

Network Keyboard

Quick Start Guide

V1.0.0

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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.

Overview

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

Symbol Definition

The following symbols may appear in the document. Please refer to the table below for the respective definition.

Symbol	Note
 Danger	It indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 Warning	It indicates a moderate or low level of potential danger which, if not avoided, could result in minor or moderate injury.
 Caution	It indicates a potential risk that, if ignored, could result in damage to device, loss of data, degraded performance, or unpredictable results.
 Anti-static	It means electrostatic-sensitive device.
 Protection against electric shock	It means high-voltage danger.
 Laser radiation	It means intensive laser radiation.
 Tip	It means that it can help you to solve some problems or save your time.
 Note	It means the additional information, which is the emphasis and supplement of the main body.

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

- Please don't place and install the device in an area exposed to direct sunlight or near heat generating device.
- Please don't install the device in a humid, dusty or fuliginous area.
- Please keep its horizontal installation, or install it at stable places, and prevent it from falling.
- Please don't drip or splash liquids onto the device; don't put on the device anything filled with liquids, in order to prevent liquids from flowing into the device.
- Please install the device at well-ventilated places; don't block its ventilation opening.
- Use the device only within rated input and output range.
- Please don't dismantle the device arbitrarily.
- Please 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

- Please make sure to 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!
- Please make sure to use standard power adapter matched with this device. Otherwise, the user shall undertake resulting personnel injuries or device damages.
- Please 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, please keep an angle that facilitates operation.

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1

Appearance and Keys of Internet Keyboard

1.1 Product Appearance

Appearance of internet keyboard is shown in Figure 1-1. Please refer to Table 1-1 for details.

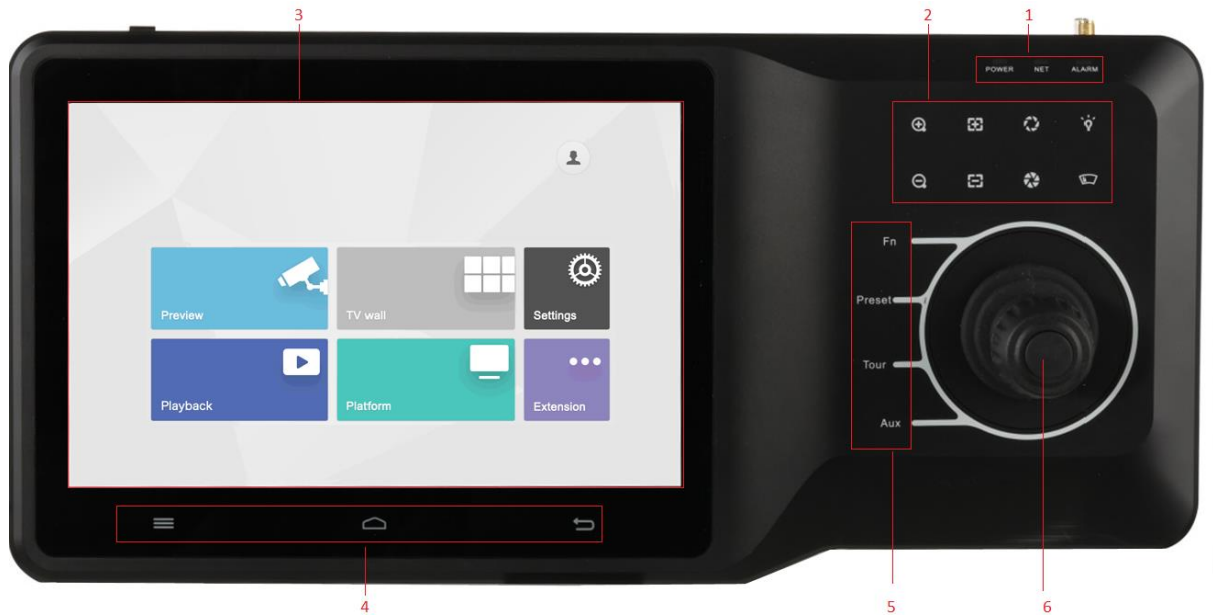


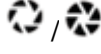
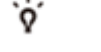



Figure 1-1

No.	Icon	Function
1	Power	Working power indicator light. Green light turns on when working power of internet keyboard is normal.
	Network	Network indicator light. Green light turns on when the keyboard is connected with 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 aperture of PTZ lens.
		Shortcut key to control speed dome light.
		Shortcut key to control speed dome wiper.

No.	Icon	Function
3	-	Touch screen, showing keyboard screen menu.
4	☰	Navigation bar.
	🏠	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.

Table 1-1

1.2 Key Module

After key module is connected with internet keyboard through USB or Bluetooth successfully, green light at the upper right corner will be on for 10s and then turn off. Schematic diagram of key module is shown in Figure 1-2. Please refer to Table 1-2 for details.

When key module is connected with internet keyboard through Bluetooth, please turn on main switch at the side of key module. In case of Bluetooth connection, default WI-FI network name is "KEYBOARD".



Figure 1-2

Key	Example	Function
F1	Press F1	Reserved.
F2	Press F2	Reserved.
F3	Press F3	Reserved.
F4	Press F4	Reserved.
Mode	Operation mode switch. It is operation mode at present.	Reserved.
0~9	Number 0~9	-
Screen	123+screen	Reserved.
Window	3+window	Focus on the 3 rd window of present screen.
Split	4+split	Divide present screen into 4 splits.

Key	Example	Function
	Press	Delete 1 digit from number buffer zone. The icon is similar to squares.
(Camera group)	123+	Reserved.
(Camera)	567+	Drag no. 567 camera into present window. Note 0+camera means to turn off present video source.
Preset	2+preset	Call no. 2 preset point.
Tour	5+tour	Call no. 5 tour.
PTZ	-	In case of USB power supply, long press it to turn on and off the backlight.
Scan	3+scan	Call no. 3 scan.
Pattern	4+pattern	Call no. 4 pattern.
Rotate	Press	Press it once to start rotation, and press it again to stop rotation.
Exit	-	Reserved.
Confirm	-	Snapshot function under preview module.
(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.

Table 1-2

1.3 Port Introduction

1.3.1 Rear Panel Ports

Rear panel ports are shown in Figure 1-3. Please refer to Table 1-3 for details.

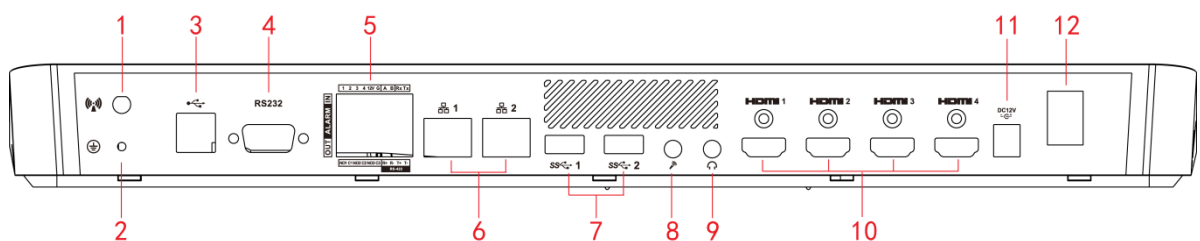


Figure 1-3

No.	Name	Function
1	WI-FI port	Connect Wi-Fi antenna.
2	Grounding stud	Grounding.
3	USB2.0	Connect mouse and USB.
4	RS232	Connect serial port.

No.	Name	Function
5	Alarm input/output port	Please refer to Table 1-4 for details.
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.

Table 1-3

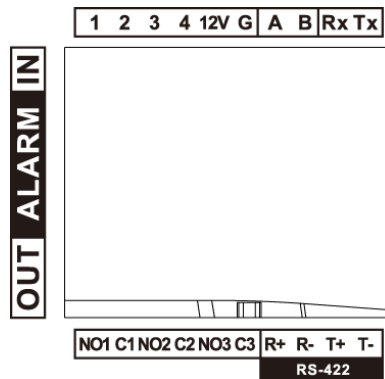


Figure 1-4

No.	Name
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.

Table 1-4

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 start the internet 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” and 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, as shown in Figure 3-1.

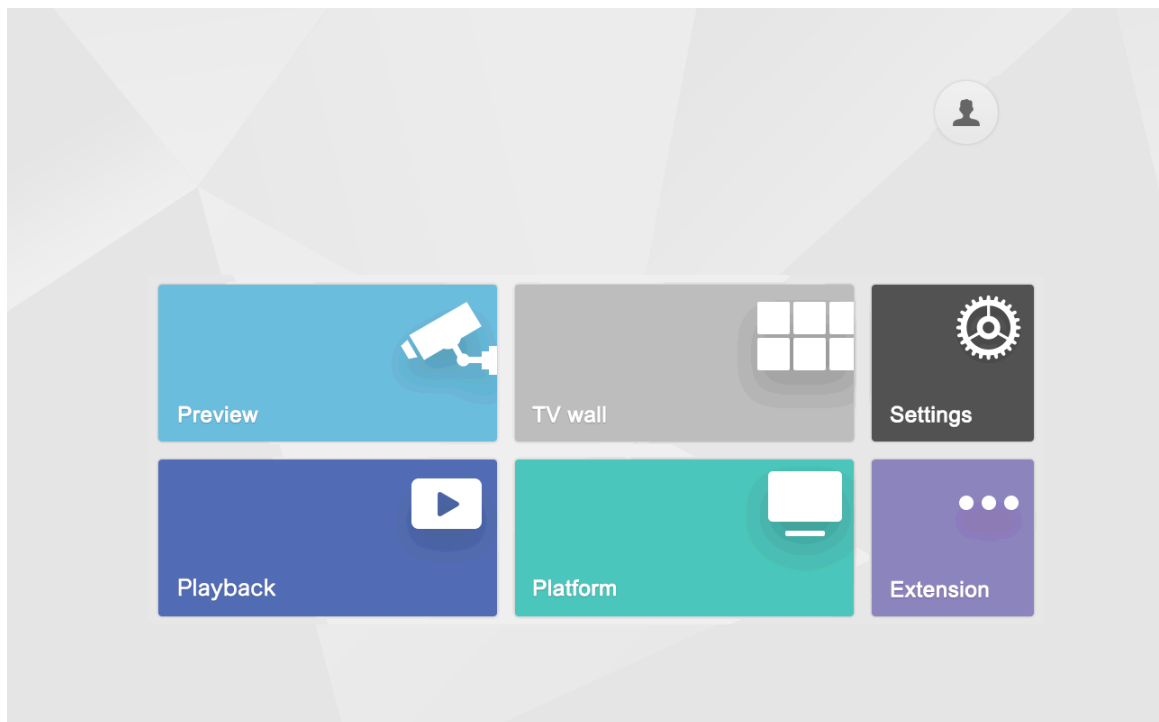


Figure 3-1

Please refer to Table 3-1 for details.

Name	Description
Preview	Preview local devices and corresponding operations.
TV wall	Control decoder/matrix/TV wall.

Name	Description
Playback	Play back videos in local recording device or USB disk.
Platform	After connecting with the platform, internet keyboard is able to control devices on the platform.
Settings	There are four modules, including device, general, account and system.
Extension	Control the devices with direct physical connection with internet keyboard. At present, it only supports to control speed dome with 485 port.

Table 3-1

3.3 Settings Interface

At the main interface, click “Settings” to enter “Settings” interface, as shown in Figure 3-2. Please refer to Table 3-2 for functional descriptions.

