



DS-1600KI Keyboard

User Manual

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Preface




Applicable Models

This manual is applicable to the models listed in the following table.

Series	Model
Network Keyboard	DS-1600KI

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

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Chapter 1 Product Description

1.1 Product Overview

Introduction

DS-1600KI is a fully touch-enabled and detachable network keyboard independently developed by Hikvision.

In addition to displaying images, the 10.1" capacitive touchscreen supports DVI and HDMI video outputs. The software system runs on Android 6.0. It is compatible with all series of Hikvision IP cameras, NVRs/DVRs, and control center platform such as HikCentral. It supports recording, picture capturing and two-way audio, as well as the video wall control and scene switch of platform and decoding devices.

The four-axis joystick can be used to the PTZ control of speed dome and quick location of the target. The joystick panel is detachable for convenience.

Key Features

- 10.1" capacitive touchscreen, with 1280 × 800 resolution
- Android operation system and detachable design of the touchscreen and joystick
- Capable of decoding 4-ch at 1080p resolution
- Up to 16-division window display
- Supports H.265/H.264 encoding format, up to 1-ch 4k or 4-ch 1080p
- Live view on touchscreen
- DVI and HDMI outputs to monitor
- Local playback of video
- Accessible to private products including DVR, DVS, NVR, network camera, speed dome, etc.
- Control of decoders for video decoding and output on video wall
- Accessible by platforms and matrix access gateway
- Supports video wall configuration and scene switch
- Smart scaling of video wall layout
- Flexible PTZ control including setting and calling the preset, calling the patrol, auto-scan, setting and calling the pattern, light on/off, wiper on/off, focus control and iris control; You can control the directions, zoom in, zoom out and capture pictures via the joystick
- Upgrade and configuration files import/export by USB flash drive
- Recording, picture capturing and two-way audio; Saving files in USB flash drive or uploading to FTP server
- Two-level user authority and up to 32 user accounts are configurable, including 1 admin and 31 operators
- Wired and Wi-Fi network connection

1.2 Appearance

The DS-1600KI keyboard consists of a touchscreen and a joystick panel. The joystick panel is detachable and can be separated from the keyboard. Refer to the following figure for keyboard appearance.



Figure 1-1 DS-1600KI Keyboard Appearance

Front Panel

Refer to the following table for description of keyboard appearance.

Table 1-1 Keyboard Appearance Description

Number	Name	Description
1	Touchscreen	10.1" capacitive touchscreen for display, configuration and operation of the keyboard.
2	Joystick	Used for PTZ control.
3	Capture Button	Used for picture capture.

Refer to the following table for description of joystick operations.

Table 1-2 Joystick Operation Description

Operation	Function
Up	PTZ control mode: Move the PTZ up.
Down	PTZ control mode: Move the PTZ down.
Left	PTZ control mode: Move the PTZ left.
Right	PTZ control mode: Move the PTZ right.
Upper left	PTZ control mode: Move the PTZ upper left.

Operation	Function
Upper right	PTZ control mode: Move the PTZ upper right.
Lower left	PTZ control mode: Move the PTZ lower left.
Lower right	PTZ control mode: Move the PTZ lower right.
Rotate anticlockwise	Zoom out (ZOOM-)
Rotate clockwise	Zoom in (ZOOM+)

Interfaces

Eight interfaces and one button are provided on the rear panel of DS-1600KI keyboard.

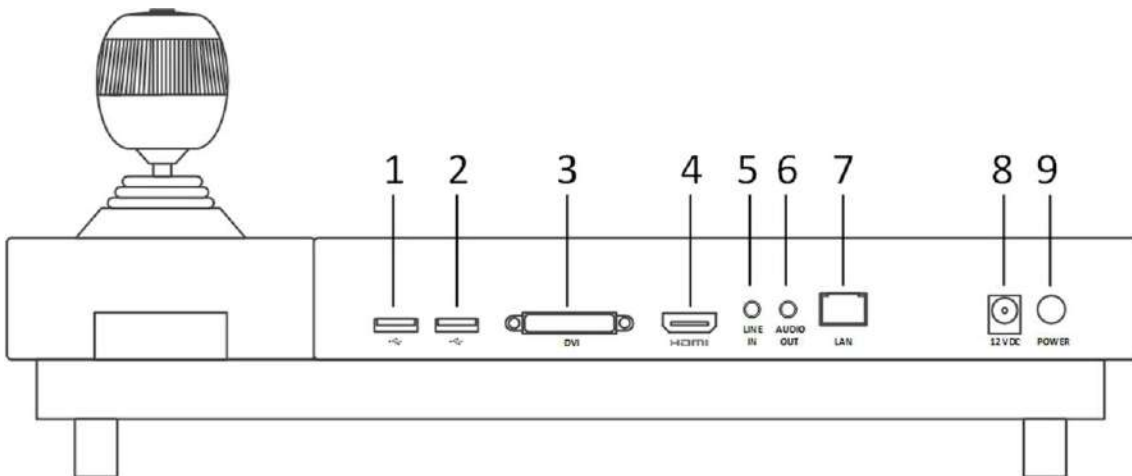


Figure 1-2 Rear Panel of DS-1600KI

Refer to the following table for description of the interfaces.

Table 1-3 Description of Interfaces

Number	Name	Description
1	USB Interface	One for connecting to the USB device. One for connecting to the joystick.
2		
3	DVI	DVI video output connector.
4	HDMI	HDMI video output connector.
5	LINE IN	3.5 mm connector for audio input.
6	AUDIO OUT	3.5 mm connector for audio output (the external amplifier must be connected).
7	LAN Network Interface	1 10M/100M/1000M adaptive Ethernet interface.
8	Power Input	12 VDC power input.

Number	Name	Description
9	Power Switch	Press to wake up the touchscreen, or turn the keyboard into sleeping mode. Hold (for 3 s) to power on/off, or reboot the device.

Chapter 2 Start-up

2.1 Activate Keyboard

The network keyboard is inactive by default. You should activate it before performing other operations. Then you can log in and log out of the keyboard. Here we introduce the local operation. Refer to SADP user manual for SADP operation.

Set an admin password to activate the keyboard for the first time access. No operation is allowed before activation. You can activate it by the local keyboard operation or changing settings in SADP software.

Steps

1. Enter the device password.
-

Caution

- Passwords are divided into 4 types: digits, lowercase letters, uppercase letters, and special symbols. Passwords are classified into 4 levels:
 - Level 0 (risky password): password length < 8 or only one type of character.
 - Level 1 (weak password): password length ≥ 8 and two types of characters. The character combination includes digits + lowercase letters and digits+ upper case letters.
 - Level 2 (medium password): password length ≥ 8 and two types of characters. The character combination cannot be digits + lowercase letters or digits+ upper case letters.
 - Level 3 (strong password): password length ≥ 8 and three types of characters.
 - Do not use the risky passwords. To better protect your product, reset your password regularly.
 - The password cannot contain the user name (in the forward order and backward order), 123, admin (case insensitive), a string of at least four consecutive digits (such as 1234, 12345, 4321, etc.), a string of at least four repeating characters (such as 1111, 8888, aaaa, etc.).
 - The password cannot be 1qaz2wsx, 1qaz@WSX, !@#\$QWER, p@ssword, passw0rd, or p@ssw0rd.
-

2. Confirm the password and click **Activate**.

Note

You can activate the network keyboard on the Web when PC and the keyboard are on the same network segment.

What to do next

You can log in the keyboard and operate it now.

2.2 Change Password

You can reset the keyboard password by SADP.

Steps

1. Select the checkbox before the ID of the DS-1600KI keyboard.
2. Click **Forgot Password**.

Reset Password

1 Step 1: Click Export to download the key request file (XML file) or take a photo of the QR code. Send the XML file or QR code photo to our technical engineers.

Export

2 Step 2: Input the key or import the key file received from the technical engineer to reset the password for the device.

Import File

New Password:

Confirm Password:


Confirm Cancel

Figure 2-1 Reset the Password

3. Click **Export** to download the key request file.
4. Set the file path in the pop-up window.
5. Click **Select Folder** to save the device key request file on your PC.

 **Note**

The exported key request file is XML file which is named as **Device Serial No.-System Time**.

6. Send the key request file to our technical engineers and the engineer will send you a key file back.
 7. Click  to select the key file (XML file) returned by the technical engineer.
 8. Click **Open**.
 9. Enter the new password in **New Password** and **Confirm Password**.
-

 **Caution**

- Passwords are divided into 4 types: digits, lowercase letters, uppercase letters, and special symbols. Passwords are classified into 4 levels:
 - Level 0 (risky password): password length < 8 or only one type of character.
 - Level 1 (weak password): password length ≥ 8 and two types of characters. The character combination includes digits + lowercase letters and digits+ upper case letters.
 - Level 2 (medium password): password length ≥ 8 and two types of characters. The character combination cannot be digits + lowercase letters or digits+ upper case letters.
 - Level 3 (strong password): password length ≥ 8 and three types of characters.
 - Do not use the risky passwords. To better protect your product, reset your password regularly.
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 - The password cannot be 1qaz2wsx, 1qaz@WSX, !@#\$QWER, p@ssword, passw0rd, or p@ssw0rd.
-

10. Click **Confirm** to reset the password.

2.3 Login and Logout

Log in the keyboard to operate it. Log out to lock your operation.

Steps

1. Click **Keyboard** on the menu.
2. Select the account and enter the password to login.

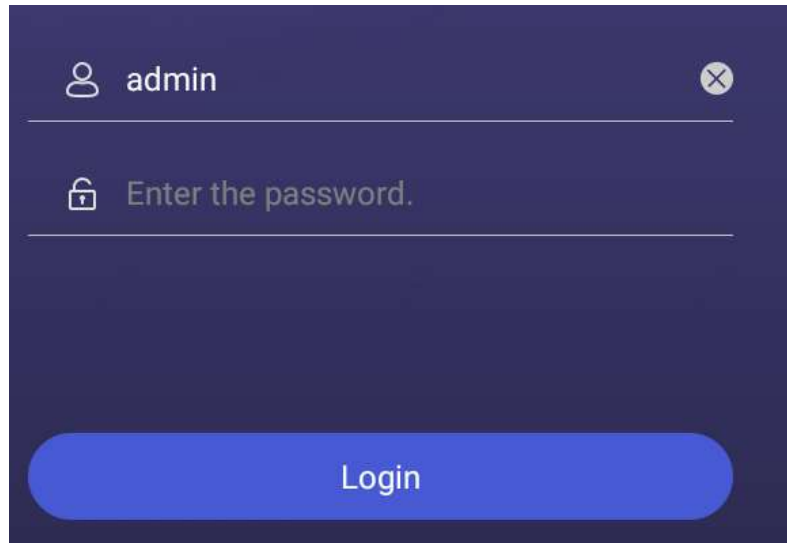




Figure 2-2 Login Interface

3. Optional: You can log out the keyboard anytime.
 - 1) Click **Keyboard** on the menu.
 - 2) Click  on the upper-left corner.
 - 3) Click **Users**.
 - 4) Click , then a logout message box will pop up.
 - 5) Click **Logout**.

Chapter 3 Configure Network


3.1 Set Wired Network

Setting the wired network parameters to connect to the network.

Before You Start

Make sure the network cable is appropriately connected.

Steps

1. Click  on the home page and choose **Ethernet**.
2. Switch on **Ethernet** to enable Ethernet configuration.
3. Set network parameters. You can connect to network by two following ways.

Static IP Static IP addresses don't change. Using the static IP method, you must set your own IP address, network gateway, subnet mask and other parameters.

DHCP With DHCP, you don't need to set your IP address; it is assigned dynamically.


3.2 Set Wireless Network

The keyboard has Wi-Fi module that can connect to wireless network.

Before You Start

A Wi-Fi network must be appropriately configured.

Steps

1. Click  on the home page and choose **WLAN**.
2. Switch on **WLAN** to enable automatic acquisition of WLAN information.
You can obtain Wi-Fi information nearby or enter Wi-Fi information manually to add network.
3. Connect to an existing Wi-Fi hotspot or add a new network.

Connect to a nearby Wi-Fi hotspot 1. Click the Wi-Fi hotspot in the Wi-Fi list.
2. Enter the password and connect to the network.

Add a new Wi-Fi network 1. Click **Add Network** at the bottom of the Wi-Fi list.
2. Enter the SSID name manually.
3. Select the Security Type.
4. Enter the password to connect to the network.

Chapter 4 Manage Keyboard


4.1 Manage Device

4.1.1 Add and Edit Device

Add Device Manually

You can add devices manually by inputting device parameters. Up to 8,000 devices can be added by the admin.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device**.

