DS-6900UDI(B) Series
HD Video and Audio Decoder

User Manual
About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (https://www.hikvision.com/).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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Regulatory information

FCC information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment 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.

FCC conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.
Applicable Model

<table>
<thead>
<tr>
<th>Series</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-6900UDI Decoder</td>
<td>DS-6901UDI(B)</td>
</tr>
<tr>
<td></td>
<td>DS-6904UDI(B)</td>
</tr>
<tr>
<td></td>
<td>DS-6908UDI(B)</td>
</tr>
<tr>
<td></td>
<td>DS-6910UDI(B)</td>
</tr>
<tr>
<td></td>
<td>DS-6912UDI(B)</td>
</tr>
<tr>
<td></td>
<td>DS-6916UDI(B)</td>
</tr>
</tbody>
</table>

About the Default

<table>
<thead>
<tr>
<th>Item</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>User name</td>
<td>admin</td>
</tr>
<tr>
<td>Device IP address</td>
<td>192.0.0.64</td>
</tr>
<tr>
<td>SSH login</td>
<td>User name: admin</td>
</tr>
<tr>
<td></td>
<td>Password: same as the device</td>
</tr>
</tbody>
</table>

Symbol Conventions

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![i]</td>
<td>Provides additional information to emphasize or supplement important points of the main text.</td>
</tr>
<tr>
<td>![WARNING]</td>
<td>Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.</td>
</tr>
<tr>
<td>![DANGER]</td>
<td>Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.</td>
</tr>
</tbody>
</table>

### Safety Instructions

**WARNING**
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Use the power adapter delivered with the device only.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- Please make sure that the plug is firmly connected to the power socket.
- The equipment must be connected to an earthed mains socket-outlet.
- The equipment has been designed, when required, modified for connection to an IT power distribution system.
- This equipment is not suitable for use in locations where children are likely to be present.
- **CAUTION:** Risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
  ATTENTION: Risque d’explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les batteries usagées selon les instructions.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
● + identifies the battery holder itself and identifies the positioning of the cell(s) inside the battery holder. + identifies the positive terminal(s) of equipment which is used with, or generates direct current. - identifies the negative terminal(s) of equipment which is used with, or generates direct current.

● If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

● If the product does not work properly, please contact your dealer or the nearest service center.

● Never attempt to disassemble the product yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

● Please enhance the protection for personal information and data security as the device may be confronted with the network security problems when it is connected to the Internet. Please contact your dealer or the nearest service center once you find that there may be the network security problems.

● The USB port of the equipment is used for connecting to a mouse, a keyboard, or a USB flash drive only.

● Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).

● Do not expose the device to the explosive situation.

● Keep clean and dry on the surface of the device.

● Do not touch the exposed connection points or components when the device is powered on.

● Do not place any naked flame sources, such as lit candles, on the device.

● Do not place any objects containing water or liquids on the device. Prevent the device from water dropping or splashing.

● Place the device in a well-ventilated, dust-free environment. Ensure that the air vents are not covered by any objects such as newspapers, tablecloths, or curtains.

● Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

● If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
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Chapter 1 Introduction

1.1 Description
Designed for the high-definition video monitoring system, DS-6900UDI(B) Decoder is developed on the basis of embedded hardware platform, ensuring high reliability and stability of system running.

DS-6900UDI(B) Decoder is capable of simultaneous decoding video for 8-ch@24MP, 16-ch@12MP, 32-ch@8MP, 48-ch@5MP, 80-ch@3MP, 128-ch@1080p simultaneous decoding, and outputting decoded video via BNC, VGA, or HDMI interfaces, and it also supports multiple video stream formats like H.265, H.264+, Hik264, H.264 and MPEG4. The decoded video can be displayed on video wall or large screen.

1.2 Features
Powerful Decoding Capability
- DS-6901UDI(B) provides HDMI, VGA, and BNC output interfaces.
- Up to 8-ch decoding at 24 MP resolution (DS-6916UDI(B)).
- DS-6904UDI(B), DS-6908UDI(B), DS-6910UDI(B), DS-6912UDI(B), DS-6916UDI(B) provide HDMI (adaptable to DVI-D) and BNC output interfaces.
- Up to 4K (3840 × 2160@30 Hz) via HDMI interface (only for even interface), and up to 1080p@60 Hz via VGA interface.
- PS, RTP, TS, ES, HIK encapsulation formats.
- Supports window opening and window roaming.
- Supports two-window division mode.
- You can double click the roaming window to zoom in or out for one roaming window or divided roaming sub-window.
- Three encoding levels: baseline, main, and high-profile.
- Accessible by panoVu network camera.
- Accessible by 2.4 MP DeepinView camera.
- Accessible by thermal network camera and you can view the temperature measurement, dynamic fire source detection, ship detection and VCA information in live view and playback.
- You can enable or disable the smart information for the thermal network camera.

Multiple Decoding Control Modes
Two decoding modes: active decoding and passive decoding.
Decoding output of remote video files.
Decoding on video wall by directly linking cameras or by stream media forwarding.
Gets stream and decodes via URL.
Remotely controls PTZ of DVR or DVS via transparent channel.
Two-way audio via client software.
Supports multi-screen control with PC installed with RSC server.
Supports Wi-Fi module access to display the signal from iOS/Android mobile phone or pad on video wall.
Wi-Fi can be enabled via the Web browser or client software. You can get stream and decode the video on the video wall when Wi-Fi is enabled if no wired network can be accessed.
Configurable LED width and height parameters when the LED is connected.
Regular and irregular virtual screen configurable to display multiple signal sources and get rid of the restriction of physical screen.
LCD output type configurable for the BNC and VGA outputs; LCD and LED output types configurable for HDMI outputs.
You can configure what the video wall show when decoding ends and streaming fails via the Web browser and client software.
Auto-switch of sub-stream configurable via the Web browser and client software.

Integrated Capability
Decoding video/audio stream accessed by ONIVF, RTP/RTSP protocols.
Provides complete software development kit (SDK) for third-party developers.
Port link aggregation technology (Ethernet Channel).

