



Education Sharing System

User Manual

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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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Conditions

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

- This device may not cause harmful interference.
- 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, 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: <http://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: <http://www.recyclethis.info>.

Industry Canada ICES-003 Compliance

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




Applicable Models

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

Product Name	Model
Education Sharing System	DS-9604LNI-V/B12

Symbol Conventions

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


Symbol	Description
 NOTE	Provides additional information to emphasize or supplement important points of the main text.
 WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Safety Instructions

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Firmly connect the plug to the power socket. Do not connect several devices to one power adapter. Power off the device before connecting and disconnecting accessories and peripherals.
- Shock hazard! Disconnect all power sources before maintenance.
- The equipment must be connected to an earthed mains socket-outlet.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- ⚡ indicates hazardous live and the external wiring connected to the terminals requires installation by an instructed person.
- Never place the equipment in an unstable location. The equipment may fall, causing serious personal injury or death.
- Input voltage should meet the SELV (Safety Extra Low Voltage) and the LPS (Limited Power Source) according to the IEC60950-1.
- High touch current! Connect to earth before connecting to the power supply.
- 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.
- Use the device in conjunction with an UPS, and use factory recommended HDD if possible.
- This product contains a coin/button cell battery. If the battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- 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.
- 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.
- Dispose of used batteries according to the instructions.
- Keep body parts away from fan blades and motors. Disconnect the power source during servicing.
- Keep body parts away from motors. Disconnect the power source during servicing.

Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- The device is designed for indoor use only. Install it in a well-ventilated, dust-free environment without liquids.
- Ensure recorder is properly secured to a rack or shelf. Major shocks or jolts to the recorder as a result of dropping it may cause damage to the sensitive electronics within the recorder.
- The equipment shall not be exposed to dripping or splashing and that no objects filled with liquids shall be placed on the equipment, such as vases.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc. The openings shall never be blocked by placing the equipment on a bed, sofa, rug or other similar surface.
- For certain models, ensure correct wiring of the terminals for connection to an AC mains supply.
- For certain models, the equipment has been designed, when required, modified for connection to an IT power distribution system.
-  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.
- Keep a minimum 200 mm (7.87 inch) distance around the equipment for sufficient ventilation.
- For certain models, ensure correct wiring of the terminals for connection to an AC mains supply.
- Use only power supplies listed in the user manual or user instruction.
- The USB port of the equipment is used for connecting to a mouse, keyboard, USB flash drive, or Wi-Fi dongle only.
- Use only power supplies listed in the user manual or user instruction.
- Do not touch the sharp edges or corners.

Chapter 1 Introduction and Installation

1.1 Indicator Description

The device has an indicator at the lower-right corner of the front panel. The indicator indicates different working status of your device.

Table 1-1 Indicator Description

Indicator Status	Description
Unlit	The device is shut down.
Solid Blue	The device is powered on.
Fast Blinking Blue	The device is downloading or publishing videos.
Slowly Blinking Blue	The device is starting up.
Solid Red	The device system is shut down, but the power is still on.
Fast Blinking Red	The video is exceptional.

1.2 Device Installation

1.2.1 Wall-Mounted Installation

Before you start:

Prepare suitable installation tools, including screwdrivers and an electric drill.

Step 1 Take out the accessories from the device package.

Step 2 Determine the mounting position for the wall-mounted bracket (as the direction shown in the following figure).

Mark 4 holes for installing expansion bolts.

Step 3 Secure the bracket on to the wall with 4 expansion bolts.

Step 4 Align the device mounting hooks with the bracket.

Step 5 Mount the device on the bracket.

Step 6 Tighten 2 screws at the bottom to fix the device firmly.

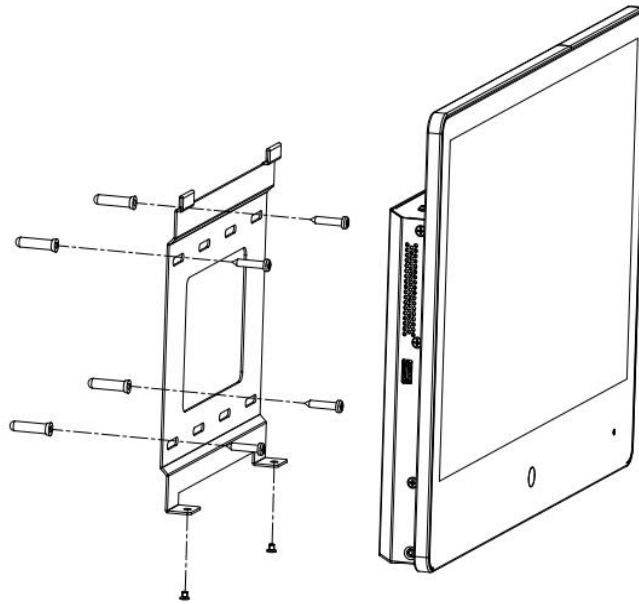


Figure 1-1 Wall-Mounted Installation

1.2.2 Standing Installation

Before you start:

Prepare suitable installation tools, including screwdrivers.

Step 1 Take out the accessories from the device package.

Step 2 Align the standing bracket holes with the device (as the direction shown in the following figure).

Step 3 Tighten 2 crews at the backside to fix the device firmly.

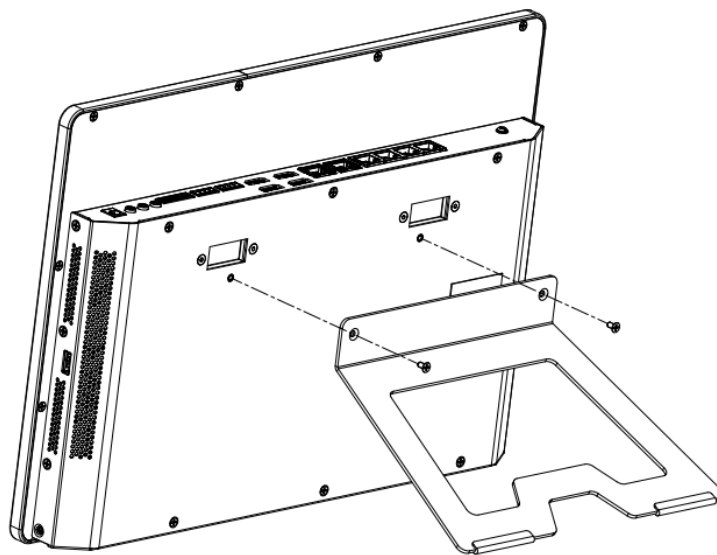


Figure 1-2 Standing Installation

Chapter 2 Start-up

2.1 Startup and Shutdown

Proper startup and shutdown procedures are crucial to expanding the life of the device. Follow the steps to start your device.

2.1.1 Startup

Step 1 Connect the device and a socket with the provided power cord. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device.

Step 2 Turn on the power switch at the device side panel.

2.1.2 Shutdown

Step 1 Tap **Power** at the upper-right corner.

Step 2 Tap **Shutdown**, and wait for the device to power off.

Step 3 Turn off the power switch at the device side pane.

2.2 Network Connection



- You shall acknowledge that the use of the product with 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, please contact with your dealer or the nearest service center.
- To ensure the network security of the education sharing system, we recommend you to have the device assessed and maintained termly. You can contact us if you need such service.

Purpose:

Create network connection between the education sharing system and your computer. Two methods are provided, including connecting the education sharing system via a LAN (Local Area Network) and via a WAN (Wide Area Network). We take the example of connecting via LAN to describe the steps.

Step 1 Create the network connection between the device and your computer.

- Option1: Directly connect the device to the computer with a network cable.
- Option 2: Connect the device and your computer via a switch or a router.

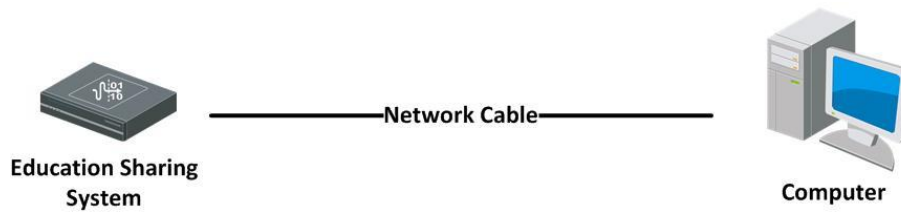


Figure 2-1 Connect Directly

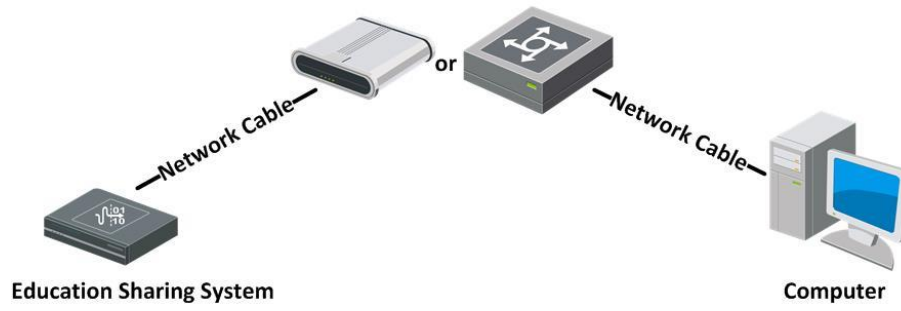


Figure 2-2 Connect via a Switch or a Router

Chapter 3 Local Operation (Mainly Used for Teacher)

3.1 Basic Operation

3.1.1 Activate Your Device

For the first-time access, you have to set an admin password to activate your device. No operation is allowed before activation. You can also activate the device via web browser, or SADP.



- Default administrator account: admin.
- Default IPv4 address: 192.168.1.64.

Step 1 Enter the user password twice.



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 2 Tap **Activate**.

3.1.2 Log In to Your Device

You may have to log in to your device to configure a few devices functions.

Tap **Login** at upper-right corner, and choose a login method. You can enter your user name and password to log in, or tap **Face Login** to scan your face to log in.



Face Login is only available for the operator, and the corresponding face picture should be imported in advance via web browser. Refer to *4.12 User Management* for details about adding face picture.