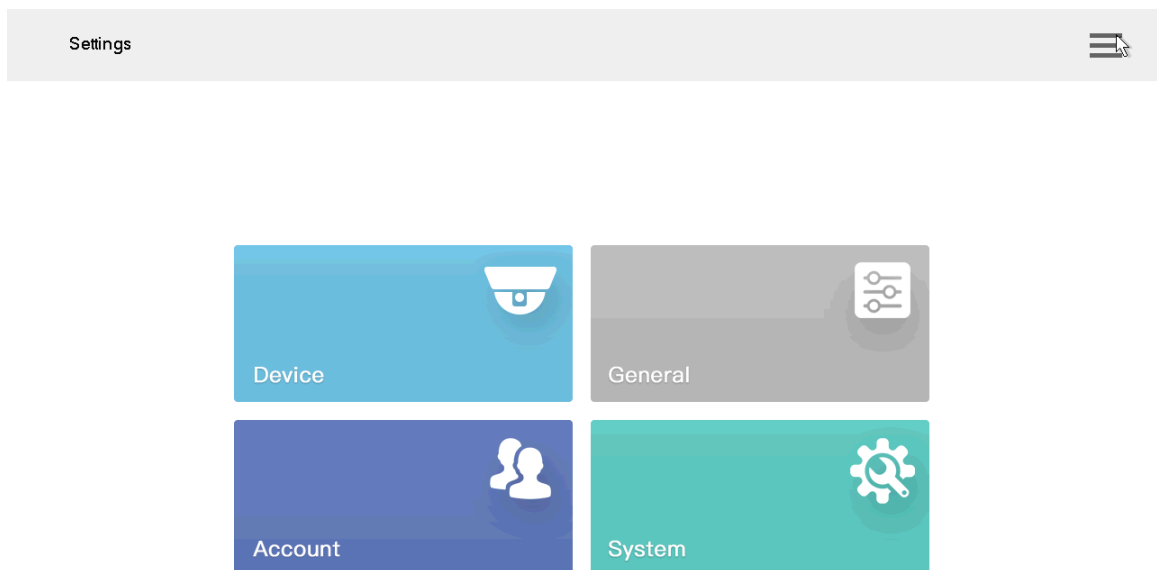



Figure 3-2

Name	Description
Device	Add, modify and delete devices; view input channel and modify input channel no. 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.

Table 3-2

 Note

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 internet keyboard, so as to connect with other devices in the networking.

Precondition

Before setting network parameters, please ensure that the internet keyboard has connected network correctly.

Step 1 At “Settings” interface, click “General”. The system displays “Network” interface, as shown in Figure 3-3.

The screenshot displays the 'Network' settings page. At the top, there's a header 'Network' with a menu icon. Below it, a sidebar on the right lists various settings: Network (selected), WiFi, Bluetooth, Serial, General, and Hardware. The main content area is divided into several sections. The first section includes 'Net Mode' (Multi-address), 'Default Card' (Ethernet1), and 'TCP Port' (37777). The second section includes 'IP Version' (IPv4), 'Ethernet Card' (Ethernet1), 'IP Address' (172.3.4.24), 'Subnet Mask' (255.255.0.0), and 'Gateway' (172.3.0.1). The third section includes 'Preferred DNS' (223.5.5.5) and 'Alternate DNS' (223.6.6.6). At the bottom, there are three buttons: 'Default', 'Save', and 'Cancel'.

Figure 3-3

Step 2 Set the parameters. Please refer to Table 3-3 for details.



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 undertake 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.
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". Default IP address of Internet keyboard is "192.168.1.108".
Subnet mask	
Gateway	
Preferred DNS	IP address of DNS server.
Alternate DNS	IP address of alternate DNS server.

Table 3-3

Step 3 Click "Save".

3.4.2 Wi-Fi

Automatic Search for Wi-Fi

Click  to enable WI-FI function. The system will search Wi-Fi automatically and display results as shown in Figure 3-4. Click  to update the search.

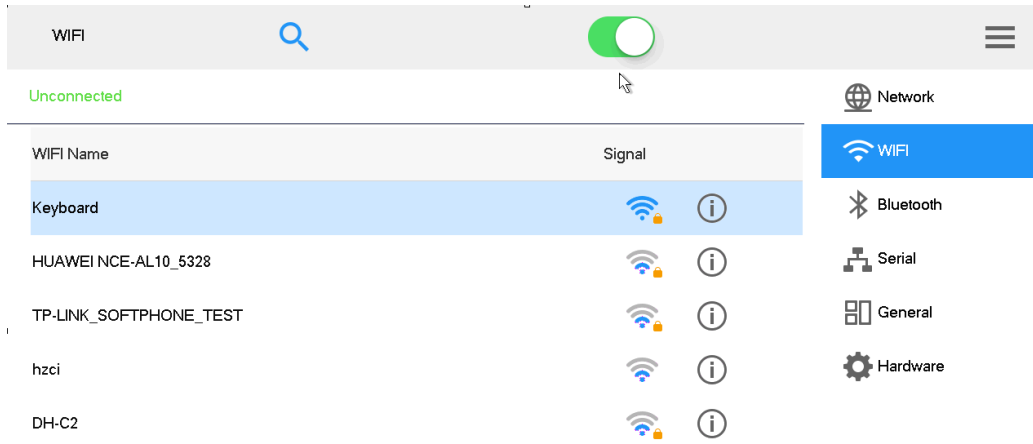


Figure 3-4


Wi-Fi Connection

- Step 1 Double click Wi-Fi name or signal strength. “Wi-Fi Connection” dialog box will pop out, as shown in Figure 3-5.
- Step 2 Enter correct password and click “Connect”.
In case of successful connection, the connected “Wi-Fi Name” and “Connected” will be displayed at the upper left corner.



Figure 3-5

Disconnect Wi-Fi

Click  on the right of “Connected” Wi-Fi and click “Disconnect” in the popped out dialog box.

3.5 Add Device

It includes manual adding and auto search.

3.5.1 Enter Device Management Interface

In “Settings” interface, click “Device Manage” to enter the interface, as shown in Figure 3-6.

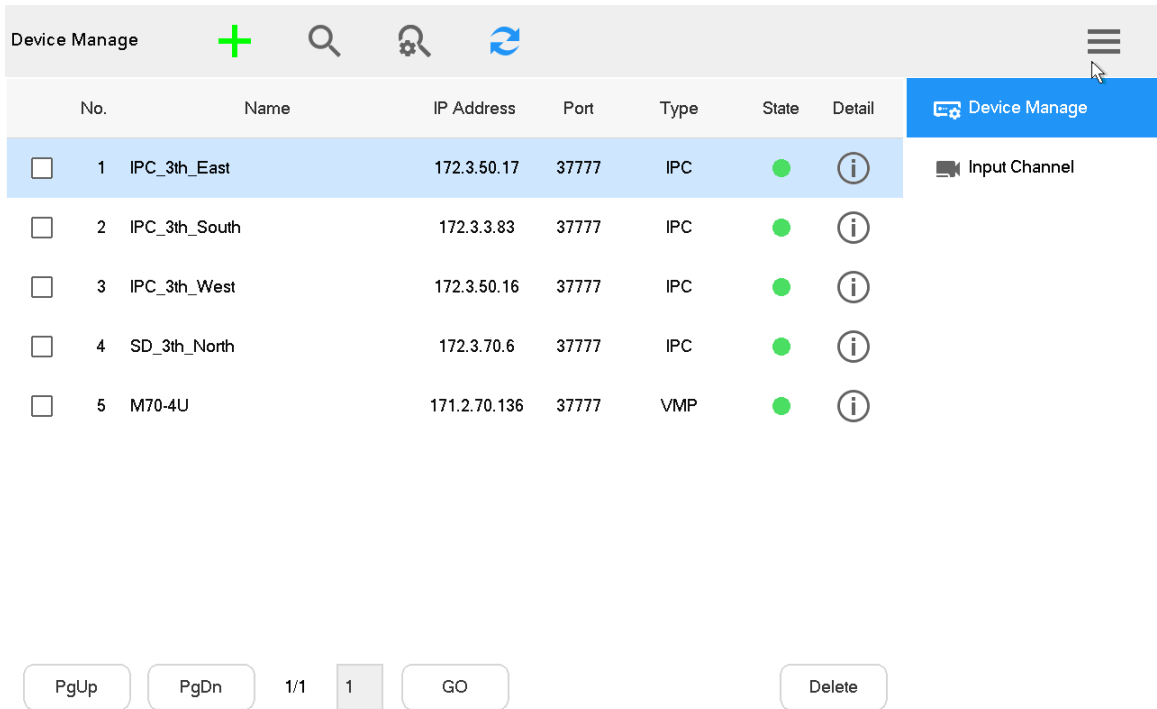



Figure 3-6

3.5.2 Manual Add

Step 1 Enter “Device Manage” interface and click . The system pops out “Manual Add” dialog box, as shown in Figure 3-7.

Cancel Manual Add OK

Protocol Private

Start IP 0 . 0 . 0 . 0

End IP 0 . 0 . 0 . 0

Port 37777

Username admin

Password


Channel 16 

Figure 3-7

Step 2 Set the parameters. Please refer to Table 3-4.




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.

Table 3-4

Step 3 Click “OK”.

3.5.3 Auto Search

Step 1 Enter “Device Manage” interface and click . The system pops out dialog box of auto search, as shown in Figure 3-8.

Device Manage Username Modify Password

<input checked="" type="checkbox"/>	Network Segment1	172 . 3 . 50 . 1	—	<input type="text" value="172 . 3 . 50 . 30"/>
<input type="checkbox"/>	Network Segment2	192 . 168 . 0 . 1	—	192 . 168 . 0 . 255
<input type="checkbox"/>	Network Segment3	192 . 168 . 0 . 1	—	192 . 168 . 0 . 255
<input type="checkbox"/>	Network Segment4	192 . 168 . 0 . 1	—	192 . 168 . 0 . 255
<input type="checkbox"/>	Network Segment5	192 . 168 . 0 . 1	—	192 . 168 . 0 . 255
<input type="checkbox"/>	Network Segment6	192 . 168 . 0 . 1	—	192 . 168 . 0 . 255
<input checked="" type="checkbox"/>	Port	<input type="text" value="37777"/>		


Default Save Cancel




Figure 3-8

Step 2 Enter IP segment and tick the check box.

Step 3 Click “Save”. Auto search results are shown as Figure 3-9.

 Note

Alternatively, click  to view search results.

Device Manage   

	Name	IP Address	Port	State
<input checked="" type="checkbox"/>	IPC-HFW5421E-Z	172.3.50.17	37777	
<input type="checkbox"/>	IPC-HFW1120S-W	172.3.50.20	37777	
<input type="checkbox"/>	SD-6A9230F-HNI	172.3.50.19	37777	
<input type="checkbox"/>	ITC302-RF1A	172.3.50.18	37777	
<input type="checkbox"/>	IP Camera	172.3.50.3	37777	
<input type="checkbox"/>	IP Camera	172.3.50.21	37777	
<input checked="" type="checkbox"/>	IP Camera	172.3.50.16	37777	
<input type="checkbox"/>	IPC-HFW4300S	172.3.50.1	37777	

PgUp PgDn 1/1 GO None Add

Figure 3-9

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

4.1 Enter Preview Interface

Click “Preview ” at main interface to enter “Preview” interface, as shown in Figure 4-1. There are five modes, including VGA and HDMI1~HDMI4.