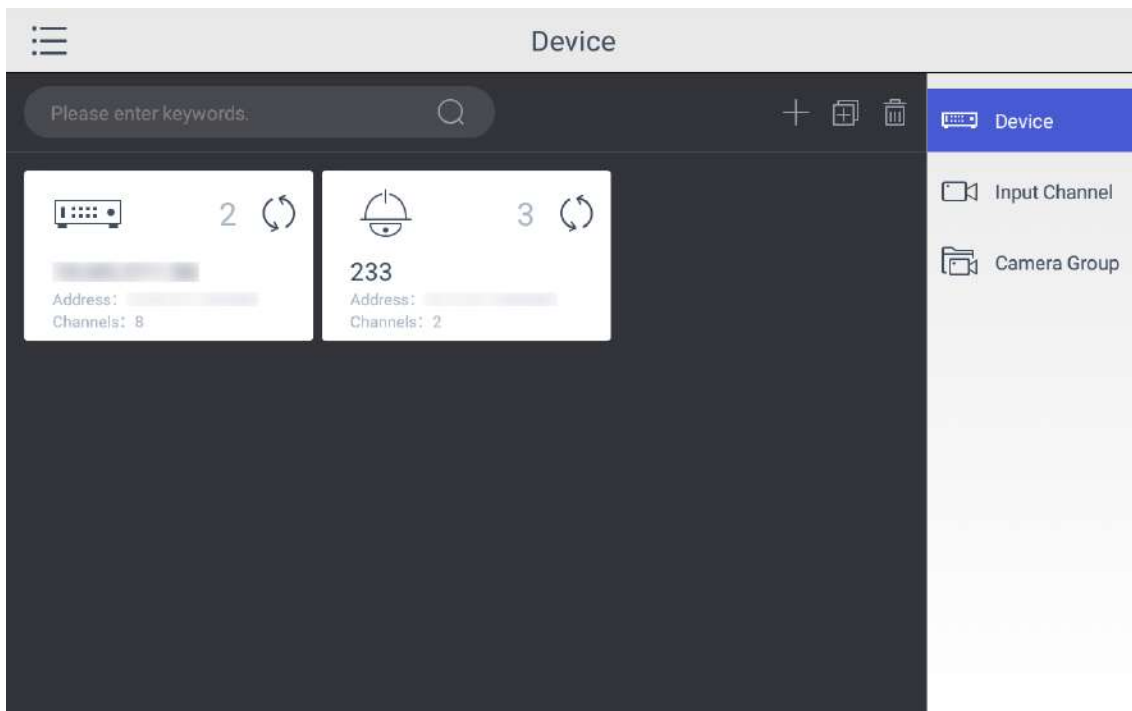


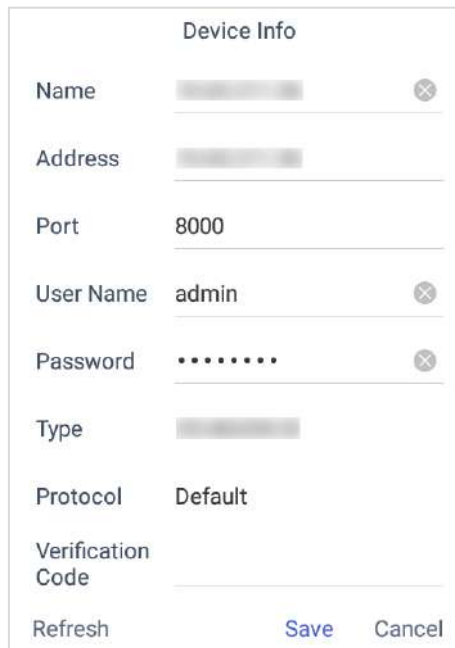
Figure 4-1 Device Management Interface of the Admin

4. Click  to enter the **Add Device** interface.
5. Input device parameters including **Name**, **Address**, **Port**, **User Name**, **Password**, and **Protocol**.

Note

- It will keep using the original device name if you leave **Device Name** empty.

- In **Protocol**, you can select **Default** for same brand devices, or select **ONVIF** for devices from other manufacturers.



The screenshot shows a 'Device Info' form with the following fields and values:

Device Info	
Name	<input type="text"/>
Address	<input type="text"/>
Port	8000
User Name	admin
Password	••••••
Type	<input type="text"/>
Protocol	Default
Verification Code	<input type="text"/>
Refresh	<input type="button" value="Save"/> <input type="button" value="Cancel"/>



Figure 4-2 Add Device Manually

6. Click **Save** to finish adding.

Add Device by Searching Online Devices

You can also add devices by online searching

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device**.
4. Click  to enter **Auto Search** interface. All online devices in the same network segment will be displayed in the list.

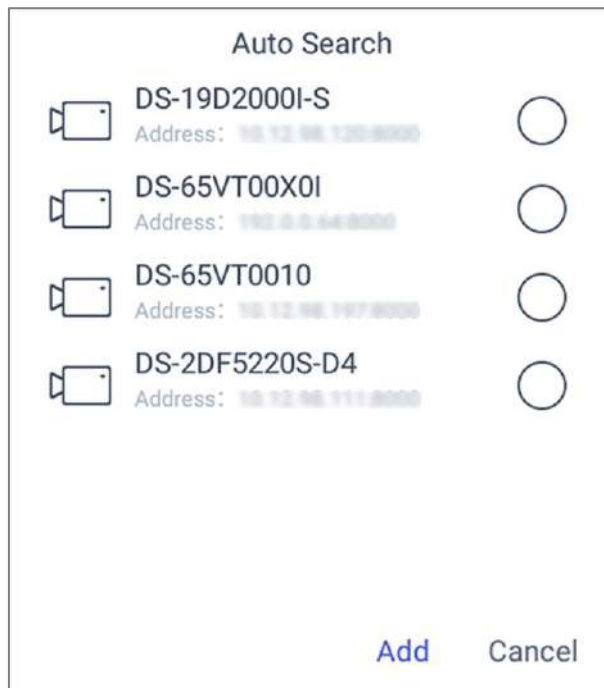


Figure 4-3 Auto Search Result

5. Select the device(s) as you desired.
6. Enter **User Name**, and **Password**.
7. Click **Save**.

 **Note**

If you want to add multiple devices, all device user names and passwords must be the same.



Add Device by Importing from USB Flash Drive


You can add devices in batch by importing device information from USB flash drive.

Before You Start

You need a USB flash drive to import devices. Make sure you have added at least one device.

Steps



1. Click **Keyboard**.
2. Click .
3. Click **Camera**.
4. Optional: If you don't know the import file format, you can export a file to find out.
 - 1) Click .
 - 2) Enter the admin password.
 - 3) Select a file where you want to export.
 - 4) Click **Export** to export the excel file.
 - 5) Edit the excel sheet in other device, then save it in USB flash drive.

5. Click .
6. Enter the admin password.
7. Select the import file from the USB flash drive.
8. Click **Confirm**.

Find Added Devices

In the device/camera management interface, you can quickly search the added device/camera by IP address, keywords, or name.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device**.
4. You can input device ID, IP address, keywords or name in the text field to search device.
5. Click .

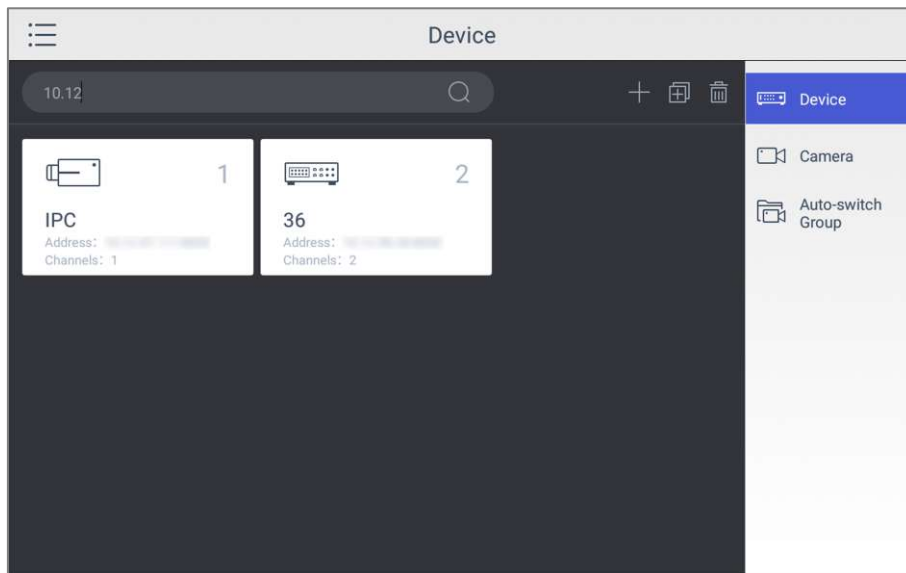


Figure 4-4 Search Device


Edit Device Property

You can view and edit details of the added devices in **Device** interface.

Before You Start

Ensure you have at least added one device.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device**.

4. Click on the name of the added device to view device details.
5. Modify the device parameters on the pop-up window.

Note

Only **Name**, **User Name**, and **Password** are editable.

Device Info	
Name	IPC <input type="text"/>
Address	<input type="text"/>
Port	8000 <input type="text"/>
User Name	admin <input type="text"/>
Password <input type="text"/>
Type	IPC
Protocol	Default
Verification Code	<input type="text"/>
Refresh	<input type="button" value="Save"/> <input type="button" value="Cancel"/>

Figure 4-5 Edit the Device

6. Click **Save** to confirm the modification.


4.1.2 Manage Connected Cameras

You can view and edit connected camera information.

Before You Start

Ensure you have added at least one camera and logged in the admin user account.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device** → **Camera**.
4. Click the camera as you desired and then you can view its details.

Name

The camera name.

Channel ID

The camera serial number according to the added sequence.

Protocol

The transfer protocol.

Stream

The stream type.

Device

The device name.

Address

The IP address and port of the corresponding device.

Channel No.

The channel number of added camera.

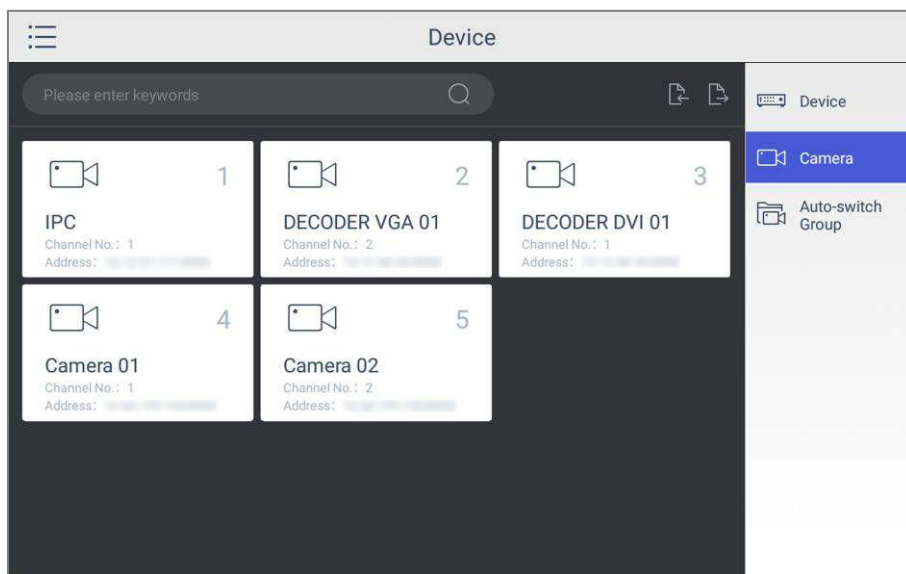


Figure 4-6 Camera Management Interface

5. Modify the camera details. Only **Name**, **Channel ID**, **Protocol**, and **Stream** are editable.

Note

The range of **Channel ID** is from 1 to 99999999, and the ID cannot be repeated.



6. Click **Save** to finish modification.

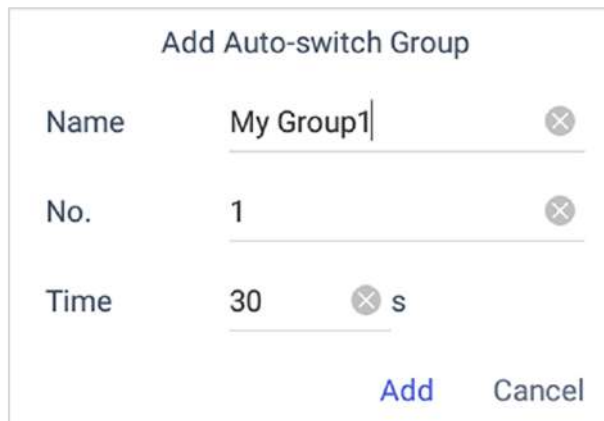
4.1.3 Manage Auto-switch Group

Create Auto-switch Group

It would be easier to manage your devices by adding relevant cameras into a group. For example, you can add all the underground garage cameras into one auto-switch group, so you can view the group to view the cameras in it.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device** → **Auto-switch Group**.
4. Click .
5. Enter the group parameters.






Add Auto-switch Group	
Name	My Group1 
No.	1 
Time	30  s
Add Cancel	

Figure 4-7 Create a New Group

Name

Enter the group name as desired. Special characters, including / : * ? ' " < > | %, are not allowed, and the length cannot exceed 32 characters.

No.

Enter the group number as desired. The range is from 1 to 16, and it cannot be repeated. Up to 64 cameras can be added in each group, no more than 16 groups can be added.

Time

Enter the cycle dwell time for each channel as desired. The range is from 10s to 10000s. The default dwell time is 30s.