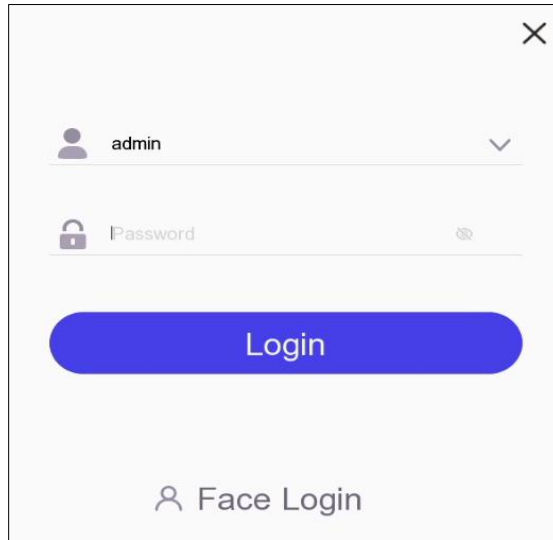


Figure 3-1 Log In to Your Device

3.1.3 Configure Network Parameters

Step 1 Tap **System Settings** > **System** > **Network**.

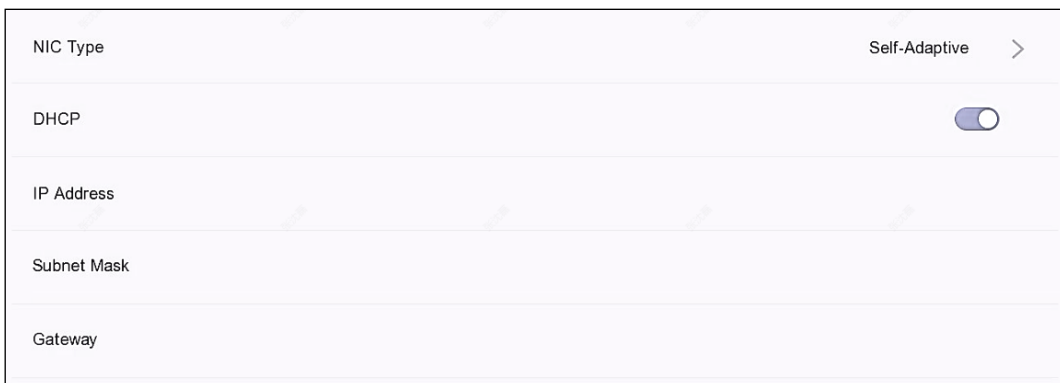


Figure 3-2 Configure Network Parameters

Step 2 Set **NIC Type**.

Step 3 IPv4 IP address parameters.

- If you enable **DHCP** (Dynamic Host Configuration Protocol), the device will obtain IPv4 address parameters automatically.
- If you disable **DHCP**, you shall manually enter IPv4 address parameters, including **IP Address**, **Subnet Mask**, and **Gateway**.

3.2 Live View

Purpose:

You can view the live image of connected cameras on the device screen.

Step 1 Tap **Course Recording** after login.

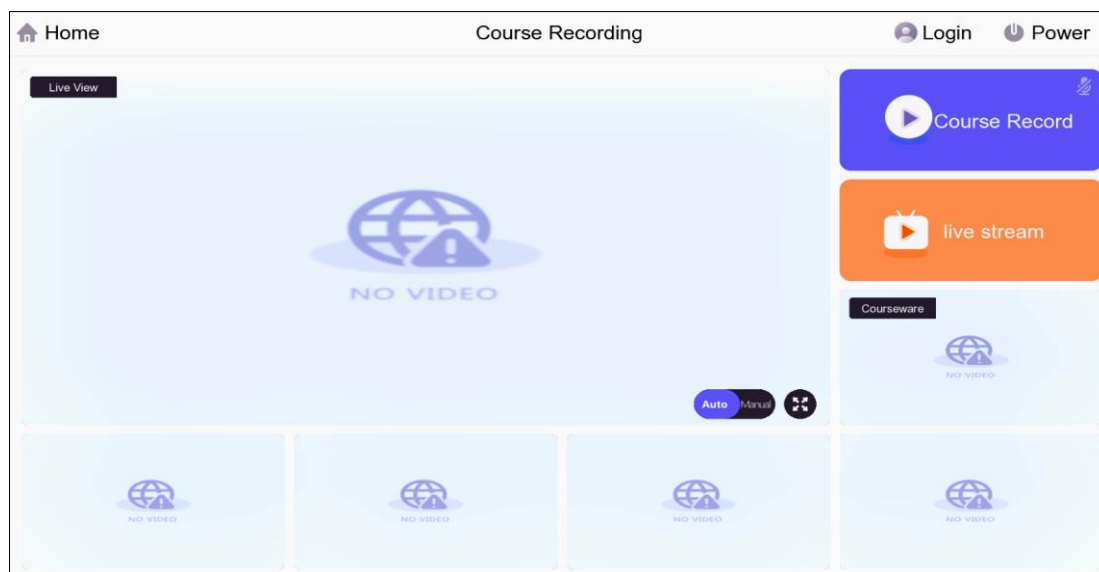



Figure 3-3 Live View via Local Menu

Step 2 Optionally, select the live mode as **Manual**, or **Auto**.

- **Manual**: Manually switch camera image to the main screen. You can tap the camera image at the bottom to switch.
- **Auto**: The speed dome can automatically track object. The device will automatically display image to the main screen when the connected education specified cameras have detected smart events.

Step 3 Optionally, tap  to view the full image of live view.

Step 4 Optionally, tap **Course Recording** to record course live videos. The course recording videos are configurable, refer to *3.4 Download Course Files* for details.

- 1) Enter the course information, including **Course Name** and **Course Teacher**.
- 2) Click **OK**, and the device starts to record.
- 3) Tap **Pause Recording** or **Stop Recording** to pause/stop course recording.
- 4) After course recording is stopped, you can tap **View Video** to view the recorded videos.

3.3 Interactive Education

There are two interactive education options, one is point-to-point meeting, and the other is multi-classroom interaction.

3.3.1 Point-to-Point (P-to-P) Video Meeting

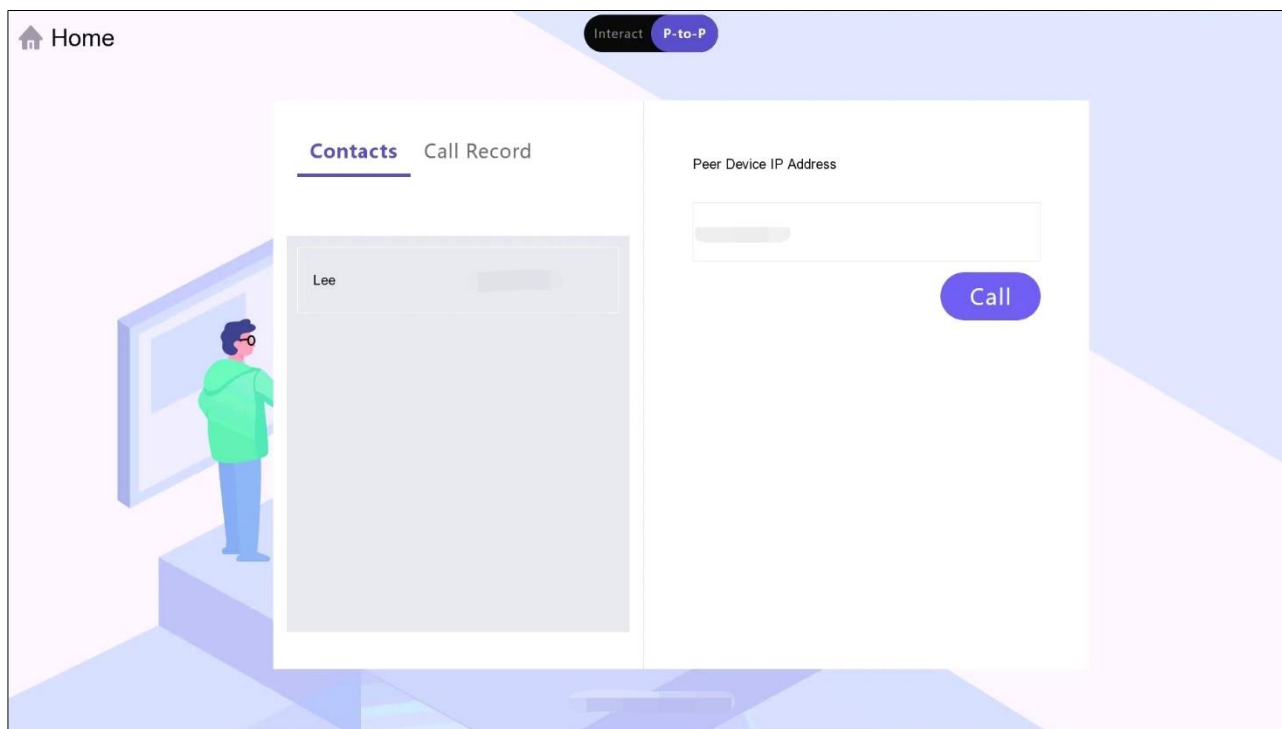
Purpose:

Point-to-point (P-to-P) video meeting creates a meeting with two devices. You can only invite another one to the meeting.

Before you start

Prepare the terminal device IP address, or add the terminal device IP address in contacts via web browser in advance. Refer to 4.7 *Point-to-Point Video Meeting* for details about contacts configuration.

Step 1 Tap **Interactive Education > P-to-P**.



Step 2 Call the terminal device.

- Use **Contacts** to call a terminal device.
- Use **Call Record** to call a terminal device.
- Enter the terminal device under **Peer Device IP Address**, and tap **Call**.

Step 3 After the terminal device accepts the call, the meeting would be initiated.

3.3.2 Multi-Classroom Interaction (Cloud Interaction)

Configure Platform Parameters

Platform parameters are used for interaction. You can configure platform parameters in **System Settings > System > Platform Management** via local menu.

Default settings are recommended. If the default parameters are invalid, please contact the installer or technical support service.

Join/Initiate Interaction

Before you start

- Ensure you have properly configured interactive meeting parameters. The parameters can be configured through **Configuration > Interaction Settings > Cloud Interactive Class** via web browser.
- Ensure you have properly configured Platform parameters. Refer for details.
- Turn off point-to-point video meeting.
- The device has been registered, logged in and topped up.

Step 1 Tap **Interactive Education**.

Step 2 Enter the meeting number to join an interactive meeting, or tap **Initiate Interaction** to create an interactive meeting.


