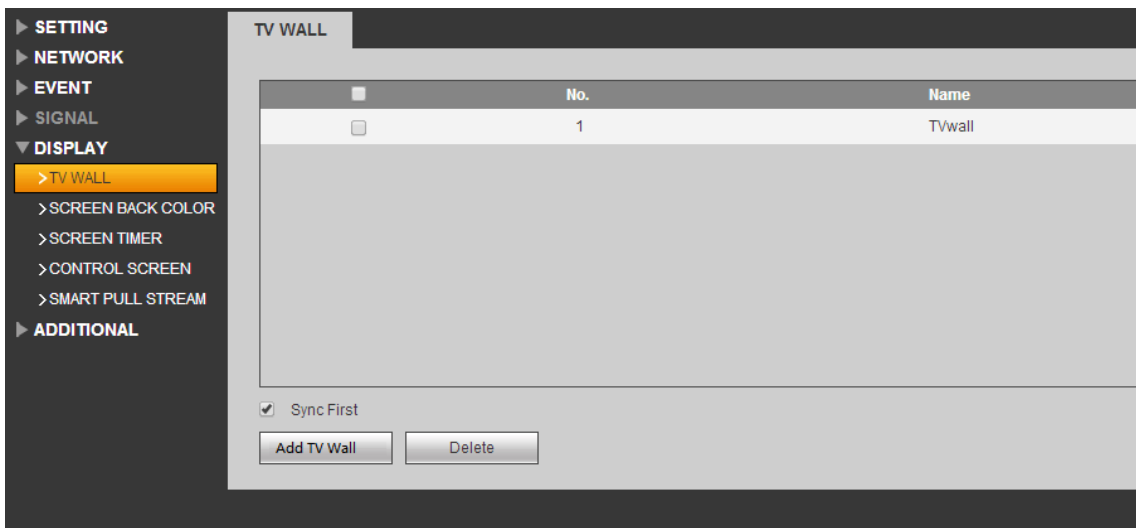


6.1.4 Adding TV Wall

Step 1 Select **Settings > Display > TV Wall**.

The **TV Wall** interface is displayed. See Figure 6-4.

Figure 6-4 TV wall



Step 2 Click **Add TV Wall** to add.

6.2 Adding TV Wall through Decoder WEB Client

This part takes decoder WEB client as an example.



- This part is operated at decoder WEB client.
- For more specific configurations, refer to decoder user's manual.

6.2.1 Entering Decoder WEB Login Interface

Step 1 Enter IP address of decoder at address bar of the browser, and press Enter to enter decoder login interface. See Figure 6-5.

Figure 6-5 Login interface of decoder



Step 2 Enter username and password.

Step 3 Click **Login** to enter WEB interface.

6.2.2 Adding Remote Device

Search or add network signals manually.

Step 1 Select **Settings > Remote Device**.

The **Remote Device** interface is displayed. See Figure 6-6.

Figure 6-6 Remote device



Step 2 Add remote device.

- Click **Device Search** to show search results, select the needed device and click **Add**.
- Click **Add** to set parameters in the pop-up dialog box.

6.2.3 Editing Decoder TV Wall

Click merged screen to edit TV wall.

6.3 Adding Device

Add TV wall, matrix and decoder device at the network keyboard. Refer to "3.5 Adding Device" for details.

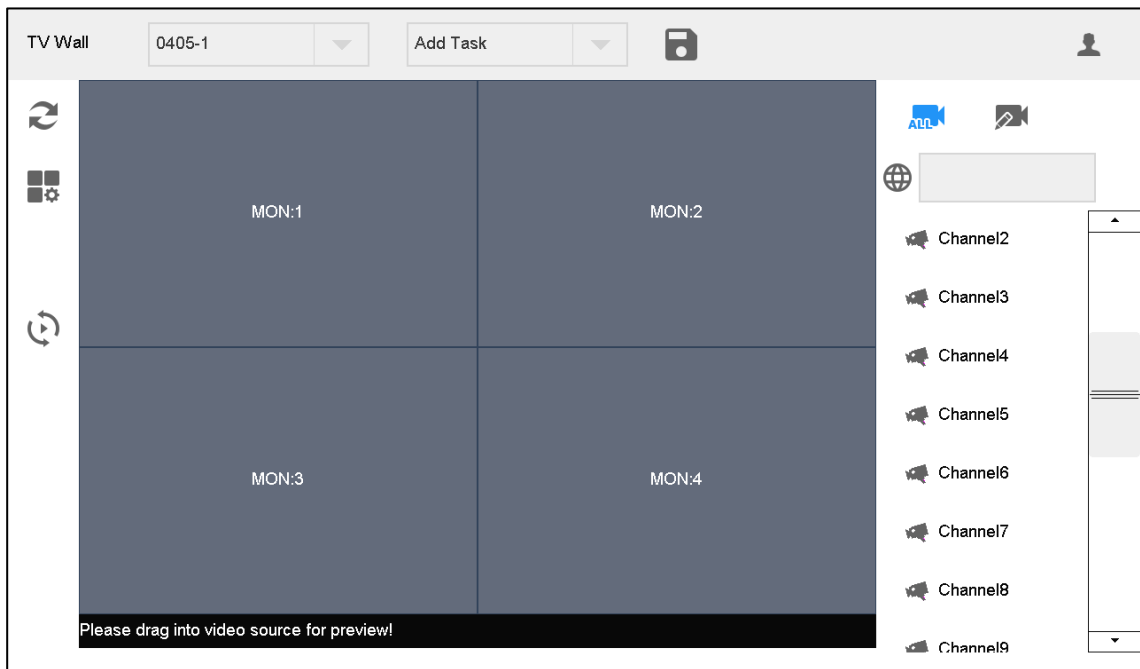
6.4 Video on Wall

Step 1 On the main interface, click **TV Wall**.

The **TV Wall** interface is displayed.

Step 2 In the pull-down list, select TV wall. See Figure 6-7.

Figure 6-7 TV wall (screen)



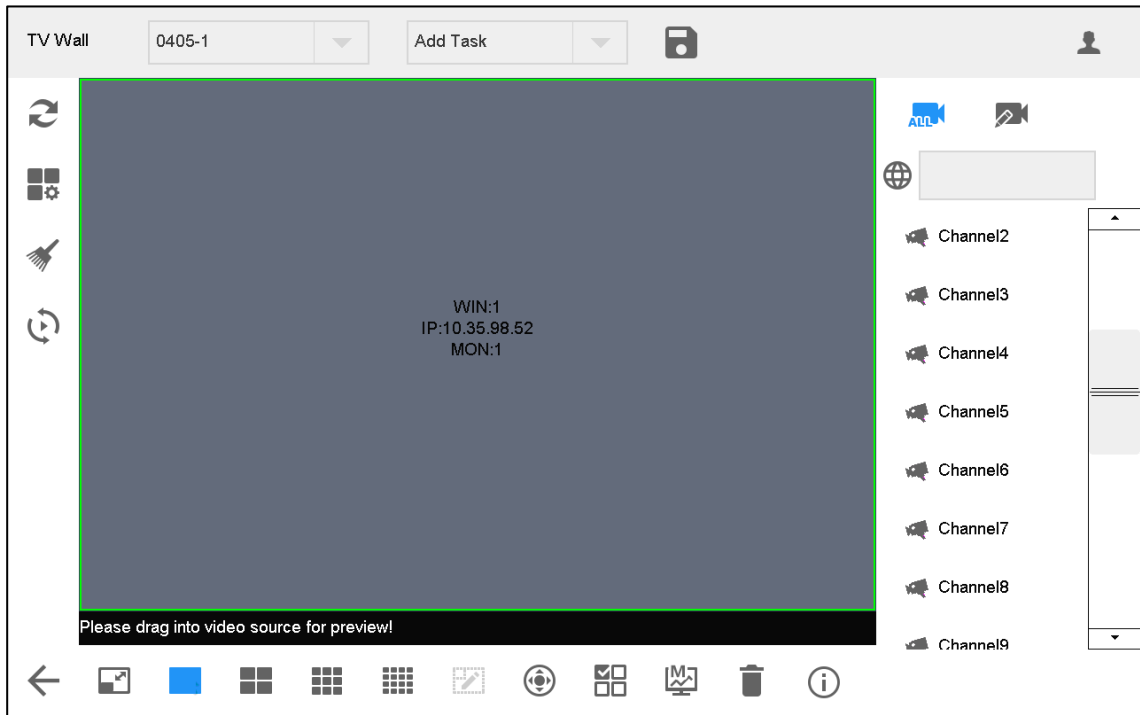
Step 3 Click one screen in Figure 6-7, such as MON:1.

Step 4 Split the screen.


Step 5 Drag video source on the right onto large screen.

The system displays relevant information. See Figure 6-8.


Figure 6-8 TV wall (screen information)



Switch Main and Sub-stream

Click  to switch main and sub-stream. M represents main stream, while S represents sub-stream.

Clear Screen









Click  to clear screen.




For other operations of TV wall, please refer to "4.3 Video on Wall".

6.5 Icons of TV Wall Interface

Refer to Table 6-1 for introductions to icons.

Table 6-1 Icons of TV wall interface

Icon	Description	Icon	Description
	Refresh		Configure TV wall
	Clear screen		Return
	Maximize and restore the window		Single split
	4-split		9-split

Icon	Description	Icon	Description
	16-split		Custom split.
	PTZ		Select window/all windows on the screen.  This button is used with delete button.
	Switch main and sub-stream. M represents main stream, while S represents sub-stream.		Delete
	Detailed information about channel.		Display the video on the wall quickly.  Refer to "4.3 Video on Wall" for details.
	Display all input channels.		Display signal group.  Refer to "6.1.3 Signal Group" for new signal group.

6.6 PTZ Control

Please refer to "8 PTZ Control".

6.7 Adding Task

Frequently-used operations can be saved as tasks, in order to call them quickly.