6. Click **Add**.

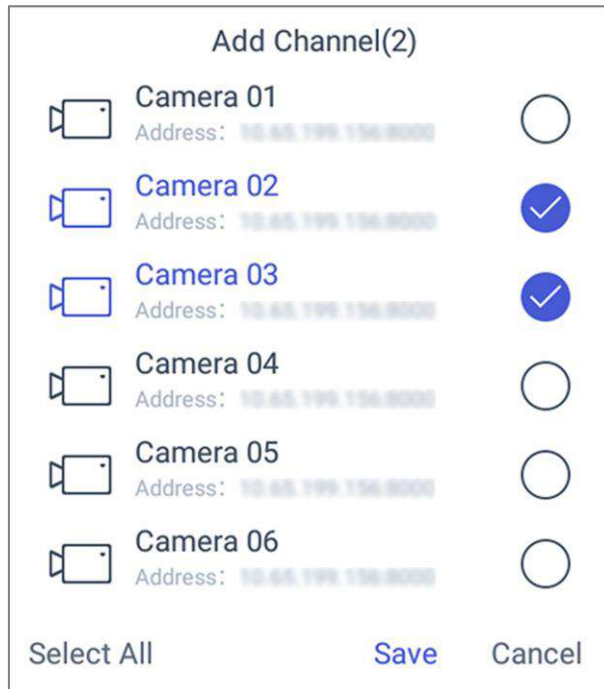


Figure 4-8 Add Camera(s) to the New Group

7. Select the camera(s).
8. Click **Save** to finish creating auto-switch group.


Edit Auto-switch Group

You can view and modify auto-switch group details in **Auto-switch Group** interface.

Before You Start

Ensure you have groups added.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Device** → **Auto-switch Group**.
4. Click on the added group.

Auto-switch Group Info

Name	My Group1	<input type="text"/>
No.	1	<input type="text"/>
Time	30	<input type="text"/> s

Figure 4-9 Edit the Group



5. Edit group parameters of **Name**, **No.**, and **Time**.
6. Click **Edit** to edit channel(s) in the group.
7. Click **Save** to confirm the modification.



4.2 Live View on Screen

4.2.1 View Video with Keyboard

After device is successfully added, you can view the live video of the added network cameras or video encoders.

Steps





1. Click **Keyboard**.
2. Click .
3. Click **Live View**.
4. Optional: You can click  to select the window division mode.
5. Select a display window.
6. Select a camera to display by two selectable ways.


In keyboard panel Enter the serial number in the numeric panel, and click  or  to play the live video of corresponding camera or camera group on the window.

- In the list**
1. Click **List** or **Group**.
 2. Select a camera or group from the list to play.

Note

- Up to 16 cameras can be selected for live view at the same time.
- For group, auto-switch is not supported in multi-screen mode.
- Hold down the title bar to move the channel selection panel.

- Click  to delete the entered information if you entered incorrectly.
- Click  or  to preview the previous or next camera or group.
- Enter **0** in the numeric panel and click  to stop the live view.

7. Optional: You can click  to perform operations including full screen, capture picture, record video, two-way audio, and view parameters of the camera on live view.

Note

If you perform operations of capture picture and record video, make sure to connect the keyboard with a USB flash drive, or provide a valid and correct network connection between PC (running FTP server) and the keyboard, and set the FTP parameters of keyboard correctly. Refer to Set Storage for FTP configuration.

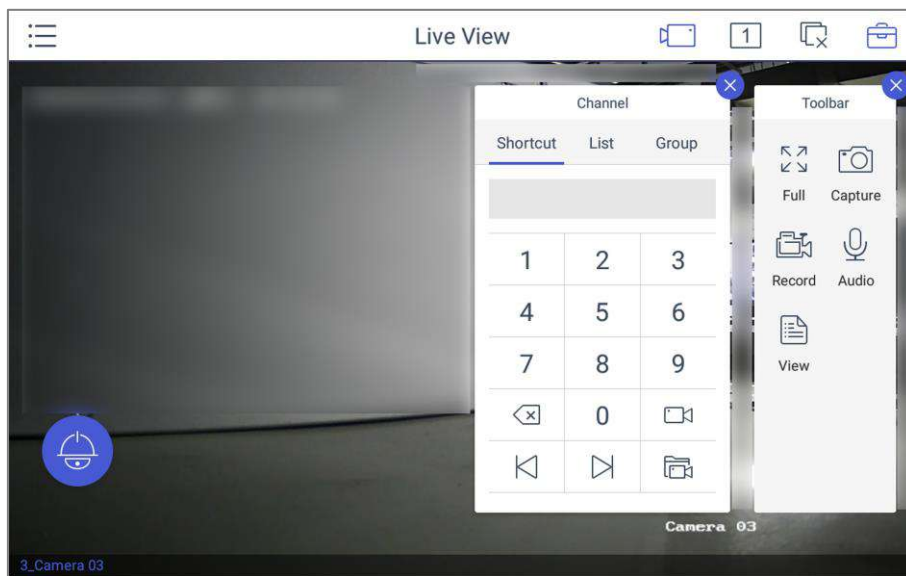



Figure 4-10 Live View

4.2.2 PTZ Control

You can click  in the live view mode to achieve PTZ control operation. The PTZ control should be supported by the added device.

Set and Call a Preset


A preset is a predefined image position which contains information of pan, tilt, zoom, focus and other parameters.

Steps

1. Click **Preset** in the PTZ control panel.
2. Use the joystick to move the camera to the desired scene.

 **Note**

Before using the joystick, make sure the joystick is connected to the USB interface of the keyboard.

3. Click  to set the preset.
-

 **Note**

Up to 300 presets can be configured.

What to do next

You can click a preset from the list to call the preset.

Call a Patrol

A patrol is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable.

Before You Start

Set the patrol for the camera through Web Browser, client software, etc.

Steps

1. Click **Patrol** in the PTZ control mode.
 2. Click a patrol from the list to call it.
-



 **Note**

Up to 8 pre-defined patrols can be called.

Set and Call a Pattern

You can record the pan/tilt movements and zoom control of the PTZ camera, and call the pattern.

Steps

1. Tap **Pattern** in the PTZ control panel.
 2. Tap  to start recording path of the desired pattern.
 3. Use the joystick and other buttons to control the PTZ movement, including pan/tilt movements, zoom and focus control, auto-scanning, etc.
 4. Tap  to stop recording of this pattern path.
-

 **Note**

Up to 4 patterns can be configured.

What to do next




You can tap a pattern from the list to call the pattern.

4.3 Manage Video Wall

4.3.1 Edit Video Wall Layout

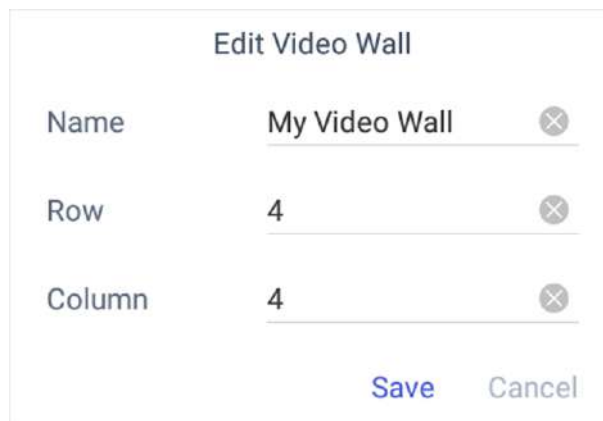
You can edit the layout of the video wall, including the name, row and column.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Click .
5. Click **Config** on toolbar panel.
6. Click .
7. Enter the parameters of video wall.

Note

You can add 2 to 10 rows and 2 to 15 columns.






Edit Video Wall		
Name	My Video Wall	
Row	4	
Column	4	
		Save Cancel

Figure 4-11 Edit the Video Wall

Name

Edit a name for the video wall as desired.

Row

The row of the video wall.

Column



The column of the video wall.

8. Click **Save** to save the settings.

4.3.2 Configure Video Channels on Video Wall

You can select and configure the output channel for each video wall window. For some other video wall devices, you can get the output channels automatically.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Click .
5. Click **Config** on the toolbar panel.
6. Select the playing window on the video wall.

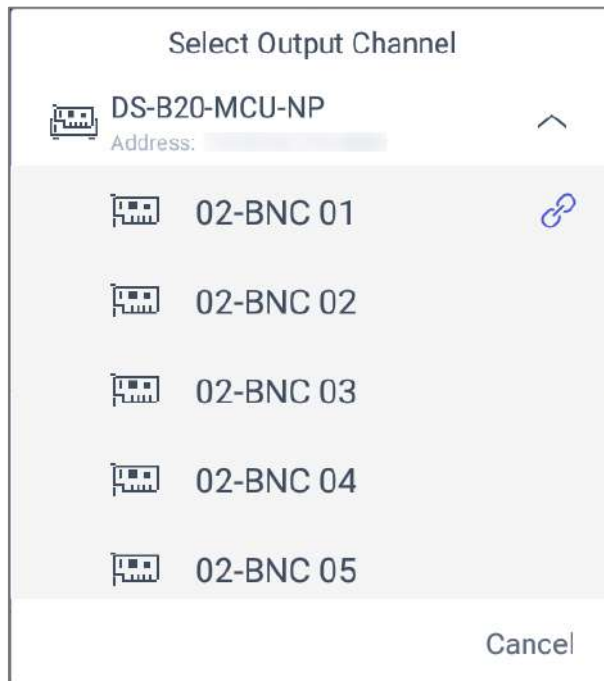



Figure 4-12 Select the Output Channel

7. Select the output channel as you desired.

Note

- If you want to delete the output channel, hold the configured window and click  on the upper-right corner
- At **Video Wall** interface, you can also open, close, and move window by holding the window.

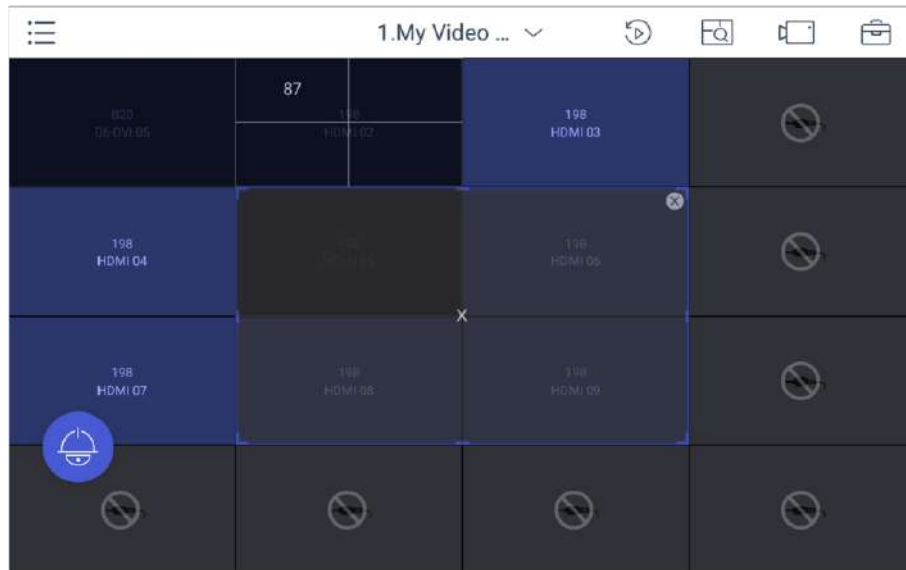


Figure 4-13 Delete the Output Channel





What to do next

You can log in the keyboard and operate it now.

4.3.3 Play Video on Video Wall



You can play live video on video wall window.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Select a playing window.
5. Click  to expand the channel panel.
6. Select the camera No. you want to play on the selected display window.
 - 1) Click **Shortcut**.
 - 2) Enter the camera/group No. in the numeric panel.
 - 3) Click  or  on the display window.

Note

- You can also select camera by clicking the camera or group from **List** or **Group** interface.
- You can see the camera No. on the display window. If you select a group, the display window will show **G**.

7. Optional: You can perform PTZ control by clicking , refer to **PTZ Control** for specifications.
8. Optional: You can achieve functions such as capture picture, record video, and refresh display interface by clicking .

4.3.4 Configure Display Window

For the devices supporting window roaming (e.g., DS-96000NI-I/H, DS-B20), you can move the playing window within the video wall as desired, close the window and adjust the window to match it with the borders.

Before You Start

Ensure the connected decoding device supports window roaming function.

Steps



1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Select a window as you desired.
5. Hold the window until the window frame appears.




Figure 4-14 Window Roaming


6. You can move the playing window within the video wall as desired and adjust its size.
7. The dotted borders will display during moving the window. You can double-click the window to adjust it to match the borders.
8. Optional: Click  in toolbar to split the window.

4.3.5 Save Current Video Wall Settings as a Scene


You can save your current video wall settings as a scene.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Select a display window on the configured video wall layout.

5. Click  to expand the toolbar.
6. Click **Scene** to access the scene list.
7. Select the scene in the list.
8. Click **Save** to save the current video wall scene.

4.3.6 Enable Video Wall Playback Local Decoding

Click  → **System Setting** → **Others**, and enable **Video Wall Playback Local Decoding**.
When **Video Wall Playback Local Decoding** is enabled, videos can be shown on the playback.