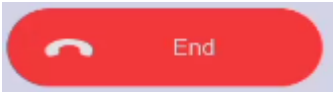


- If you are going to join an interactive meeting, the meeting number can be obtained from the initiator. Refer to *Configure Meeting Room Permission* for details.
- If you are going to join an interactive meeting, but the meeting does not have verification code, just leave the verification code empty, and tap **OK**.

Step 3 Operation as your desire.

Table 3-1 Icon Description

Icon	Description
	Exit/enter full screen.
	Exit the interaction.
	Tap – or + to adjust volume.
	Display the recorded time.
	Enable/disable the microphone of participant.
	Display more options.
	Interact with the participant. For example, you can tap it to ask questions to the participant, and the participant would be able to speak (the microphone of participant would be enabled automatically).
	After tapping to interact with the participant, tap End

Icon	Description
	Speaking to finish.
	Remove the participant from the meeting.
	End the interactive meeting.

3.4 Play Back Course Videos

Step 1 Tap **Course File**.

Step 2 Locate the course video.

Step 3 Tap the video.

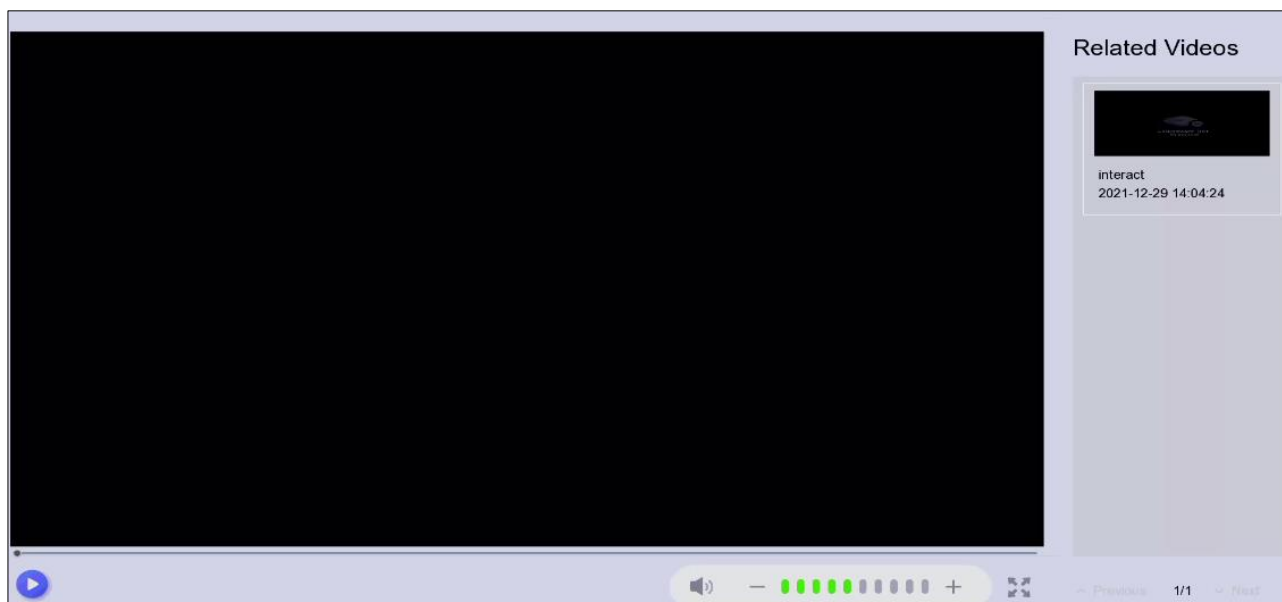


Figure 3-4 Play Back Course Videos Via Local Menu

Step 4 Tap  to start playback.

Step 5 Optionally, tap the related video(s) at the right list, and play back the related videos.

3.5 Download Course Files

Before you start:

Prepare a USB flash drive with enough free space.

Step 1 Insert a USB flash drive to your device.



The device USB interface is at the side panel.

Step 2 Tap **Course File**.

Step 3 Locate the course video or course video folder.

Step 4 Tap **Export** at the upper-right corner.

Step 5 Select the course videos or course video folders as your desire.

Step 6 Tap **Export** again.

Step 7 Select the backup device and folder path.

Step 8 Tap **Save**.

3.6 System Settings

3.6.1 Configure Audio

You can configure the sound volume in **System Settings > Sound** via local menu. For sound mix settings, refer to *OSound Mix Settings* for details.

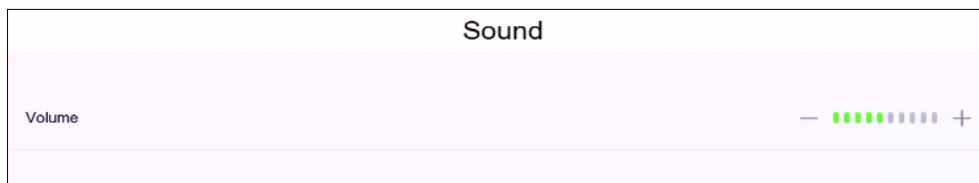


Figure 3-5 Configure Sound Volume

3.6.2 Configure Auto Screen Off Time

Your device will automatically turn off the local menu screen after a specified period. When the screen is off, you can press the power button at the side panel to light it up. The time period is configurable in **System Settings > Display** via local menu.

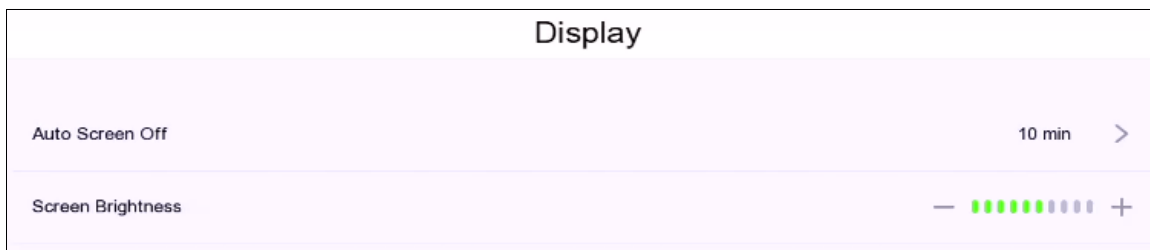


Figure 3-6 Configure Auto Lock Screen Time

3.6.3 Configure LCD Screen Brightness

The local menu LCD screen brightness is configurable in **System Settings > Display** via local menu. You can tap – or + to adjust the brightness.

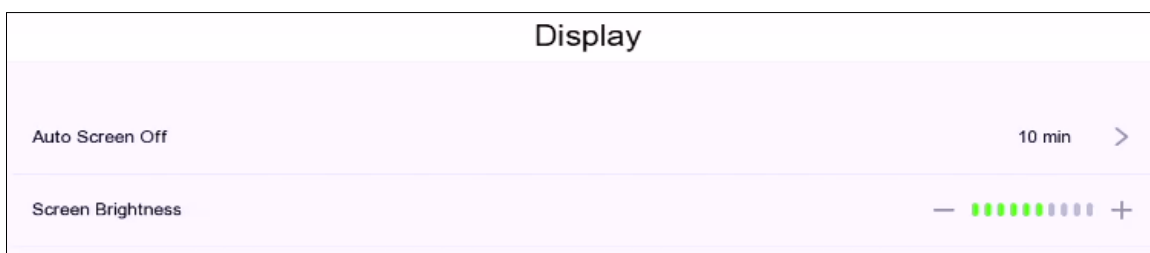


Figure 3-7 Configure LCD Screen Brightness

3.6.1 Configure Recording Parameters

The recording channels are configurable in **System Settings > Record**. The device **Recording Channel** is set to **Live View Channel** by default. You can choose to record multiple channel during live view as your desire.

If you forget to stop recording, the device will automatically stop it according to **Manual Recording Auto Stop Time**. You can configure **Manual Recording Auto Stop Time** as your desire.

3.6.2 Configure Time

Purpose:

You can manually sync the device time, or let the device automatically sync time with NTP (Network Time Protocol) server.

Step 1 Go to **System Settings > System > Time** via local menu.

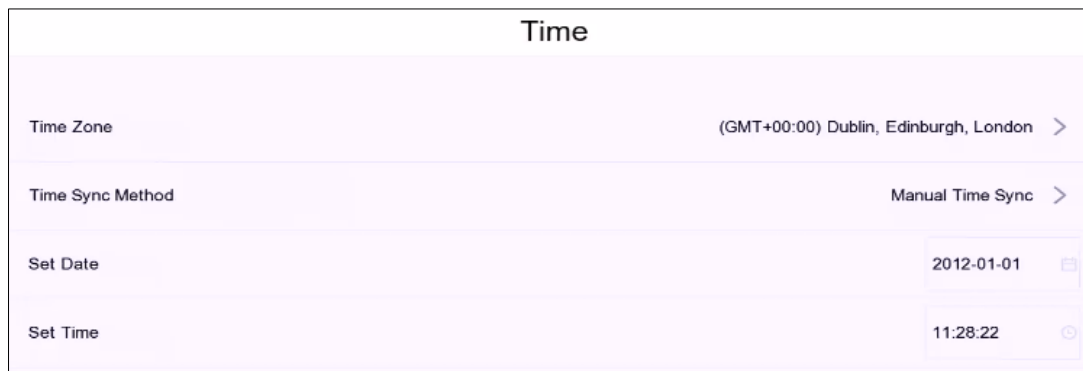


Figure 3-8 Time Settings via Local Menu

Step 2 Select **Time Zone**.

Step 3 Select **Time Sync Method**.

- **Manual Time Sync:** Manually adjust the device time.
- **NTP Time Sync:** Automatically adjust the device time with the connected NTP server.

Step 4 Set the related parameters.

3.6.3 Configure Auto Logout Time

Your device can automatically log out after it is on standby for a specified time. After the device is logged out, you have to enter your password again to log in. The auto logout time is configurable in **System Settings > System > Auto Logout** via local menu.

3.6.4 Configure Password Protection

After password protection is enabled, the device will verify your password when operating certain functions like live view, cloud interaction, courseware settings, etc. Password protection function

is configurable in **System Settings > System > Password Protection** via local menu.

3.6.5 View Device Info

Device information like software version, storage status, PoE status, network status, connected channel information, and logs can be viewed in **System Settings > System > Info** via local menu. You can search and export logs as your desire.

Chapter 4 Web Operation (Mainly Used for Technical Support)

4.1 Basic Operation

4.1.1 Activate Your Device

Purpose:

You can get access to the device via web browser. The supported resolutions include 1024*768 and above.