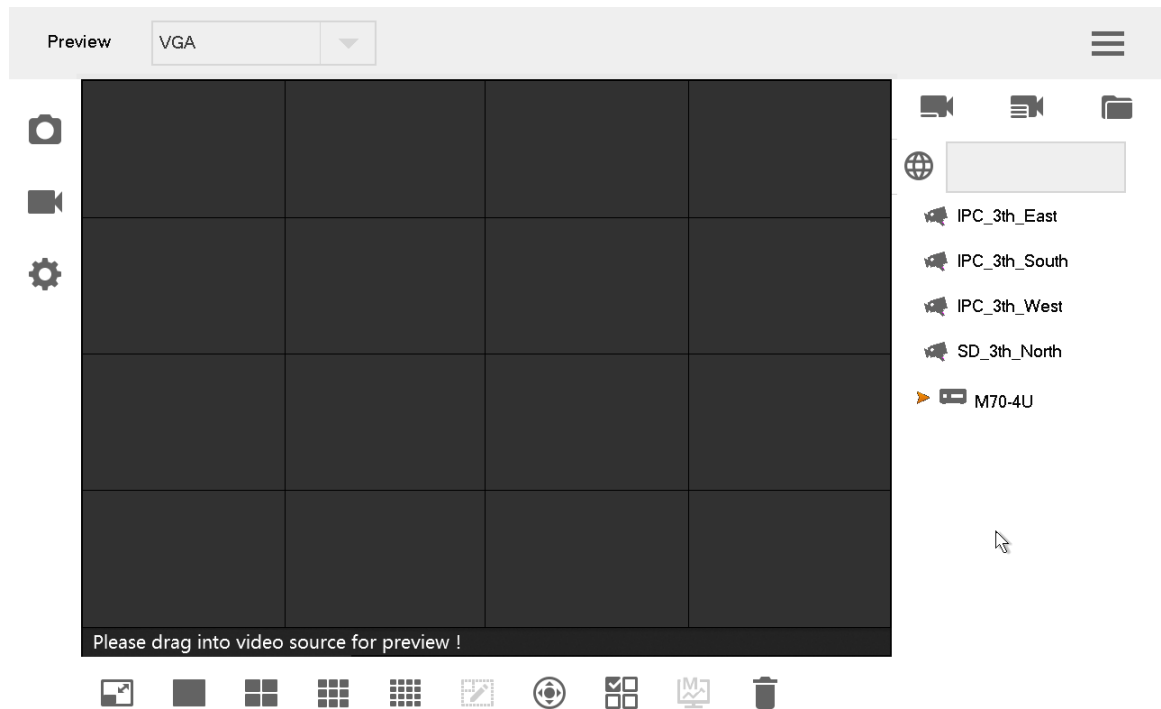










Figure 4-1

4.2 Icons of Preview Interface

Icon	Description	Icon	Description
	Snapshot Screenshot to USB disk		Manual recording
	Snapshot and recording settings		Maximize and restore the window
	Single split		4-split
	9-split		16-split






Icon	Description	Icon	Description
	Custom split		PTZ
	Select screen		Smart stream mode
	Delete	-	-



Table 4-1

4.3 Video on Wall

Step 1 At “Preview” interface, select VGA or HDMI1~HDMI4 in pull-down dialog box.

Step 2 Select video source in 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, as shown in Figure 4-2. Enter “Number (such as 1)+
”, so no. 1 device will be on wall quickly.

 Note

Please refer to “8.1.2 Input Channel” to inquire “Number” in the input channel.







7	8	9
4	5	6
1	2	3
	0	
		

Figure 4-2

Quick Search for Added Device (Optional)


In the input box behind  , enter keywords of the added device, so as to search the added device.

Click the popped out language box, as shown in Figure 4-3. Press [Shift] key to switch the input method.



Figure 4-3

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 to be , 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 “7. PTZ Control” for details.


4.5 Snapshot

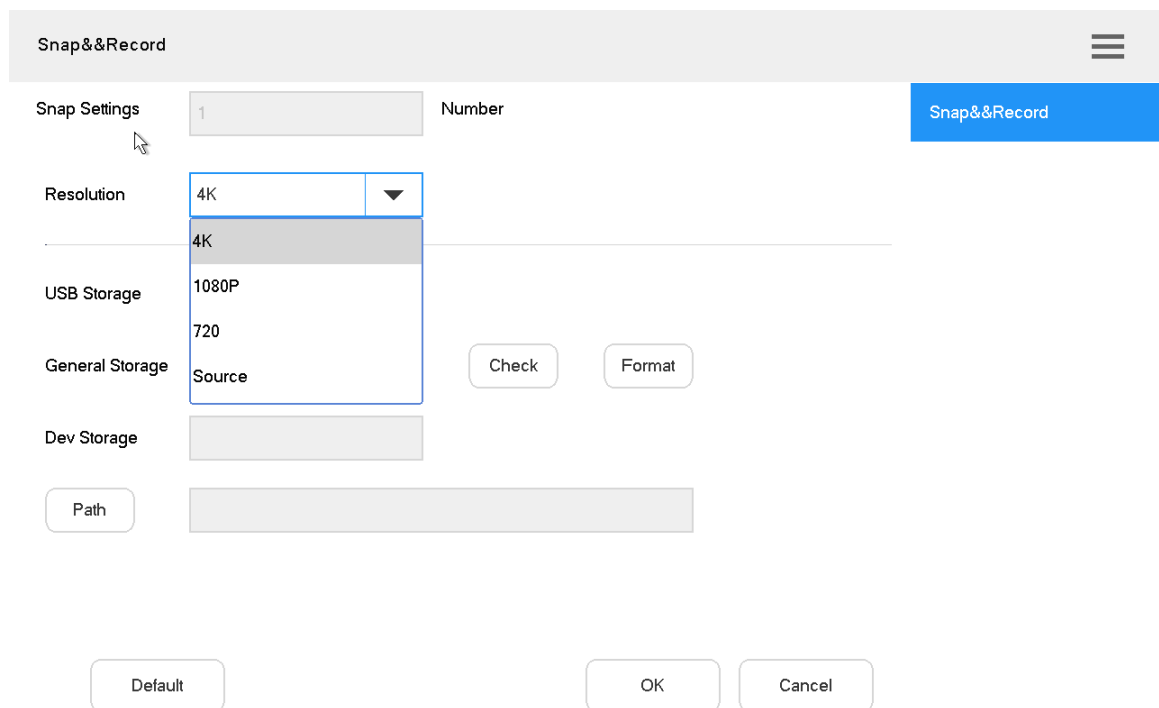
At “Preview” interface, insert a USB disk into Internet keyboard, and click  after checking USB disk.

4.6 Recording

At “Preview” interface, insert a USB disk into Internet keyboard, and click  after checking USB disk.

4.7 Snapshot and Recording Settings

Step 1 At “Preview” interface, click . The system displays “Snap & Record” interface, as shown in Figure 4-4.



The screenshot shows the "Snap&&Record" configuration window. The "Snap Settings" field is set to "1". The "Resolution" dropdown menu is open, showing options for "4K", "1080P", and "720". The "USB Storage" field is labeled "Source". There are "Check" and "Format" buttons next to the "USB Storage" field. The "Dev Storage" field is empty. The "Path" field is also empty. At the bottom of the window, there are "Default", "OK", and "Cancel" buttons.

Figure 4-4

Step 2 Insert a USB disk into Internet keyboard.

Step 3 Click “Check”. The system displays general storage disk name and device storage.

Step 4 Set the parameters. Please refer to Table 4-2 for details.

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

Table 4-2

Step 5 Click "OK".

Control decoder/matrix/TV wall.

Devices can be added only through WEB client. For details, please refer to “5.1 Add TV Wall through Matrix WEB Client” and “5.2 Add 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 “5.8 Configure TV Wall” for details.

5.1 Add TV Wall through Matrix WEB Client

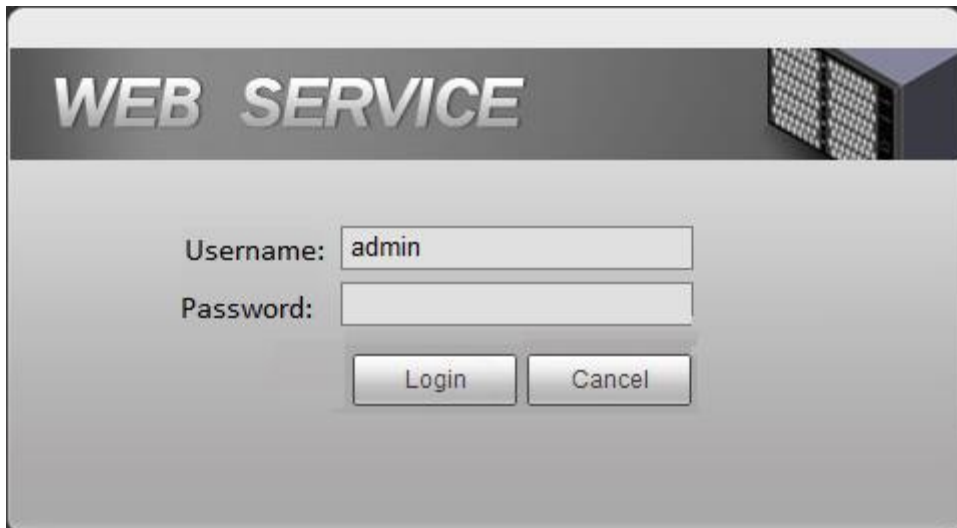
This part takes matrix WEB client as an example.

 Note

- This part is operated at matrix WEB client.
- For more specific configurations, please refer to matrix user’s manual.
- This part also applies to large screen device.

5.1.1 Enter Matrix WEB Login Interface

Step 1 Enter IP address of matrix at address bar of the browser; press [Enter] key to enter matrix login interface, as shown in Figure 5-1.



The screenshot shows a web browser window displaying the Matrix WEB Service login interface. The title bar of the browser window is not visible. The page has a dark header with the text "WEB SERVICE" in a light, stylized 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 the input fields are two buttons: "Login" and "Cancel".

Figure 5-1

Step 2 Enter username and password. Default password is “admin”.

Step 3 Click “Login” to enter WEB interface.

5.1.2 Add Network Signal

Search or add network signals manually.

Step 1 Select “Settings > Signal > Network Signal”. The system displays “Network Signal” interface, as shown in Figure 5-2.

No.	IP Address	Port

No.	Connection Status	IP Address	Port	
<input type="checkbox"/>	1	Successful	171.2.2.11	37777
<input type="checkbox"/>	2	Successful	171.2.2.25	37777

Figure 5-2

Step 2 Add network signals.

- Click “Device Search” to show search results, select the needed device and click “Add”.
- Click “Manual Add” to set parameters in the popped out dialog box.

5.1.3 Signal Group

Select “Settings > Signal > Signal Group”. The system displays “Signal Group” interface, as shown in Figure 5-3. Devices in the device list can be added to group list.