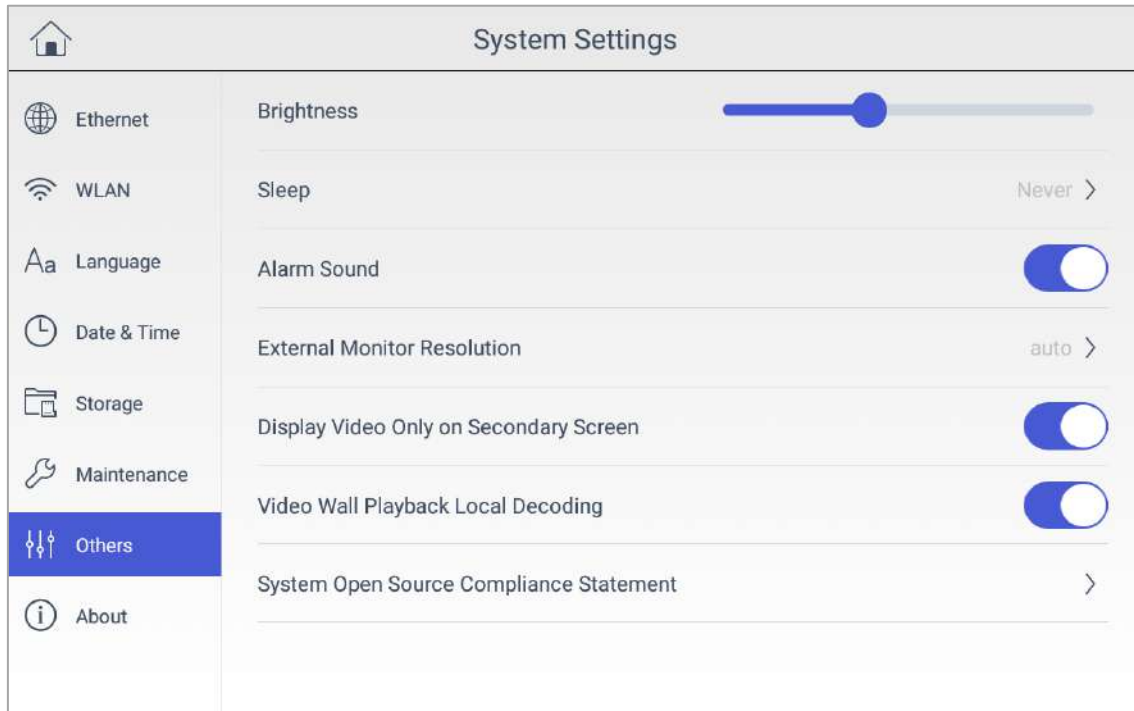


Figure 4-15 Enable Video Wall Playback Local Decoding



4.3.7 Video Wall Playback

You can playback and view videos on video wall.

Before You Start

- Ensure you have added decoding device channel(s) to the video wall.
- Ensure you have enabled **Video Wall Playback Local Decoding**.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Select a window on the video wall interface.
5. Click .

6. Select the date as you desired.

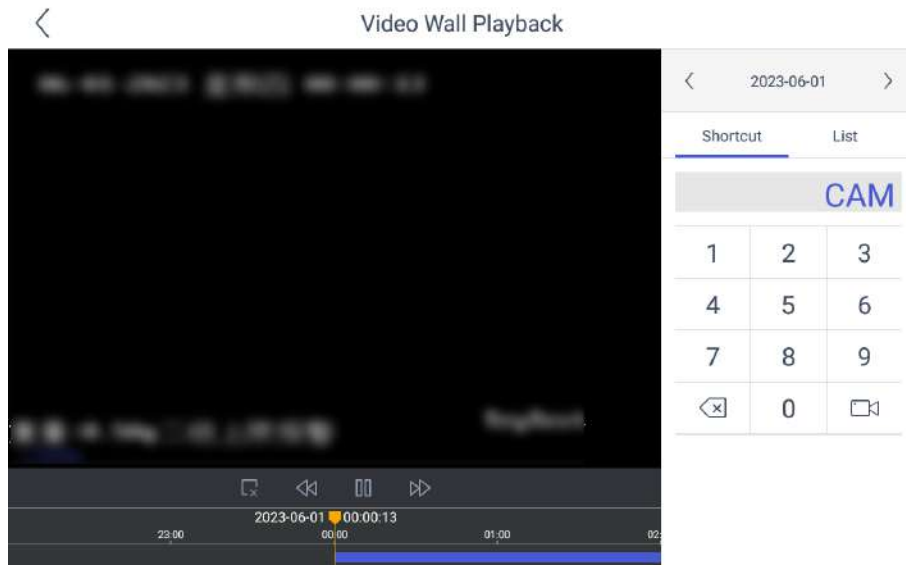



Figure 4-16 Video Wall Playback

7. Optional: You can switch channel by two ways.

In keyboard panel Enter the serial number in the numeric panel, and click .

- In the list**
1. Click **List**
 2. Select a camera in the list.

 **Note**




The channel of the selected window must be from a decoding device.

8. Drag the slider to set required playback time.

 **Note**

Time and progress bar are refreshed automatically when playback.

9. Use the toolbar to perform playback operations, including stop playing video, start/pause playing video, slow forward speed, and fast forward speed.

Icon	Description
	Pause/Start
	Fast forward speed; you can also move the joystick right to fast forward the video.
	Slow forward speed; you can also move the joystick left to slow forward the video.





Stop

4.3.8 Smart Scaling on Video Wall

For the large-scale video wall layout, you can use the smart scaling function to select and zoom in the required windows area.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Video Wall**.
4. Click  to open the smart scale control panel.
5. You can adjust the frame size with fingers.

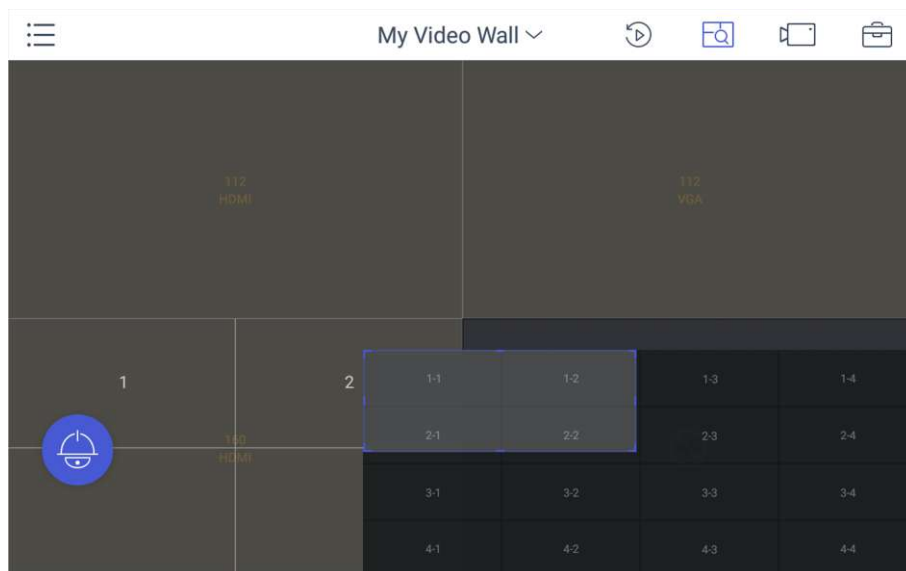


Figure 4-17 Smart Scaling

4.3.9 Video Wall Preview

You can preview videos on the local keyboard interface to check the layout and other effects of the video wall.

Ensure you have connected video wall controller or multi-function video center before previewing the video wall.

Select  →  to preview the video wall.


Note

Only one video wall can be previewed each time.

4.4 Video Playback

The videos stored in the encoding device within 24 hours can be played back on the keyboard.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Playback** on the menu to enter the play back interface.
4. Select the date as you desired.

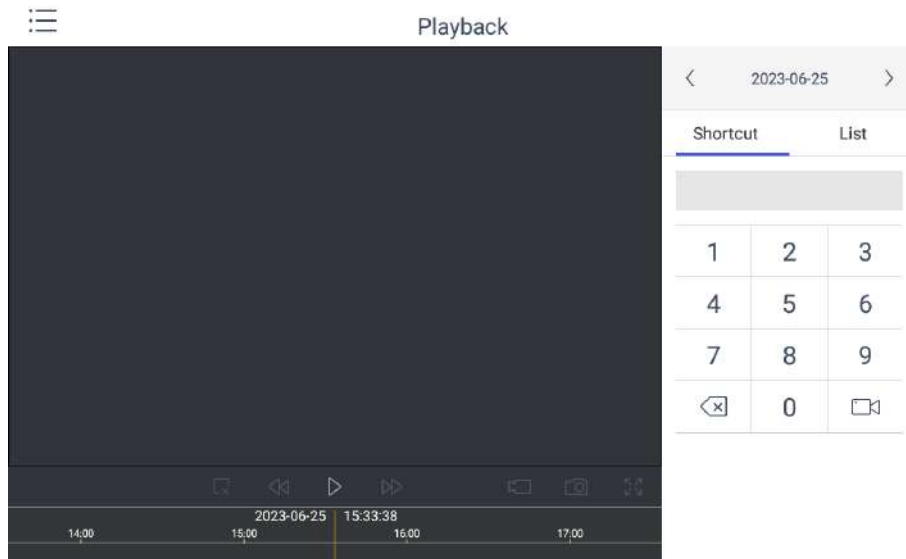



Figure 4-18 Video Playback

5. You can switch channel by two ways.

In keyboard panel Enter the serial number in the numeric panel, and click .

In the list

1. Click **List**
2. Select a camera in the list.

6. Drag the time bar to set required playback time.
7. Use the toolbar to perform playback operations, including stop playing video, start/pause playing video, slow forward speed, and fast forward speed.


Note

To control the play speed, you can also move joysticks left or right to slow or fast forward the video respectively.

4.5 Control DVR

The keyboard can operate the added DVR/NVR and achieve PTZ control operation.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **Operate DVR**.
4. Select the NVR/DVR from the right list as you desired.
5. Apply the buttons on the control panel to achieve DVR/NVR functions such as switching the camera, playing the video, recording, entering menu, main/spot output switching, Aux functions, etc.

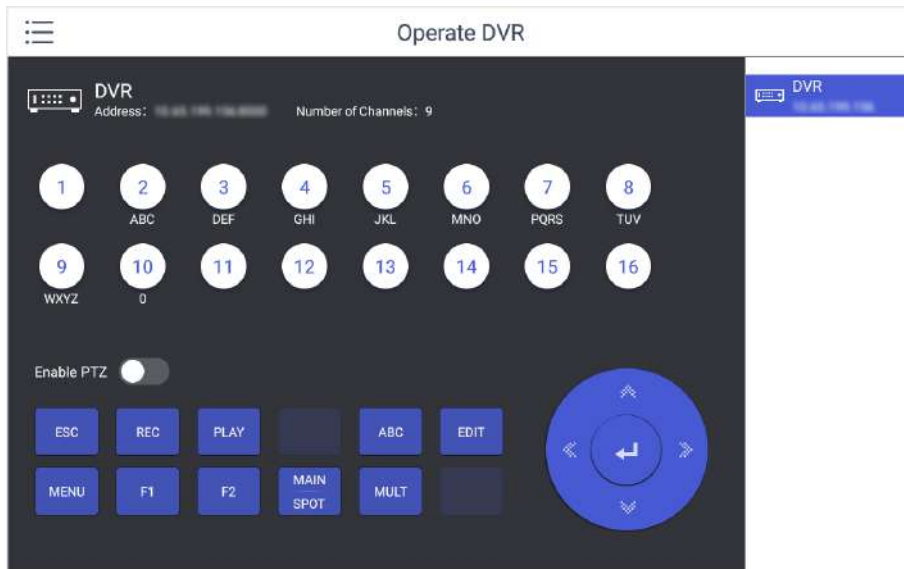


Figure 4-19 DVR/NVR Remote Panel

Note

When the number of channels to be controlled is a multiple of 10, e.g. 20, press 2 and then press 10.

6. Optional: You can switch on **Enable PTZ** to achieve functions such as PTZ control, iris control, focus, wiper, light, etc.

Note

Ensure the device that connects to DVR/NVR device supports PTZ control operation.

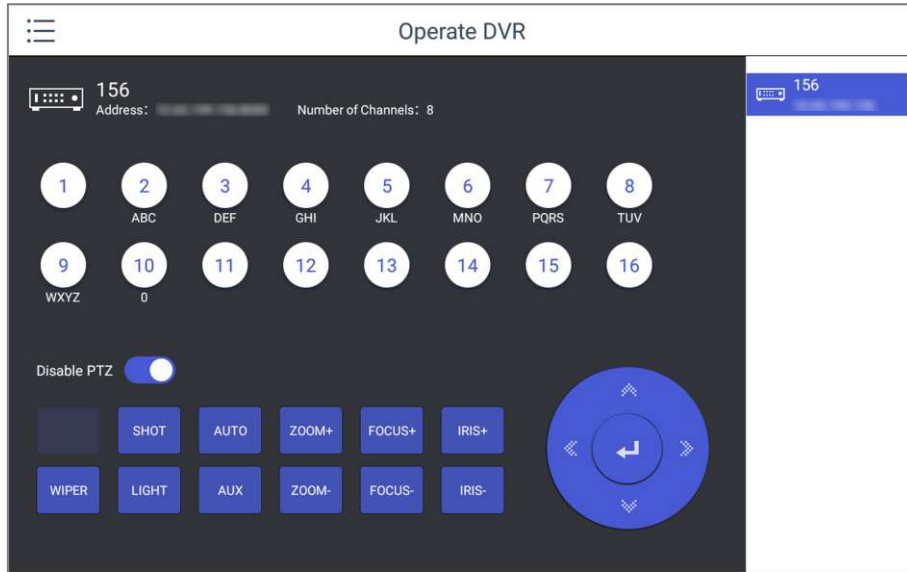


Figure 4-20 Enable PTZ

Table 4-1 Panel Description

Name	Function Description
ESC	Returns to the previous menu.
	Presses for arming/disarming the device in live view mode.
REC/SHOT	Enters the Manual Record settings menu.
	Presses this button followed by a numeric button to call a PTZ preset in PTZ control settings.
	Turns audio on/off in the playback mode.
PLAY/AUTO	Enters the playback mode.
	Automatically scans in the PTZ control menu
ZOOM+	Zooms in the PTZ camera in the PTZ control setting.
ABC/FOCUS+	Adjusts focus in the PTZ Control menu.
	Switches between input methods (upper and lower case alphabet, symbols and numeric input).
EDIT/IRIS+	Edits text fields. When editing text fields, it also deletes the character in front of the cursor.
	Checks the checkbox in the checkbox fields.
	Adjusts the iris of the camera in PTZ control mode.
	Generates video clips for backup in playback mode.
	Enters/exits the folder of USB device and eSATA HDD.