NOTE

- Default administrator account: admin.
- Default IPv4 address: 192.168.1.64.
- You may have to close the web browser to finish the installation of the plug-in.
- It is recommended to use Chrome or Edge web browser.

Step 1 Open web browser, input the device IP address. The default IP address is 192.168.1.64.

Step 2 Press **Enter**.

Step 3 Enter the admin password twice.



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 Click **OK**.

Step 5 Optional: If new user accounts or facial login function are needed, please set the parameters via web browser. Refer to *4.12 User Management* for details.

4.1.2 Configure Network Parameters

Step 1 Go to **Configuration > System Settings > Network Settings > TCP/IP**.

Working Mode: Net Fault-tolerance

NIC Type: Auto

DHCP

IPv4 Address: [Field]

IPv4 Subnet Mask: [Field]

IPv4 Default Gateway: [Field]

IPv6 Address: [Field]

IPv6 Default Gateway: [Field]

Mac Address: [Field]

MTU: 1500

DNS Server

Auto DNS

Preferred DNS Server: [Field]

Alternate DNS Server: [Field]

Main NIC: Lan1

Save

Figure 4-1 Basic Network Settings

Step 2 Select **Working Mode** as **Net Fault-Tolerance**, **Load Balance**, or **Multi-Address**.

- **Net-fault Tolerance Mode:** The two NIC cards use the same IP address, and you can select the Main NIC to any LAN. By this way, in case of one NIC card failure, the system will automatically enable the standby NIC card so as to ensure the normal running of the whole system.
- **Load Balance:** By using the same IP address and two NIC cards share the load of the total bandwidth, which enables the system to provide two Gigabit network capacity.
- **Multi-address Mode:** The parameters of the two NIC cards can be configured independently. You can select a LAN in the NIC type field for parameter settings. You can select one NIC card as the default route. And then the system is connecting with the extranet the data will be forwarded through the default route.

Step 3 Set the NIC settings.

- 1) Select **NIC Type**.
- 2) Enter **IPv4 Address**, **IPv4 Subnet Mask**, **IPv4 Default Gateway**. You can check **DHCP** (Dynamic Host Configuration Protocol) to obtain IPv4 address dynamically.

Step 4 Optionally, you can configure the maximum transmission unit (MTU) as your desire.

Step 5 Enter DNS server parameters.

Step 6 Click **Save** to save the settings.

4.1.3 Use Wizard to Set System Main Parameters

Purpose:

The wizard is used to quickly view system information and configure system main parameters.

Step 1 Go to **Configuration** › **Wizard Configuration** › **Step 1** via web browser.

- **System Info:** View the device model, software version, and connected PoE camera information.
- **Audio Configuration:** Audio mode and audio gain is configurable. You can get the description of each audio mode in pop-ups. Refer to *Sound Mix Settings* for details about audio gain.
- **Interaction Platform Management:** Interaction platform parameters are configurable if you have the device logged into a platform. After your device logged in to a platform, the parameters would not be configurable.
- **Interaction Account Management:** You can log in or log out your interactive meeting account. Refer to *Account Management* for details.

Step 2 Go to **Configuration** › **Wizard Configuration** › **Step 2** via web browser. The live view strategy is configurable. Refer to *Automatic Live View Control* for details.

4.2 Education Specified Camera Connection

Before you can get the live view or record the image of classroom, connect the education specified camera to the device via PoE (Poser over Ethernet) interface or network.

4.2.1 SADP Search

Purpose:

You can search and modify network parameters of IP cameras in the same network segment.

Step 1 Go to **Configuration > System Settings > Camera Management > SADP Search**.

Step 2 Click **Refresh** to search the IP camera in the same network segment.

Step 3 Optionally, edit the network parameters of IP camera.

- 1) Select the camera.
- 2) Click **Modify**.
- 3) Edit the network parameters, including IP address and port.
- 4) Enter the user name and password.
- 5) Click **OK**.

4.2.2 Connect Network Camera via PoE Interface

Purpose:

PoE provides power to a network camera via the same cable as used for the network connection. Supported PoE camera number varies with device module. If you disable the PoE interface, you can also connect to the online network cameras. And the PoE interface supports the Plug-and-Play function.

Step 1 Connect an education specified PoE camera to a device PoE interface with network cable.

Step 2 Go to **Configuration > System Settings > Camera Management > SADP Search** via web browser.

Step 3 If the PoE camera is activated, edit its IP address under 192.168.254.xxx network segment (for example, 192.168.254.123).



NOTE

The device would automatically allocate IP addresses to inactivated PoE cameras.

Step 4 Go to **Configuration > Recording Settings > Live View Settings > Live View Channel Settings**.

Step 5 Click **Add**.

Step 6 Enter the PoE camera parameters.



Camera type cannot be duplicated with each other.

 A screenshot of a software dialog box titled 'IP Camera' with a close button (X) in the top right corner. The dialog contains several input fields: 'IP Camera Address' with a green checkmark, 'Protocol' with a dropdown arrow, 'Management Port' with the value '8000', 'User Name' with the value 'admin', 'Password' with masked characters and a green checkmark, 'Confirm' with masked characters and a green checkmark, and 'Camera Type' with a dropdown arrow showing 'Track Teacher'. At the bottom right are 'OK' and 'Cancel' buttons.

IP Camera Address	<input type="text" value="192.168.1.100"/>	✓
Protocol	<input type="text" value="RTSP"/>	▼
Management Port	<input type="text" value="8000"/>	
User Name	<input type="text" value="admin"/>	
Password	<input type="password" value="••••••••"/>	✓
Confirm	<input type="password" value="••••••••"/>	✓
Camera Type	<input type="text" value="Track Teacher"/>	▼

Figure 4-4 Add IP Camera

Step 4 Click **OK**.

4.3 Live View

4.3.1 Configure Live View Image

Purpose:

You can view the live image of connected cameras with manual, semi-auto, or auto mode. The relevant information is displayed on the left.

Before you start:

Ensure the device has successfully connected to the education specified cameras, and your web browser has installed the latest web component.

Step 1 Go to **Live View** via web browser.

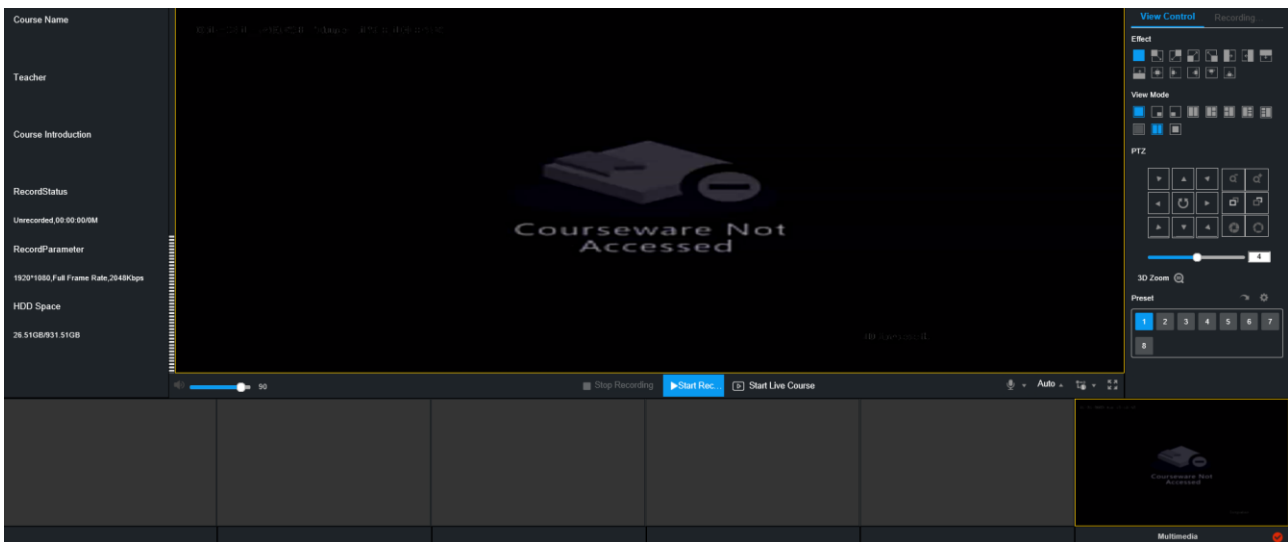


Figure 4-5 Live View

Step 2 Click **View Control** to set the view mode.



Figure 4-6 View Mode

Table 4-1 View Mode Description

Mode	Icon	Description
Movie		Single screen
Picture-in-Picture		PIP 1, overlay the picture at the lower right corner
		PIP 1, overlay the picture at the lower left corner
Multi-Screen		Multi-Screen 1, split screen in half
		Multi-Screen 2, split screen in three blocks with the larger one at left side
		Multi-Screen 3, split screen in three blocks with the larger one at right side
		Multi-Screen 4, split screen in four blocks with the larger one at left side
		Multi-Screen 5, split screen in four blocks with the larger one at right side

Step 3 Optionally, set the channel switching effect.

Step 4 Optionally, when you are in single screen, you can double-click the windows at the bottom to switch live view camera.

Step 5 Optionally, click **Start Recording** or **Stop Recording**. You shall enter the course information when you start course recording.

- 1) Enter course information including **Course Name**, **Teacher**, and **Course Introduction**.
- 2) You can check **Video Head** or **Video Trailer** to add video head or tail to the recording video. Refer to for details.
- 3) Click **OK**.

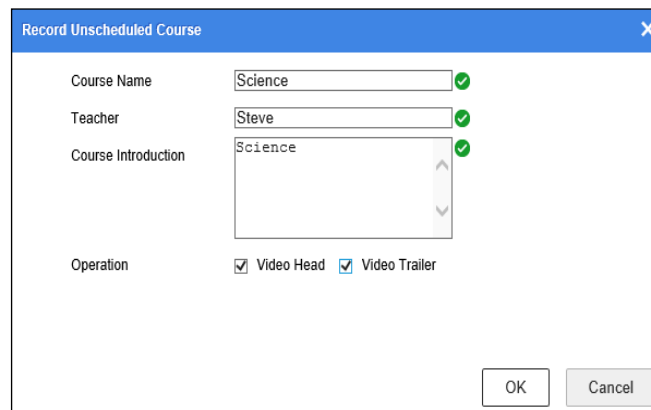


Figure 4-7 Course Information

Step 6 Select the live mode as **Manual**, **SimiAuto**, or **Auto**.