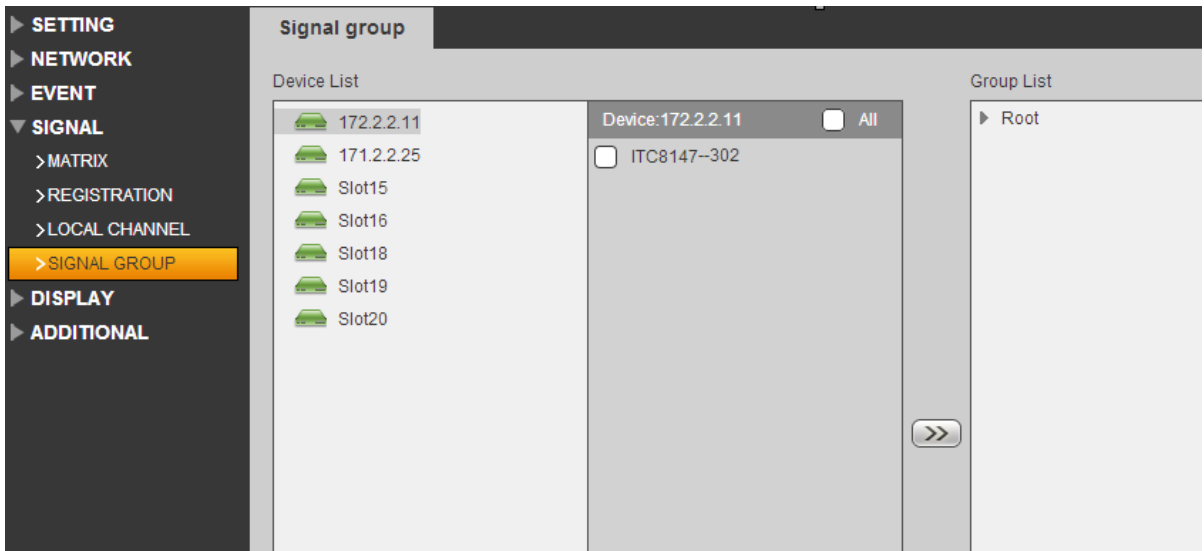


Figure 5-3

5.1.4 Add TV Wall

Step 1 Select “Settings > Display > TV Wall> TV Wall Config”. The system displays “TV Wall Config” interface, as shown in Figure 5-4.

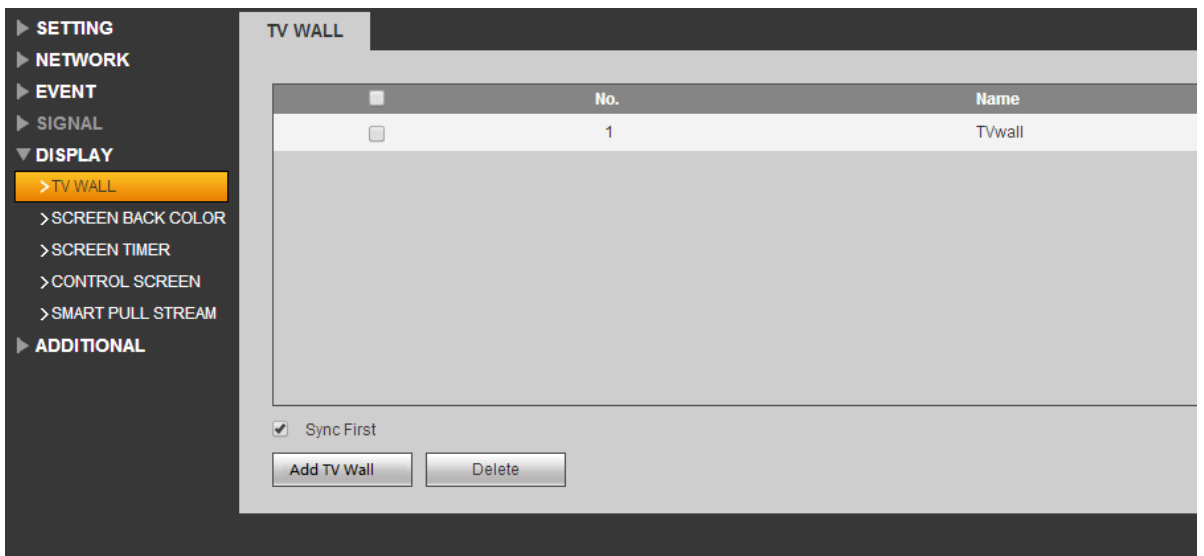


Figure 5-4

Step 2 Click “Add TV Wall” to add it.

5.2 Add TV Wall through Decoder WEB Client

This part takes decoder WEB client as an example.

Note

- This part is operated at decoder WEB client.

- For more specific configurations, please refer to decoder user's manual.

5.2.1 Enter Decoder WEB Login Interface

Step 1 Enter IP address of decoder at address bar of the browser; press [Enter] key to enter decoder login interface, as shown in Figure 5-5.

Figure 5-5

Step 2 Enter username and password. Default password is “admin”.

Step 3 Click “Login” to enter WEB interface.

5.2.2 Add Remote Device

Search or add network signals manually.

Step 1 Select “Settings > Remote Device”. The system displays “Remote Device” interface, as shown in Figure 5-6.

SN	IP Address	Mac Address
201	171.2.2.176	4c:11:bf:57:80:70
202	171.2.3.151	18-66-DA-00-18-12
203	171.2.70.136	90:02:a9:7f:e0:a2
204	171.2.7.234	D4:BE:D9:A2:DD:36
205	171.2.2.203	20:15:07:16:08:48
206	171.2.2.99	22:22:22:22:22:22
207	171.2.2.106	90:02:a9:97:92:cd
208	171.2.2.3	20:91:84:07:13:01

Figure 5-6

Step 2 Add remote device.

- Click “Device Search” to show search results, select the needed device and click

“Add”.

- Click “Manual Add” to set parameters in the popped out dialog box.

5.2.3 Edit Decoder TV Wall

Click merged screen to edit TV wall.

5.3 Add Device

Add TV wall, matrix and decoder device. Please refer to “3.5 Add Device” for details.

5.4 Video on Wall

Step 1 At main interface, click “TV Wall” to enter “TV Wall” interface.

Step 2 In the pull-down list, select TV wall, as shown in Figure 5-7.

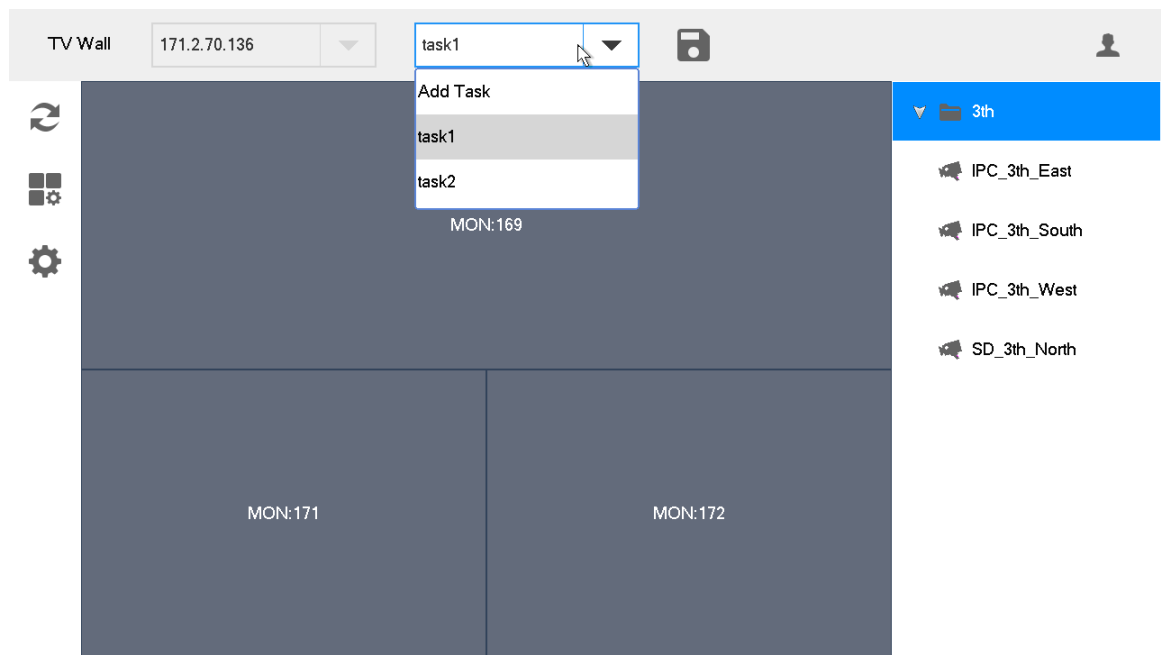



Figure 5-7

Step 3 Click one screen in Figure 5-7, such as MON:169.

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

Step 5 Drag video source in the right onto large screen. The system displays relevant info, as shown in Figure 5-8.

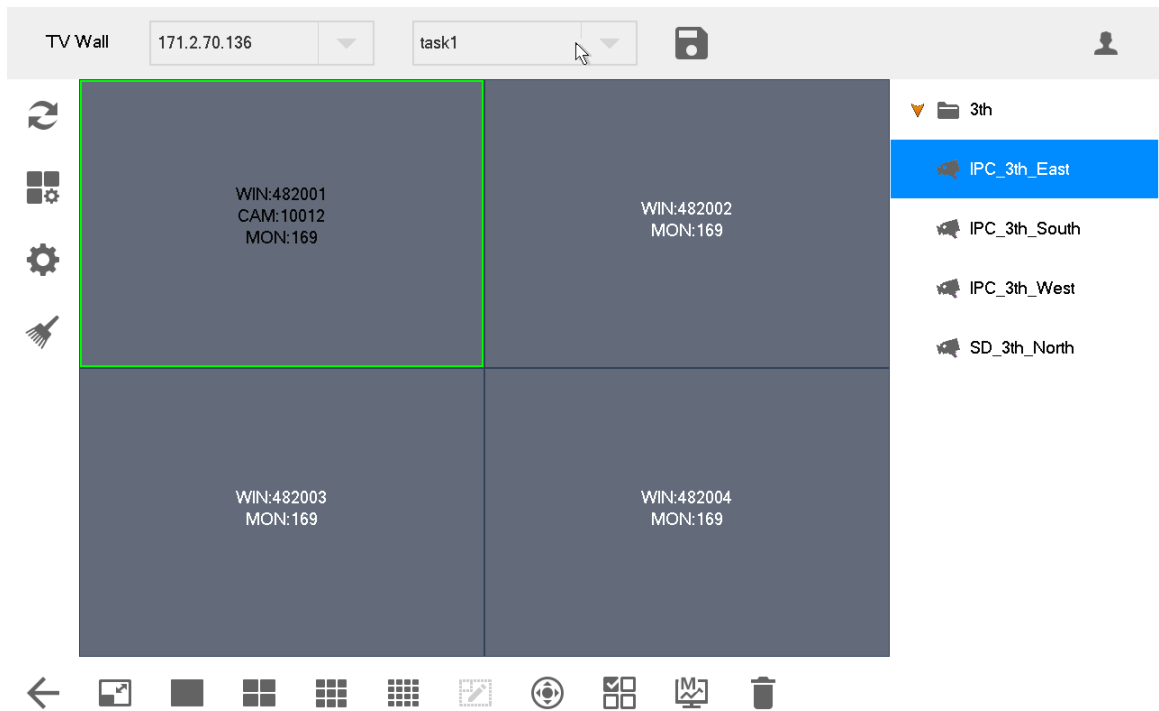




Figure 5-8

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”.

5.5 Icons of TV Wall Interface

Please refer to Table 5-1 for introductions to icons.

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








Icon	Description	Icon	Description
	9-split		16-split
	Custom split		PTZ
	Select screen		Switch main and sub-stream. M represents main stream, while S represents sub-stream.
	Delete	-	-

Table 5-1


5.6 PTZ Control

Please refer to “7 PTZ Control”.

5.7 Add Task

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

Step 1 At “TV Wall” interface, carry out a series of operations according to actual needs. For example, split the screen into 16 parts.

Step 2 Click . “Add Task” dialog box will pop out, as shown in Figure 5-9.