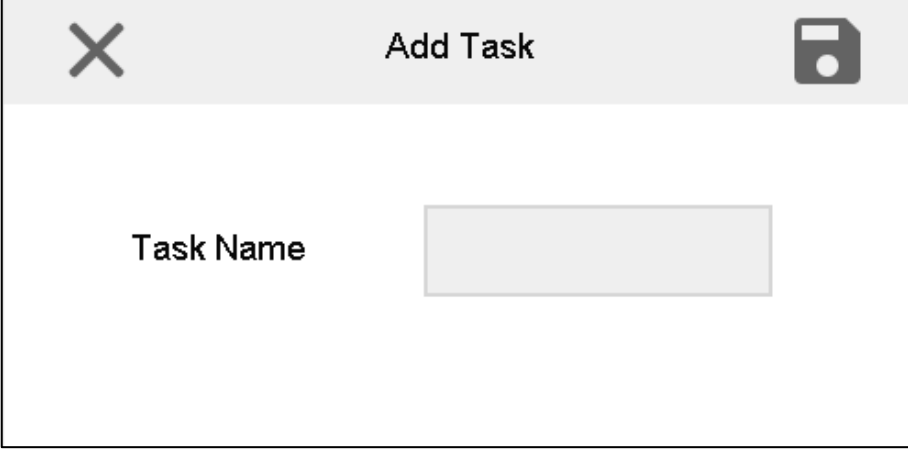
Step 1 On the **TV Wall** interface, carry out a series of operations according to actual needs.

For example, split the screen into 16 parts.

Step 2 Click .

The **Add Task** dialog box will pop out. See Figure 6-9.

Figure 6-9 Add task



Step 3 Enter task name.

Step 4 Click .

6.8 Configuring TV Wall


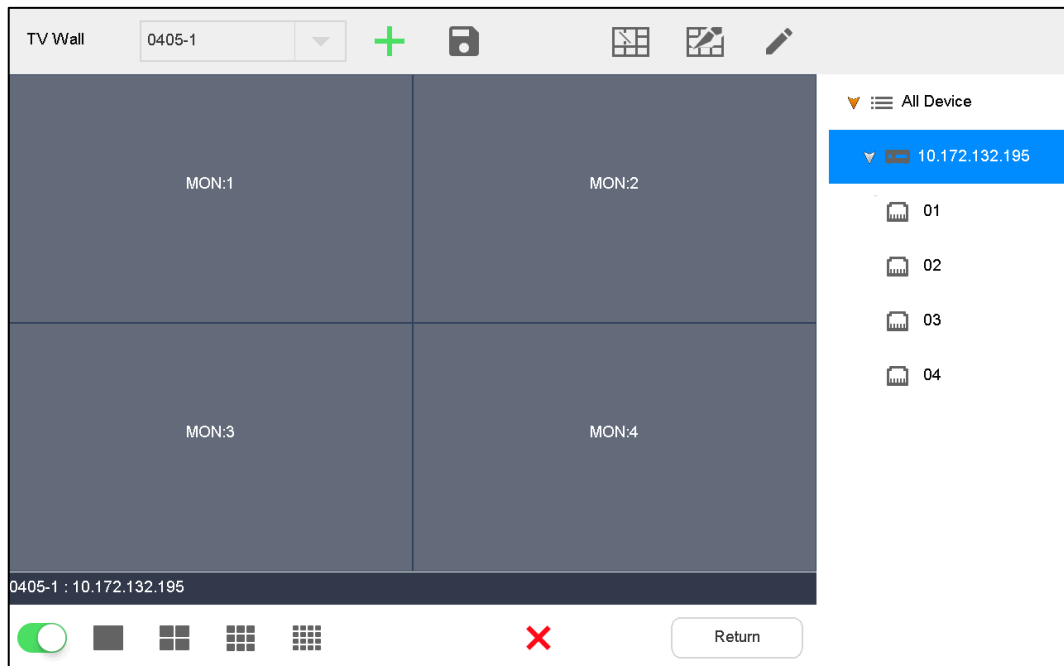

On the **TV Wall** interface, click  to enter **TV Wall** interface. See Figure 6-10.

Figure 6-10 Configure TV wall



Enable TV Wall

Click  to enable TV Wall. Then, TV Wall pull-down list in Figure 6-7 will display this TV wall.



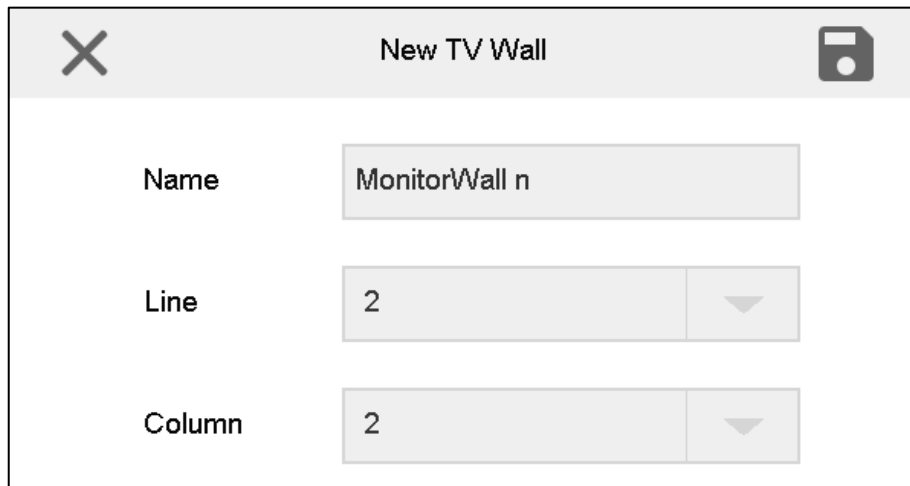
If decoding channel of this TV wall is bonded to other TV walls, other TV walls will be disabled.

New TV Wall


Step 1 Click .

The **New TV Wall** dialog box pops up. See Figure 6-11.


Figure 6-11 New TV wall



New TV Wall	
Name	MonitorWall n
Line	2
Column	2


Step 2 Enter the name, select line and column, and then click .

Step 3 Drag decoding channels on the right into the screen, so as to bond corresponding relations.


Step 4 (Optional) Select two or more screens, and click  to merge them into one screen.

Step 5 Click .

Delete TV Wall

Click  to delete TV wall.

Cancel Merged Screen

Select a merged screen and click .

Edit TV Wall


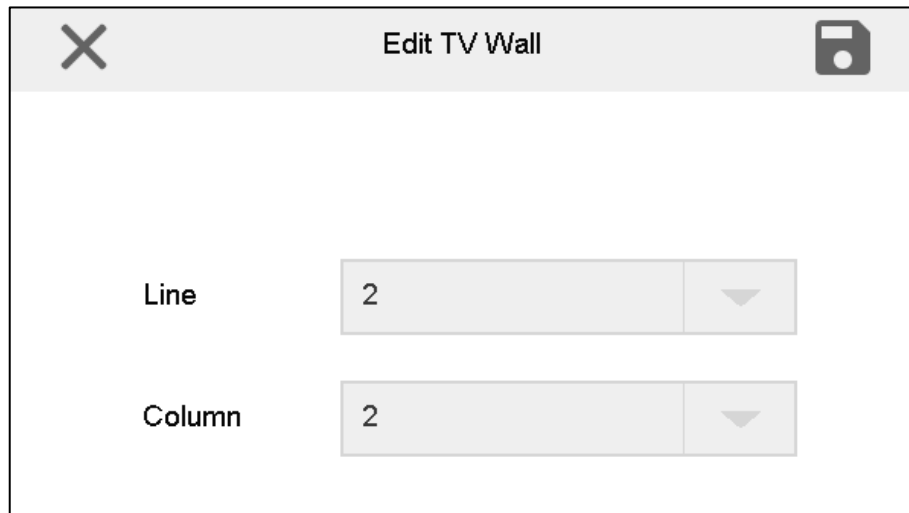
Click  and the system will pop out a dialog box of **Edit TV Wall**. See Figure 6-12.

Figure 6-12 Edit TV wall



The screenshot shows a window titled "Edit TV Wall" with a close button (X) on the top left and a save icon on the top right. Inside the window, there are two dropdown menus. The first is labeled "Line" and has the value "2" selected. The second is labeled "Column" and also has the value "2" selected. Both dropdown menus have a downward-pointing arrow on the right side.

Return to TV Wall Interface

Click **Return** to return to TV wall interface.

Exit TV Wall Interface

Click  to exit TV wall interface.

The network keyboard can connect with a platform, and thus control devices that are added to the platform.

7.1 Adding Devices at Platform

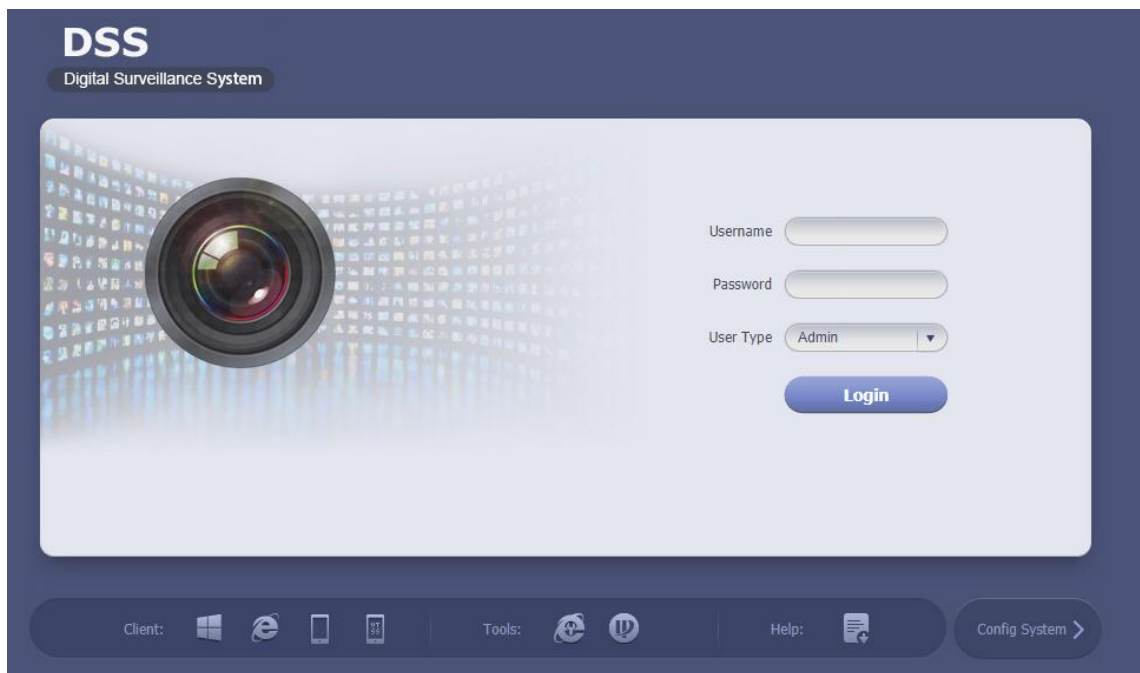


This part is operated on the platform server.