Maintenance Management
Remotely get, configure, export and import parameters.
Remotely reboot, restore default settings and upgrading via web browser or client software.
Chapter 2 Panels and Connections

2.1 Front Panel

- Front panel of DS-6901UDI(B)

![Front Panel of DS-6901UDI(B)](image)

**Figure 2-1 Front Panel of DS-6901UDI(B)**

<table>
<thead>
<tr>
<th>No.</th>
<th>LED Indicator &amp; Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>POWER</td>
<td>Power LED indicator</td>
</tr>
<tr>
<td>2</td>
<td>LINK</td>
<td>Network connection LED indicator</td>
</tr>
<tr>
<td>3</td>
<td>Tx/Rx</td>
<td>Data transmitting/receiving status LED indicator</td>
</tr>
<tr>
<td>4</td>
<td>HDMI</td>
<td>HDMI video output</td>
</tr>
<tr>
<td>5</td>
<td>VGA</td>
<td>VGA video output</td>
</tr>
<tr>
<td>6</td>
<td>AUDIO OUT</td>
<td>Audio output, 3.5mm connector</td>
</tr>
<tr>
<td>7</td>
<td>VIDEO OUT</td>
<td>Video output, BNC connector</td>
</tr>
</tbody>
</table>

- Front Panel of DS-6904UDI(B)

![Front Panel of DS-6904UDI(B)](image)

**Figure 2-2 Front Panel of DS-6904UDI(B)**

No. | LED Indicator & Interface | Description                                           |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2-2 Description of DS-6904UDI(B) Front Panel

<table>
<thead>
<tr>
<th>No.</th>
<th>LED Indicator &amp; Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HDMI IN</td>
<td>HDMI input indicator</td>
</tr>
<tr>
<td>2</td>
<td>DVI IN</td>
<td>DVI input indicator</td>
</tr>
<tr>
<td>3</td>
<td>Power</td>
<td>Power indicator</td>
</tr>
<tr>
<td>4</td>
<td>RS-232/485</td>
<td>Connect to RS-232/485 devices, e.g., PC, etc.</td>
</tr>
<tr>
<td>5</td>
<td>CONSOLE</td>
<td>Debugging interface</td>
</tr>
<tr>
<td>6</td>
<td>USB</td>
<td>USB 2.0 interface</td>
</tr>
<tr>
<td>7</td>
<td>LAN</td>
<td>10/100/1000 Mbps Ethernet interface</td>
</tr>
<tr>
<td>8</td>
<td>OPT</td>
<td>10/100/1000 Mbps optical interface</td>
</tr>
<tr>
<td>9</td>
<td>OPT ACT</td>
<td>Optical interface indicator</td>
</tr>
</tbody>
</table>

Front Panel of DS-6908UDI(B)

Figure 2-3 Front Panel of DS-6908UDI(B)
Table 2-3 Description of DS-6908UDI(B) Front Panel

<table>
<thead>
<tr>
<th>No.</th>
<th>LED Indicator &amp; Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VGA IN</td>
<td>VGA input indicator</td>
</tr>
<tr>
<td>2</td>
<td>DVI IN</td>
<td>DVI input indicator</td>
</tr>
<tr>
<td>3</td>
<td>POWER</td>
<td>Power indicator</td>
</tr>
<tr>
<td>4</td>
<td>G1</td>
<td>10/100/1000 Mbps Ethernet interface 1</td>
</tr>
<tr>
<td>5</td>
<td>G2</td>
<td>10/100/1000 Mbps Ethernet interface 2</td>
</tr>
<tr>
<td>6</td>
<td>OPT1</td>
<td>10/100/1000 Mbps optical interface 1</td>
</tr>
<tr>
<td>7</td>
<td>OPT2</td>
<td>10/100/1000 Mbps optical interface 2</td>
</tr>
<tr>
<td>8</td>
<td>RS-232</td>
<td>Connect to RS-232 devices, e.g., PC, etc.</td>
</tr>
<tr>
<td>9</td>
<td>USB</td>
<td>USB 2.0 interface</td>
</tr>
</tbody>
</table>

• Front Panel of DS-6910/6912/6916UDI(B)

Figure 2-4 Front Panel of DS-6916UDI(B)
2.2 Rear Panel

- Rear Panel of DS-6901UDI(B)

Table 2-5 Description of DS-6901UDI(B) Rear Panel

<table>
<thead>
<tr>
<th>No.</th>
<th>Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LINE IN/OUT</td>
<td>Two-way audio input/output, 3.5 mm connector</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td>Connect to RS-232 devices, e.g., PC, etc.</td>
</tr>
<tr>
<td>3</td>
<td>LAN</td>
<td>10/100/1000 Mbps Ethernet interface</td>
</tr>
<tr>
<td>4</td>
<td>RS-485</td>
<td>Connect to RS-485 devices, e.g., keyboard, etc.</td>
</tr>
</tbody>
</table>
### Rear Panel of DS-6904UDI(B)

![Rear Panel of DS-6904UDI(B)](image)

#### Table 2-6 Description of DS-6904UDI(B)

<table>
<thead>
<tr>
<th>No.</th>
<th>Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LINE OUT</td>
<td>BNC connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI OUT</td>
<td>HDMI video output interface</td>
</tr>
<tr>
<td>3</td>
<td>CVBS</td>
<td>CVBS video output interface</td>
</tr>
<tr>
<td>4</td>
<td>DVI IN</td>
<td>DVI video input interface</td>
</tr>
<tr>
<td>5</td>
<td>HDMI IN</td>
<td>HDMI video input interface</td>
</tr>
<tr>
<td>6</td>
<td>Power switch</td>
<td>Power on or power off the device</td>
</tr>
<tr>
<td>7</td>
<td>Power</td>
<td>Power indicator</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>GND</td>
</tr>
</tbody>
</table>