Name	Function Description
MAIN/SPOT/ZOOM-	Switches between main and spot output.
	Zooms out the image in PTZ control mode.
F1/ LIGHT	Selects all items on the list when used in a list field.
	Turns on/off PTZ light (if applicable) in PTZ control mode.
	Switches between play and reverse play in playback mode.
F2/AUX	Cycles through tab pages.
	Switches between channels in synchronous playback mode.
MENU/WIPER	Returns to the Main menu (after successful login).
	Presses and holds the button for five seconds to turn off audible key beep.
	Starts wiper (if applicable) in PTZ control mode.
	Shows/hides the control interface in playback mode.
MULT/FOCUS-	Switches between single screen and multi-screen mode.
	Adjusts the focus in conjunction with the A/FOCUS+ button in PTZ control mode.
IRIS-	Adjusts the iris of the PTZ camera in PTZ control mode.

4.6 Manage User

4.6.1 Add New Users with Admin Account

Multiple user accounts can be added to operate the keyboard. The admin user is assigned with the highest permissions, including viewing/deleting user accounts, adding devices to the users, and changing password. For the operator, you can view your assigned devices and change your own password.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **User**.
4. Click  to add new user.
5. Enter the user name and password.

 **Caution**

- Passwords are divided into 4 types: digits, lowercase letters, uppercase letters, and special symbols. Passwords are classified into 4 levels:
 - Level 0 (risky password): password length < 8 or only one type of character.
 - Level 1 (weak password): password length ≥ 8 and two types of characters. The character combination includes digits + lowercase letters and digits+ upper case letters.
 - Level 2 (medium password): password length ≥ 8 and two types of characters. The character combination cannot be digits + lowercase letters or digits+ upper case letters.
 - Level 3 (strong password): password length ≥ 8 and three types of characters.
 - Do not use the risky passwords. To better protect your product, reset your password regularly.
 - The password cannot contain the user name (in the forward order and backward order), 123, admin (case insensitive), a string of at least four consecutive digits (such as 1234, 12345, 4321, etc.), a string of at least four repeating characters (such as 1111, 8888, aaaa, etc.).
 - The password cannot be 1qaz2wsx, 1qaz@WSX, !@#\$QWER, p@ssword, passw0rd, or p@ssw0rd.
-

6. Click **Add**.
 7. Select camera(s) from the device list to assign user device permission.
 8. Click **Save** to save the settings.
-

 **Note**

You can have only 1 admin user account and up to 31 operator accounts.

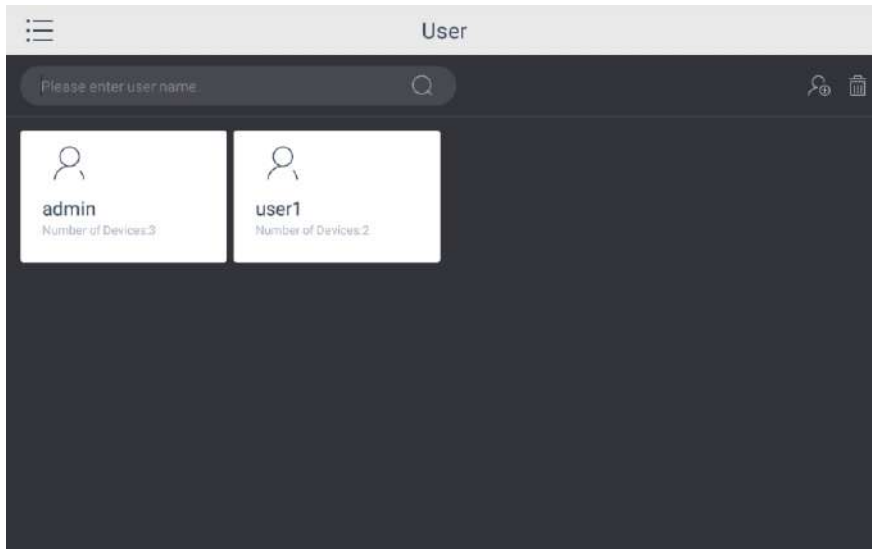


Figure 4-21 User Management


4.6.2 Edit User Accounts by Administrator

The administrator has the highest operation permissions that can change the settings of all other operators, including assigning device permission to the operator, and changing the password of other operator accounts.

Before You Start

Make sure you log in with the admin account.

Steps

1. Click **Keyboard**.
2. Click .
3. Click **User**.
4. Select a user account as you desired.
5. You can change password or assign device permission to the user account.

Edit password

1. Click **Edit**.
2. Enter new password twice.
3. Click **Save** to confirm.

Edit device permission

1. Click **Device**.
2. Select device permission for the account.
3. Click **Save**.

Chapter 5 Control Platform

You can connect the keyboard to platforms to play live video on video wall or watch live video on the local keyboard interface.

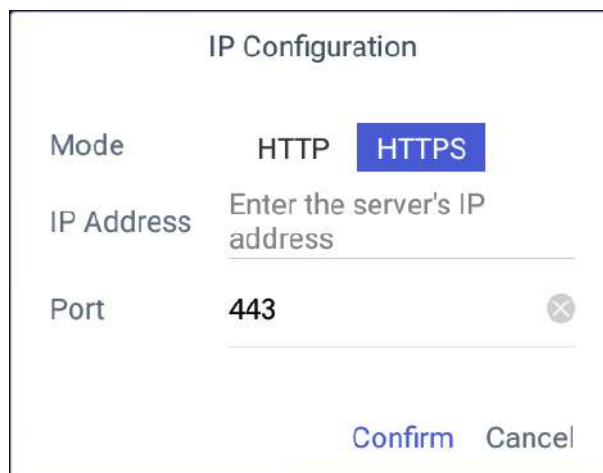
5.1 Control iSecure

You can connect the keyboard to iSecure platform to play live video on video wall, watch live video or watch video playback on the local keyboard interface.

5.1.1 Login

Steps

1. Tap **iSecure** on the main page.
2. Tap **IP Configuration**.
3. Select **HTTP** or **HTTPS** mode, enter the server's **IP Address**, and tap **Confirm**.



IP Configuration

Mode HTTP **HTTPS**

IP Address Enter the server's IP address

Port 443 ✕

Confirm Cancel

Figure 5-1 IP Configuration

4. Enter the server's user name and password.

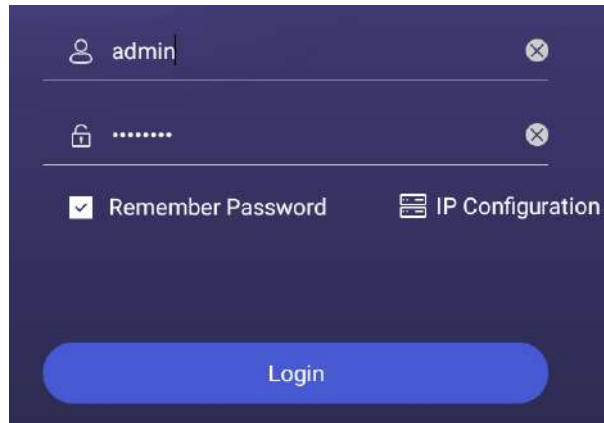




Figure 5-2 Login

5. Optional: Check **Remember Password** to log in with no need to enter password next time.
6. Tap **Login**.

5.1.2 Display a Camera on Video Wall

Steps

1. Tap  on the iSecure main page, and select **Video Wall**.
2. Tap  in the upper-right corner and select **Video Wall**, and select the video wall that you want to configure.
All video wall resources from the platform will be listed in **Video Wall**.

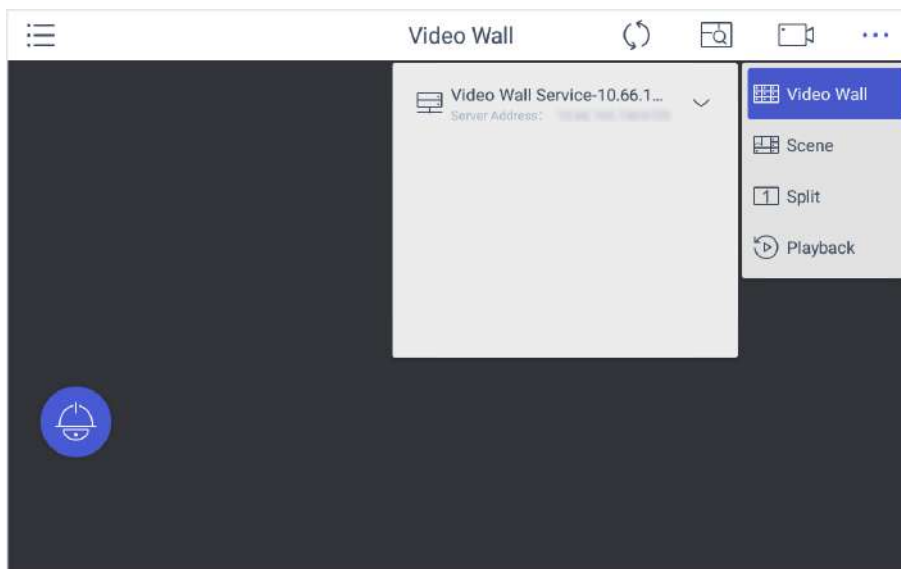





Figure 5-3 Video Wall

3. Optional: Tap  to select desired scene from **Scene** list.
4. Optional: Tap  and select **Split** to split the output window.
5. Tap  to play the live video of corresponding camera on the window. You can choose one of the following ways:

Tap **Shortcut**, and enter the serial number in the numeric panel, and tap . Tap **List**, and select a camera to display.

You can also perform the following operations:

- Enter 0+ to stop playing the live video of corresponding camera on the window.
- Tap to preview the live video of the previous input camera channel on the selected output monitor.
- Tap to preview the live video of the next input camera channel on the selected output monitor.

6. Other operations:

- Tap and use the smart scaling function to select and zoom in the desired wall area. For details about the operation, see *Smart Scaling on Video Wall*.
- Tap to perform PTZ control. For details, see *PTZ Control* for specifications.

5.1.3 Local Live View

Steps

1. Tap and select **Live View** to go to the local live view.

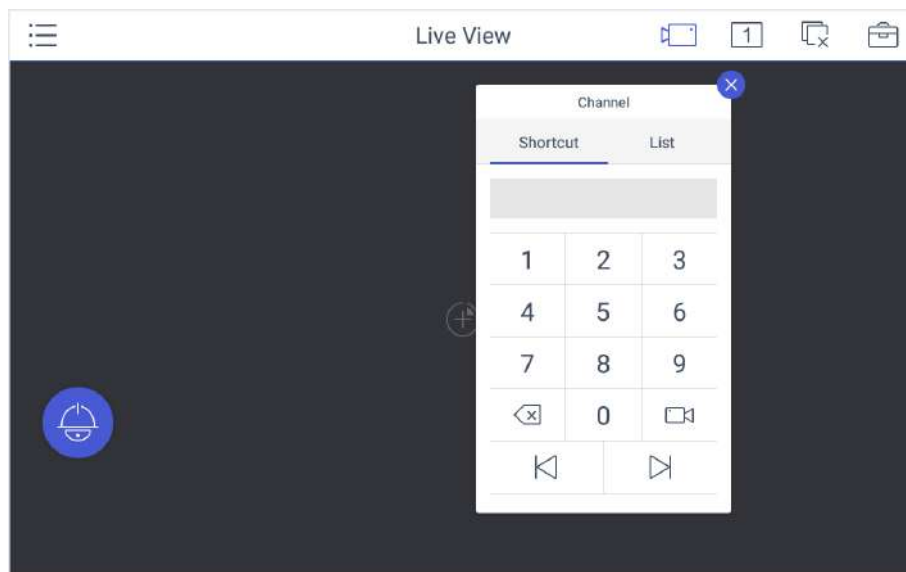


Figure 5-4 Live View

2. Optional: Tap to select the window division mode.

Note

You can also preview the window first and then split the window. In this situation, the previewed window is on the upper-left by default.

3. Select a channel, and tap .

4. Watch the live view.

Tap **Shortcut**, and enter the serial number in the numeric panel, and tap . Tap **List**, and select a channel to preview.

5. Optional: Switch the channel.

Enter 0+ to stop previewing. Tap to preview the live video of the previous input camera channel on the selected output monitor. Tap to preview the live video of the next input camera channel on the selected output monitor.