7.1.1 Entering Main Interface of Platform Server

Step 1 Enter IP address of platform server at address bar of the browser, and press Enter.
The platform server login interface is displayed. See Figure 7-1.

Figure 7-1 Platform server login interface

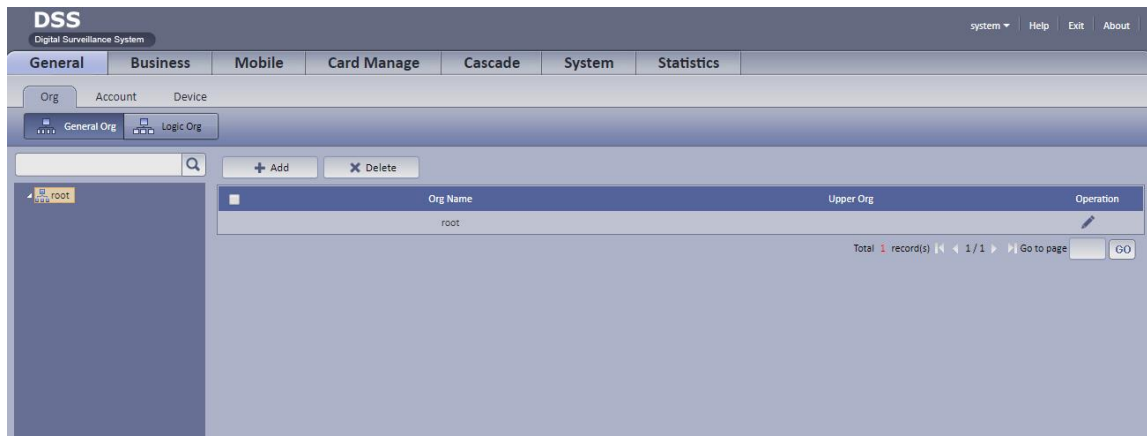


Step 2 Enter username and password.

Step 3 Click **Login**.

Main interface of platform server is displayed. See Figure 7-2.

Figure 7-2 Main interface of platform server



7.1.2 Adding Decoder

You can add encoder, decoder, large screen device and matrix device. Take adding decoder for example.

Step 1 On the main interface of platform server, select **General > Device > Device > Decoder**.

Step 2 Click .

The **Add Decoder** dialog box pops up. See Figure 7-3.

Figure 7-3 Add decoder

Step 3 Enter **IP Address, Device Port, Username, Password, Device Name** and **Org**, and then click **Add**.

Step 4 Enter **Decode Channel** in the pop-up interface. See Figure 7-4.

Figure 7-4 Device information

The 'Add Decoder' dialog box has a title bar with a close button. It contains the following fields and controls:

- Device Type: NVD (dropdown menu)
- Device SN: (text input field)
- Decode Channel: 1 (text input field with a red asterisk)
- Decode Mode: Pull (dropdown menu)
- Support to Combine: (checkbox)
- Buttons: Add More, OK

Step 5 Select **Support to Combine**.

Step 6 Click **OK**.



Refer to platform user's manual for details.

7.1.3 Adding TV Wall









Step 1 On the main interface of platform server, select **Business > TV Wall**.

Step 2 Click  **Add**.

Step 1: TV wall setup of **Add TV Wall** interface is displayed. See Figure 7-5.

Figure 7-5 TV wall setup

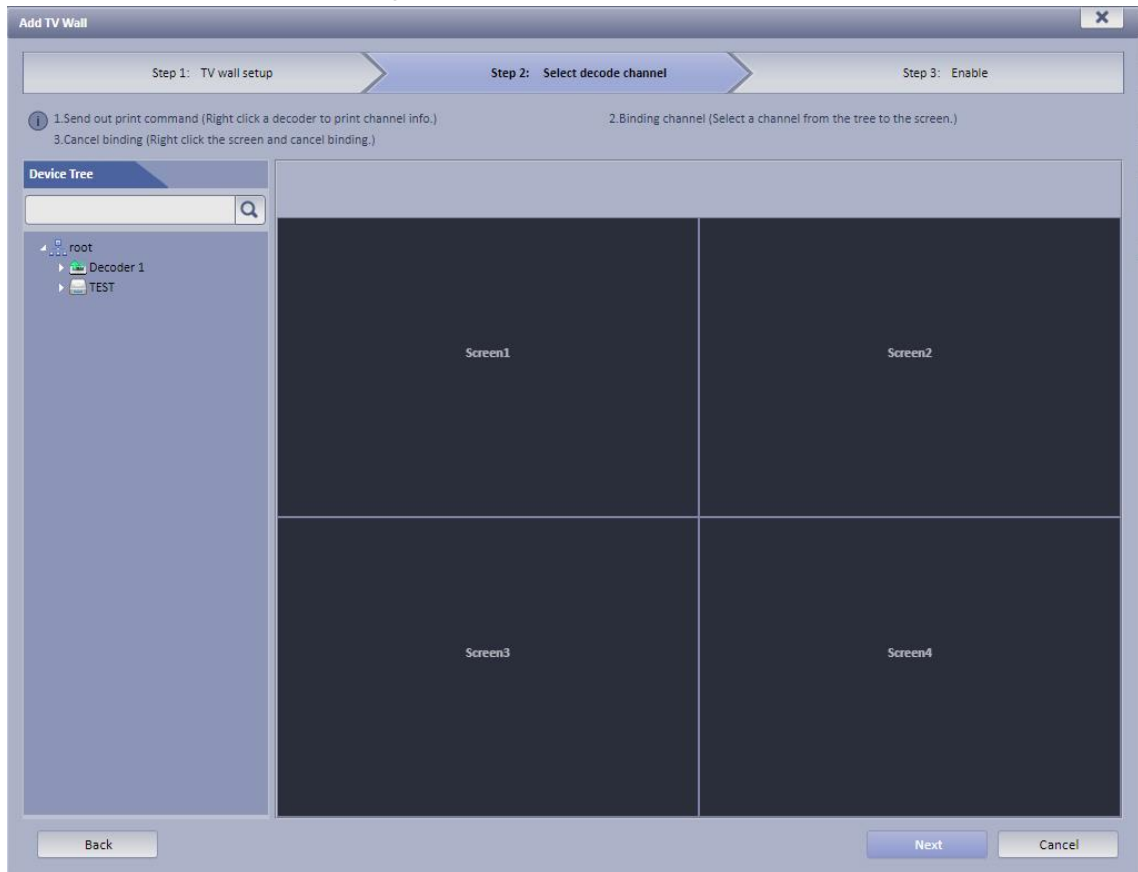
The 'Add TV Wall' interface has a title bar with a close button. It features a progress bar with three steps: Step 1: TV wall setup (active), Step 2: Select decode channel, and Step 3: Enable. Below the progress bar, there are instructions: 1. Set general layout, 2. Adjust TV screen, 3. Combine to create a screen group, and 4. Cancel group screen setup. The 'Basic Info' section includes:

- TV Wall Scheme Name: (text input field with a red asterisk)
- Memo: (text area)
- Layout selection icons: , , , , 
- Control icons: , , 
- Buttons: Back, Next, Cancel

Step 3 Enter **TV Wall Scheme Name**, select TV wall layout, and then click **Next**.

Step 2: Select decode channel is displayed. See Figure 7-6.

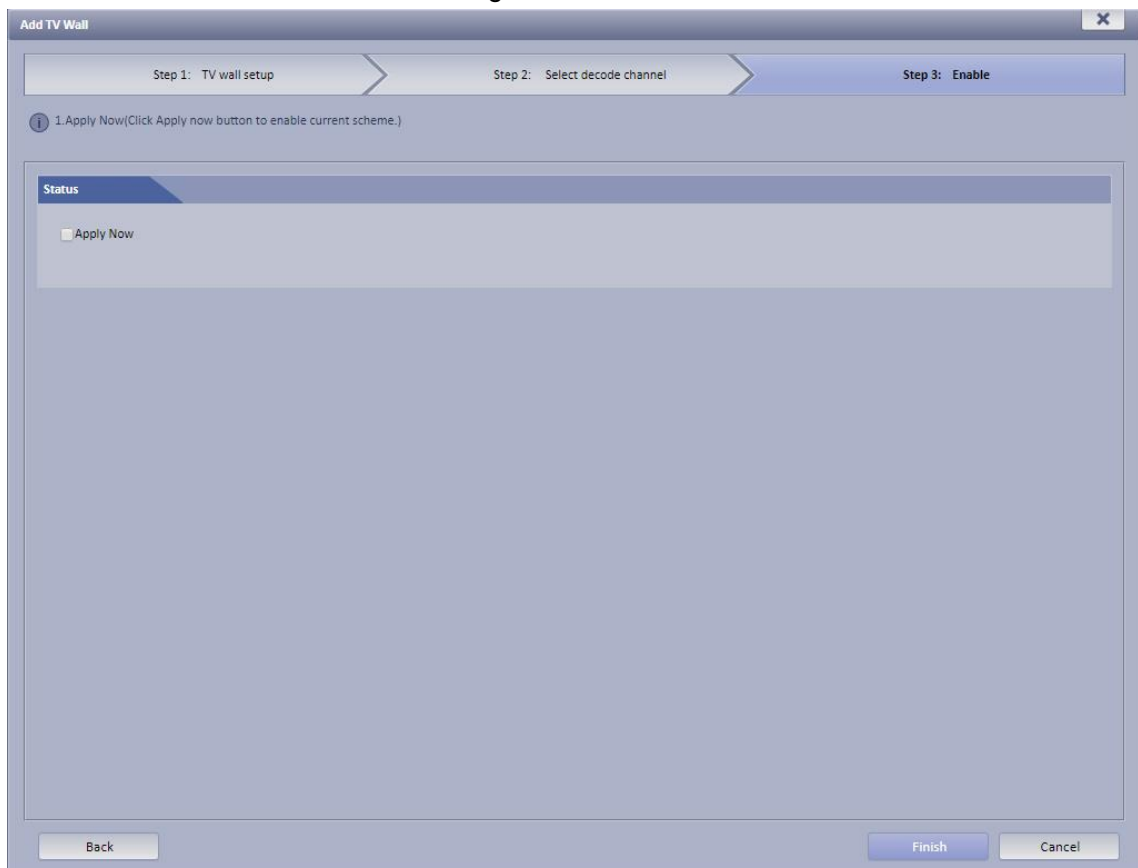
Figure 7-6 Select decode channel



Step 4 Select one channel from **Device Tree** on the left, and then click **Next**.