### Rear Panel of DS-6908UDI(B)
### Rear Panel of DS-6908UDI(B)

#### Table 2-7 Description of DS-6908UDI(B) Rear Panel

<table>
<thead>
<tr>
<th>No.</th>
<th>Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AUDIO/VIDEO OUT</td>
<td>BNC connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI OUT</td>
<td>HDMI video output interface</td>
</tr>
<tr>
<td>3</td>
<td>VGA VIDEO IN</td>
<td>VGA video input interface</td>
</tr>
<tr>
<td>4</td>
<td>DVI VIDEO IN</td>
<td>DVI video input interface</td>
</tr>
<tr>
<td>5</td>
<td>LINE IN/OUT</td>
<td>Two-way audio input/output, 3.5mm connector</td>
</tr>
<tr>
<td>6</td>
<td>RS-485</td>
<td>Connect to RS-485 devices, e.g., keyboard, etc.</td>
</tr>
<tr>
<td>7</td>
<td>ALARM IN</td>
<td>8 alarm inputs</td>
</tr>
<tr>
<td></td>
<td>ALARM OUT</td>
<td>8 alarm outputs</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>GND</td>
</tr>
<tr>
<td>9</td>
<td>Power</td>
<td>Power input</td>
</tr>
</tbody>
</table>

![Figure 2-7 Rear Panel of DS-6908UDI(B)](image-url)
Table 2-8 Description of DS-6916UDI(B) Rear Panel

<table>
<thead>
<tr>
<th>No.</th>
<th>Interface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AUDIO OUT</td>
<td>BNC connector</td>
</tr>
<tr>
<td>2</td>
<td>VIDEO OUT</td>
<td>BNC connector</td>
</tr>
<tr>
<td>3</td>
<td>HDMI OUT</td>
<td>HDMI video output interface</td>
</tr>
<tr>
<td>4</td>
<td>VGA VIDEO IN</td>
<td>VGA video input interface</td>
</tr>
<tr>
<td>5</td>
<td>DVI VIDEO IN</td>
<td>DVI video input interface</td>
</tr>
<tr>
<td>6</td>
<td>LINE IN/OUT</td>
<td>Two-way audio input/output, 3.5mm connector</td>
</tr>
<tr>
<td>7</td>
<td>RS-485</td>
<td>Connect to RS-485 devices, e.g., keyboard, etc.</td>
</tr>
<tr>
<td>8</td>
<td>ALARM IN</td>
<td>8 alarm inputs</td>
</tr>
<tr>
<td></td>
<td>ALARM OUT</td>
<td>8 alarm outputs</td>
</tr>
<tr>
<td>9</td>
<td>Power</td>
<td>Power input</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>GND</td>
</tr>
</tbody>
</table>

NOTE

DS-6910UDI(B) provides 10 HDMI output interfaces, DS-6912UDI(B) provides 12 HDMI output interfaces and other interfaces are the same with DS-6916UDI(B).
Chapter 3 Device Activation

Purpose
You are required to activate the decoder first by setting a strong password for it before you can use the device. You can configure the basic network parameters.

Activation via Web Browser and Client Software are all supported.

**NOTE**
For the first-time user, the default user name of DS-6900UDI(B) is admin, and the default IP address is 192.0.0.64.

3.1 Activating via SADP Software

SADP software is used for detecting the online device, activating the camera, and resetting the password.

Get the SADP software from the supplied disk or the official website, and install the SADP according to the prompts. Follow the steps to activate the camera.

**Step 1** Run the SADP software to search the online devices.

**Step 2** Check the device status from the device list, and select the inactive device.

![SADP Interface](image)

**Figure 3-1 SADP Interface**

**Step 3** Create a password and input it in the password field, and confirm the password.

**Step 4** Click **Activate** to activate the device.
STRONG PASSWORD RECOMMENDED—We highly recommend you create a strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 5 Change the device IP address to the same subnet with your computer by either modifying the IP address manually or checking the checkbox of Enable DHCP.

![Modify Network Parameters](image)

Figure 3-2 Modify the IP Address

Step 6 Input the password and click the **Modify** button to activate your IP address modification.

### 3.2 Activating via Web Browser

Step 1 Power on the decoder, and connect the decoder to the network.

Step 2 Input the IP address into the address bar of the web browser, and click Enter to enter the activation interface.
Step 3 Create a password and input the password into the password field.

**WARNING**

**STRONG PASSWORD RECOMMENDED**—We highly recommend you create a strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 4 Confirm the password.

Step 5 Click **OK** to save the password and enter the live view interface.
Chapter 4 Network Configuration

**NOTE**
You shall acknowledge that the use of the product with the Internet access might be under network security risks. For avoidance of any network attacks and information leakage, please strengthen your own protection. If the product does not work properly, contact with your dealer or the nearest service center.

**Purpose**
You shall configure the basic network, DDNS, and Wi-Fi settings before other operations. In this chapter, the network configuration of the decoder by the Web browser is provided.

**NOTE**
The tested Web browsers include: IE 8.0+, Chrome 18.0+, Firefox 5.0+, and Safari 5.02+.

Step 1 Open the Web browser and input the IP address of Decoder (e.g., http://192.168.0.0).

Step 2 Log in to the device.

![Login Interface](image)

Figure 4-1 Login Interface

- If the device has not been activated, you need to activate the device first before login.
STRONG PASSWORD RECOMMENDED—We highly recommend you create a strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

- If the device is already activated, input the user name and password in the login interface, and click the Login button.

The following interface is shown after successful login.
4.1 Configuring Basic Network Settings

*Purpose*
You can set the network parameters for the decoder in the parameter configuration interface.

**Step 1** Click **Configuration > Network > TCP/IP** to enter the general network settings interface.

![Table of TCP/IP settings]

**Figure 4-4 Configure Basic Network Settings**

**Step 2** Set the network parameters, including the NIC, IP Address, Subnet Mask, Gateway, and DNS Server.

**NOTE**
The DS-6904/6908/6910/6912/6916UDI provides multiple NICs for selection.

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

4.2 Configuring Security Control

*Purpose*
You can disable SSH, SADP, or HTTPS to enhance the access security, e.g., when you are in the untrusted network environment.

**Step 1** Go to **Configuration > Security Control**.
Step 2 Uncheck **Enable SSH, Enable SADP, or Enable HTTPS** to disable the services.

**NOTE**

- By default, SSH is disabled, and SADP and HTTPS are enabled.
- The login user name for SSH is *root*, and the password is the same with that of the admin.

Step 3 Select **Authentication** as *digest* or *digest/basic*. *Digest* is an encryption transmission mechanism, and *basic* is not. Select *digest* to enable the encryption mechanism, and select *digest/basic* to enable both the two mechanism.