6. Optional: Tap to close all the live view windows. You can tap to perform the following operations.

Icon	Description
Full	<ul style="list-style-type: none"> ● Tap Full to have a full-screen preview of the live video of corresponding camera on the window. ● Double-tap the window to have a full-screen preview.
Capture	Select a window and tap Capture to save pictures to a USB flash drive or FTP server.
<hr/> <div style="display: flex; align-items: center;"> Note </div> <p>You can also press the button on the joystick to capture pictures.</p> <hr/>	
Record	Select a window and tap Record to save records to a USB flash drive or FTP server.
View	Tap View to view parameters of the camera on live view.

Note

If you perform operations of capturing pictures or recording videos, make sure to connect the keyboard with a USB flash drive, or provide a valid and correct network connection between PC (running FTP server) and the keyboard, and set the FTP parameters of keyboard correctly. Refer to Set Storage for FTP configuration.

5.1.4 Video Wall Playback

Before You Start

Ensure you have enabled **Video Wall Playback Local Decoding**.

Steps

1. Tap on the iSecure main page, and select **Video Wall**.
2. Select a display window, tap in the upper-right corner, and select **Playback**.

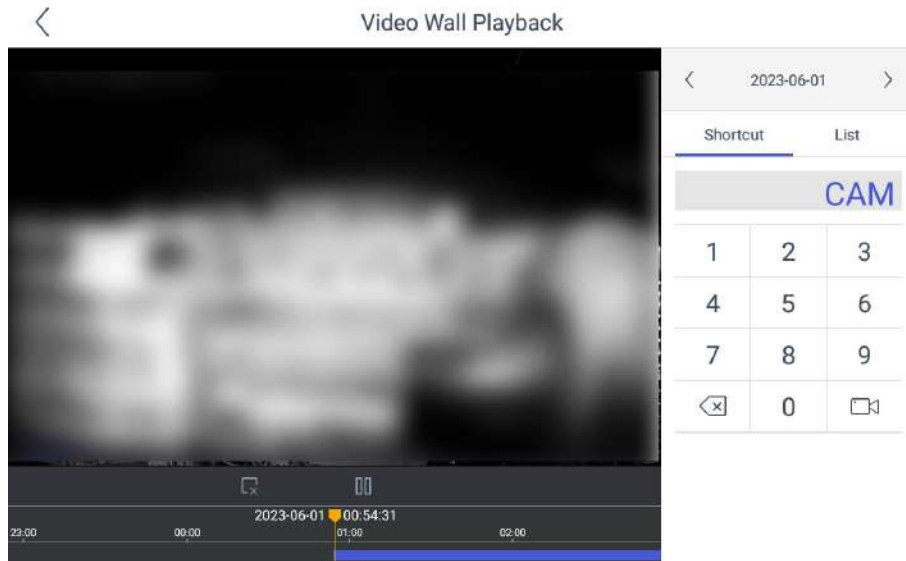





Figure 5-5 Video Wall Playback

3. Select the date.
4. Select the channel. You can choose one of the following ways.
 - Tap **Shortcut**, and enter the serial number in the numeric panel, and tap .
 - Tap **List**, and select the desired channel.
5. Drag the slider to set required playback time and play from the start time by default.
6. Use the toolbar to perform playback operations.

Icon	Description
	Pause/Start
	Stop

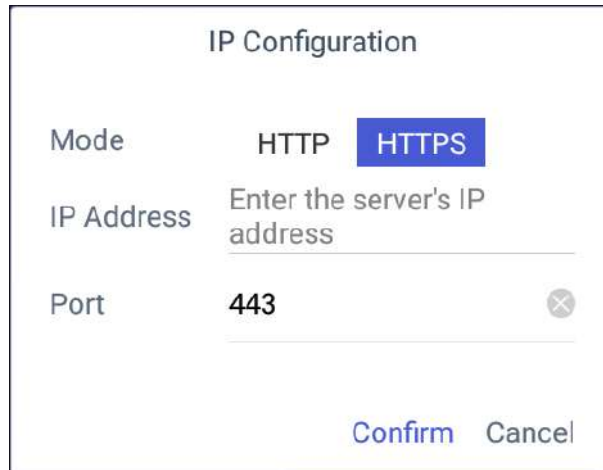
5.2 Control HikCentral

You can connect the keyboard to **HikCentral** platform to play live videos on the video wall, watch video playback or watch live video locally.

5.2.1 Login

Steps

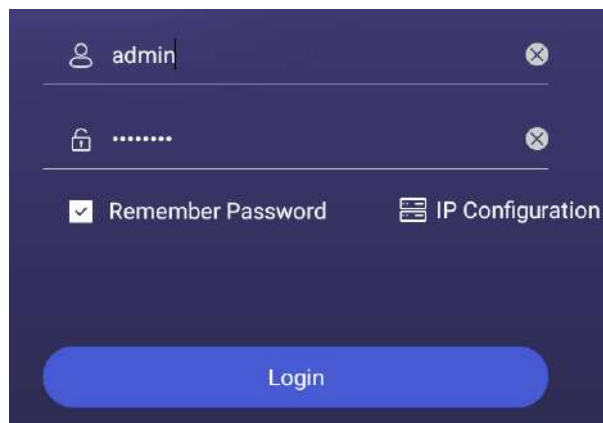
1. Tap **HikCentral** on the main page.
2. Tap **IP Configuration**.
3. Select **HTTP** or **HTTPS** mode, enter the server's **IP Address**, and tap **Confirm**.



The image shows a dialog box titled "IP Configuration". It has three main sections: "Mode" with "HTTP" and "HTTPS" buttons (HTTPS is selected), "IP Address" with a text input field containing the placeholder "Enter the server's IP address", and "Port" with a text input field containing "443" and a clear button (X). At the bottom right, there are "Confirm" and "Cancel" buttons.

Figure 5-6 IP Configuration

4. Enter the server's user name and password.



The image shows a login screen with a dark blue background. It features two input fields: the first contains the username "admin" and the second contains a masked password ".....". Below the password field is a checkbox labeled "Remember Password" which is checked, and a button labeled "IP Configuration". At the bottom center is a large blue "Login" button.



Figure 5-7 Login

5. Optional: Check **Remember Password** to log in with no need to enter password next time.

6. Tap **Login**.

5.2.2 Display a Camera on Video Wall

Steps

1. Tap HikCentral  on the iSecure main page, and select **Video Wall**.
2. Tap  in the upper-right corner and select **Wall**, and select the video wall that you want to configure.

All video wall resources from the platform will be listed in **Wall**.

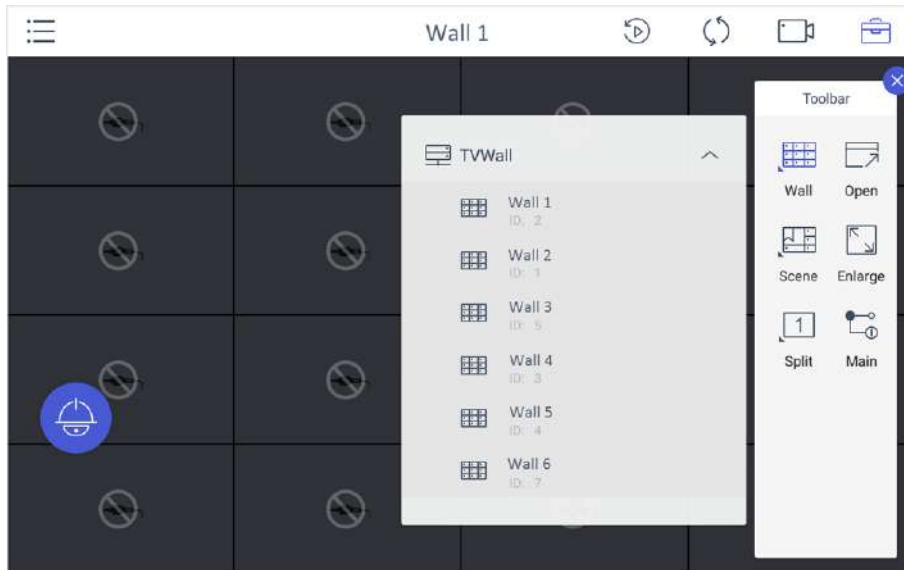











Figure 5-8 Video Wall

3. Optional: Tap  to select desired scene from **Scene** list.
4. Optional: Tap  and select **Split** to split the output window.
5. Tap  to play the live video of corresponding camera on the window. You can choose one of the following ways:

- Tap **Shortcut**, and enter the serial number in the numeric panel, and tap .
- Tap **List**, and select a camera to display.

You can also perform the following operations:

- Enter 0+ to stop playing the live video of corresponding camera on the window.
 - Tap  to preview the live video of the previous input camera channel on the selected output monitor.
 - Tap  to preview the live video of the next input camera channel on the selected output monitor.
6. Other operations:
 - Select a non-BNC window, tap  and select **Open** to open a new window above non-roaming windows.
 - Tap  to perform PTZ control. For details, see **PTZ Control** for specifications.
 - Select a window and tap **Enlarge** to enlarge the window.
 - Select a window and tap **Main** to switch the stream type.

5.2.3 Local Live View

Steps

1. Tap  and select **Live View** to go to the local live view.

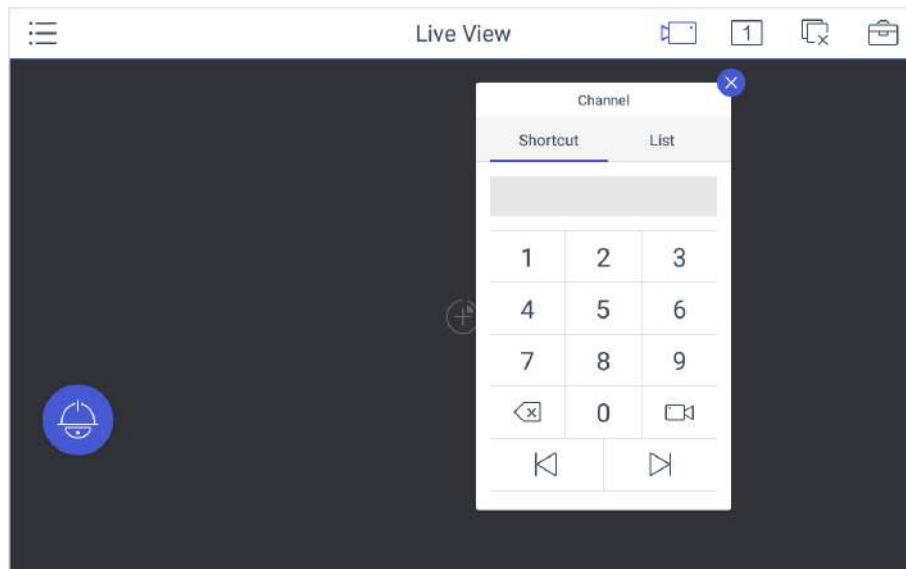


Figure 5-9 Live View

2. Optional: Tap to select the window division mode.

Note

You can also preview the window first and then split the window. In this situation, the previewed window is on the upper-left by default.

3. Select a channel, and tap .

4. Watch the live view.

- Tap **Shortcut**, and enter the serial number in the numeric panel, and tap .
- Tap **List**, and select the desired channel.

5. Optional: Switch the channel.

Enter 0+ to stop previewing. Tap to preview the live video of the previous input camera channel on the selected output monitor. Tap to preview the live video of the next input camera channel on the selected output monitor.

6. Optional: Tap to close all the live view windows. You can tap to perform the following operations.

Icon	Description
Full	<ul style="list-style-type: none"> • Tap Full to have a full-screen preview of the live video of corresponding camera on the window. • Double-tap the window to have a full-screen preview.
Capture	Select a window and tap Capture to save pictures to a USB flash drive or FTP server.

Note

You can also press the button on the joystick to capture pictures.

Record Select a window and tap **Record** to save records to a USB flash drive or FTP server.

View Tap **View** to view parameters of the camera on live view.

Note

If you perform operations of capturing pictures or recording videos, make sure to connect the keyboard with a USB flash drive, or provide a valid and correct network connection between PC (running FTP server) and the keyboard, and set the FTP parameters of keyboard correctly. Refer to Set Storage for FTP configuration.

5.2.4 Video Wall Playback

Before You Start

Ensure you have enabled **Video Wall Playback Local Decoding**.

Steps







1. Tap  in the upper-right corner to watch video wall playback.



Figure 5-10 Video Wall Playback

2. Select the date.
3. Select the channel. You can choose one of the following ways.
 - Tap **Shortcut**, and enter the serial number in the numeric panel, and tap .
 - Tap **List**, and select the desired channel.
4. Drag the slider to set required playback time and play from the start time by default.
5. Use the toolbar to perform playback operations.

Icon	Description
	Pause/Start
	Fast forward speed; you can also move the joystick right to fast forward the video.
	Slow forward speed; you can also move the joystick left to slow forward the video.
	Stop

5.3 Control KPS

You can connect the keyboard to KPS platform to play live videos on the video wall.

Steps

1. Click KPS on the home page.
2. Enter **Server IP, Port, User Name, and Password** to log in the platform.
3. Click **Login** to enter the platform interface.

Note

You can check **Remember Password** to remember the login password in next time.