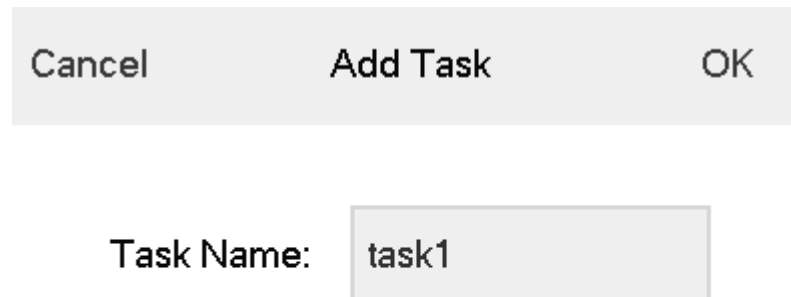


Figure 5-9

Step 3 Enter task name.

Step 4 Click “OK”.

5.8 Configure TV Wall

At “TV Wall” interface, click  to enter “TV Wall Config” interface, as shown in Figure 5-10.

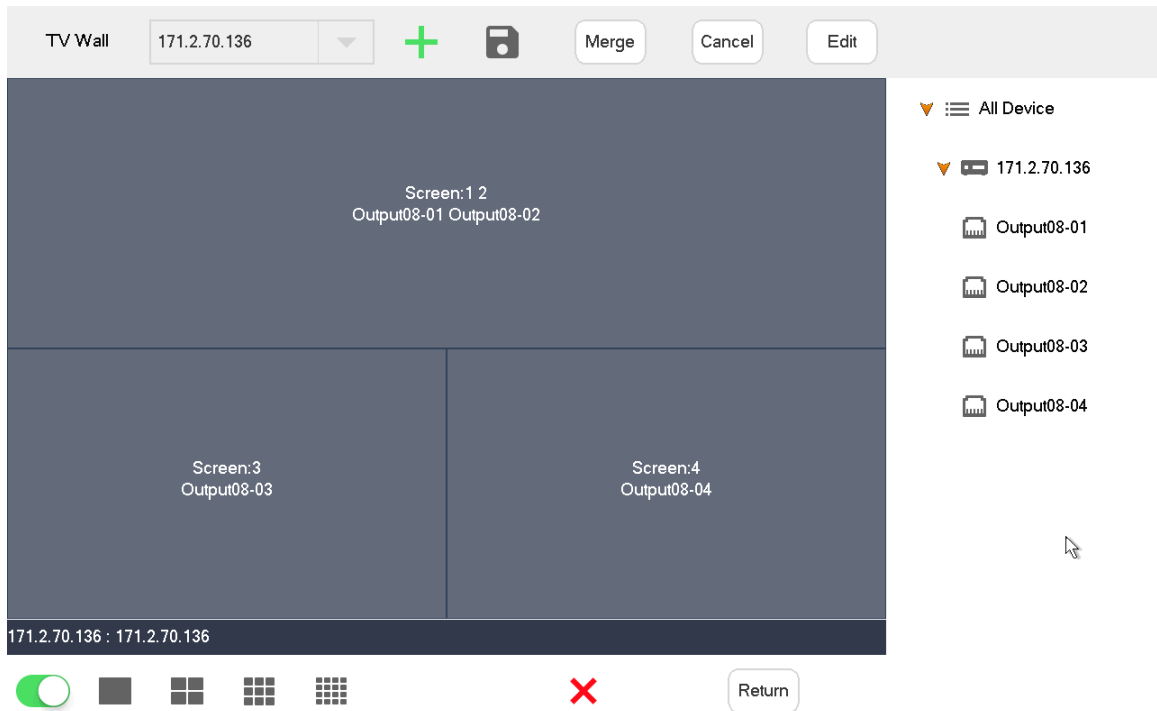



Figure 5-10


Enable TV Wall

Click  to enable TV Wall. Then, “TV Wall” pull-down list in Figure 5-7 will display this TV wall.

 Note

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 , and the system will pop out a dialog box of “New TV Wall”, as shown in Figure 5-11.

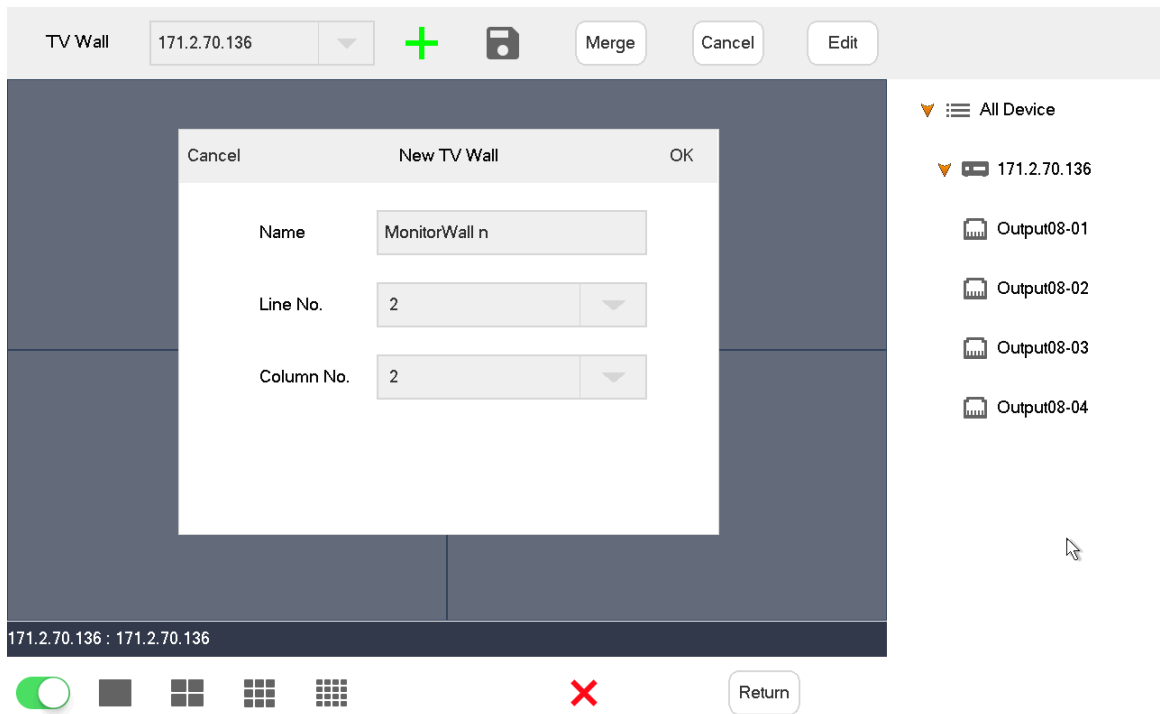



Figure 5-11

- Step 2 Enter the name, select line no. and column no., and then click “OK”.
- Step 3 Drag decoding channels in the right into the screen, so as to bond corresponding relations.
- Step 4 (Optional) Select two or more screens, click “Merge” 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 “Cancel”.

Edit TV Wall

Click “Edit” and the system will pop out a dialog box of “New TV Wall”, as shown in Figure 5-12.

Cancel	New TV Wall	OK
Name	MonitorWall n	
Line No.	2	▼
Column No.	2	▼

Figure 5-12

Return to TV Wall Interface

Click "Return" to return to TV wall interface.

Exit TV Wall Interface

Click  to exit TV wall interface.


6 Platform

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

7

PTZ Control

Precondition: speed dome owns PTZ function.

Click  in “Platform” interface, so PTZ control interface appears in the right, as shown in Figure 7-1.

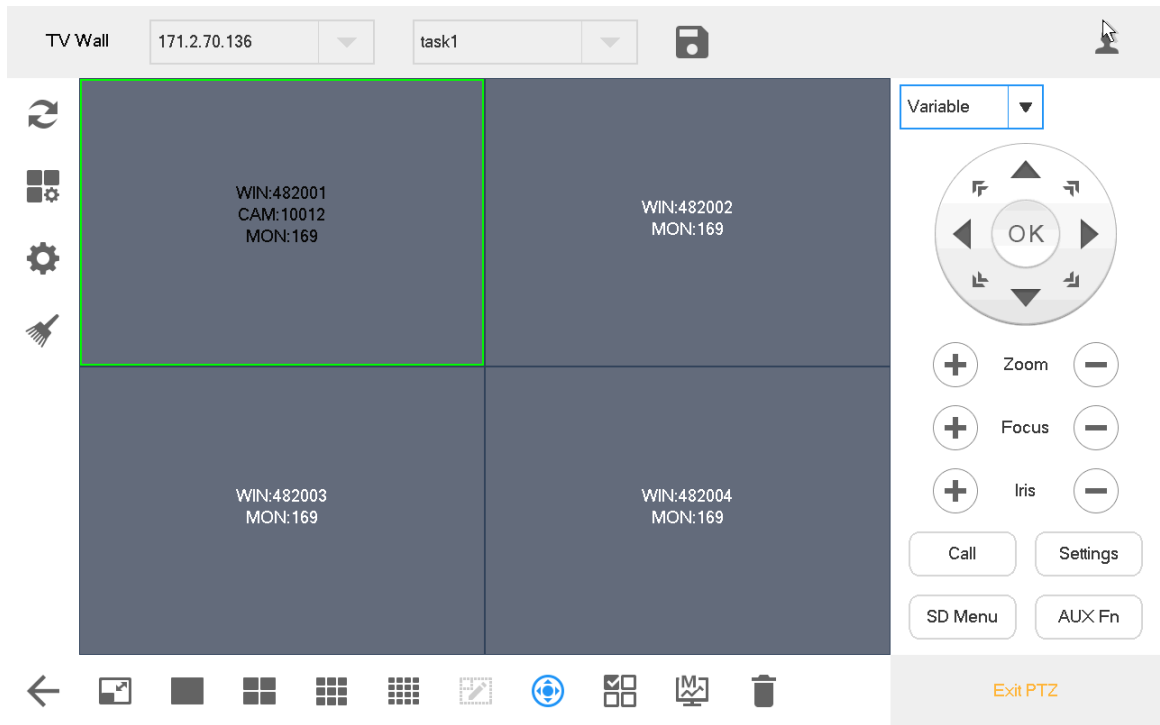


Figure 7-1

Parameter	Description
Step type	It consists of fixed step and variable step. <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.

Table 7-1



Use the joystick to control 8 directions of PTZ.

Call

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

It will be called successfully under the precondition that preset point 1 exists. Call methods of scan, tour and pattern are the same as that of preset point.