Step 3: Enable is displayed. See Figure 7-7.

Figure 7-7 Enable



Step 5 Tick the **Apply Now** check box, and then click **Finish**.

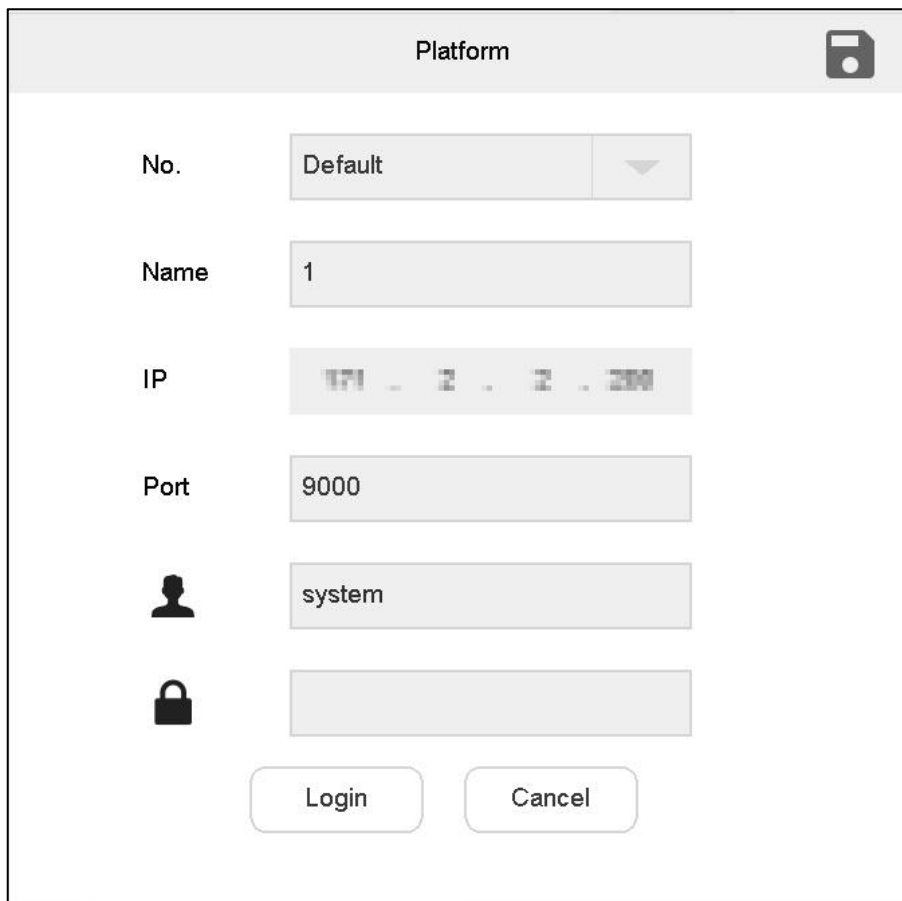
The TV wall is added and enabled successfully.

7.2 Video on Wall

Step 1 On the main interface, click **Platform**.

The connection interface of keyboard operation platform is displayed. See Figure 7-8.

Figure 7-8 Connect keyboard operation platform



Step 2 Set parameters. Refer to Table 7-1.


Table 7-1 Platform parameter description

Parameter	Description
No.	Customize platform number.
Name	Customize platform name.
IP	Enter IP address of platform.
Port	Set port number.
Username	Enter username to login the platform.
Password	Enter password to login the platform.

Step 3 Click **Login**.

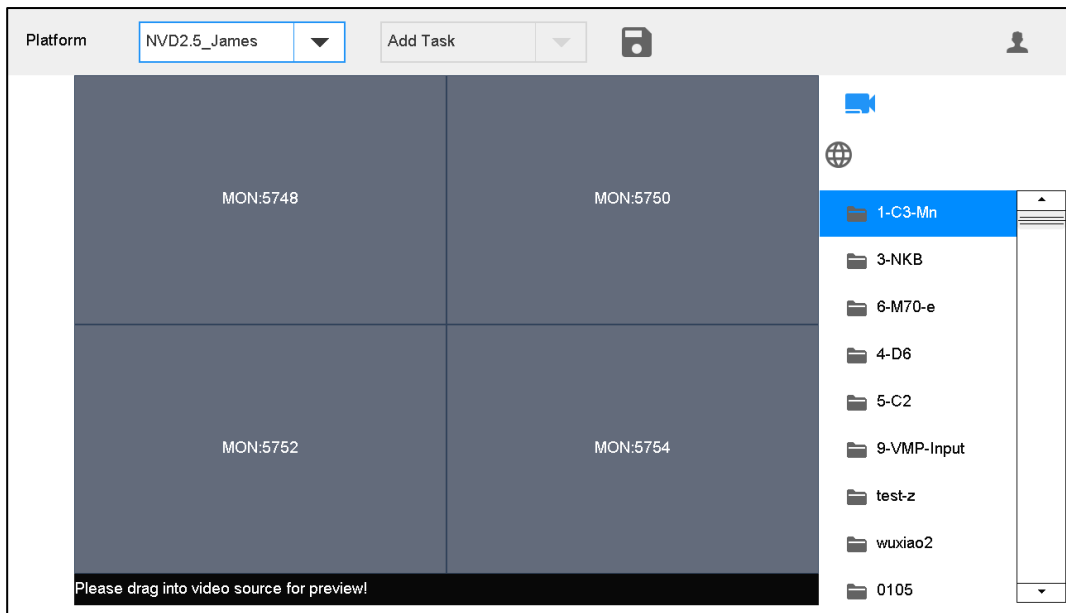
The **Login** interface is displayed.



Click  to save the present information.

Step 4 Select platform. See Figure 7-9.

Figure 7-9 Platform (1)

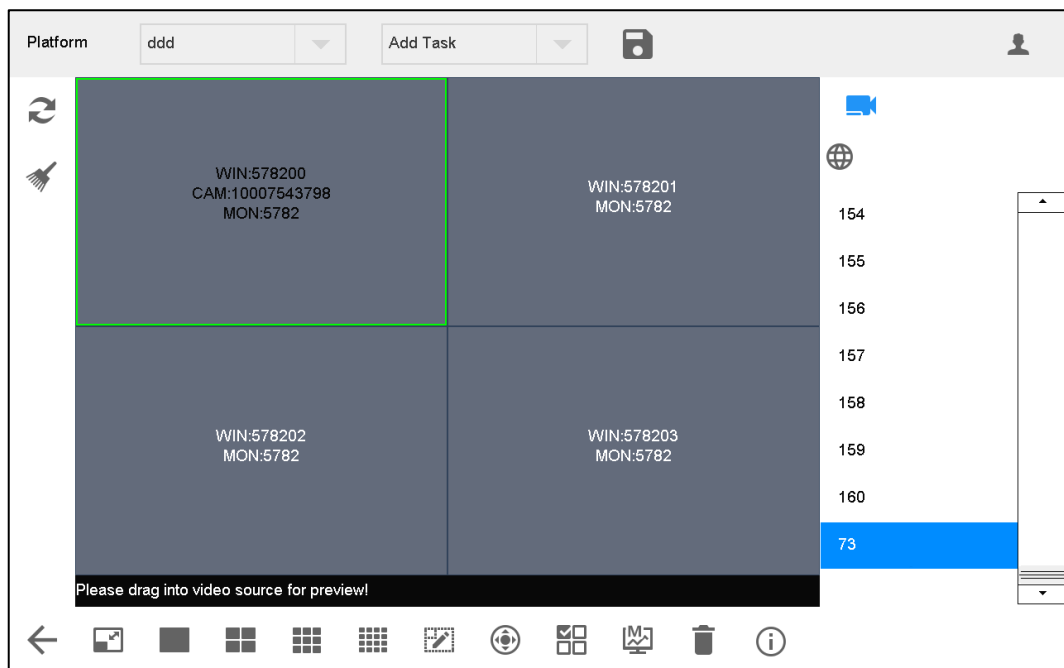


Step 5 Click one screen in Figure 7-9, such as 1-C3-Mn. Enter display screen information interface.


Step 6 Split the screen. For example, click  to get 4-split screen.

Step 7 Drag video source on the right onto large screen. See Figure 7-10.


Figure 7-10 Platform (2)



Switch Main Stream and Sub-stream

Click  to switch main and sub-stream. M represents main stream, while S represents sub-stream.

Clear Screen
















Click  to clear screen.

For other operations of TV wall, please refer to "4.3 Video on Wall".

7.3 Icons of Platform Interface

Refer to Table 7-2 for introductions to icons.

Table 7-2 Icons of platform interface

Icon	Description	Icon	Description
	Refresh		Clear screen
	Return		Maximize and restore the window
	Single split		4-split
	9-split		16-split
	Custom split		PTZ
	Select window/ all windows on the screen.  This button is used with delete button.		Switch main and sub-stream. M represents main stream, while S represents sub-stream.
	Delete		Detailed information about input channel.

7.4 PTZ Control

Refer to "8 PTZ Control".