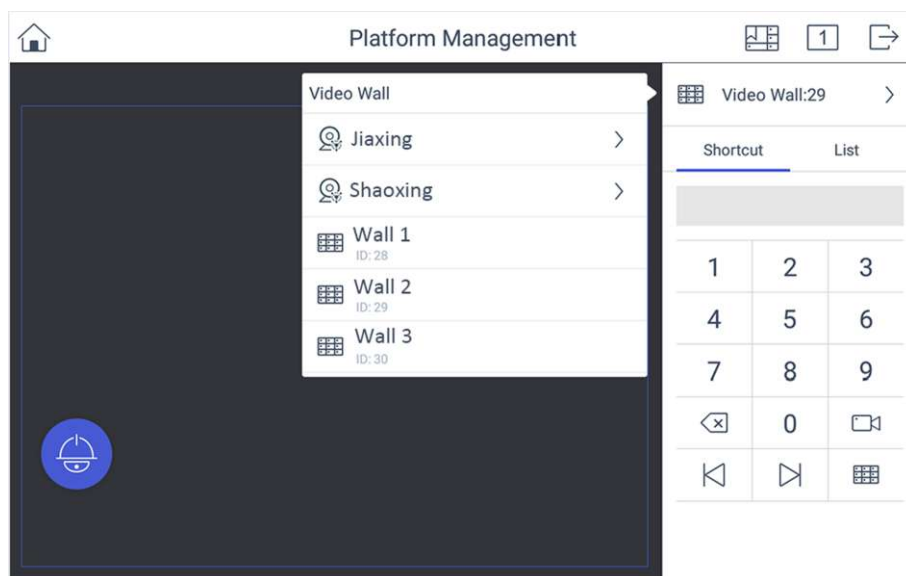





Figure 5-11 Platform Management

4. Click > in the upper-right corner and select **Video Wall**, and select the video wall that you want to configure.






 **Note**

All video wall resources from the platform will be listed in **Video Wall**.

5. Click **Shortcut**, enter the serial number of window and click  to select the window.
 6. Select a camera to play on video wall.
 - 1) Select an output window on the video wall to play the camera.
 - 2) Click , enter the serial number in the numeric panel, and click  to play the live video of corresponding camera on the window.
-

 **Note**

You can also select from **List**.

7. Optional: Click  or  to preview the live video of the previous or next input camera channel on the selected output monitor.
8. Optional: Click  to select desired scene from **Scene** list.
9. Optional: Click  to split the output window.
10. Optional: Click  to perform PTZ control. For details, see **PTZ Control** for specifications.

Chapter 6 Configure Web

You can add devices, manage channels or configure basic parameters through the web interface of the network keyboard. It is convenient to remotely configure and maintain the network keyboard.

6.1 Login

Before You Start

Ensure that the network keyboard is connected to the network and the IP address of the network keyboard is obtained.

Steps

1. Open the browser, enter the IP address of the network keyboard (HTTPS://IP address) in the address bar, and enter the login interface.

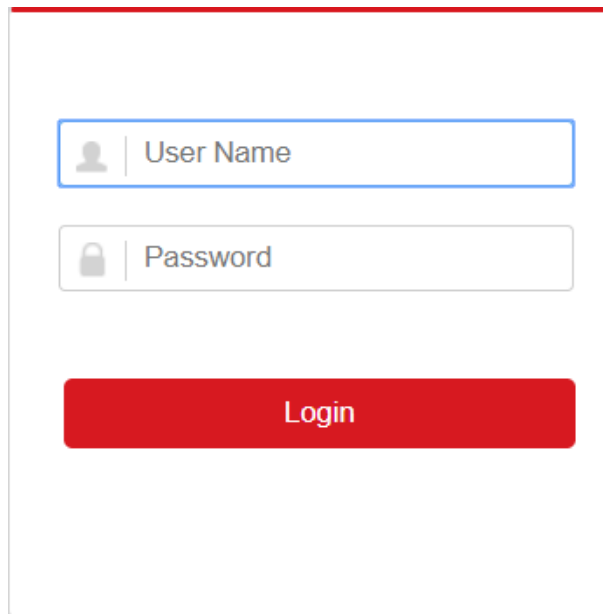
The image shows a web login interface. It consists of two input fields stacked vertically. The top field is labeled 'User Name' and has a person icon on the left. The bottom field is labeled 'Password' and has a lock icon on the left. Below these fields is a prominent red button with the text 'Login' in white.

Figure 6-1 Login

2. Enter user name and password.

Caution

- Passwords are divided into 4 types: digits, lowercase letters, uppercase letters, and special symbols. Passwords are classified into 4 levels:
 - Level 0 (risky password): password length < 8 or only one type of character.
 - Level 1 (weak password): password length \geq 8 and two types of characters. The character combination includes digits + lowercase letters and digits+ upper case letters.

- Level 2 (medium password): password length ≥ 8 and two types of characters. The character combination cannot be digits + lowercase letters or digits+ upper case letters.
- Level 3 (strong password): password length ≥ 8 and three types of characters.
- Do not use the risky passwords. To better protect your product, reset your password regularly.
- The password cannot contain the user name (in the forward order and backward order), 123, admin (case insensitive), a string of at least four consecutive digits (such as 1234, 12345, 4321, etc.), a string of at least four repeating characters (such as 1111, 8888, aaaa, etc.).
- The password cannot be 1qaz2wsx, 1qaz@WSX, !@#\$QWER, p@ssword, passw0rd, or p@ssw0rd.

3. Click **Login**.

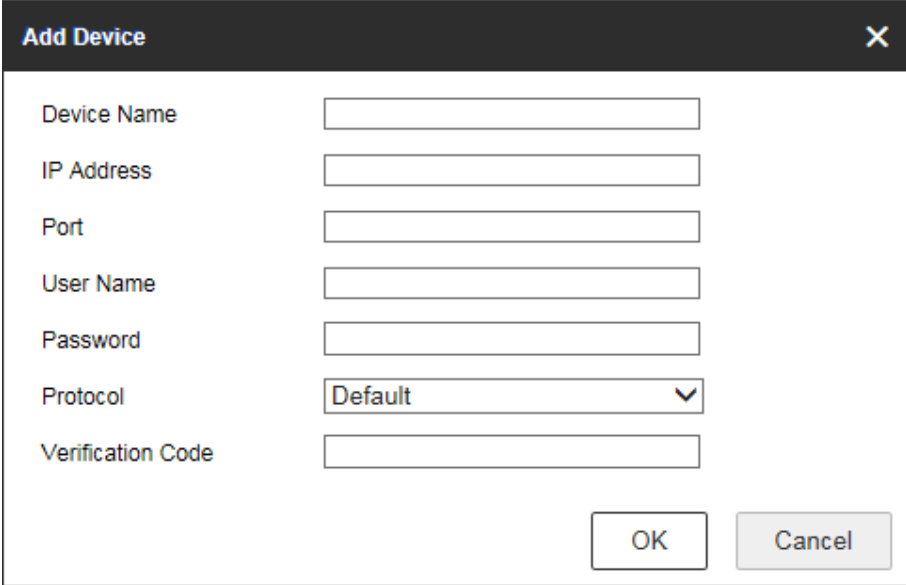
6.2 Add Devices

6.2.1 Manually Add

You can add devices to the network keyboard on Web.

Steps

1. In **Device Management** interface, click **Add**.
2. Enter **IP Address**, **Port**, **User Name** and **Password**, and select protocol type.



The screenshot shows a dialog box titled "Add Device" with a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Device Name: Text input field
- IP Address: Text input field
- Port: Text input field
- User Name: Text input field
- Password: Text input field
- Protocol: Dropdown menu with "Default" selected and a downward arrow
- Verification Code: Text input field
- OK: Button
- Cancel: Button

Figure 6-2 Add Device by IP Address

3. If you enable stream encryption for the device, you need to enter the verification code when adding the device by IP address.
4. Optional: In **Device Management** interface, click **Add SADP**, enter user name and password, check the device to be added, and click **OK** to add online devices on the same network segment.

<input type="checkbox"/>	ID	Device Type	IP Address	Port No.
<input type="checkbox"/>	1	DS-7608N-Q1/1T	192.168.1.10	8000
<input type="checkbox"/>	2	DS-8104LHFH-E2/RTJ	192.168.1.100	8000
<input type="checkbox"/>	3	DS-2CD4112F-I	192.168.1.2	8000
<input type="checkbox"/>	4	iDS-96064NX-I16/RTJ	192.168.1.100	8000
<input type="checkbox"/>	5	iDS-8108LHFH-K2	192.168.1.10	8000
<input type="checkbox"/>	6	DS-7616NI-K2/16P	192.168.1.10	8000

Selected 0 Total 6 Items << < 1/1 > >>

OK Cancel

Figure 6-3 Add SADP

Note

- SADP search can only add devices in the same network segment.
- After adding devices in batches by SADP, you need to refresh manually to get the added devices.

6.2.2 Import Input Channels in Batches

Before You Start

1. Add several devices manually. Go to **Channel Management** → **Input Channel**, click **Export**, enter password, and then export channel information.
2. Edit the device channel information based on the exported template, and save the exported

channel information into the local PC.

Steps

1. Go to **Channel Management** → **Input Channel**.
2. Click **Import**.



The dialog box titled "Import Input Channels List (Excel)" has a close button (X) in the top right corner. It contains two input fields: "Input Channel File" with a "Browse" button to its right, and "Password". At the bottom right are "OK" and "Cancel" buttons.

Figure 6-4 Import Input Channel in Batches

3. Click **Browse** and select the imported template.
4. Enter password and click **OK**.
The channels in the template will be added into network keyboards.

6.3 Channel Management

6.3.1 Edit Channel

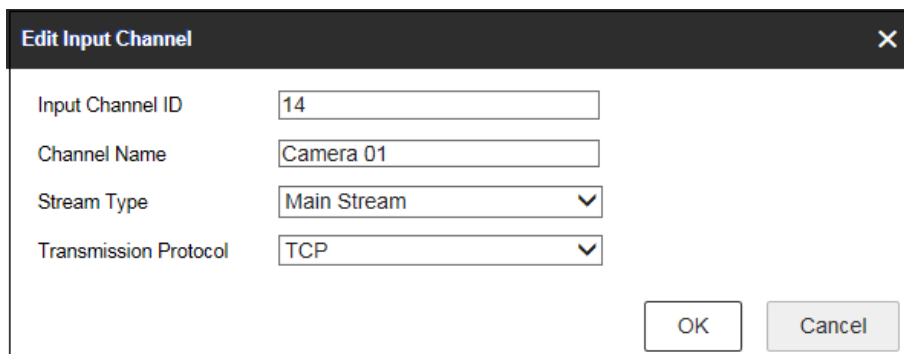
Steps

1. Go to **Channel Management** → **Input Channel**.

Note

Input and output channels can be edited. This section takes input channels as an example.

2. Select the input channel to be edited and click **Edit**.



The dialog box titled "Edit Input Channel" has a close button (X) in the top right corner. It contains four fields: "Input Channel ID" (14), "Channel Name" (Camera 01), "Stream Type" (Main Stream), and "Transmission Protocol" (TCP). At the bottom right are "OK" and "Cancel" buttons.

Figure 6-5 Edit Input Channel

3. Edit channel parameters.

Input Channel ID

Each input channel corresponds to a unique number, which is valid for video wall and local live view.

Stream Type

Code stream for local live view and video wall preview.

Transmission Protocol

Available for video wall preview.

4. Click **OK**.

6.3.2 Camera Group

Camera group enables you to preview a group of cameras (input channels) in sequence.

Steps

1. Go to **Channel Management** → **Camera Group**.
2. Click **Add**.

The screenshot shows a dialog box titled "Add CAM-G" with a close button (X) in the top right corner. It contains two input fields: "CAM-G Name" and "Interval (sec)" with the value "30". Below these is a table titled "Select Linked Input Channel" with a search bar "Enter keywords:". The table has 8 columns: Channel No., Channel Name, Original C..., Device Type, IP Address, Port No., Stream Type, and Transmission Pr. The table lists 12 channels with various parameters. At the bottom right of the table are "OK" and "Cancel" buttons.

Channel No.	Channel Name	Original C...	Device Type	IP Address	Port No.	Stream Type	Transmission Pr.
<input type="checkbox"/>	1	1			8000	Main Stream	TCP
<input type="checkbox"/>	2	2			8000	Main Stream	TCP
<input type="checkbox"/>	3	2			8000	Main Stream	TCP
<input type="checkbox"/>	4	1			8000	Main Stream	TCP
<input type="checkbox"/>	5	36			8000	Main Stream	TCP
<input type="checkbox"/>	6	39			8000	Main Stream	TCP
<input type="checkbox"/>	7	40			8000	Main Stream	TCP
<input type="checkbox"/>	8	41			8000	Main Stream	TCP
<input type="checkbox"/>	9	42			8000	Main Stream	TCP
<input type="checkbox"/>	10	43			8000	Main Stream	TCP
<input type="checkbox"/>	11	46			8000	Main Stream	TCP
<input type="checkbox"/>	12	57			8000	Main Stream	TCP

Total 12 Items << < 1/1 > >>

OK Cancel

Figure 6-6 Add Camera Group

3. Enter **Name** and **Interval(s)**.
4. Check input channels to be linked and click **OK**.

Note

- Up to 16 camera groups can be added.
 - Each camera group can link up to 64 input channels.
 - Interval range: 10 to 10000 seconds.
 - The camera groups set by different users are independent. Namely, users can only view and edit their own camera groups.
-

5. Click **Edit** in **Camera Group** interface, uncheck input channels to be unlinked and click **OK** to unlink the input channel.