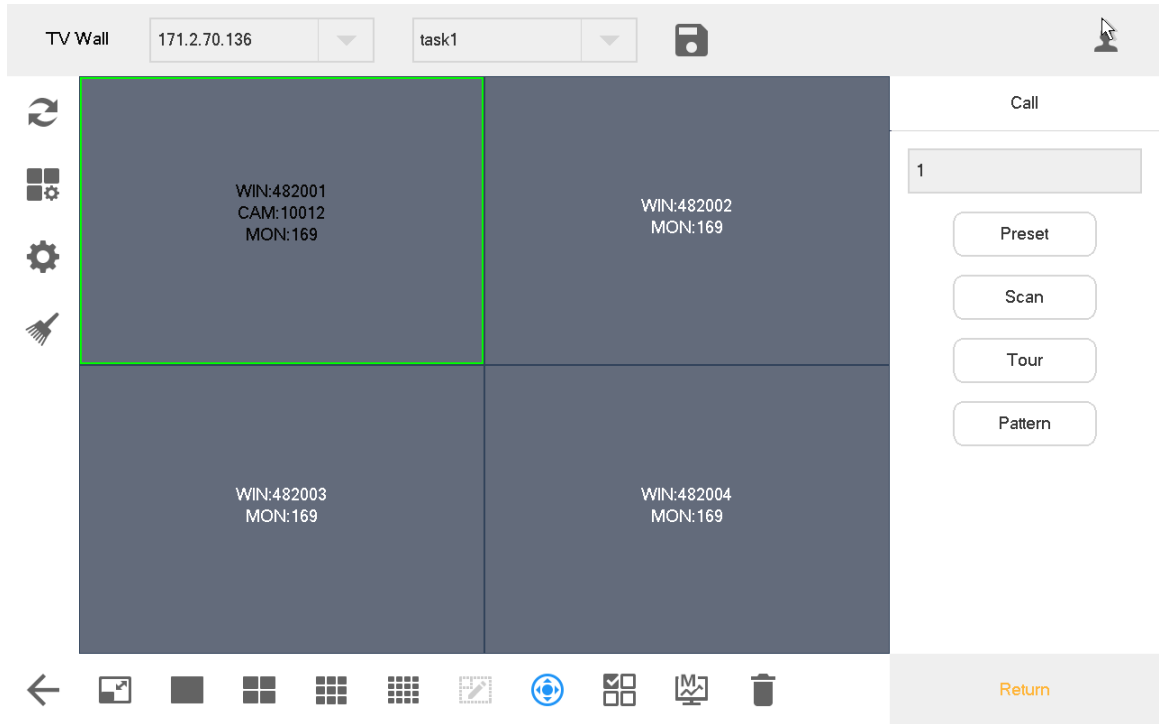


Figure 7-2

Settings

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.

Settings of Tour

- Step 1 Enter tour route value in “Tour No.” input box.
- Step 2 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.

Settings of Pattern

- Step 1 Enter pattern no. in the dialog box of pattern no..
- Step 2 Click “Start Pattern” to carry out operations of zoom, focus, iris or direction.
- Step 3 Click “Stop Pattern” to complete the settings of one pattern route.

Settings of Scan

Turn the camera to left margin with the joystick or direction button; click “Set Left” to determine left margin position. Set the right margin position in the same way, so as to complete the settings of scan route.

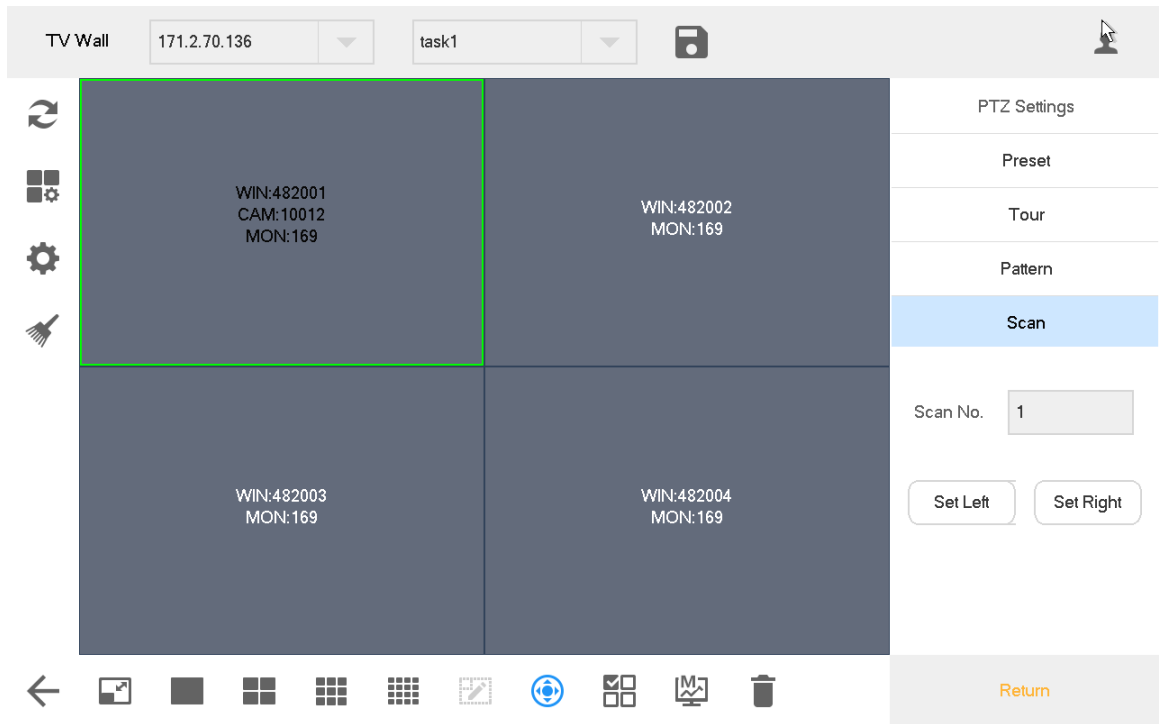


Figure 7-3

SD Menu

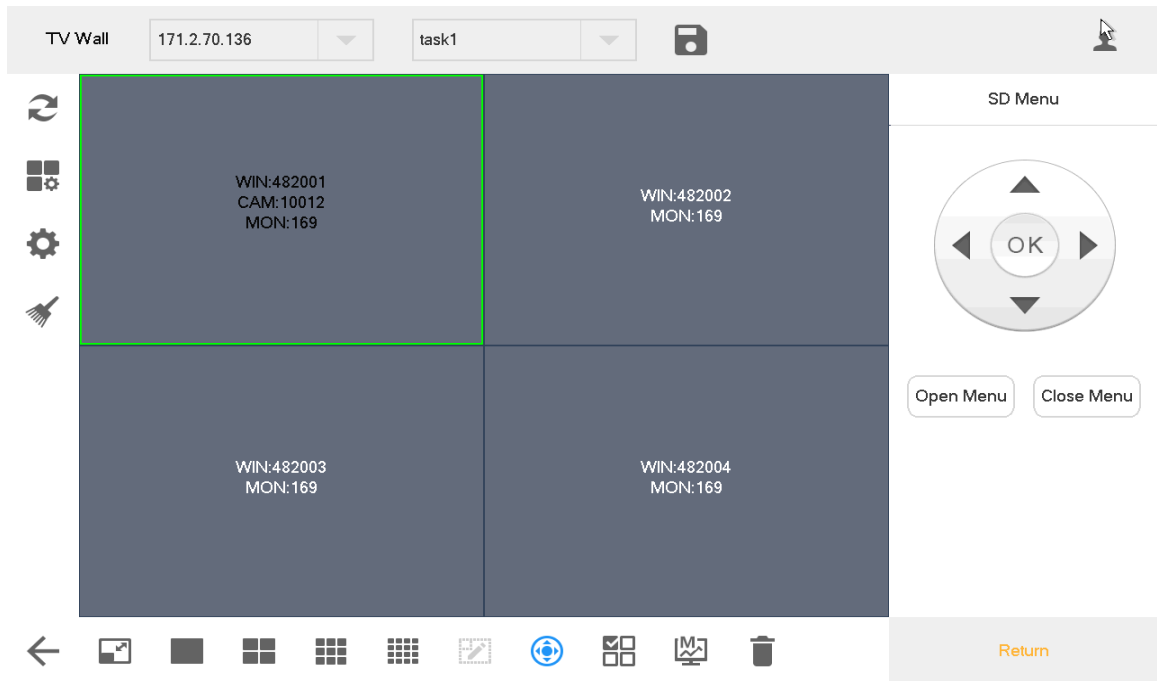


Figure 7-4

Auxiliary Function

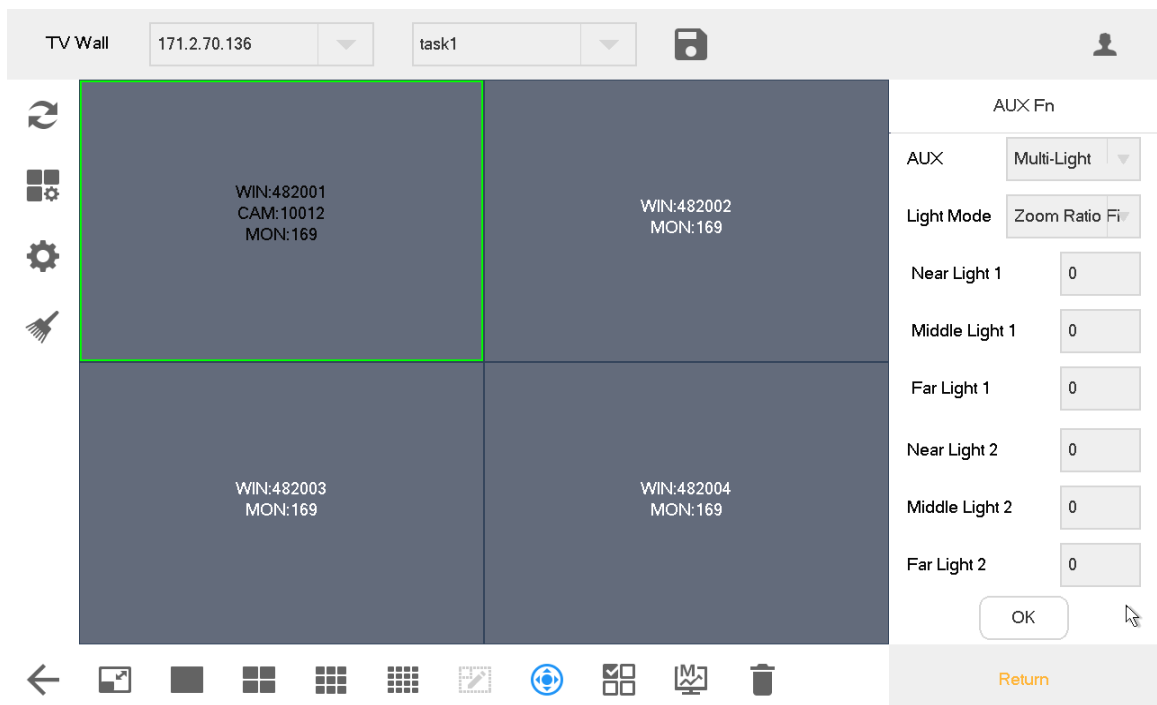


Figure 7-5

- Auxiliary function includes single light, multi-light and wiper.
- Light mode includes manual, SmartIR and zoom ratio first.
- Light strength: light strength can be set.
- Light angle: light angle can be set.

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

8.1 Device Management

8.1.1 Add Device

Please refer to “3.5 Add Device”.

8.1.2 Input Channel

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

At “Settings” interface, click “Device”, and then click “Input Channel” tab to enter “Input Channel” interface, as shown in Figure 8-1.

Input Channel							☰
NO.	Channel No.	Name	Device	IP Address	Detail		Device Manage
1	1	IPC_3th_East	IPC_3th_East	172.3.50.17			Input Channel
2	1	IPC_3th_South	IPC_3th_South	172.3.3.83			
3	1	IPC_3th_West	IPC_3th_West	172.3.50.16			
4	1	SD_3th_North	SD_3th_North	172.3.70.6			
5	1	channel_0	M70-4U	171.2.70.136			
6	2	channel_1	M70-4U	171.2.70.136			
7	3	channel_2	M70-4U	171.2.70.136			
8	4	channel_3	M70-4U	171.2.70.136			

PgUp PgDn 1/129 1 GO

Figure 8-1

Modify Input Channel No.

Click to modify input channel no. in the popped out dialog box.

8.2 General Settings

8.2.1 Wired Network

Please refer to “3.4.1 Wired Network” for details.