Step 4 Click **Save**.
Chapter 5 Decoding Parameters Configuration

5.1 Configuring Stream Settings

*Purpose*

The stream configuration refers to the auto stream switch between main stream and sub-stream.

**Step 1** Click **Configuration > Decoding Configuration > Stream Configuration** to enter stream configuration interface.

![Stream Configuration Interface](image)

**Figure 5-1 Stream Configuration Interface**

**Step 2** Check the check box of **Auto-Switch Stream Type** to enable auto switch between main stream and sub-stream.

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

---

**NOTE**

When a screen is split into more than 16 windows, the main stream will automatically switch to sub-stream to lower the bandwidth.

5.2 Configuring Transparent Channel

*Purpose*

The Transparent Channel refers to the transmission channel used for forwarding data between the decoder and the encoder without operating on the data.

**Step 1** Click **Configuration > Decoding Configuration > Transparent Channel** to enter transparent channel settings interface.
Step 2 Select a transparent channel from the list to configure.

Step 3 Click **Modify** to modify the parameters of the selected transparent channel.

Step 4 Select the **Local Serial Port** and the **Remote Serial Port** to RS-485 or RS-232.

**Local Serial Port**: The serial port used as the transparent channel by the decoder.

**Remote Serial Port**: The serial port used as the transparent channel by the encoding device.

You can click **Delete** to delete the selected channel.

### 5.3 Configuring Synchronous Output Settings

*Purpose*
All video outputs of the device can be configured to be synchronous.

Step 1 Click **Configuration > Decoding Configuration > Synchronous Output Settings** to enter the Synchronous Output Settings interface.

![Figure 5-4 Synchronous Output Settings](image)

Step 2 Click the **Enable Sync Out** button to enable the synchronization of all outputs. The following message box pops up.

![Figure 5-5 Enable Synchronous Output](image)

Step 3 Click **OK** to confirm the settings.

### 5.4 Configuring Personalized Settings

**Purpose**

You can set the stopped decoding image and failed streaming image for the personalized configuration.

Step 1 Click **Configuration > Decoding Configuration > Personalized Configuration** to enter the personalized configuration interface.

![Figure 5-6 Personalized Configuration](image)

Step 2 Select **Blank Screen** or **Last Frame** when decoding ends. If you select **Blank Screen**, the screen will change blank when the decoding ends. If you select **Last Frame**, the screen will show the last frame when the decoding ends.
Step 3 Select **No Network Signal** or **Last Frame** when streaming fails. If you select **No Network Signal**, the screen will show the cause of the failure when streaming fails. If you select **Last Frame**, the screen will show the last frame when streaming fails.

**Step 4** Click **Save** to save the settings.
Chapter 6 Decoding Operation

6.1 Configuring Encoding Devices

6.1.1 Adding an Encoding Device

**Purpose**

You can add an encoding device via IP address or URL.

- **Adding an Encoding Device via IP Address**

Step 1 Click IP to add encoding devices.

![Figure 6-1 Encoding Device List](image)

Step 2 Input **Device Name**, **Type**, **Port**, **User Name**, **Password** and **Channel Number** and select the **Transmission Protocol**, **Area Name**, and **Device Manufacturer**. Decide whether to enable **Stream Encryption** and input the encryption password. Check the checkbox of **Get Stream by Stream Media** to lower the network load of the device.

**NOTE**

- You can add device by IP or DDNS. If you select DDNS, you need to enter the domain name and ensure that you have configured the DNS server. For details, see section 4.1 Configuring Basic Network Settings.
- If **Stream Encryption** is enabled, you need to input the encryption password so you can remotely watch live videos of encrypted camera streams.
Step 3 (Optional) You can also click + to add a new area and click - to save the area.

Step 4 Click Next to select the channel. The channel(s) displayed here depend(s) on the Channel Number you input on the previous page.
Step 5 Click **OK** to save the settings and add the device.

- **Adding an Encoding Device via URL**

Step 1 Click **URL** to add encoding devices.

Step 2 Input the **Device Name** and **URL**. Select the **Area Name** from the dropdown list or click ☞ to add a new area. Decide whether to enable **Stream Encryption** and input the encryption password.
An example of the URL format is as follows: rtsp://10.9.1.233:554/h264/ch1/main/av_stream/?username=admin?password=hik12345?linkmode=tcp

In the above URL, **10.9.1.233** indicates the device IP, **admin** indicates the user name, **hik12345** indicates the password, and **tcp** indicates the stream transport protocol. The transport protocol can be set as tcp, udp, and mcast.

If **Stream Encryption** is enabled, you need to input the encryption password so you can remotely watch live videos of encrypted camera streams.

### Figure 6-5 Add Device via URL

**Step 3** Click **OK** to save the settings.

### 6.1.2 Modifying an Encoding Device

**Step 1** Select one area or one encoding device, and click **Modify** to modify corresponding parameters.

### Figure 6-6 Modify Area
Step 2 Click OK to save the new settings.

### 6.1.3 Deleting an Encoding Device

Step 1 Select one area or one encoding device and click Delete to pop up the note interface below.

Step 2 Click OK to delete it.

### 6.2 Configuring Video Wall

**Purpose**

To realize the display of the decoded video on the video wall, you must set the video wall configuration first so as to link the video output with video wall.

Step 1 Click Video Wall Configuration to enter the corresponding interface.
Step 2 You can use the default video wall layout or click to add a new layout. Input the number of screens in row and column and up to 16 × 20 split screens are available.

Step 3 Click OK to finish the adding of the video wall information.

Step 4 Drag the output channels from the left-side list to the display screen.

Step 5 Move the cursor to the window, and the icon automatically appears in the upper-right corner of the window. Click to close the window.

6.3 Configuring Decoding Output

**Purpose**
In the output list, there are two kinds of video output signals, respectively BNC and HDMI. You can configure the resolution and output mode.

### 6.3.1 Configuring BNC Output

**Step 1** Click **Video Wall Configuration** to enter the corresponding interface. Right click one of the BNC signal sources.

![Figure 6-12 BNC Decoding Output](image)

**Step 2** Right click one of BNC signal sources and select **Resolution Configuration** to pop up the interface as below.