7.5 Adding Task

Refer to "6.7 Adding Task".

Precondition: speed dome owns PTZ function.


Click  on the **Platform** interface, so PTZ control interface is displayed on the right. See Figure 8-1.

Figure 8-1 PTZ control



Table 8-1 PTZ control parameter description

Parameter	Description
Step type	<p>It consists of fixed step and variable step.</p> <ul style="list-style-type: none"> By selecting Fixed, the step remains unchanged when PTZ turns; it is always the set step value. By selecting Variable, the step changes with the tilt of joystick. The larger tilt angle represents quicker turning speed.
8 direction keys	Control turning direction of SD lens.
Zoom	Set the zoom increase/decrease of PTZ lens.
Focus	Set the focus increase/decrease of PTZ lens.
Iris	Set the iris increase/decrease of PTZ lens.
Call	Call the preset point, scan, tour and pattern.
Settings	PTZ operation settings, including the preset point, scan, tour and pattern.
SD menu	Open and close SD menu.
Auxiliary function	Lighting and wiper function.
Exit	Exit PTZ control.



Use the joystick to control 8 directions of PTZ.

8.1 Call

Click **Call**. The **Call** interface is displayed. See Figure 8-2.

Figure 8-2 Call

The screenshot shows a mobile application interface titled "Call". At the top, there is a header with the word "Call". Below the header is a text input field containing the number "1". Underneath the input field are four vertically stacked buttons: "Preset", "Scan", "Tour", and "Pattern". At the bottom of the screen, there is a "Return" button.

Enter a number in the input box, such as 1. Click **Preset** to call the preset point 1.



- It will be called successfully after you have set preset point.
- Call methods of scan, tour and pattern are the same as that of preset point. Refer to "8.2 Settings" for details.

8.2 Settings

8.2.1 Settings of Preset Point

Step 1 Turn the camera to required position with the joystick or direction button.

Step 2 Select **Preset**.

Step 3 Enter a preset point value in **Preset** input box, such as 1.

Step 4 Click **Settings**. Preset point 1 is set successfully.

8.2.2 Settings of Tour

Step 1 Select **Tour**.

Step 2 Enter tour route value in **Tour No.** input box.

Step 3 Enter a preset point value in **Preset** input box and click **Add Preset** to add a preset point to the tour route.



- Multiple preset points can be added.
- Click **Del Preset** to delete the preset point from this tour route. Repeat the operation to delete multiple preset points from this tour route. Preset points cannot be deleted in some protocols.
- Click **Del Tour** to delete the present tour route.

8.2.3 Settings of Pattern

Step 1 Select **Pattern**.

Step 2 Enter pattern no. in **Pattern No.** input box.

Step 3 Click **Start Pattern** to carry out operations of zoom, focus, iris or direction.

Step 4 Click **Stop Pattern** to complete the settings of one pattern route.

8.2.4 Settings of Scan

Step 1 Turn the camera to left margin with the joystick or direction button.

Step 2 Click **Set Left** to determine left margin position.

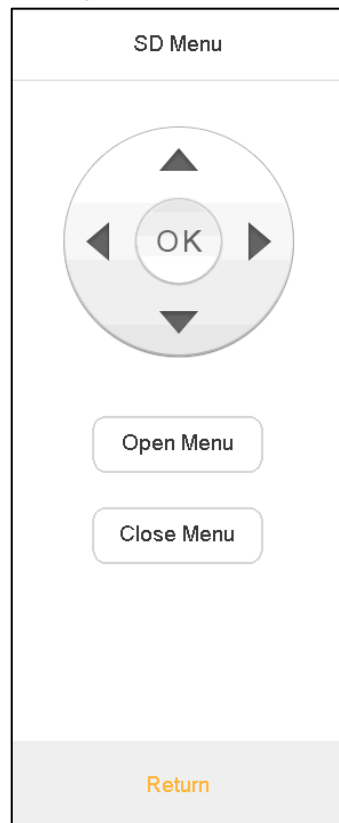
Step 3 Turn the camera to right margin with the joystick or direction button.

Step 4 Click **Set Right** to determine right margin position.

8.3 SD Menu



Click **SD Menu**. The **SD Menu** interface is displayed. See Figure 8-3.

Figure 8-3 SD menu



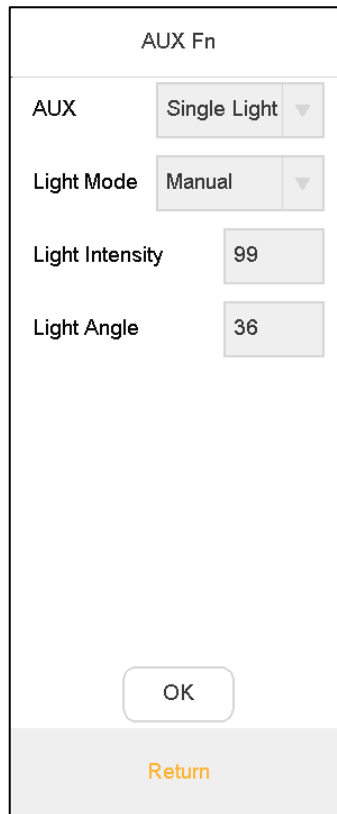
Refer to Table 7-2 for introductions to icons.

Table 8-2 SD menu parameter description

Parameter	Description
Direction key	Select PTZ menu options.
OK key	Confirm operations.
PTZ menu	<ul style="list-style-type: none"> Click  to open PTZ menu on preview interface. Then, use direction key to select different functions to operate the PTZ. Click  to close PTZ menu on preview interface.

8.4 Auxiliary Function

Figure 8-4 Auxiliary function



- Auxiliary function includes **Single Light**, **Multi-light** and **Wiper**.
- Light mode includes **Manual**, **SmartIR** and **Zoom Ratio First**.
- Light intensity: Light intensity can be set.
- Light angle: Light angle can be set.

It consists of four parts, namely, device, general, account and system.

9.1 Device Management

9.1.1 Adding Device

Refer to "3.5 Adding Device".

9.1.2 Input Channel

Display input no., channel, name, device, IP address and protocol of all channels. Meanwhile, modify input channel number.

On the **Settings** interface, click **Device**, and then click **Input Channel** tab.

The **Input Channel** interface is displayed. See Figure 9-1.

Figure 9-1 Input channel

Input Channel							☰
NO.	Channel	Ch Name	Device	IP	Detail	Device	
1	1	151	123456	192.168.1.100		Input Channel	
2	2	CAM 2	123456	192.168.1.100			
3	3	IPC-2.22-D1	123456	192.168.1.100			
4	4	CAM 4	123456	192.168.1.100			
5	5	CAM 5	123456	192.168.1.100			
6	6	CAM 6	123456	192.168.1.100			
7	7	CAM 7	123456	192.168.1.100			
8	8	CAM 8	123456	192.168.1.100			

PgUp PgDn 1/8 1 GO

Modify Input Channel Number

Click to modify input channel number and name in the pop-up dialog box.

9.2 General Settings

9.2.1 Wired Network

Refer to "3.4.1 Wired Network" for details.

9.2.2 Wi-Fi


Refer to "3.4.2 Wi-Fi" for details.


9.2.3 Bluetooth

Default Bluetooth name of network keyboard is **KEYBOARD**.

Step 1 On the **General** interface, click **Bluetooth** tab.

The **Bluetooth** interface is displayed.

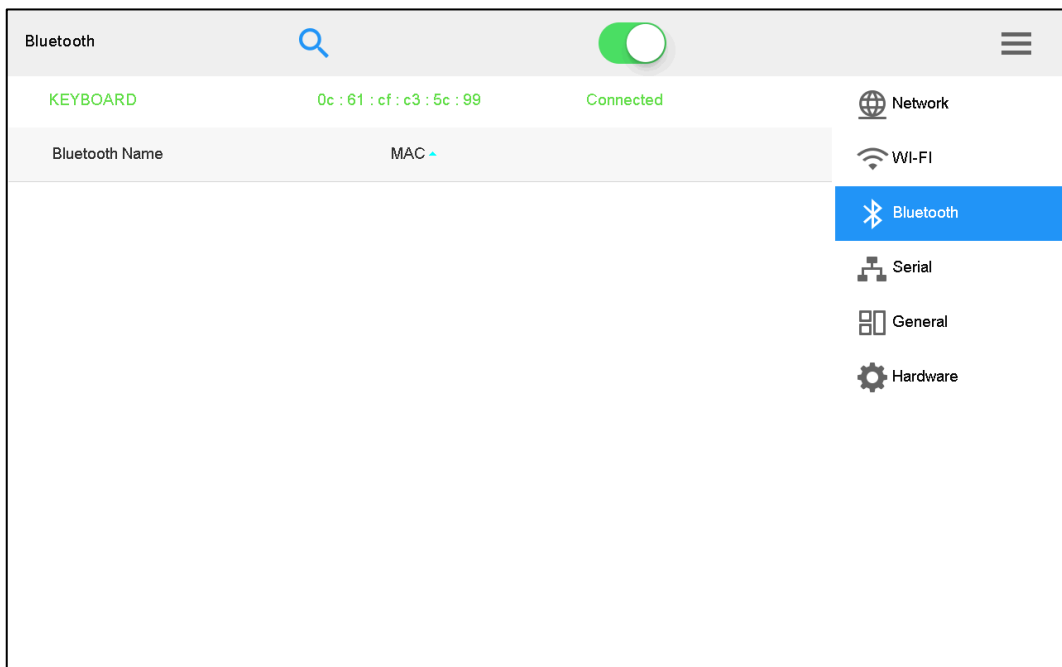
Step 2 Click  to enable Bluetooth.

Step 3 Click  to search nearby Bluetooth device.

Step 4 Double-click the searched device and the system will display **Connecting**.

After several seconds, the system will display **Connected**, so it is connected successfully. See Figure 9-2.