6.4 Network

Steps

1. Select **Network Management** at the main interface.
2. Configure network parameters.
 - Check **DHCP** to obtain IP address and related network parameters automatically.
 - Uncheck **DHCP** and enter IP address, gateway, subnet mask.
3. Click **Save**.

IP Address Settings	
DHCP	<input checked="" type="checkbox"/> Enable
IP Address	<input type="text"/>
Gateway	<input type="text"/>
Subnet Mask	<input type="text"/>
Mac Address	<input type="text"/>
<input type="button" value="Save"/>	

Figure 6-7 Network Parameters

6.5 System Settings

6.5.1 Version

Go to **System Management** → **Version** to view system version information.

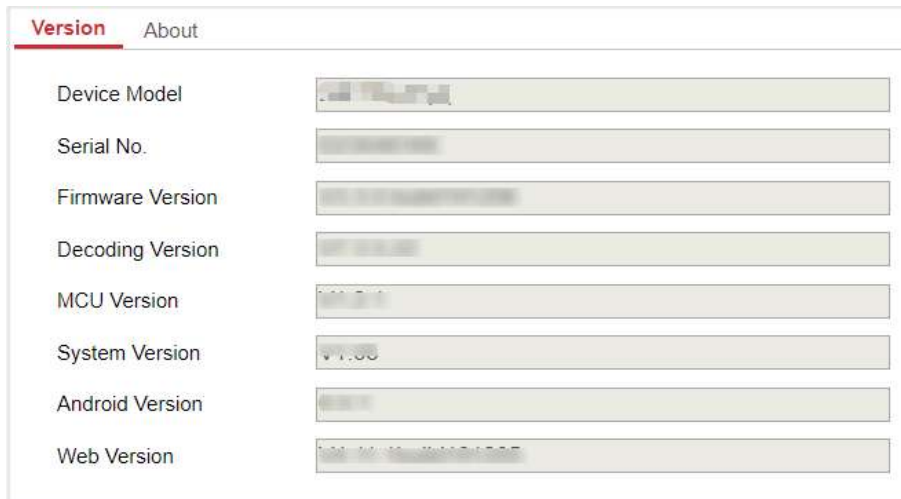


Figure 6-8 Version

6.5.2 User Management

Administrator can add operator and allocate devices to the operator. Operators can operate the allocated devices, but cannot add, edit, or delete devices.

Steps

1. Go to **System Management** → **User Management**.
2. Click **Add**.

Add User
✕

User Name

Admin Password

Password

8 to 16 characters allowed, including at least 2 of the following types: upper-case letters, lower-case letters and digits.

Confirm Password

Select Associated Device Select All

<input type="checkbox"/>	ID	Device Type	Device Name	IP Address	Port No.
<input type="checkbox"/>	1	IPC	IPC	192.168.1.20	8000
<input type="checkbox"/>	2	DVR	DVR	192.168.1.20	8000
<input type="checkbox"/>	3	IPC	IPC	192.168.1.20	8000
<input type="checkbox"/>	4	DS-B20-MCU-NP	DS-B20-MCU-NP	192.168.1.20	8000

Selected 0 Total 4 Items << < 1/1 > >>

OK Cancel

Figure 6-9 Add User

3. Enter user name and password for an operator, and click **OK**.

Caution

- Passwords are divided into 4 types: digits, lowercase letters, uppercase letters, and special symbols. Passwords are classified into 4 levels:
 - Level 0 (risky password): password length < 8 or only one type of character.
 - Level 1 (weak password): password length ≥ 8 and two types of characters. The character combination includes digits + lowercase letters and digits+ upper case letters.
 - Level 2 (medium password): password length ≥ 8 and two types of characters. The character combination cannot be digits + lowercase letters or digits+ upper case letters.
 - Level 3 (strong password): password length ≥ 8 and three types of characters.

- Do not use the risky passwords. To better protect your product, reset your password regularly.
 - The password cannot contain the user name (in the forward order and backward order), 123, admin (case insensitive), a string of at least four consecutive digits (such as 1234, 12345, 4321, etc.), a string of at least four repeating characters (such as 1111, 8888, aaaa, etc.).
 - The password cannot be 1qaz2wsx, 1qaz@WSX, !@#\$QWER, p@ssword, passw0rd, or p@ssw0rd.
-

4. Check devices to be linked as desired and click **OK**.

Note

- Keyboard supports up to 32 users: 1 administrator and 31 operators.
 - The operator can only operate on the devices allocated.
-

5. Optional: Click **Edit**, uncheck the devices to be unlinked and click **OK** to unlink the devices.

6.5.3 System Maintenance

Go to **System Management** → **System Maintenance** to restart the device, restore defaults, export/import configuration file, etc.

Note

Restoring default settings, importing/exporting configuration files, and remote upgrades require the administrator password to be verified.

Restart

You can restart the network keyboard.

Restore Defaults

- **Simply Restore:** Keep the activation state (administrator password) and the network parameters of the network keyboard, and the remaining parameters will be restored to the default settings.
- **Completely Restore:** Completely restore the parameters to default settings.

Import/Export Configuration File

You can export the configuration file to the computer or import the configuration file from the computer to the keyboard. In case of keyboard failure, you need to back up the data by exporting the configuration file first, and then repair the failure. To copy the data of this keyboard to another keyboard, you can also import/export the configuration file.

Note

- Please set the key for the configuration file when exporting it.
-

- The configuration file encrypted and exported is named as configurationData.bin.
- If the configuration file is encrypted, you need to enter the key of the configuration file when importing it.

Remote Upgrade

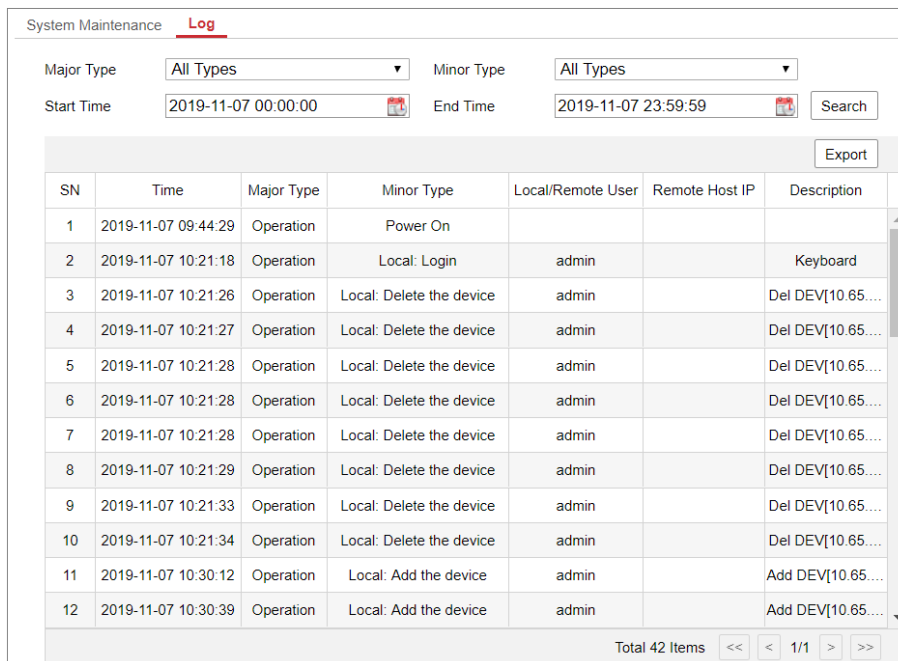
Click **Browse** to select the upgrade file in the computer, and click **Upgrade** to upgrade the network keyboard remotely.

Note

The upgrade file must be named as DS-1600K.apk.

6.5.4 Log Management

Go to **System Management** → **System Maintenance** → **Log**, select the major and minor types and start and end time of the log, and then search and export the log.



The screenshot shows the 'Log' management interface. At the top, there are filters for Major Type (All Types), Minor Type (All Types), Start Time (2019-11-07 00:00:00), and End Time (2019-11-07 23:59:59). Below the filters is a table with 12 rows of log entries. The table has columns for SN, Time, Major Type, Minor Type, Local/Remote User, Remote Host IP, and Description. The entries show various operations like Power On, Local Login, and Local Delete/Add device. At the bottom right, there is a pagination control showing 'Total 42 Items' and navigation buttons.

SN	Time	Major Type	Minor Type	Local/Remote User	Remote Host IP	Description
1	2019-11-07 09:44:29	Operation	Power On			
2	2019-11-07 10:21:18	Operation	Local: Login	admin		Keyboard
3	2019-11-07 10:21:26	Operation	Local: Delete the device	admin		Del DEV[10.65...
4	2019-11-07 10:21:27	Operation	Local: Delete the device	admin		Del DEV[10.65...
5	2019-11-07 10:21:28	Operation	Local: Delete the device	admin		Del DEV[10.65...
6	2019-11-07 10:21:28	Operation	Local: Delete the device	admin		Del DEV[10.65...
7	2019-11-07 10:21:28	Operation	Local: Delete the device	admin		Del DEV[10.65...
8	2019-11-07 10:21:29	Operation	Local: Delete the device	admin		Del DEV[10.65...
9	2019-11-07 10:21:33	Operation	Local: Delete the device	admin		Del DEV[10.65...
10	2019-11-07 10:21:34	Operation	Local: Delete the device	admin		Del DEV[10.65...
11	2019-11-07 10:30:12	Operation	Local: Add the device	admin		Add DEV[10.65...
12	2019-11-07 10:30:39	Operation	Local: Add the device	admin		Add DEV[10.65...

Figure 6-10 View Logs

6.5.5 Security Settings

Go to **System Management** → **Security Settings**, and enable SADP. When you enable SADP, the

keyboard can be searched. When you disable SADP, the keyboard cannot be searched.

6.5.6 View Open Source Software Licenses

Go to **System Management** → **About**, and click **View Licenses** to view open source software licenses.

Chapter 7 Configure System

For Ethernet and WLAN configuration, refer to *Set Wired Network* and *Set Wireless Network*.

7.1 Set Language

You can choose the device language.

Steps

1. Click **System Settings** → **Language**.
2. Select the system language as you desired.


7.2 Set Date and Time


You can set date and time and select time zone by configuring the parameters.

Steps

1. Click **System Settings** → **Date & Time**.
2. You can set the system date and time in two ways.

Automatic mode Enable **Auto-obtain**.

- Manual mode**
1. Disable **Auto-obtain**.
 2. Click  at **Date & Time**.
 3. Set time as you desired.
 4. Click **Confirm**.

3. You can select time zone for your keyboard system.
 - 1) Click  at **Time Zone**.
 - 2) Select time zone as you desired.

7.3 Set Storage

The keyboard has no hard disk for storage, you can configure the FTP server parameters in **Storage** interface or you can connect a USB flash drive for storage.

Before You Start

Ensure the network connection of the PC (running FTP server) and the device is valid and correct. Run the FTP server on the PC.

Steps

1. Click **System Settings** → **Storage**.

2. Switch on **FTP server**.
3. Enter **Address, Folder, User Name, and Password** of the FTP server.

 **Note**

A new folder will be created in the directory.

4. Click **Save**.

7.4 Maintenance

For the admin user account, you can import and export the configuration files, and restore the defaults of local configurations. The import and export operation allows you to duplicate system settings from one device to another, which is a convenient way to configure your device.

Steps

1. Click **System Settings** → **Maintenance**.
2. Perform the following operations as demand.

Configure File (Import)

Enter the admin password, and the USB flash drive will pop up. Import the configuration file (configurationData.db) from the USB flash drive.

Configure File (Export)

Enter the admin password, and the USB flash drive will pop up. Set the key and export the configuration file (configurationData.db) to the USB flash drive.

Restore Default (Simple)

Restore the defaults of local configurations except the network, admin password.

 **Note**

It is recommended to export the configuration file first before restoring default.

Restore Default (Complete)

You can restore the defaults of all the local configurations except the network parameters and the device will become inactive status.

 **Note**

- It is recommended to export the configuration file first before restoring default.
 - The default IP address is 192.0.0.64 after restoring default completely.
-

Log File (Export)

Export the log file to the USB flash drive.

7.5 Set Others

You can adjust screen brightness, set the sleep mode, enable/disable alarm sound, choose the resolution of external monitor and other parameters.

Steps

1. Click **System Settings** → **Others**.
2. Perform the following operations as demand.

Brightness

You can drag brightness slider to set it as you desired.

Sleep

Select the sleep mode.

Alarm Sound

You can enable/disable alarm sound.

External Monitor Resolution

Select the resolution for the external monitor.

Display Video Only on Secondary Screen

When enabling this function, live view and playback video will be shown on the secondary screen. And the operation will be shown on the keyboard.

Video Wall Playback Local Decoding

When enabling this function, video wall playback can be enabled.

Joystick Sensitivity

Select the joystick sensitivity.

System Open Source Compliance Statement

Click  to view the system open source compliance statement.



Note

The alarm sound will be triggered when network is disconnected.

7.6 Upgrade Firmware

You can view keyboard version, access help document, and upgrade firmware by USB flash drive.

Steps

1. Click **System Settings** → **About**.
2. Click **Upgrade** and the system will automatically get upgrade firmware from USB flash drive.
3. You can click **Help** to access help document.



See Far, Go Further