![Figure 6-13 Resolution Configuration](image)

**Step 3** Select the resolution from the **LCD Resolution** drop-down list. PAL and NTSC are selectable.

**Step 4** Check the checkbox of **Batch Configuration** to set the same configuration for other outputs with same signal source.
Step 5 Click OK to save the settings.

6.3.2 Configuring HDMI Output

Step 1 Right click one of the HDMI signal sources.

Step 2 Click Resolution Configuration to enter the interface below.

Step 3 Select the Output Mode and set the corresponding parameters. You can select LCD and LED.

- LCD
  1. Select the Output Mode to LCD.
  1. Select the resolution from the LCD Resolution drop-down list.

- LED
  1. Select the Output Mode to LED.
  1. Input the LED Width and LED Height in the corresponding text fields.
The value of LED width and height cannot exceed the output resolution you select.

- The supported min. value of LED width × height of HDMI output is 288 × 288 and the max. value is 1920 × 1080.

Step 4 Check the checkbox of **Batch Configuration** to set the same configuration for other outputs with same signal source.

Step 5 Click **OK** to save the settings.

Step 6 Right click one of the HDMI signal sources and click **Output Mode Configuration** to pop up the interface below.
Step 7 Select the output mode to HDMI or DVI.

Step 8 Check the checkbox of **Batch Configuration** to set the same configuration for other HDMI outputs.

Step 9 Click **OK** to save the settings.

### 6.4 Decoding Video on Video Wall

**Purpose**

You can decode the video of the encoding devices on the video wall by dragging the channel directly or opening window via coordinate.

### 6.4.1 Interface Description

Click **Video Wall** to enter the video wall interface.

Refer to the following figure for the video wall description.
## 6.4.2 Dragging Channels to the Video Wall

**Step 1** Drag the channel from the left side list to realize the decoding in the selected window.

You can also drag an area file to the video wall to decode the added encoding devices in the area file on the video wall.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Encoding Device List</strong>: The encoding devices added in the Web</td>
</tr>
<tr>
<td>2</td>
<td><strong>Scene</strong>: The Web supports up to 8 scenes by default, capable of independent scene configuration and fast switching.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Video Wall</strong>: Video wall operation interface</td>
</tr>
<tr>
<td>4</td>
<td><strong>Shortcut Toolbar:</strong></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Select decoding screen layout." /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Save the scene." /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Delete all windows." /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Refresh all windows." /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="If two decoding windows overlap with each other, click the icon to switch the upper window to the bottom." /></td>
</tr>
</tbody>
</table>
You cannot drag an area file to the video wall across the LCD and LED outputs.

If there are more than 3 encoding devices in an area, when you drag the area file to the video wall, the note pops up to remind you that no more window can be opened or the total area of layers in single-screen has reached the limit. Only the first 3 encoding devices in the area file can be decoded on the video wall.

Step 2 Select one decoding window and click \[\]

to set the decoding screen layout.  
1/2/4/6/8/9/12/16/25/36 window division modes are available.

6.4.3 Opening Window via Coordinate

Step 1 Select one encoding device and right-click it to pop up the interface below.
Step 2 Click **Open Window via Coordinate**.

Step 3 Select the **Window Opening Mode**. LCD and LED are selectable.

- **Opening Window via Coordinate for LCD Output**
  1) Select the **Window Opening Mode** as **LCD**.
  2) Enter the **Left Margin**, **Right Margin**, **Width** and **Height** in the corresponding text fields.
  3) Click **OK** to save the settings.

4) The window will be opened in the LCD area.

- **Opening Window via Coordinate for LED Output**
1) Select the **Window Opening Mode** as **LED**.

2) Select the **LED** area.

   The area number depends on the HDMI decoding output configuration. For the adjacent HDMI outputs, if the resolution is configured to be LED, and the LED width or height is same, they can be seen as one area. You can refer to *Chapter 6.3.2 Configuring HDMI Output*.

3) Enter the **Left Margin**, **Right Margin**, **Width** and **Height** in the corresponding text fields.

4) Click **OK** to save the settings.

![Open Window via Coordinate](image)

Figure 6-27 Open Window via Coordinate for LED Output

5) The window will be opened in the LED area.

![Window Opened in LED Area](image)

Figure 6-28 Window Opened in LED Area

### 6.4.4 Managing Decoding

Right-click the selected window and the Decoding Management interface pops up.
• **Stop Decoding**
  Click the button to stop decoding.

• **Decoding Status**
  1. Click the button to enter the decoding status interface.
  2. View the decoding status.

  ![Decoding Status](image)

  **Figure 6-30 Decoding Status**

  3. Click **More** to check the decoding information of each channel.

  ![Check More Decoding Status Information](image)

  **Figure 6-31 Check More Decoding Status Information**

• **Turn on Audio**
  1. Click the button to enter the interface below.
2. Select from the dropdown list to enable the audio in the corresponding window.
3. Click OK to save the settings.

- **Decoding Delay**
  1. Click the button to enter the decoding delay interface.
  2. Select the type of decoding delay. The default mode is the same with medium real time and fluency.
  3. Click OK to save the settings.

- **Enable Smart Information**
  1. Click the button to enable smart information.
  2. (Optional) Click **Disable Smart Information** to disable the function.

**NOTE**

For the normal IP camera, the smart information refers to the VCA information. For the thermal network camera, the smart information refers to the VCA and the temperature, dynamic fire source detection and ship detection information.

- **Stream Information**

Click the button to view stream information such as host name and transport protocol.

### 6.4.5 Switching Encoding Channel

**Purpose**

You can switch the encoding channel to display on the selected decoding window.

Step 1 Select a decoding window and select an encoding channel from the left side list.
Step 2 Click **Switch Channel** from the right-click menu to switch the selected channel to the decoding window.

![Figure 6-34 Right-Click Menu]

### 6.4.6 Configuring Auto-Switch of Cameras

**Purpose**

You can enable auto-switch of the added cameras in one area.

**Step 1** Select a camera area and click **Start Auto-Switch** from the right-click menu.

![Figure 6-35 Right-Click Menu]

**Step 2** On the Start Auto-Switch interface, input the **Interval** for auto-switch.

![Figure 6-36 Start Auto-Switch]

**Step 3** Click **OK** to save the settings.

### 6.4.7 Roaming Window

**Step 1** Drag one camera from the left side list to the video wall layout to enable decoding in the corresponding window automatically.