Figure 9-2 Bluetooth

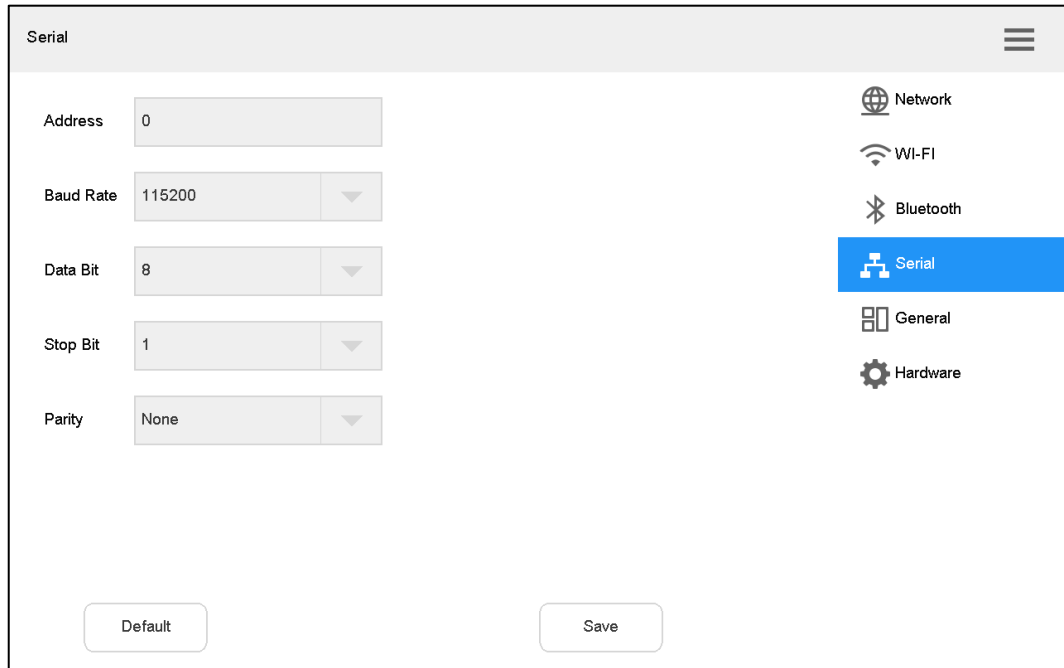


9.2.4 Serial Port

Step 1 On the **General** interface, click **Serial** tab.

The **Serial** interface is displayed. See Figure 9-3.

Figure 9-3 Serial



Step 2 Set the parameters. Refer to Table 9-1.

Table 9-1 Serial port parameter description

Parameter	Description
Address	In case of serial port control, identify devices according to the address. Value ranges from 0 to 255.
Baud rate	Baud rate ranges from 1200 to 115200. There are 8 levels available.
Data bit	Select data bit, including 5, 6, 7 and 8.
Stop bit	Select stop bit, including 1 and 2.
Parity	Select parity, including none, odd, even, checkmark and null parity.

Step 3 Click **OK**.

9.2.5 General

You can set name, date and time etc. of network keyboard.

Step 1 On the **Settings** interface, click **General** tab.

The **General** interface is displayed. See Figure 9-4.

Figure 9-4 General

Step 2 Set the parameters. Refer to Table 9-2.

Table 9-2 General parameter description

Parameter	Description
Name	Set network keyboard name.
Language	Select language.
Date	Set date.
Time	Set time.
Format	Set time format, including 24-hour and 12-hour.
Separator	Set date separator, including ".", "-" and "/". When it takes effect, system time is displayed as "2018.12.18", "2018-12-18" and "2018/12/18".
Excel	Excel config file import separator. It is comma by default. Italian config file shall use semicolon.

Step 3 Click **Save**.

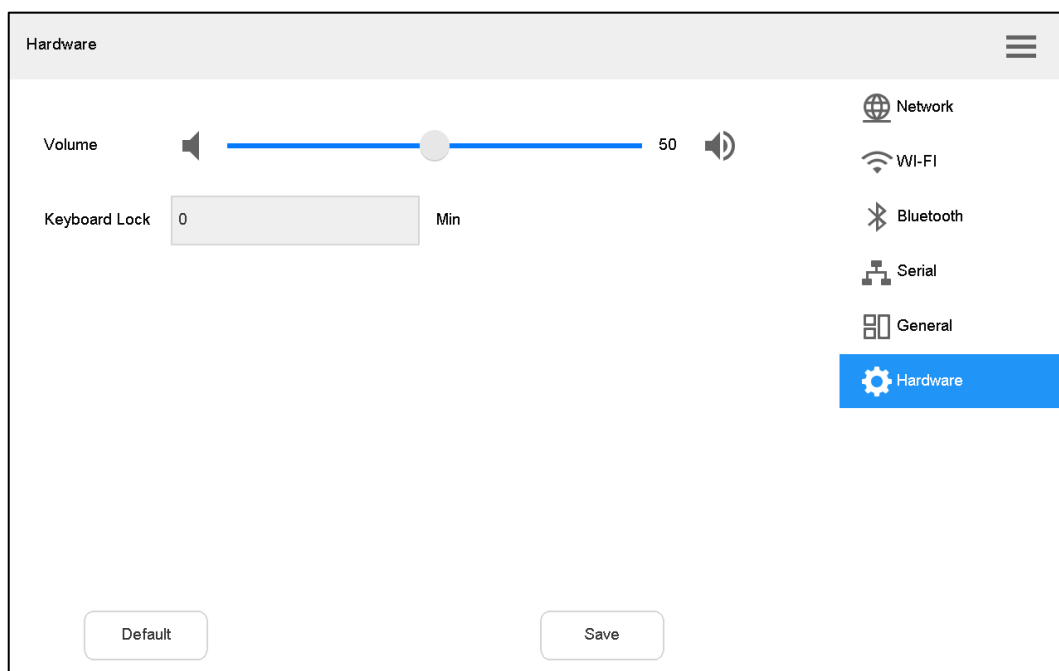
9.2.6 Hardware

You can adjust volume, and set the locking time of network keyboard.

Step 1 On the **Settings** interface, click **Hardware** tab.

The **Hardware** interface is displayed. See Figure 9-5.

Figure 9-5 Hardware



Step 2 Set the parameters. Refer to Table 9-3.

Table 9-3 Hardware parameter description

Parameter	Description
Volume	Adjust the volume.
Keyboard lock	After keyboard is locked, log in the device to enter it again.

Step 3 Click **Save**.

9.3 Account

9.3.1 Role

In the whole network, users might have different authorities to access network keyboard. You can classify users with the same authority into one role, to maintain and manage user information conveniently. Then, you can add, delete and modify role.

Select **Settings > Account > Role**. The **Role** interface is displayed. See Figure 9-6.

Figure 9-6 Role

Role					
<input type="checkbox"/>	1	admin			Account
<input type="checkbox"/>	2	1			
<input type="checkbox"/>	3	2			
<input type="checkbox"/>	4	3			
<input type="checkbox"/>	5	A			
<input type="checkbox"/>	6	6			
<input type="checkbox"/>	7	7			
<input type="checkbox"/>	8	8			

PgUp PgDn 1/3 1 GO Delete

9.3.1.1 Adding roles

Default admin of the system cannot be deleted. Admin has the highest authority by default.

Step 1 Click

The **Add roles** interface is displayed. See Figure 9-7.

Figure 9-7 Add roles

Add roles

Information

Role name:

Role rank: ▼

System authority

All

Preview TV wall operate

Playback Platform Extension

Device Account General System

Device authority

All

Step 2 Set **Role name** and **Role rank**.



There are 8 role ranks. The number 1 rank is the highest, only second to default admin. It drops from number 1 to number 8.

Step 3 In **System authority**, select role authority to operate the system.

- Tick the check box to enable the authority.
- Tick **All** to select all authorities.

Step 4 Configure operation authority of device input channel.

1) Click **Input Channel**.

The **Input Channel** interface is displayed. See Figure 9-8.

Figure 9-8 Input channel

NO.	Channel	Ch Name	Device	IP
-----	---------	---------	--------	----

PgUp PgDn 1/0 1 GO + - Group Return

2) Click .

The **Add channel** interface is displayed. See Figure 9-9.

Figure 9-9 Add channel

<input type="checkbox"/>	NO.	Channel	Ch Name	Device	IP
<input type="checkbox"/>	1	1	151	123456	192.168.1.1
<input type="checkbox"/>	2	2	CAM 2	123456	192.168.1.2
<input type="checkbox"/>	3	3	IPC-2.22-D1	123456	192.168.1.3
<input type="checkbox"/>	4	4	CAM 4	123456	192.168.1.4
<input type="checkbox"/>	5	5	CAM 5	123456	192.168.1.5
<input type="checkbox"/>	6	6	CAM 6	123456	192.168.1.6
<input type="checkbox"/>	7	7	CAM 7	123456	192.168.1.7
<input type="checkbox"/>	8	8	CAM 8	123456	192.168.1.8

PgUp PgDn 1/8 1 GO OK Return

3) Tick the check box of corresponding channel, and click **OK**.



Click **Group** to divide the input channels into groups.

Step 5 Click **Return** to return to **Add roles** interface.

Step 6 Click  to save the settings.

9.3.1.2 Deleting Roles


Step 1 Tick the check box of corresponding role.

Step 2 Click **Delete**.

The **Message** dialog box pops up.