- **Manual:** Manually switch the camera image to the main screen. You can double-click the camera image at the bottom to switch image, or use the PTZ control panel to manually track the object.
- **SimiAuto:** The speed dome can automatically track object, but you still have to manually switch live view image by double-clicking the camera display window at the bottom.
- **Auto:** The speed dome can automatically track object. The device will automatically display image to the main screen when the connected education specified cameras have detected smart events. The auto live view control is enabled by default.

Step 7 For the student and teacher channel, rotate the camera to desired view. Refer to *4.3.2 PTZ Control* for details.



Figure 4-8 PTZ Control Panel

Step 8 Optionally, click **Recording Management** to edit **Logo**, **Subtitles**, **Video Head**, and **Video Tail**. Refer to *4.5.5 Logo Configuration and Configure OSD*.

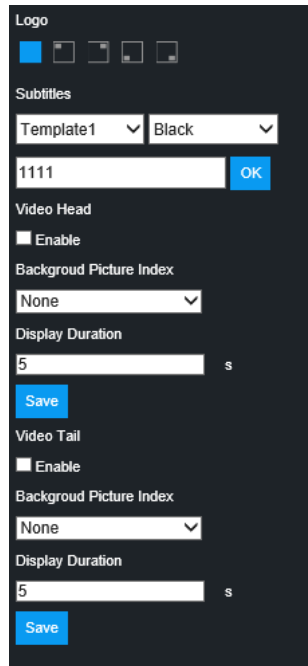


Figure 4-9 Recording Management

4.3.2 PTZ Control

PTZ Settings

Purpose:

For the student and teacher channel, you can rotate them to desired view.

Follow the procedure to set the parameters for PTZ. The configuring of the PTZ parameters should be done before you control the PTZ camera.

Step 1 Go to **Configuration > System Settings > System Settings > RS-485** via web browser.

Channel No.	[A1] Teacher
RS485	
Baud Rate	9600
Data Bit	8
Stop Bit	1
Parity	None
Flow Ctrl	None
PTZ Protocol	
PTZ Address	0
<input type="button" value="Copy to..."/> <input type="button" value="Save"/>	

Figure 4-10 PTZ Settings

Step 2 Select the camera for PTZ setting in **Channel No.**

Step 3 Set the PTZ camera parameters.



All the parameters should be the same as the PTZ camera parameters.

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

Set PTZ Presets

Purpose:

Follow the steps to set the preset position location which you want the PTZ camera to point to when an event takes place.

Step 1 Go to **Live View** via web browser. And start live view of a channel.

Step 2 Click **PTZ** at the upper right corner.

Step 3 Select a preset.

Step 4 Use the directional button to wheel the camera to the location where you want to set preset. The zoom and focus operations can be recorded in the preset as well.

Step 5 Click  to save the preset.



Figure 4-11 Select a Preset



Repeat the above steps to set more presets.

Call Presets

Purpose:

This feature enables the camera to point to a specified position such as a window when an event takes place.

Step 1 Go to **Live View** via web browser. And start live view of a channel.

Step 2 Click **PTZ** at the upper right corner.

Step 3 Select the preset you want to call.

Step 4 Click  to call the preset.

4.4 HDD Management

4.4.1 Format Hard Disk

Purpose:

A newly installed hard disk must be formatted before using.

Step 1 Go to **Configuration > System Settings > Storage Management > HDD Management** via web browser.

Step 2 Select the HDD.

Step 3 Click **Format** to start formatting.

4.4.2 Set Cloud Storage

Purpose:

The cloud storage allows you to get alarm pictures from the device.

Step 1 Go to **Configuration > System Settings > Storage Management > Cloud Storage** via web browser.

Step 2 Check **Enable Cloud Storage**.

Step 3 Set the related parameters.

Step 4 Click **Save**.

4.4.3 Record Schedule Settings

Step 1 Go to **Configuration > System Settings > Camera Management > Record Schedule** via web browser.

Step 2 Select **Channel No.**

Step 3 Check **Enable**.

Step 4 Select the recording type, including **Continuous, Motion, Alarm, Motion | Alarm, Motion & Alarm**, and **Event**.

Step 5 Set the recording schedule of selected day.

Step 6 Optionally, you can click **Copy to** to copy the schedule settings to other channel(s).

Step 7 Optionally, click **Advanced** to set the pre-record and post-record time of the recording schedule, and expired time of the recording file.

Step 8 Click **Save**.

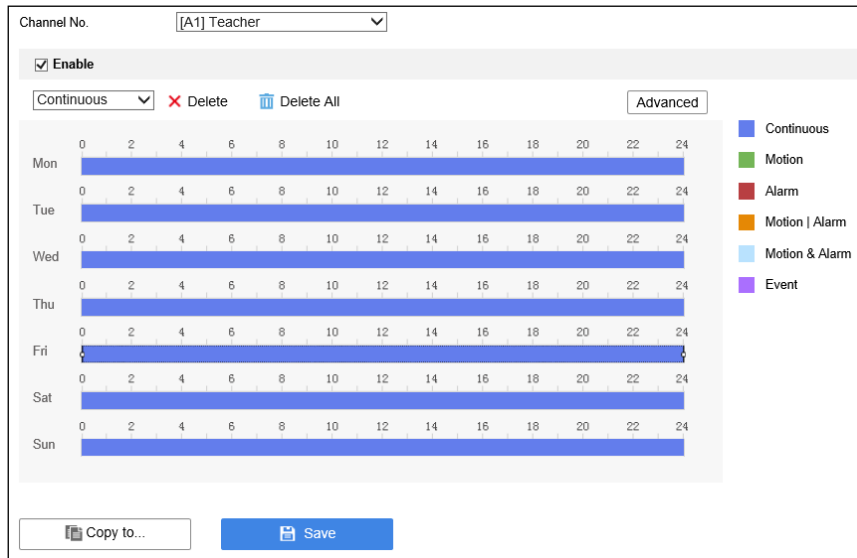


Figure 4-12 Schedule Settings

4.4.4 Advanced Settings

HDD Sleeping

Purpose:

To reduce consumption and extend hard disk’s lifespan, you can enable the hard disk sleep feature. The hard disk will turn into sleep status if it keeps idle for a period.

Step 1 Go to **Configuration > System Settings > Storage Management > Advanced Configuration** via web browser.

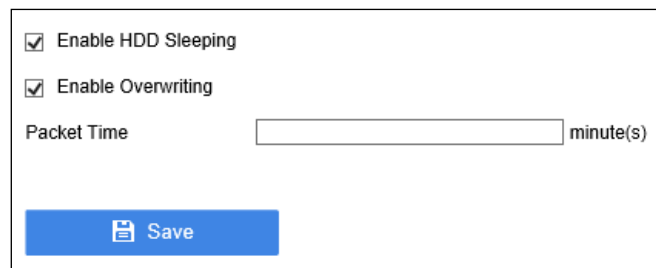


Figure 4-13 Advanced Configuration

Step 2 Check **Enable HDD Sleeping**.

Step 3 Click **Save** to activate the feature.

Overwriting

Purpose:

When the hard disk is full, the overwriting function will keep writing data into the hard disk by replacing its previous data.

Step 1 Go to **Configuration > System Settings > Storage Management > Advanced Configuration** via web browser.

Step 2 Check **Enable Overwriting**.

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

4.5 Recording Settings

4.5.1 Manage Background Picture

Purpose:

When the live view control view is set as multi-screen 1, multi-screen 2, or multi-screen 3, in case the collaged image cannot fill in the whole screen and leaves the screen top and bottom filled in black bar, you can upload a background picture to span the whole screen.

Before you start

Ensure you have installed a hard disk to the device.

Upload Image

Step 1 Go to **Configuration > Recording Settings > Auxiliary Settings > Picture Upload** via web browser.

*Uploaded pictures can be used for background, video opening and ending settings. Only JPEG picture is supported, and the resolution shall be between 352 × 288 and 1920 × 1080.

Image No.	File Name	File Size	Picture Type	Picture Width	Picture Height	Operation Item

Upload Pict...


Figure 4-14 Background Settings

Step 2 Click **Upload Picture** to upload a picture.



- Only JPEG format pictures can be uploaded, and the resolution shall be between 352 × 288 and 1920 × 1080.
- Up to 11 pictures can be uploaded.

Step 3 Click **OK**.

Step 4 Optionally, you can click  to deleted the picture. But you cannot delete the background picture that is in usage.

Set Background Picture

Step 1 Go to **Configuration > Recording Settings > Auxiliary Settings > Background Settings** via web browser.

Step 2 Check **Enable Background Overlay**.

Step 3 Check the live view control view that requires to overlay background image. Only multi-screen is available.

Step 4 Select background image for the multi-screen.

Step 5 Click **Save**.

4.5.2 Courseware Detection

Set Courseware Detection

Purpose:

If auto live view control is enabled, once multimedia change is detected, education sharing system will automatically switch to multimedia channel.

Step 1 Go to **Configuration > Recording Settings > Courseware Settings > Courseware Settings** via web browser.



Figure 4-15 Courseware Detection

Step 2 Select **Channel No.** for course detection. **[A9] Computer** and **[A10] Computer** refer to VEDIO IN 1 and VEDIO IN 2 at the rear panel respectively.

Step 3 Check **Enable Course Detection**.

Step 4 Click **Draw Area** to draw the detection area in the camera view.

Step 5 Click **Stop Drawing** when you finish drawing the detection area.

Step 6 Optionally, you can click **Clear All** to detete the drawing area.

Step 7 Set **Sensitivity** and **Threshold** of course detection.

- **Sensitivity:** Sensitivity refers to the how much the detection area pixels change.
- **Threshold:** Threshold refers to how many pixels are changing.

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

Configure Courseware Input Source

Purpose:

The device can automatically detect the courseware input source at startup. You can configure the input source as your desire.

Step 1 Go to **Configuration > Recording Settings > Courseware Settings > Input Source Configuration** via web browser.

Step 2 Select **Channel No.** for input source. **[A9] Computer** and **[A10] Computer** refer to VEDIO IN 1 and VEDIO IN 2 at the rear panel respectively.

Step 3 Select **Input Source**. The device can automatically detect the courseware input source if you select **Auto**.