**Step 2** Drag the decoding window randomly to realize the window roaming on the video wall.
Step 3 Select one of the roaming windows, and click to realize window division in the selected roaming window with 1/2/4/6/8/9/12/16/25/36 available.

Step 4 (Optional) Generally the selected window is at top by default. Click to place the selected window at bottom.

**NOTE**

- Roaming and fluent video cannot be realized in the window with the signal output via BNC interfaces.
- The roaming window cannot cross the output window of different resolution. For example, you cannot move the roaming window across the LCD and LED window.

### 6.4.8 Zooming in/out Roaming Windows

**Purpose**

You can double click the roaming window to zoom in or out.

- **For one roaming window:**

  Step 1 Double click the roaming window to zoom in. Then the window will occupy the area with the same output.
Step 2 Double click the window again to zoom out. Then the window will restore to the original size.

For divided roaming sub-window:

Step 1 Double click the divided roaming sub-window to zoom in. Then the sub-window will occupy the whole window before being divided.
Double click the divided roaming sub-window again to zoom out. Then the sub-window will restore to the original size.

6.4.9 Configuring Scene

**Purpose**

Different video wall layouts can be saved as different scenes and up to 8 scenes can be added. You can easily view the required live videos on the video wall by calling the scene.

Step 1 In the Video Wall interface drag the channel from the left side list to realize the decoding in the selected window.
Step 2 Click **Save** to save the scene directly or click **Save as** to pop up the following dialog box.

![Save as Interface](image)

Step 3 Input the **Name** and click **OK** to save the scene.

![Scene List](image)

Step 4 Select one of the scenes you have configured. Click ✖️ to call the scene.

Step 5 (Optional) You can also click ✎️ to rename the scene, or click ✗ to delete the scene.
Chapter 7 User Management

**Purpose**

You can add, modify, delete, and set the permissions of the user accounts on the User Management interface.

Step 1 Click **Configuration > System > User Management** to enter the user management interface.

![User Management Table]

**Figure 7-1 Configure User Account**

Step 2 You can add, modify or delete the user account, as well as configure operating permissions for each user account.

![Add User Account and Set Permissions]

**Figure 7-2 Add User Account and Set Permissions**
**NOTE**

- Up to 32 user accounts can be added including the admin.
- For the admin user, only the password can be modified.
- You must input the admin password if you want to modify the user account except the admin.

**WARNING**

**STRONG PASSWORD RECOMMENDED**—We highly recommend you create a strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.
Chapter 8 System Configuration

8.1 Checking Device Information

*Purpose*
You can check the information of the device in the device information interface, such as the Physical Address, Device Type, Device Serial No., Firmware Version, Decoding Version, Web Version, Plugin Version, etc., and modify the Device Name.

Step 1 Click **Configuration > System** > **System Settings** > **Basic Information**.

Step 2 (Optional) Modify **Device Name**.

The default device name is *Embedded multiDecoder*. If you want to modify the device name to the model of the device, enter *Embedded multiDecoder + # + device model* in the text field.

Step 3 View other device information.

**NOTE**

The description about the decoder configuration and operation by web browser below is based on the firmware, decoding, web and plugin version shown in the following figure.

![Figure 8-1 Check Device Information](image)

8.2 Configuring Time Settings

*Purpose*
You can set the time for the decoder in the **Time Settings** interface.

Step 1 Click **Configuration > System Settings > Time Settings** to enter the following interface:
Configure the time synchronization by NTP server or manually.

- **Configuring Time Synchronization by NTP Server**

  A Network Time Protocol (NTP) Server can be configured on your device to ensure the accuracy of system date/time.

  If the device is connected to a Dynamic Host Configuration Protocol (DHCP) network that has time server properties configured, the camera will synchronize automatically with the time server.

  Enable the **NTP** function by selecting the radio button, and configure the following settings:

  - **NTP Server**: IP address of NTP server.
  - **NTP Port**: Port of NTP server.

- **Configuring Time Synchronization Manually**

  If the device is connected to a public network, you should use a NTP server that has a time synchronization function, such as the server at the National Time Center (IP Address: 210.72.145.44). If the device is set up in a more customized network, NTP software can be used to establish a NTP server used for time synchronization.
Enable the **Manual Time Sync**. function by selecting the radio button and then click icon to set the system time from the pop-up calendar.

![Manual Time Sync](image)

**Figure 8-4 Configure Time Manually**

Step 3 Select the time zone that is closest to the device’s location from the drop-down list.

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

## 8.3 Configuring RS-232 Serial Port

Step 1 Click **Configuration > System Settings > RS-232** to enter the following interface:

![Configure RS-232 Settings](image)

**Figure 8-5 Configure RS-232 Settings**

Step 2 Configure the RS-232 parameters, including the baud rate, data bit, stop bit and parity type.

Step 3 Select the Operating Mode of RS-232 as **Console** or **Transparent Channel**.

- **Console**: Use the RS-232 serial port for debugging the decoder.
- **Transparent Channel**: Use the RS-232 serial port as the transparent channel.

Step 4 Click **Save** to save the settings.
8.4 Configure RS-485 Serial Port

Step 1 Click **Configuration > System Settings > RS-485** to enter the following interface.

![Configure RS-485 Settings](image)

**Figure 8-6 Configure RS-485 Settings**

Step 2 Configure the RS-485 parameters, including the baud rate, data bit, stop bit and parity type.

Step 3 Click **Save** to save the settings.
Chapter 9 System Maintenance

Purpose
You can click **Configuration > System > Maintenance** to perform configuration files import/export, reboot, upgrade, and default operations.

9.1 Importing Configuration Files

Purpose
The configuration files of the device can be imported from the local device, which maintains convenient parameters configuration.

Step 1 Enter the parameters import interface.

![Figure 9-1 Import Configuration File](image)

Step 2 Click **Browse** to select the file from the local directory and then click the **Import** button to import a configuration file. Click **Device Parameters** to export parameters.

9.2 Exporting Configuration Files

Purpose
The configuration files of the device can be exported to the local device, which maintains convenient parameters configuration.