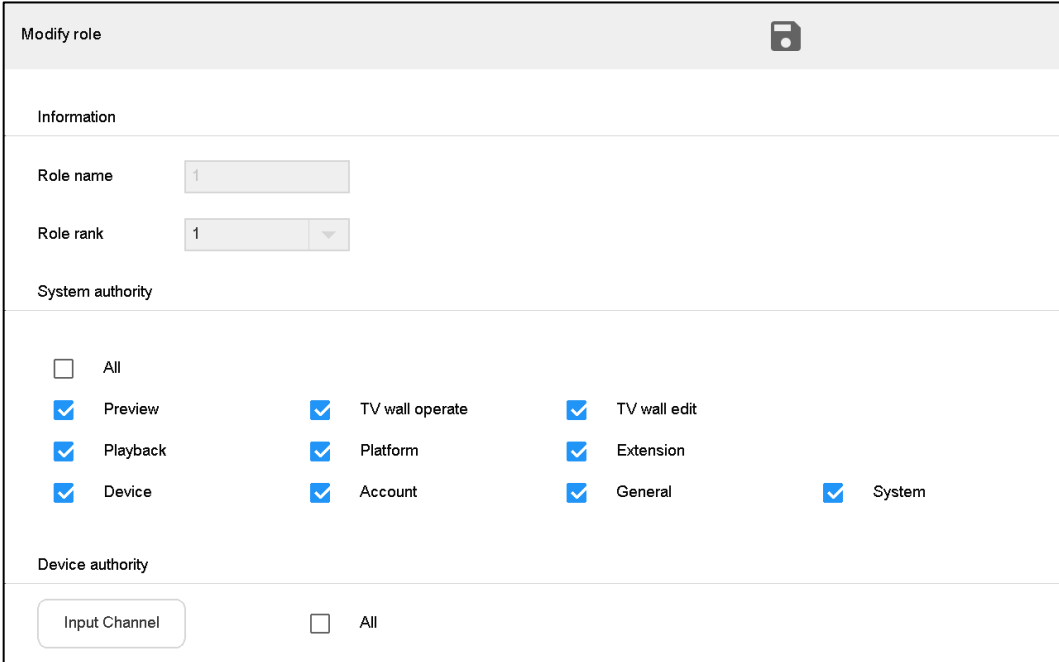
Step 3 Click **OK** to finish.

9.3.1.3 Modifying Role


Step 1 Click  corresponding to the role.

The **Modify role** interface is displayed. See Figure 9-10.

Figure 9-10 Modify role



Step 2 Modify role information according to actual needs.

Step 3 Click  to save the settings.

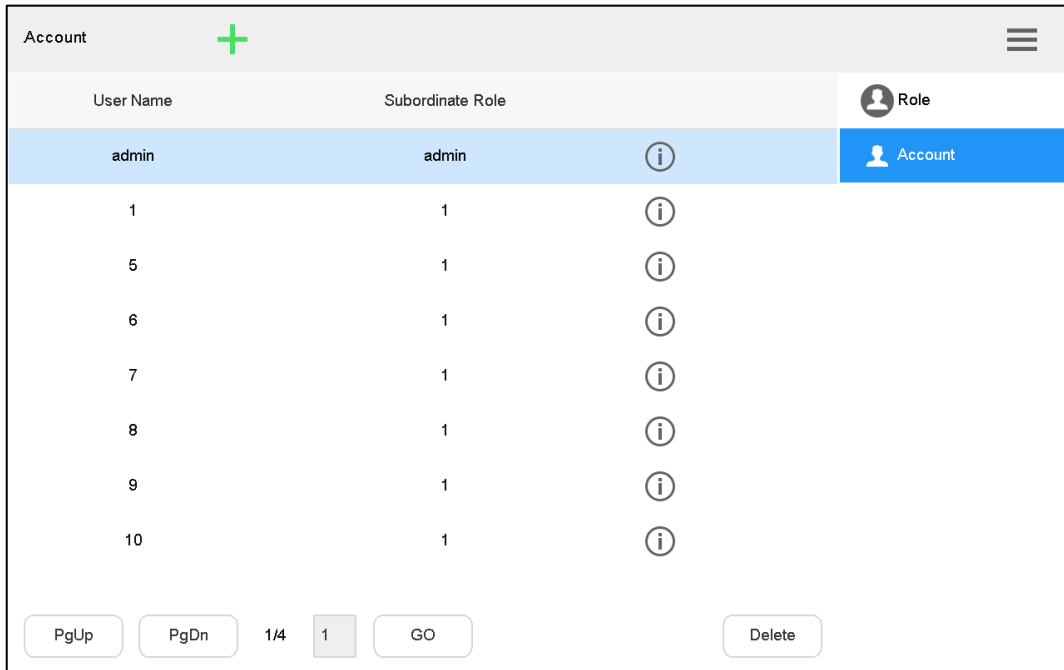
9.3.2 Account

You can view details about current user, add and delete user, and modify user password.

Select **Settings > Account > Account**.

The **Account** interface is displayed. See Figure 9-11.

Figure 9-11 Account



User Name	Subordinate Role		Role
admin	admin		Account
1	1		
5	1		
6	1		
7	1		
8	1		
9	1		
10	1		

PgUp PgDn 1/4 1 GO Delete

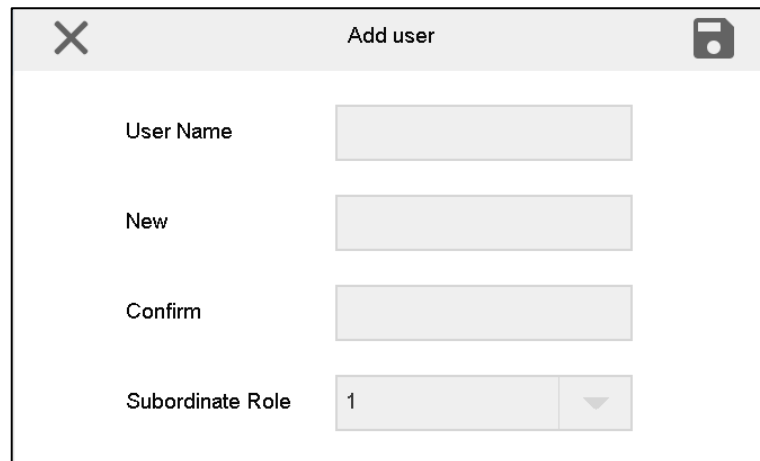
9.3.2.1 Adding User

Default admin of the system cannot be deleted. Admin has the highest authority by default. Create role before adding account.

Step 1 Click .

The **Add user** interface is displayed. See Figure 9-12.

Figure 9-12 Add user




Add user

User Name

New


Confirm

Subordinate Role 

Step 2 Set **User Name**, enter **New** and **Confirm**, and select **Subordinate Role**.



New and **Confirm** shall be the same.

Step 3 Click  to save the settings.

9.3.2.2 Deleting User


Step 1 Click the user that shall be deleted.

Step 2 Click **Delete**.

The **Message** dialog box pops up.

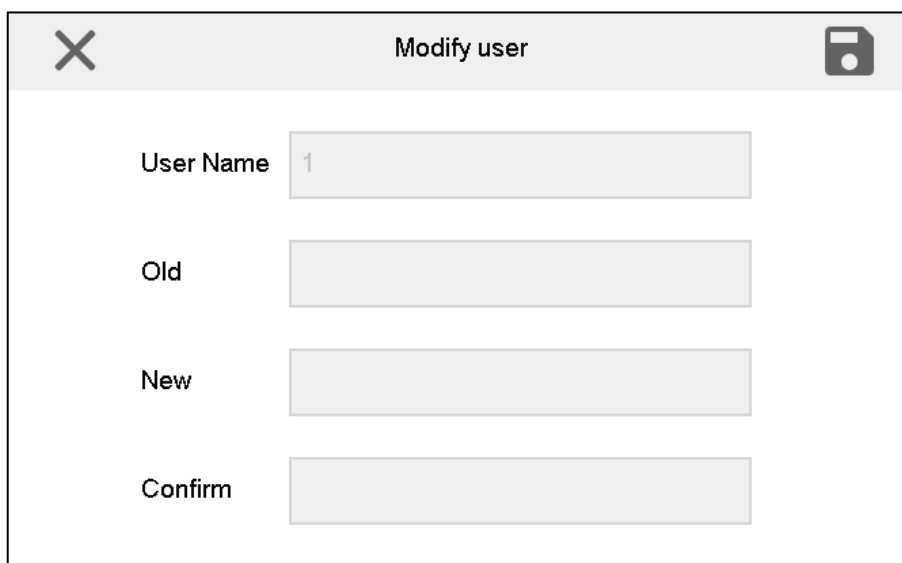
Step 3 Click **OK** to finish.

9.3.2.3 Modifying Password

Step 1 Click  corresponding to the user.

The **Modify user** interface is displayed. See Figure 9-13.

Figure 9-13 Modify user



The screenshot shows a dialog box titled "Modify user". It has a close button (X) in the top-left corner and a save button (floppy disk icon) in the top-right corner. The main content area contains four input fields:

- User Name: 1
- Old: [empty text box]
- New: [empty text box]
- Confirm: [empty text box]

Step 2 Enter old password, and set a new password.

Step 3 Click  to save the settings.

9.4 System

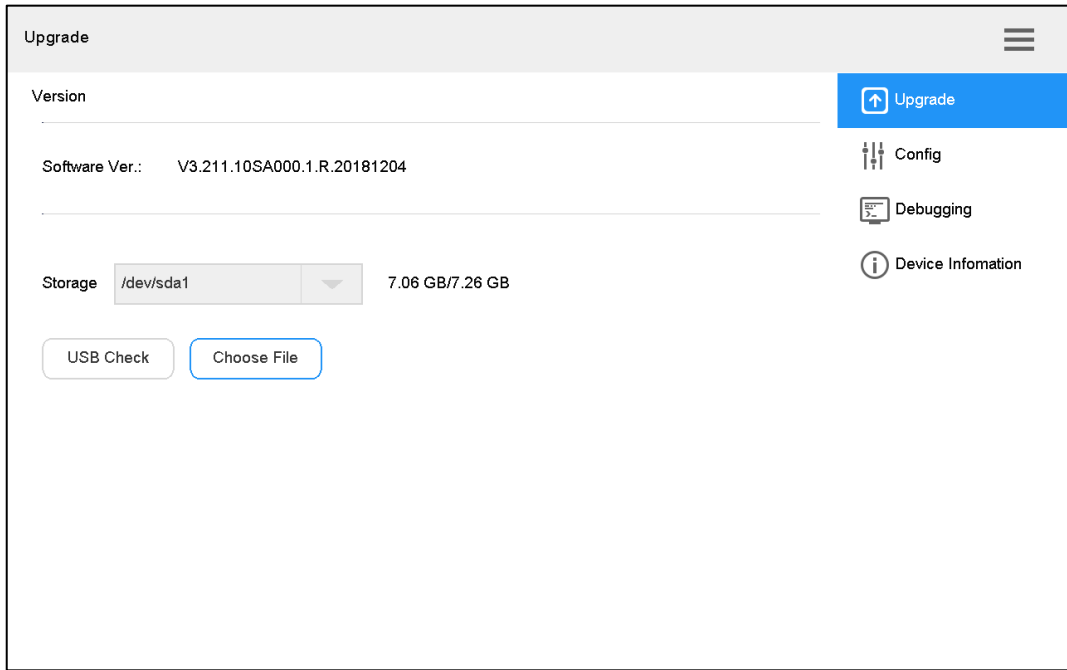
9.4.1 Version Upgrade

Upgrade the device with flash drive.