When **Input Source** is set as **Auto**, and both HDMI and VGA signal source have been detected, the device will choose HDMI as its priority input source.

A screenshot of a web-based configuration interface. It features two dropdown menus. The first is labeled 'Channel No.' and has '[A9] Computer' selected. The second is labeled 'Input Source' and has 'Auto' selected. Below these menus is a blue button with a white floppy disk icon and the text 'Save'.

Figure 4-16 Input Source

Step 4 Click **Save**.

Automatic Live View Control

Purpose:

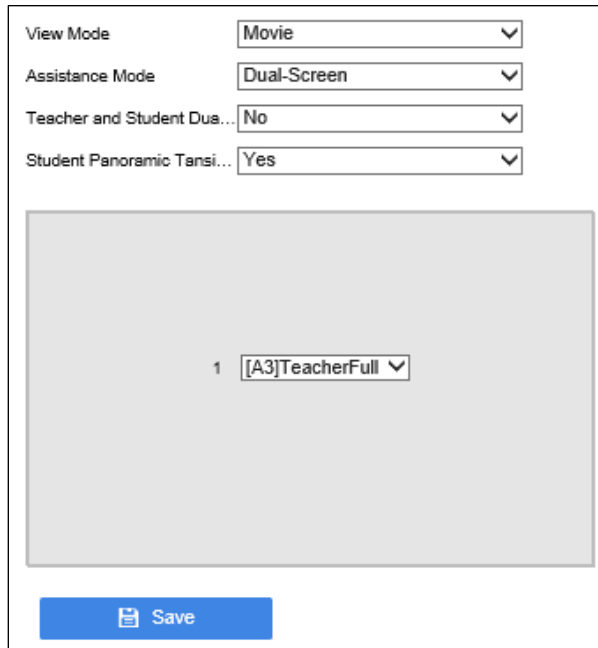
Combined with education specified speed dome and detection camera (including teacher close shot camera, student close shot camera, and multimedia camera), education sharing system can automatic display the teacher image, student image, or HDMI/VGA multimedia image in live view control view according to the speed dome smart detection information. Besides, the speed dome can preciously positioning and track teacher and record the teaching process.

 NOTE

- Connect education specified speed dome and detection to education sharing system via network.
- In auto live view control mode, when the education specified speed dome occurs smart events or HDMI/VGA multimedia courseware changes, the cameras will be automatically displayed in the resource channel in the largest window of live view control view according to the set priority.
- You need to log in education specified speed dome configuration interface to configure its smart detection rules.

Configure Live View Control View

Step 1 Go to **Configuration > Recording Settings > Live View Settings > View Settings** via web browser.



The screenshot displays the 'View Settings' configuration page. It features four dropdown menus at the top: 'View Mode' set to 'Movie', 'Assistance Mode' set to 'Dual-Screen', 'Teacher and Student Dua...' set to 'No', and 'Student Panoramic Tansi...' set to 'Yes'. Below these is a large grey rectangular area containing a single dropdown menu labeled '1 [A3]TeacherFull'. At the bottom of the page is a blue 'Save' button with a floppy disk icon.

Figure 4-17 Live View Control View

Step 2 Select **View Mode**.

- **Movie:** You need to set **Assistance Mode** for movie mode. When one alarm is triggered, it will display in single screen. But if two or more alarms are triggered, it will display as what the **Assistance Mode** is set, including **Single Screen**, **Dual-Screen**, and **Picture-in-Picture**.
- **PiP:** PiP (Picture-in-picture) is the video display method that when the video is on full screen, another video is displayed in the inset window at the same time.
- **Multi-Screen:** Multi-image of the camera are displayed simultaneously on the screen.

Step 3 Select display channel.

Step 4 Click **Save**.

Configure Live View Control Strategy

Step 1 Go to **Configuration > Recording Settings > Live View Settings > Live View Channel Settings** via web browser.

Live View Channel Setti...									
<input type="checkbox"/>	Channel No.	Camera Name	IP Address	Management Port	Camera Type	Priority	Status	Protocol	Connect
<input type="checkbox"/>	A1	Computer	[Redacted]	8000	Multimedia	1	Offline	[Redacted]	
<input type="checkbox"/>	D1	Camera 01	[Redacted]	8000	Teacher Overall...	0	Online(Get Stream)	[Redacted]	http.i. ...

Figure 4-18 Live View Channel Settings

Step 2 Select a channel for modification.

Step 3 Click **Modify**.

Priority	<input type="text" value="0"/>
IP Address	<input type="text" value="[Redacted]"/>
Management Port	<input type="text" value="8000"/>
User Name	<input type="text" value="admin"/>
Password	<input type="password" value="....."/>
Channel Display Time (s)	<input type="text" value="0"/>
Camera Type	<input type="text" value="Track Student"/>
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

Figure 4-19 Strategy Configuration Interface

Step 4 Set the parameters, including priority, IP address, port, user name, password, etc.

- **Priority:** The priority of the selected channel. The larger the value is, the higher the priority will be.
- **Channel Display Time (s):** The display time of multimedia is recommended to set as its actual duration. Other channel's display time is recommended to set as 0. Valid channel display time range: [0, 900].

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

Configure One-Touch Configuration

Step 1 Go to **Configuration > Recording Settings > Live View Settings > Live View Strategy Settings** via web browser.

Step 2 Click **Add**.

Step 3 Enter the channel parameters of live view control strategy.

Step 4 Click **OK**.

Step 5 Click **One-touch Configuration**.



The device will automatically recognize supportable education specified cameras. If issues occur, contact the product distributor for help.

Course Information

Purpose:

You can define the course number, course name, and course instructor.

Step 1 Go to **Configuration > Courseware Settings > Course Settings > Course Information** via web browser.

Step 2 Edit the course information including name, teacher, etc.

A screenshot of a software dialog box titled 'IP Camera' with a close button (X) in the top right corner. The dialog contains three input fields: 'Course Name' (a single-line text box), 'Teacher' (a single-line text box), and 'Description' (a multi-line text area with a vertical scrollbar on the right). At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Figure 4-20 Course Information

Step 3 Click **OK**.

Course Plan

Purpose:

You can set the course recording plan as your desire.

Before you start:

Course plan is saved in hard disk. So you need to install at least one hard disk and format it.

Step 1 Go to **Configuration > Courseware Settings > Course Settings > Course Plan** via web browser.

Step 2 Select year and week for the plan.

Step 3 Set the recording schedule for each day in the week.

Step 4 Optionally, click **Copy to** to copy the recording schedule to other week.

The screenshot displays a web interface for configuring a course plan. At the top, there are two dropdown menus: 'Select Year' is set to '2018' and 'Select Week' is set to '2018-09-17 ~ 2018-09-23 (week)'. Below these are two buttons: a red 'Delete' button and a blue 'Delete All' button. The main area consists of seven rows, one for each day of the week (Mon, Tue, Wed, Thu, Fri, Sat, Sun). Each row has a horizontal timeline from 0 to 24 with tick marks every 2 units. The bottom of the interface features a 'Copy to...' button with a document icon and a blue 'Save' button with a floppy disk icon.

Figure 4-21 Course Plan

Step 5 Click **Save**.

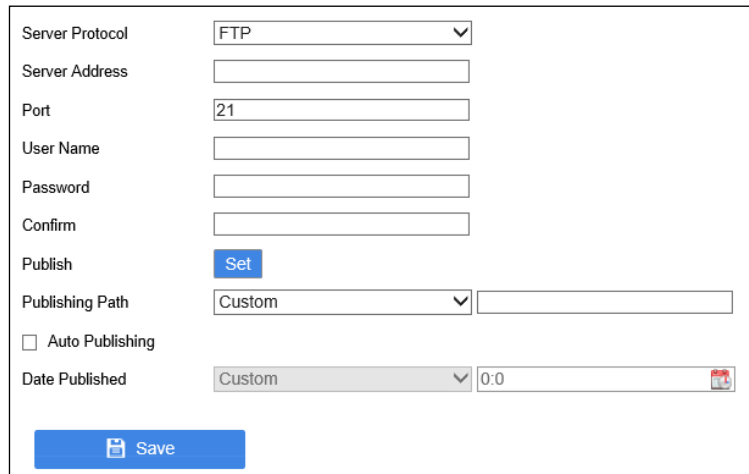
4.5.3 Course Publishing

Publish Course

Purpose:

The recorded courses can be automatically published to FTP server.

Step 1 Go to **Configuration > System Settings > FTP Publishing > Publish Configuration** via web browser.



The image shows a 'Publishing Configuration' form. It includes the following fields and controls:

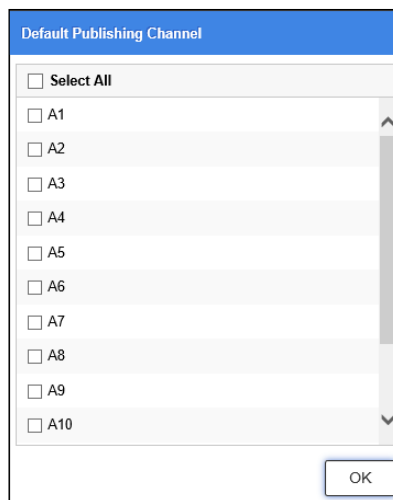
- Server Protocol: A dropdown menu with 'FTP' selected.
- Server Address: An empty text input field.
- Port: A text input field containing '21'.
- User Name: An empty text input field.
- Password: An empty text input field.
- Confirm: An empty text input field.
- Publish: A blue button labeled 'Set'.
- Publishing Path: A dropdown menu with 'Custom' selected, followed by an empty text input field.
- Auto Publishing: An unchecked checkbox.
- Date Published: A dropdown menu with 'Custom' selected, followed by a time input field showing '0:0' and a small red icon.
- Save: A blue button with a floppy disk icon and the text 'Save'.

Figure 4-22 Publishing Configuration

Step 2 Enter the FTP server address, port, user name, and password.

Step 3 Click **Set** to select the publishing channel(s).

Step 4 Click **OK**.



The image shows a 'Default Publishing Channel' dialog box. It contains the following elements:

- A title bar with the text 'Default Publishing Channel'.
- A checkbox labeled 'Select All'.
- A list of ten channels, labeled A1 through A10, each with an unchecked checkbox to its left.
- A vertical scrollbar on the right side of the list.
- An 'OK' button in the bottom right corner.

Figure 4-23 Set Publishing Channel

Step 5 Set **Publishing Path**.