Step 1 Enter the parameters export interface.

![Figure 9-2 Export Configuration File](image)

Step 2 Click **Device Parameters** to export parameters.
9.3 Upgrading the Device

Step 1 Enter the Upgrade interface.
Step 2 Click **Browse** to search the upgrading files.
Step 3 Click **Upgrade** to upgrade it.

![Figure 9-3 Upgrade the Device](image)

**NOTE**
- When logging in to the device for the first time, install the plug-in according to the prompt on the screen.
- The device will restart after completing the upgrade.

9.4 Restoring the Default Settings

Step 1 Enter the Default Settings interface.
Step 2 Click **Default** to restore the completed factory settings of the decoder.
Or click **Restore** to restore a part of the factory settings of the decoder.

![Figure 9-4 Restore Default Settings](image)

9.5 Rebooting the Device

Step 1 Enter the Reboot Device interface.
Step 2 Click **Reboot** to reboot the device.

![Figure 9-5 Reboot the Device](image)
Chapter 10 Decoder Configuration and Operation by Client Software

Double click the icon to run the HikCentral Professional Control Client in your PC. In this chapter, the basic procedure of operating the decoder by the software is described.

10.1 Decode and Display Directly

**Purpose**

After setting the smart wall via Web Client, the video streams from the camera can be decoded by the configured decoding outputs, and then you can display the decoded videos on the smart wall.

**Before You Start**

Add the smart wall via Web Client.

The following figure shows the main interface after accessing to the software.

1. Click Smart Wall on the control panel to enter the Smart Wall page.
2. Click \( \square \) in the upper-right corner of the smart wall window to select a window division mode.
3. Display resources on smart wall.

   - **Display Camera on Smart Wall**: Select Camera and site from the drop-down list, and double-click a camera name or drag the camera to the layout area of smart wall to display the camera on the smart wall.

   **NOTE**

   It is only available for the central system with Remote Site Management module (based on the license you purchased).

   - **Batch Display Cameras on Smart Wall**: Hold the Ctrl key and select multiple cameras in an area or different areas, and then drag them to the layout area of smart wall and click **Play in Batch** to display multiple cameras on the smart wall in a batch.

   - **Display Signal Source on Smart Wall**: Select **Signal Source** from the drop-down list, and drag the signal source to display window of the smart wall.

   - **Display Area on Smart Wall**: Select **Camera** and site from the drop-down list, and double-click the area or drag the area to the layout area of smart wall to display the resources in the area on the smart wall.

   **NOTE**

   If there are multiple resources in the area, when you drag it to the layout area of smart wall, you need to select **Play in Batch** or **Single-Screen Auto-Switch** to display each resource in one
display window or display area auto-switch in one display window on the smart wall. For more details about area auto-switch, refer to **Auto-Switch Cameras in One Window**.

- **Display View on Smart Wall**: Click on the left, and double-click the view name to display on the smart wall.

![Figure 10-1 Display Live Video on Smart Wall](image)

The decoded video stream is displayed on the smart wall.

**Step 4 (Optional)** Select a display window which is linked with the camera to display the live video on the large window at the bottom of the page, and then perform the following operation(s).

- **View Camera Status**: Click to show the camera's frame rate, resolution, and stream format.

- **Switch Stream**: On the Web Client, you can set the default stream type of the live video of the cameras displaying on the smart wall. If you want to change the stream, such as changing to main stream to get better image quality, you can switch stream manually as follows: or to switch the live view stream to main stream, sub-stream, or smooth stream.

  ![NOTE](image) Smooth stream needs to be supported by device.

- **Enable PTZ Control**: Click to enable PTZ (pan, tilt, zoom) control function on the display window. And then you can control PTZ and set preset, patrol, and pattern.

- **Switch to Playback**: Click to switch to playback mode.
Stop Decoding and Displaying

Click  or  to stop the decoding and displaying for the specified window or all windows.

**NOTE**
For the locked windows and alarm linked windows, you cannot stop the decoding and displaying.

## 10.2 View Settings

**Purpose**
You can set the view and organize the views into a group for displaying the video on smart wall conveniently. You can also perform the view auto-switch for the view group on the smart wall.

### 10.2.1 Add View Group

**Purpose**
A view group of a smart wall is to manage multiple views in a group for performing view auto-switch.

**Step 1** Click **Smart Wall** on control panel to open the Smart Wall window.

**Step 2** Click  to open the View window.

**Step 3** Select **Public View** or **Private View** to add this view group.

**NOTE**
- The view groups and views belonging to the public view can be seen by all the system users.
- The view groups and views belonging to the private view can only be seen by the user who add it.

**Step 4** Click  to open Add View Group window.

**Step 5** Edit the group name or use the default one.

**Step 6** Click **Save** to add the group.

**Step 7** (Optional) Perform the following operation(s) after adding the view group:

- **Edit View Group** Select the view group and click  to edit the view group name.

- **Delete View Group** Select the view group and click  to delete the group.
10.2.2 Add View

**Purpose**

View defines which cameras are displayed on the monitors of the smart wall. In this way, you can quickly access the frequently used cameras on smart wall for an excellent overview.

**Step 1** Click **Smart Wall** on control panel to open the Smart Wall window.

**Step 2** Display the videos of cameras on the smart wall.

![NOTE]

For more details, refer to **Decode and Display Directly**.

**Step 3** Click **Add View** to open the View window.

**Step 4** Select a view group.

**Step 5** Click **Add View** to open Add View window.

**Step 6** Enter the view name or use the default one.

**Step 7 (Optional)** Set **Schedule Play** switch to on and set when to automatically display the view on smart wall.

![NOTE]

For more details about how to set view schedule, refer to **Set Schedule for Displaying Views on Smart Wall**.

**Step 8** Click **OK** to save the view.

**Step 9 (Optional)** Perform the following operation(s) after adding the view.

- **Start Decoding and Displaying**  Double-click the view to start decoding and displaying on smart wall conveniently.

- **Edit View**  Click **Edit** to edit the name of the view.

- **Delete View**  Click **Delete** to delete the view.