Step 1 On the **System** interface, click **Upgrade** tab.

The **Upgrade** interface is displayed. See Figure 9-14.

Figure 9-14 Upgrade



Step 2 Insert flash drive into the network keyboard, and click **USB Check**.

Step 3 Click **Choose File** to upgrade.

The keyboard will reboot automatically after upgrade.

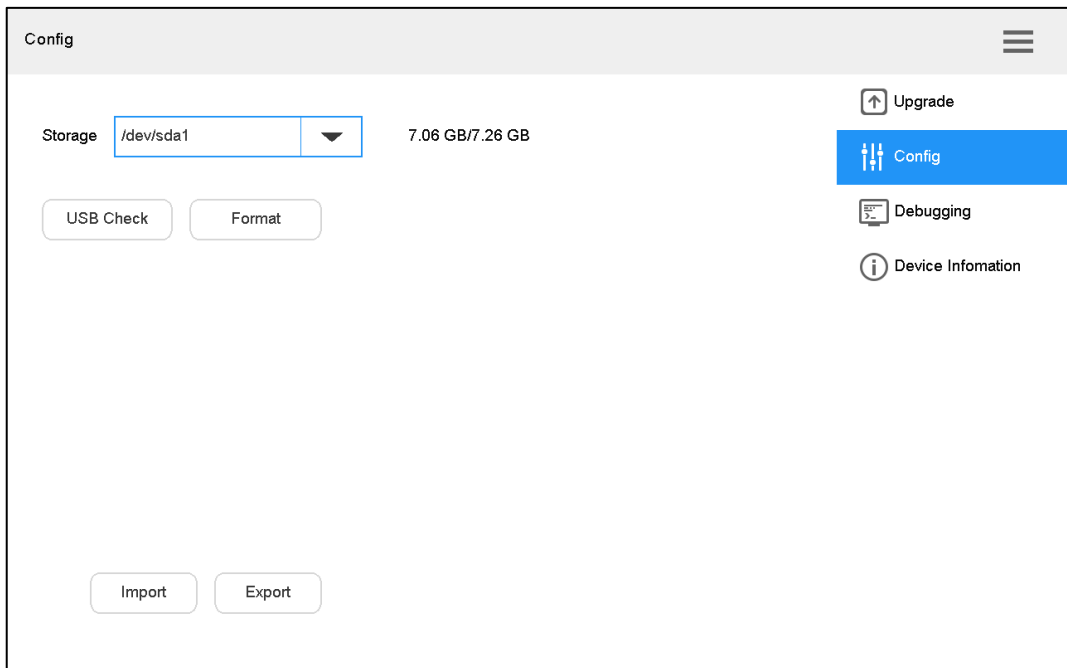
9.4.2 Configuration

You can import or export system configurations.

Step 1 On the **System** interface, click **Config** tab.

The **Config** interface is displayed. See Figure 9-15.

Figure 9-15 Config



Step 2 Insert flash drive into the network keyboard, and click **USB Check**. Detect all connected USB and capacity.

Step 3 Import or export configurations.

- Import: Import config information in flash drive into the network keyboard.
- Export: Export config information in the present keyboard to flash drive.



Click **Format** to format the storage device, and all its files will be cleared. Operate cautiously.

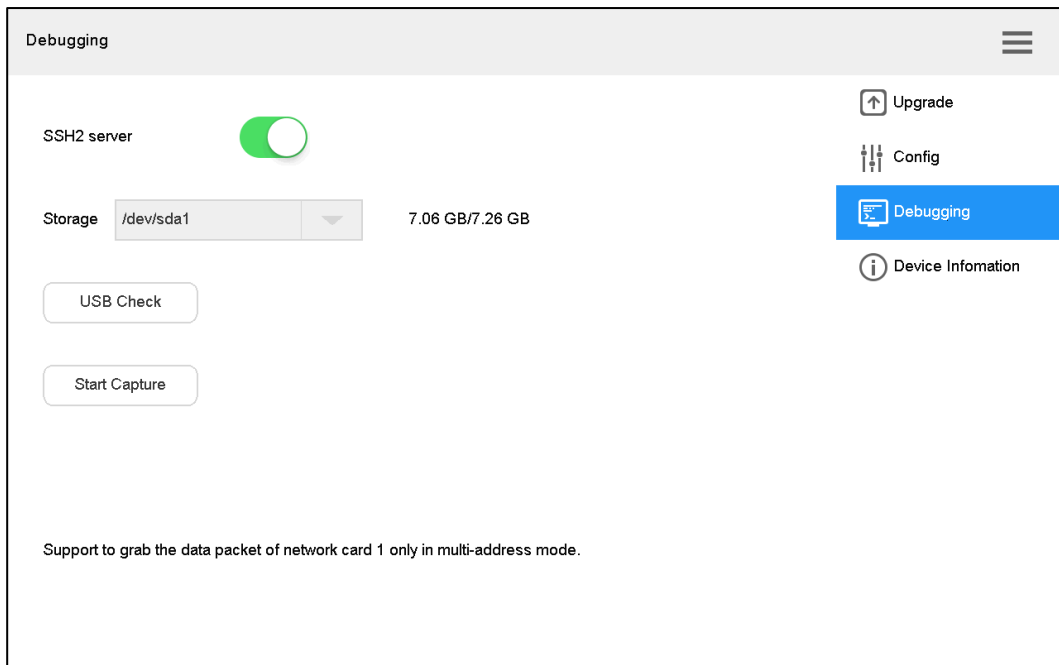
9.4.3 Debugging

In case of network error, you can capture the packet on this interface, download the file to flash drive, and then provide the file to technical support personnel to analyze network status.

Step 1 On the **System** interface, click **Debugging** tab.

The **Debugging** interface is displayed. See Figure 9-16.

Figure 9-16 Debugging



Step 2 Select **SSH2 server**, to enable the **SSH2 server** function.

Step 3 Insert flash drive into the network keyboard, and click **USB Check**. Detect all connected USB and capacity.

Step 4 Click **Start Capture**.

Click **Stop Capture** after a while. The captured data packet will be stored in flash drive.

9.4.4 Device Information

You can view S/N and MAC address of the network keyboard.

On the **System** interface, click **Device Information** tab.

The **Device Information** interface is displayed. See Figure 9-17.

Figure 9-17 Device information

The screenshot displays a settings page titled "Device Information". On the left side, there are three fields: "S/N : 3L05F80PAJ66D8B", "MAC1 : 14:A7:8B:13:F9:50", and "MAC2 : 14:A7:8B:13:F9:51". On the right side, there is a vertical menu with four items: "Upgrade" (with an upward arrow icon), "Config" (with a vertical bars icon), "Debugging" (with a terminal icon), and "Device Information" (with an information icon and highlighted in blue). A hamburger menu icon is located in the top right corner of the page header.

10 Extension

Control the devices with direct physical connection with network keyboard. At present, it only supports to control speed dome with RS-485 port.

Step 1 On the main interface, click **Extension**.

The **Analog** interface is displayed. See Figure 10-1.

Figure 10-1 Analog

The screenshot shows a configuration window titled "Analog" with a hamburger menu icon in the top right corner. The window contains several configuration fields, each with a label on the left and a value in a text box or dropdown menu on the right:

- Connection Mode: RS485 (dropdown)
- Device Type: Dome Camera (text box)
- Address: 1 (text box)
- Protocol: PELCOD (dropdown)
- Baud Rate: 9600 (dropdown)
- Data Bit: 8 (dropdown)
- Parity: Null (dropdown)
- Stop Bit: 1 (dropdown)

At the bottom of the window is an "OK" button.

Step 2 Set the parameters. Refer to Table 10-1.

Table 10-1 Analog keyboard parameter description

Parameter	Description
Connection mode	Set the connection mode, which only supports RS-485 at present.
Device type	Enter device type.
Address	Enter device address.
Protocol	Select the protocol, including SD1, PELCOD, PELCOP and so on.
Baud rate	Select baud rate.
Data bit	It includes 5, 6, 7 and 8.
Parity	It includes null, odd and even parity.
Stop bit	It includes 1, 1.5 and 2.

Step 3 Click **OK**.

Open PTZ control interface to carry out PTZ control.

Appendix 1 Technical Parameters

Appendix table 1-1 Technical parameters

Parameter	Description
LCD screen	10.1 inch TFT LCD screen, 1280×800 resolution
Touch screen	10.1 inch capacitive screen, 1280×800 resolution
Joystick	4D joystick
Video port	1 LCD screen and 4 HDMI ports. There are 5 output ports in total.
Local decoding	[Stream type] Support H.265, H.264, H264H, H264B, MJPEG, SVAC, SmartH.264 and non-standard stream. [Decoding performance] Support hardware decoding, 1200W/4K/1080P [Split performance] At present, single screen supports maximum 16-split, so 5 screens support 80-split in total.
Audio input	1 audio input, 3.5 mm stereo, support voice intercom function.
Audio output	1 audio output, 3.5 mm stereo
Loudspeaker	1 loudspeaker to play audios.
Network port	Two 100M/1000M Ethernet ports
Wi-Fi	Supported
USB port	4 USB ports, including two USB2.0 ports and two USB3.0 ports
RS-485	1, as PTZ control port
RS-232	2, as ordinary serial port (debugging), to control the recorder and other devices
RS-422	1
Power input	DC 12V 4A
Operating temperature	-10 °C to 55 °C (14°F to 131°F)
Operating humidity	10%–95% 86 kPa–106 kPa
Dimension	Host: 425 mm × 194 mm × 59 mm (L × W × H, excluding joystick / antenna) Keyboard: 421 mm × 105 mm × 26 mm (L × W × H)
Weight	3.73kg