Step 6 Optionally, check **Auto Publishing** to automatically publish courses. You can set **Date Published** as **Last Course** or **Custom time** for the course that requires to be published to FTP.

Step 7 Click **Save** to save the settings.



The published course video format is MP4.

Search Published Course

Purpose:

After course is published, you can search its publishing progress, publishing status, course introduction.

Step 1 Go to **Configuration > System Settings > FTP Publishing > Published Course Search** via web browser.

Channel No.	[M1] Direct							
Select Year	2018							
Select Week	2018-09-17 ~ 2018-09-23 (we							
			Search	Cancel Publishing				
No.	Start Time	End Time	Course Name	Teacher	Progress	Published Status	Course Introduction	

Figure 4-24 Search Published Course

Step 2 Select channel, year, and week.

Step 3 Click **Search**.



When multiple courses are waiting to be uploading, to increase the uploading speed of high priority courses, you can cancel uploading of low priority courses.

RTMP Live Settings

Purpose:

You can view the course live view image in RTMP server. The feature is turned off by default.

Step 1 Go to **Configuration > System Settings > Network Settings > RTMP Live** via web browser.

Channel No.	[A1] Computer	
<input type="checkbox"/> Enable		
Stream Type	Main Stream	
RTMP URL1		<input type="checkbox"/> Enable
RTMP URL2		<input type="checkbox"/> Enable
RTMP URL3		<input type="checkbox"/> Enable
Package Length	8192	
<input type="button" value="Save"/>		

Figure 4-25 RTMP Live

Step 2 Select **Channel No.**

Step 3 Check **Enable** to enable the RTMP live feature.



NOTE

Network camera supports push main stream and sub-stream.

Step 4 Edit **Stream Type**, **RTMP URL**, and **Package Length**.



NOTE

- RTMP URL format: rtmp://192.168.1.64:1935/live/12345. 192.168.1.64 is the server IP address. 1935 is server port. Live is server name. 12345 is a custom name used to distinguish channels and stream types.
- Valid package length range: [1024, 8192]. Package length is 8192 by default and is a recommended value.

Step 5 Click **Save**.

4.5.4 Video Head/Tail Configuration

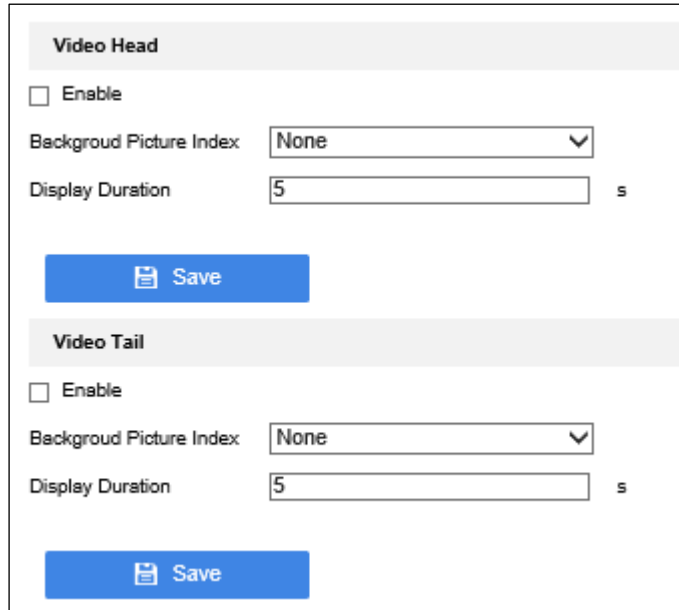
Purpose:

You can insert the picture at the beginning and ending of course video.

Before you start:

Upload background first. For detailed steps, refer to *4.5.1 Manage Background Picture*.

Step 1 Go to **Configuration > Recording Settings > Auxiliary Settings > Video Head/Tail Configuration** via web browser.



The screenshot shows two configuration panels. The top panel, titled 'Video Head', contains an unchecked 'Enable' checkbox, a 'Background Picture Index' dropdown menu with 'None' selected, and a 'Display Duration' input field with '5' entered. Below this panel is a blue 'Save' button. The bottom panel, titled 'Video Tail', contains an unchecked 'Enable' checkbox, a 'Background Picture Index' dropdown menu with 'None' selected, and a 'Display Duration' input field with '5' entered. Below this panel is another blue 'Save' button.

Figure 4-26 Video Head/Tail Configuration

Step 2 Configure video head.

- 1) Check **Enable** under **Video Head**.
- 2) Enter **Background Picture Index**. The index No. is the background picture No. in the background settings interface.
- 3) Enter **Display Duration** for the background picture.
- 4) Click **Save**.

Step 3 Configure video tail.

- 1) Check **Enable** under **Video Tail**.
- 2) Enter **Background Picture Index**. The index No. is the background picture No. in the background settings interface.
- 3) Enter **Display Duration** for the background picture.
- 4) Click **Save**.

4.5.5 Logo Configuration

You can overlay logo image on the live view.



The required logo picture format is *.jpeg* and *.jpg*, the resolution shall be smaller than 256 × 128, and file size shall be smaller than 80 KB.

Upload Logo

Step 1 Go to **Configuration > Recording Settings > Auxiliary Settings > Logo Configuration** via web browser.

Step 2 Click **Browse** to select the image path.

Step 3 Click **Save**.

Display Logo

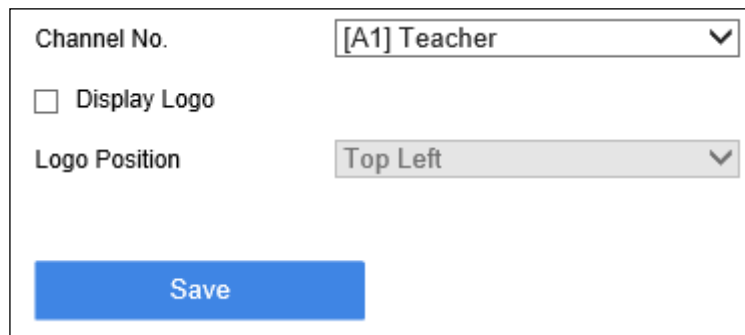
Step 1 Go to **Configuration > Recording Settings > Auxiliary Settings > Logo Configuration** via web browser.

Step 2 Select **Channel No.** The logo will be displayed at the selected channel.

Step 3 Check **Display Logo**.

Step 4 Select **Logo Position** as your desire.

Step 5 Click **Save**.



The screenshot shows a configuration form with the following elements:

- Channel No.:** A dropdown menu with the selected value "[A1] Teacher".
- Display Logo:** An unchecked checkbox.
- Logo Position:** A dropdown menu with the selected value "Top Left".
- Save:** A blue button.

Figure 4-27 Display Logo

4.6 Multi-Classroom Interaction (Cloud Interaction)

4.6.1 Interaction Settings

Account Management

Purpose:

You can manage your interactive meeting account in **Account Management**.





Step 1 Go to **Configuration > Interaction Settings > Cloud Interactive Class > Account Management** via web browser.

Step 2 Click **Current Login Account** to register the device (your device will log in automatically after registration. If you log out from the current account, you have to log in manually).

Step 3 Enter your user name and password. Click **login** to get access to the platform.

Step 4 Manage your account as required.

Table 4-2 Account Management Procedures

Item	Description
	Change your alias and phone number.
	Change account password.
	Exit current account.
Local Meeting No.	If the device initiates an interactive meeting, other devices shall use the meeting number to join in.
Alias	Alias is your device name, and other participants can find your meeting through it. You can click  to edit it. For example, it can be set as the class name.
Service Details	Check your account ID, start time and end time.
Top-up/Record	Top up or check your top-up records.

Step 5 Click **top-up**, fill in your card number and top up.

Configure Platform Parameters

Platform parameters are used for interaction. You can configure platform parameters in **Configuration > Interaction Settings > Cloud Interactive Class > Basic Settings** via web.

Default settings are recommended. If the default parameters are invalid, please contact the installer or technical support service.

Configure Interactive Video Linkage

Purpose:

You can configure Interactive Video Linkage in the interaction view.

Step 1 Go to **Configuration > Interaction Settings > Cloud Interactive Class > Interactive Video Linkage** via web browser.

Classroom Mode	Main Classroom ▼
Interactive Video 1	Sub Classroom Live View Ima ▼
Interactive Video 2	Sub Classroom Live View Ima ▼
Interactive Video 3	Sub Classroom Live View Ima ▼
Interactive Video 4	Sub Classroom Live View Ima ▼
Interactive Video 5	Sub Classroom Live View Ima ▼
Interactive Video 6	Sub Classroom Live View Ima ▼
Interactive Video 7	Sub Classroom Live View Ima ▼
Interactive Video 8	Sub Classroom Live View Ima ▼
Interactive Video 9	Sub Classroom Live View Ima ▼

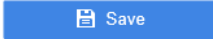
 Save

Figure 4-28 Interactive Video Linkage

Step 2 Set your classroom mode as **Main Classroom** or **Sub Classroom**.

Step 3 Select classroom live view image of the interactive video accordingly.



NOTE

You can go to **Configuration > Interaction Settings > Cloud Interactive Class > Interaction View** to set the position of interactive video in the interaction view.

Configure Interaction View

Purpose:

You can configure the view mode and the channels of the individual interaction view.

Step 1 Go to **Configuration > Interaction Settings > Cloud Interactive Class > Interaction View** via web browser.

Figure 4-29 View Configuration

Step 2 Select **Network Mode**.

- **Auto Mode:** If no view is provided by other recorder, default view mode would be single screen. Otherwise, it will add new view automatically and switch to multi-screen.
- **Manual Mode:** This mode shows multi-screen view and can match the interactive video with the required view. You can set the presentation of the interactive video if you go to **Configuration > Interaction Settings > Cloud Interactive Class > Interactive Video Linkage**.

Step 3 Click and set the channel of each view.

Figure 4-30 Channel Selection

Step 4 Click **Save**.

 **NOTE**

- The screenshots are for reference only, the optional channel is subject to the actual device conditions.
- If the view channel is null, it will present black screen.

Sending Channel Encoding Settings

Purpose:

You can configure the main stream parameters of the sending channels.

Go to **Configuration > Interaction Settings > Cloud Interactive Class > Sending Channel > Advanced Configuration** via web browser.