8.2.2 Wi-Fi


Please refer to “3.4.2 Wi-Fi” for details.

8.2.3 Bluetooth

Default Bluetooth name of internet keyboard is “KEYBOARD”.

Step 1 At “General” interface, click “Bluetooth” tab to enter “Bluetooth” interface.

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, as shown in Figure 8-2.

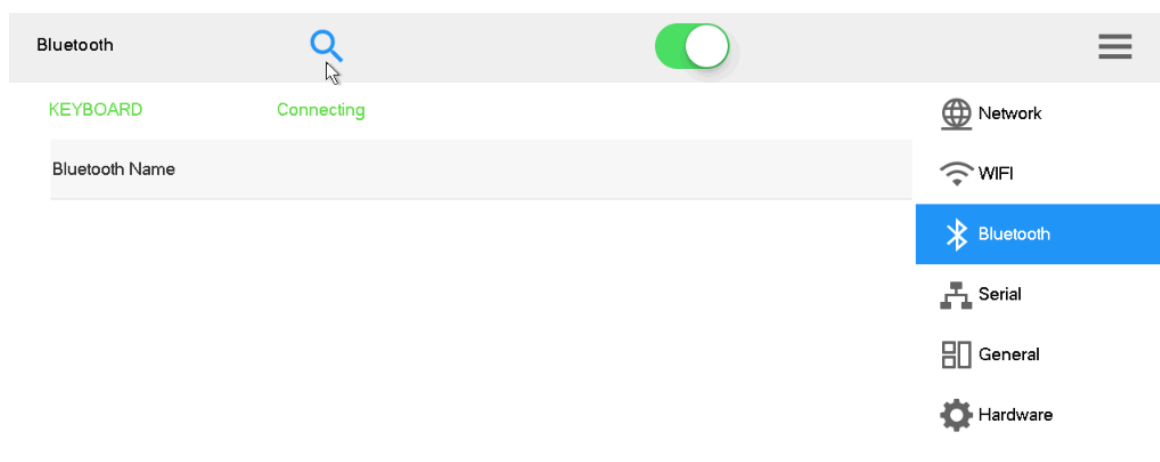


Figure 8-2

8.2.4 Serial Port

Step 1 At “General” interface, click “Serial” tab to enter “Serial” interface, as shown in Figure 8-3.

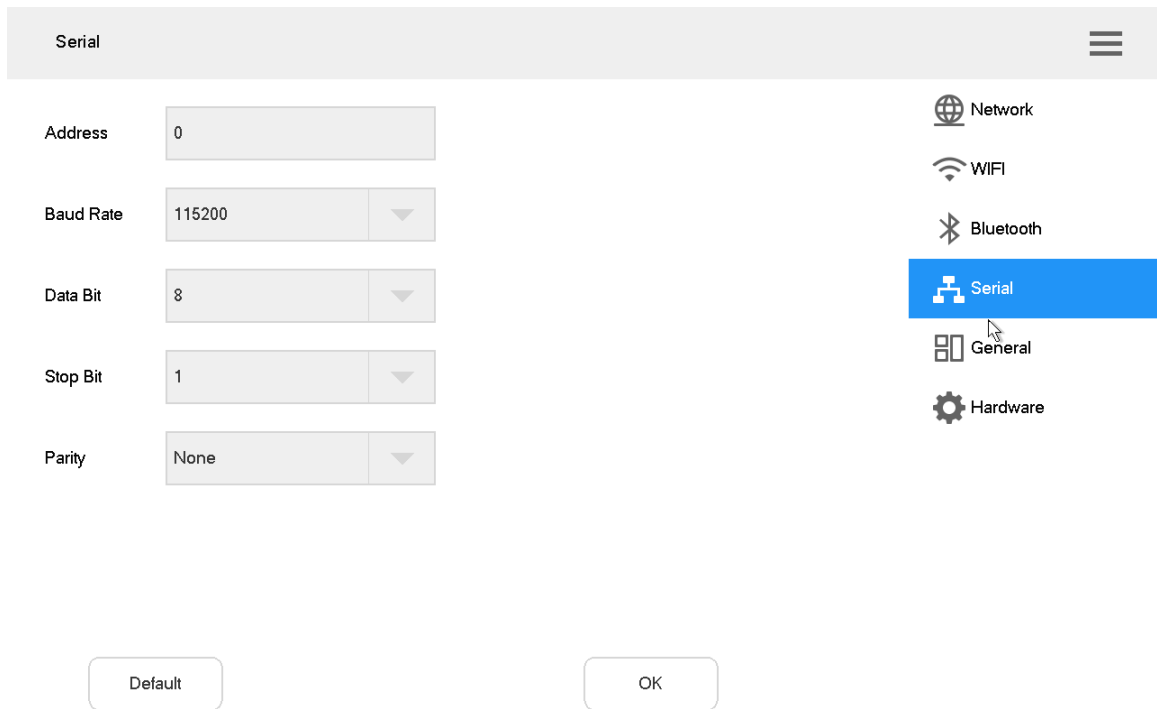


Figure 8-3

Step 2 Set the parameters. Please refer to Table 8-1 for details.

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.

Table 8-1

Step 3 Click "OK".

8.2.5 General

Set name, date and time etc. of internet keyboard.

Step 1 At "General" interface, click "General" tab to enter "General" interface, as shown in Figure 8-4.

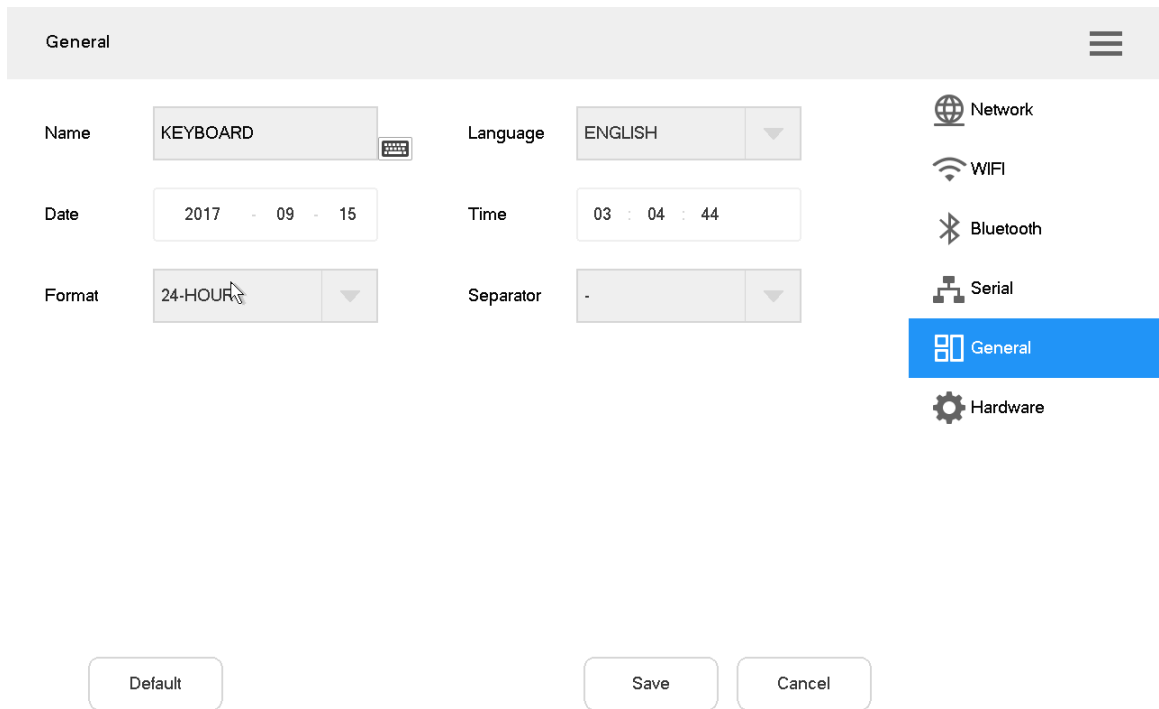


Figure 8-4

Step 2 Set the parameters. Please refer to Table 8-1 for details.

Parameter	Description
Name	Set internet 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 “2017.08.08”, “2016-08-08” and “2016/08/08”.

Table 8-2

Step 3 Click “Save”.

8.2.6 Hardware

Adjust volume, set the locking time of internet keyboard and screen off time.

Step 1 At “General” interface, click “Hardware” tab to enter “Hardware” interface, as shown in Figure 8-5.

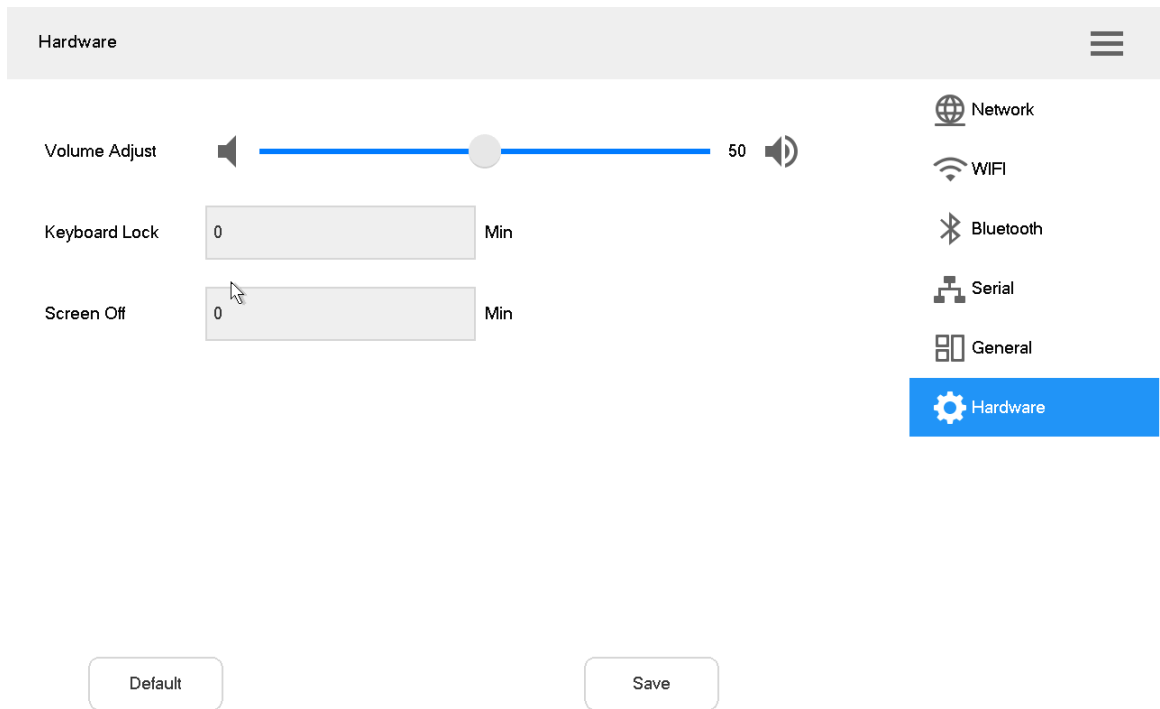


Figure 8-5

Step 2 Set the parameters. Please refer to Table 8-2 for details.

Parameter	Description
Volume adjust	Adjust the volume.
Keyboard lock	After keyboard is locked, log in the device to enter it again.
Screen off	Screen off time can be max. 60 minutes.

Table 8-3

Step 3 Click “Save”.

8.3 Account

View details of current account.

Step 1 At main interface, click “Settings” to enter settings interface.