10.2.3 Set Schedule for Displaying Views on Smart Wall

**Purpose**
The view schedule is used to define when to automatically display the view on smart wall. According to the schedule, the view will play on the smart wall at the time point(s) or the fixed time point(s) on regular date(s) in one week repeatedly.

When adding a view, enable **Scheduled Play** and do one of the followings:

- **Check Repeated Play**, select the days in one week, and set time for displaying the view on smart wall at the regular time.
- **Uncheck Repeated Play**, and set the date and time for displaying the view on smart wall at the irregular time.

![Set Schedule](image.png)

**Figure 10-2 Set Schedule**

Click ☑️ to view the view schedules of the current smart wall.

### 10.3 Perform View Auto-Switch

**Purpose**

View auto-switch is used for displaying the views of a view group one after the other. You can specify the interval between view changes.

**Before You Start**

Add at least two views into one view group, see **Add View** for details.

1. Click **Smart Wall** on control panel to open the Smart Wall window.
2. Click ☑️ to open the View window.
3. Click ☑️ beside the view name to set the auto-switch interval.
4. Click ☑️ beside the view group name to start auto-switch.

   The views in the selected view group starts switching automatically.
10.4 Auto-Switch Cameras in One Window

**Purpose**

Auto-switch in one window is used for displaying the videos from the cameras in an area or different areas, one after another, in a single window. You can specify the interval between camera changes.

**Step 1** Click **Smart Wall** on control panel to open the Smart Wall window.

**Step 2** Click the icon on the left to enter the Camera page.

**Step 3** Select **Camera** from the drop-down list.

**Step 4** Select area or cameras for auto-switch.

- Drag an area on the left panel to the window linked with a decoding output.

![NOTE]

Make sure the cameras have been added to the area.

- Hold the Ctrl key and select multiple cameras in an area or different areas, and then drag them to the window linked with a decoding output.

![NOTE]

Up to 32 cameras can be selected for auto-switch in one window.

**Step 5** Click **Single-Screen Auto-Switch** in the pop-up menu to display the videos of the cameras in one display window of the smart wall.

The cameras start switching automatically on the smart wall.

**Step 6** (Optional) Click << or >> in the toolbar of the video view to set the auto-switch interval.

10.5 Create a Roaming Window

**Purpose**

Windowing is to open a virtual window on the screen(s). The window can be within a screen or span multiple screens. You can move the window on the valid screens as desired and this function is called roaming. With windowing and roaming function, you can create custom window and the window size and position will not be limited by the actual screen(s).

**Step 1** Click **Smart Wall** on control panel to open Smart Wall window.

**Step 2** Click the icon and drag on the screens which are linked to decoding outputs to open a window.

![NOTE]

Screens linked to BNC outputs are not available for opening a window.
Step 3 (Optional) Perform the following operation(s) after opening a window.

**Roam**
Click on the window and hold the mouse to move the window on the valid screens.

**Adjust Window Size**
Move your cursor to the window edges and adjust the window size when the cursor becomes directional arrow.

**Enlarge Window**
Double-click the window and it will be enlarged to fill the spanned screens and display on the top layer. Double-click again to restore.

**Display Window on Top Layer**
Select one window when there're overlapped windows and right-click the window to display it on the top layer.

10.6 View Alarm’s Related Video on Smart Wall

**Purpose**
If you have enabled the smart wall linkage for an alarm, the live view of cameras or public views related to the alarm will pop up on the chosen smart wall when the alarm is triggered. Therefore, you will know alarm details in a timely manner for further operations.

- When an alarm linked with multiple cameras in one display window is triggered, the window will be divided into an adaptive division mode and show the videos of all cameras.
- When multiple alarms linked with one display window are triggered, the window will be divided into an adaptive division mode and show the alarms' related videos.
● When each alarm linked with multiple display windows is triggered, every window will show one alarm's related video. If the alarms exceed the window limit, the window will be divided into an adaptive division mode and show the more alarms' related videos.

For example, there are alarm A, alarm B, alarm C and alarm D are linked with window 1, window 2 and window 3 of smart wall. When alarm A, alarm B, and alarm C are triggered, the display window of smart wall will show as the left figure below. When alarm D is also triggered, the display window will show as the right figure below.

![Figure 10-4 Multiple Alarms Displayed on Smart Wall](image)

10.7 View and Export Window No. and Camera ID

**Purpose**

When displaying live view on smart wall, you can use a keyboard for convenient operations such as starting live view on smart wall, PTZ control, etc. If you want to display certain camera's live view in certain window on the smart wall, you should press the camera's identifier number and target window number on the keyboard, which are called **Camera ID** and **Window No**.

In the Web Client, you can set a unique ID for each camera added in the system.

In the Control Client, click **Smart Wall** on the control panel, and click **→ Window No. & Camera ID → Display Window No.** to show the number of each window.

If you want to export a document which contains the IDs of all the cameras and smart wall information (such as smart wall name, row and column, etc.) as a reference, click **→ Window No. & Camera ID → View Window No. and Camera ID** to generate a document.

Click **Download** to download this document and save it in local PC. You can print it if necessary.

**NOTE**

● The exported file is in PDF format.

● The exported document also contains smart wall No., which are used for selecting smart wall via network keyboard.
Chapter 11 Appendix

11.1 FAQ

● Why cannot ping the decoder?
  – Check the cable and the switch.
  – Please refer to Chapter 4 to configure the IP address of the decoder.

● Why cannot connect the decoder with client software?
  – Check the decoder IP address.
  – Cable is connected.
  – User name and password of decoder are correct.

● Why cannot play back the record files in DVR with decoder?
  – Check the DVR network connection.
  – Check the parameters of the playback file.
  – Check if there are files existed in the selected time duration.

● Why cannot decode the stream transported by stream media server?
  – Check the network connection between decoder and stream media server.
  – Check if the stream media server port is connected with the port added on decoder.
### 11.2 List of Third-Party IP Cameras Access

<table>
<thead>
<tr>
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<th>Model</th>
<th>Supported Video Format</th>
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<td></td>
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<tr>
<td></td>
<td>SP336H</td>
<td></td>
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<tr>
<td>Sony</td>
<td>SNC-CH220</td>
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<td>SNC-RH124</td>
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<td>Axis</td>
<td>P5532</td>
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