Step 2 Click “Account” to enter the account interface, as shown in Figure 8-6.

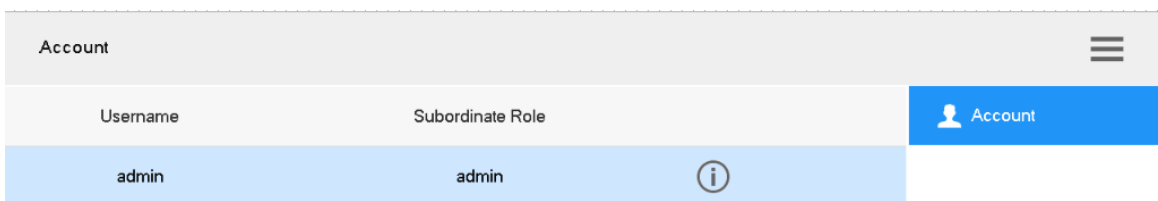


Figure 8-6

Step 3 Click to modify user’s password.

8.4 System

8.4.1 Version Upgrade

Upgrade the device with USB disk.

Step 1 At “System” interface, click “Upgrade” tab to enter “Upgrade” interface, as shown in Figure 8-7.

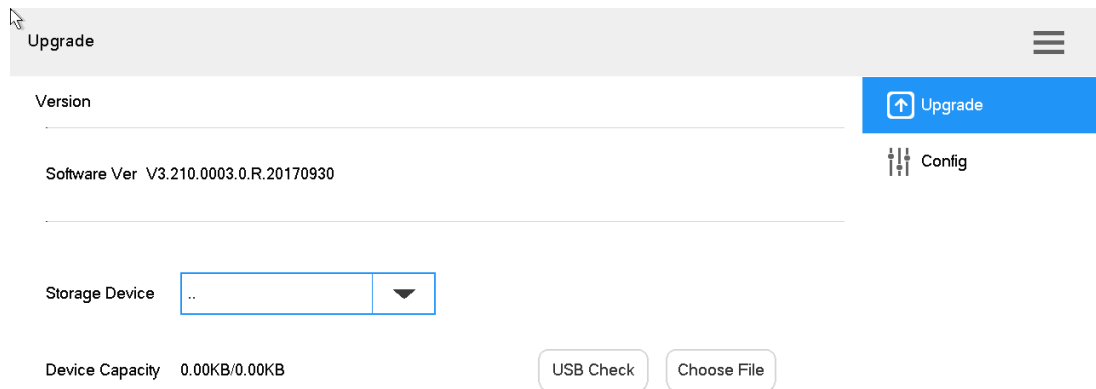


Figure 8-7

Step 2 Insert USB disk into the internet keyboard, and click “USB Check”.

Step 3 Click “Choose Files” to upgrade.

8.4.2 Configuration

Import or export system configurations.

Step 1 At “System” interface, click “Config” tab to enter “Config” interface, as shown in Figure 8-8.

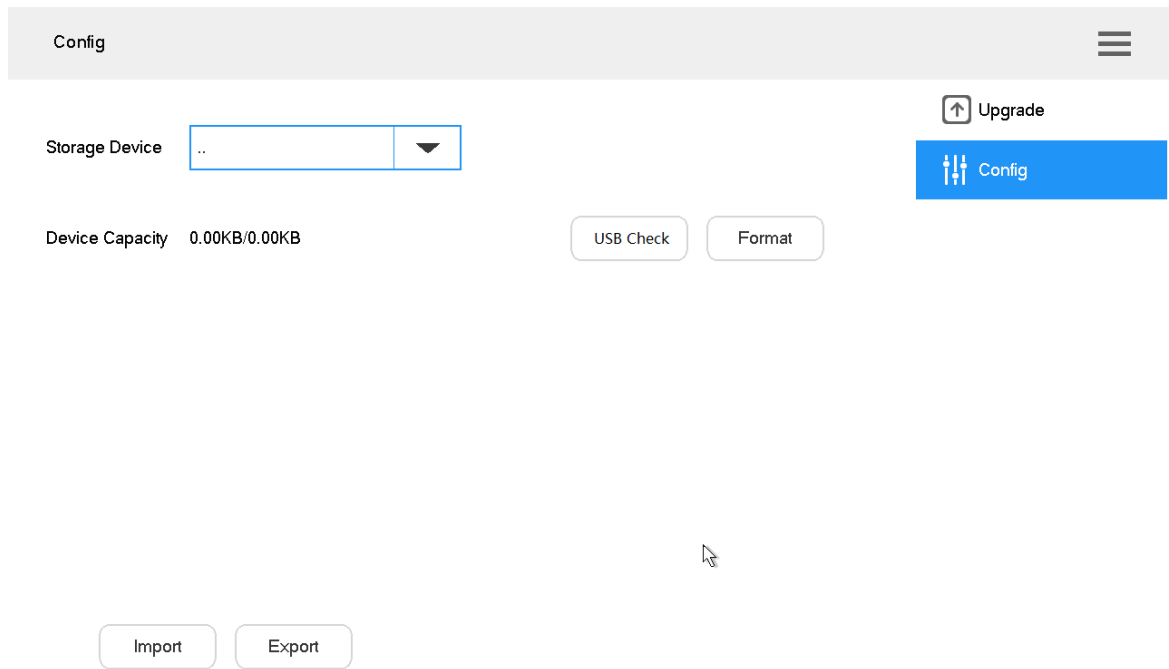



Figure 8-8

Step 2 Insert USB disk into the internet keyboard, and click “USB Check”. Detect all connected USB and capacity.

Step 3 Import or export configurations.

- Import config: import config info in USB disk into the internet keyboard.
- Export config: export config info in the present keyboard to USB disk.

 Note

Click “Format” to format the USB disk.

Play back existing records.

Step 1 At main interface, click “Playback” tab to enter “Playback” interface.

Step 2 Select target device and channel.

Step 3 Set the start time and end time.

Step 4 Click “Search”.

Display search results in the list, as shown in Figure 9-1.

Record Playback Target Device Unknown(171.2.70.15) CH All CH

Start Time 2017 09 14 03 09 04 End Time 2017 09 17 03 09 04 Search

Backup device Capacity 0.00KB/0.00KB Detect Format

No.	CH	Start Time	End Time	Size(MB)
1	4(SD_3th_North)	17-09-14 14:01:15	17-09-14 14:01:15	0.75MB
2	4(SD_3th_North)	17-09-14 14:01:15	17-09-14 14:05:40	27.75MB
3	4(SD_3th_North)	17-09-14 14:11:14	17-09-14 14:12:30	8.38MB
4	4(SD_3th_North)	17-09-14 14:15:14	17-09-14 14:15:15	0.75MB
5	4(SD_3th_North)	17-09-14 14:21:14	17-09-14 14:22:11	8.75MB
6	4(SD_3th_North)	17-09-14 14:25:15	17-09-14 14:48:20	163.38MB

PgUp PgDn Playback

Figure 9-1

Step 5 Select one search result and click “Playback”, as shown in Figure 9-2.

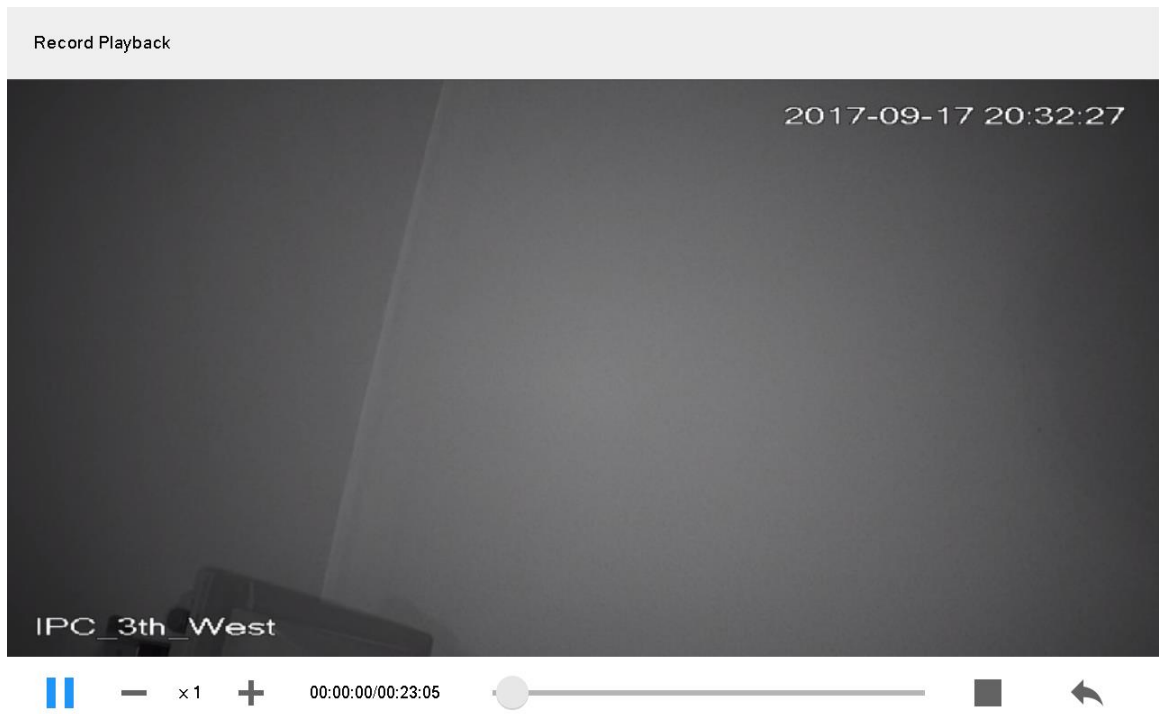



Figure 9-2

Step 6 Click  to download the record to USB disk. Records in USB disk can be played back.

10 Extension

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

Step 1 At main interface, click “Extension” to enter “Analog Keyboard” interface, as shown in Figure 10-1.

Analog Keyboard

Connection Mode: RS485

Device Type: Dome Camera

Address: 1

Protocol: PELCOD

Baud Rate: 9600

Data Bit: 8

Parity: Null

Stop Bit: 1

OK

Figure 10-1

Step 2 Set the parameters. Please refer to Table 10-1 for details.

Parameter	Description
Connection mode	Set the connection mode, which only supports RS485 at present.
Device type	Enter device type.
Address	Enter device address.
Protocol	Select the protocol, including SD1, PELCOD and PELCOP.
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.

Table 10-1

Step 3 Click “OK”.

Open PTZ control interface to carry out PTZ control.

Appendix 1 Technical Parameters

Parameter	Description
LCD screen	10.1 inch TFT LCD screen, 1280×800 resolution
Touch screen	10.1 inch capacitance 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 max. 16-split, so 5 screens support 80-split in total.
Audio input	1 audio input, 3.5mm stereo, support voice intercom function.
Audio output	1 audio output, 3.5mm stereo
Loudspeaker	1 loudspeaker to play audios.
Network port	Two 100M/1000M self-adaptive Ethernet ports
Wi-Fi	Support
USB port	4 USB ports, including 2 USB2.0 ports and 2 USB3.0 ports
RS485	1, as PTZ control port
RS232	2, as ordinary serial port (debugging), to control the recorder and other devices
RS422	1
Power input	DC 12V 4A
Operating temperature	-10℃~55℃
Operating humidity	10%~95% 86kPa~106kPa
Dimension	Host: 425mm×194mm×59mm (length × width× height, excluding joystick / antenna) Keyboard: 421mm×105mm×26mm (length × width× height)
Weight	3.73kg

Appendix Table 1-1 Technical Parameters