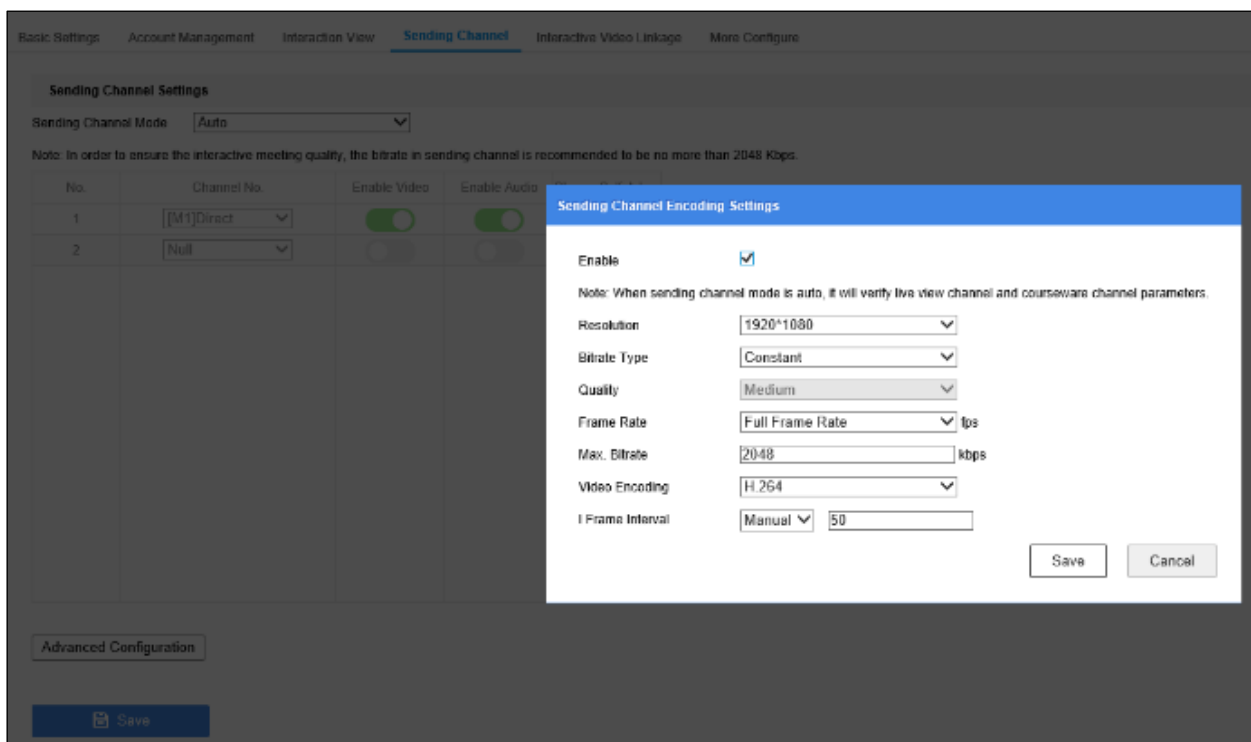


Figure 4-31 Sending Channel Code Configuration

Table 4-3 Parameter Description

Parameter Name	Parameter Description
Resolution	Indicates image precision. The higher the resolution, the clearer the image.
Bitrate Type	Variable Bitrate: Bitrate varies according to the scenarios. 6 levels of image quality are available. You can have higher usage of network bandwidth and higher efficiency of storage space. If the video encoding is H.265 and the Bitrate Type is variable, the system would adopt H.265 Pro format.
Quality	Only adjustable when Bitrate Type is set as Variable .
Frame Rate	Indicates video frame rate per second. The higher the frame rate, the higher the consistency of the video. Default setting is recommended.
Max. Bitrate	A reference number that indicates Max. Bitrate of the video encoding. The higher the Max. Bitrate, the better the video quality. Default setting is recommended. If you have to edit it for better video quality, resolution is suggested to be adjusted together.
Video Encoding	Video encoding format depends on specific camera.
I Frame Interval	You can improve its consistency in video loss by setting I Frame Interval. Generally, you do not need to adjust this setting, and default setting is recommended.

 **NOTE**

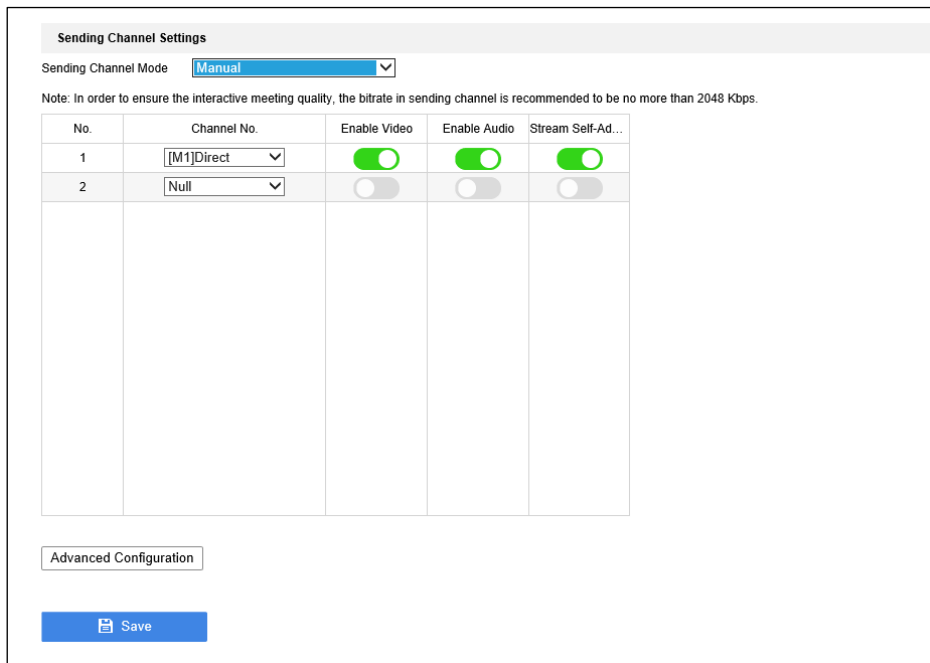
The main stream parameters of the sending channels are only effective if configured in Sending Channel Encoding Settings but not in **Audio/Video > Video Settings**.

Configure Sending Channel

Purpose:

You can configure the interactive image parameters, and the image will be sent to the interactive meeting.

Step 1 Go to **Configuration > Interaction Settings > Cloud Interactive Class > Sending Channel** via web browser.



Sending Channel Settings

Sending Channel Mode: **Manual**

Note: In order to ensure the interactive meeting quality, the bitrate in sending channel is recommended to be no more than 2048 Kbps.

No.	Channel No.	Enable Video	Enable Audio	Stream Self-Ad...
1	[(M1)Direct]	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	[Null]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advanced Configuration

Save

Figure 4-32 Configure Sending Channel

Stream Self-Adaption is recommended. If this function is enabled, it will adjust video bitrate automatically according to the network performance.



- If the **Sending Channel Mode** is **auto**, the parameters can not be configured. The courseware channel and the broadcast channel are sent by default. Meanwhile, the main stream, video, audio and **Stream Self-Adaption** are applied by default.
- As the channel No. and the stream cannot be configured during the interaction process, please configure them before the interaction starts.
- Audio can be enabled or controlled only after the video is enabled.
- After enabling the video and audio, if the host is the initiator, / will be available to initiate or stop the sending process, while if the host is the participant, the device will send the video or audio by default, but it cannot stop the sending process.

Step 2 Click **Advanced Configuration** to configure the sending channel No.

Configure Meeting Room Permission

Purpose:

You can configure the meeting room permission (direct participation or participation with verification code).

Step 1 Go to **Configuration > Interaction Settings > Cloud Interactive Class > Basic Settings > Meeting Room Management** via web browser.

Step 2 Select **Meeting Room Permission**.

Step 3 If you select encrypted meeting room permission, you should configure the verification code.



After you complete the configuration, verification code is required when other devices join in the interactive meeting that initiated by the host.

Configure Course Output

Purpose:

You can configure the course output.

Go to **Configuration > Interaction Settings > Cloud Interactive Class > More Configure > Course Output** via web browser.

If HDMI and VGA offer simultaneous video output, both HDMI or VGA provide the video of your course; if they offer independent output, the course output can be set manually. By default, VGA can provide access to both main room courseware and the sub room courseware, and this default setting can also be switched to HDMI output.

Overlay Interactive Alias

Purpose:

You can overlay interactive alias on the image of sending channels.

Step 1 Select **Configuration > Interaction Settings > Cloud Interactive Class > Basic Settings > Interactive Alias Overlay** via web browser.

Step 2 Check **Enable** and set **Overlay Position**.

Interactive Course Data Counting

Purpose:

Course data counting is available. Statistics such as head rise data and question frequencies.

Go to **Configuration > Interaction Settings > Cloud Interactive Class > More Configure > Interactive Course Data Counting** via web browser to enable this function. You can check the counting result on the platform.

Network Status Counting

Purpose:

The interactive view can show network status, and you can configure **Current Packet Loss Rate Counting Time Interval** with this function.

Go to **Configuration > Interaction Settings > Cloud Interactive Class > More Configure > Network Status Counting** via web browser to input required intervals, from 1-1000.

Interactive Facial Image Live View

Purpose:

When teacher stands in front of the interactive screen, the live view will switch to the facial image of the teacher.

Step 1 Go to **Configuration > Recording Settings > Live View Settings > Live View Strategy Settings** via web browser.

Step 2 Set **Configuration Mode** as **Auto Configuration**.

Step 3 Go to **Configuration > Recording Settings > Live View Settings > Live View Channel Settings**.

Step 4 Click **Add**.

Step 5 Set **Camera Type** as **None**.

Step 6 Set other camera parameters as required.

Step 7 Click **OK**.

4.6.2 Join/Initiate Interaction

Before you start

- Configure interactive meeting parameters (Go to **Configuration > Interaction Settings > Cloud Interactive Class** via web browser).
- Turn off point-to-point video meeting.
- The device has been registered, logged in and topped up.

Step 1 Click **Interaction**.

Step 2 Initiate or join a meeting.

 **NOTE**

The initiator can ask questions to the participant or remove the participant. The meeting No. filled in by participant is the device meeting No. (can be obtained from the initiator, on the web page of the host **Configuration > Interaction Settings > Cloud Interactive Class > Account Management**).

Step 3 Complete the configuration accordingly.

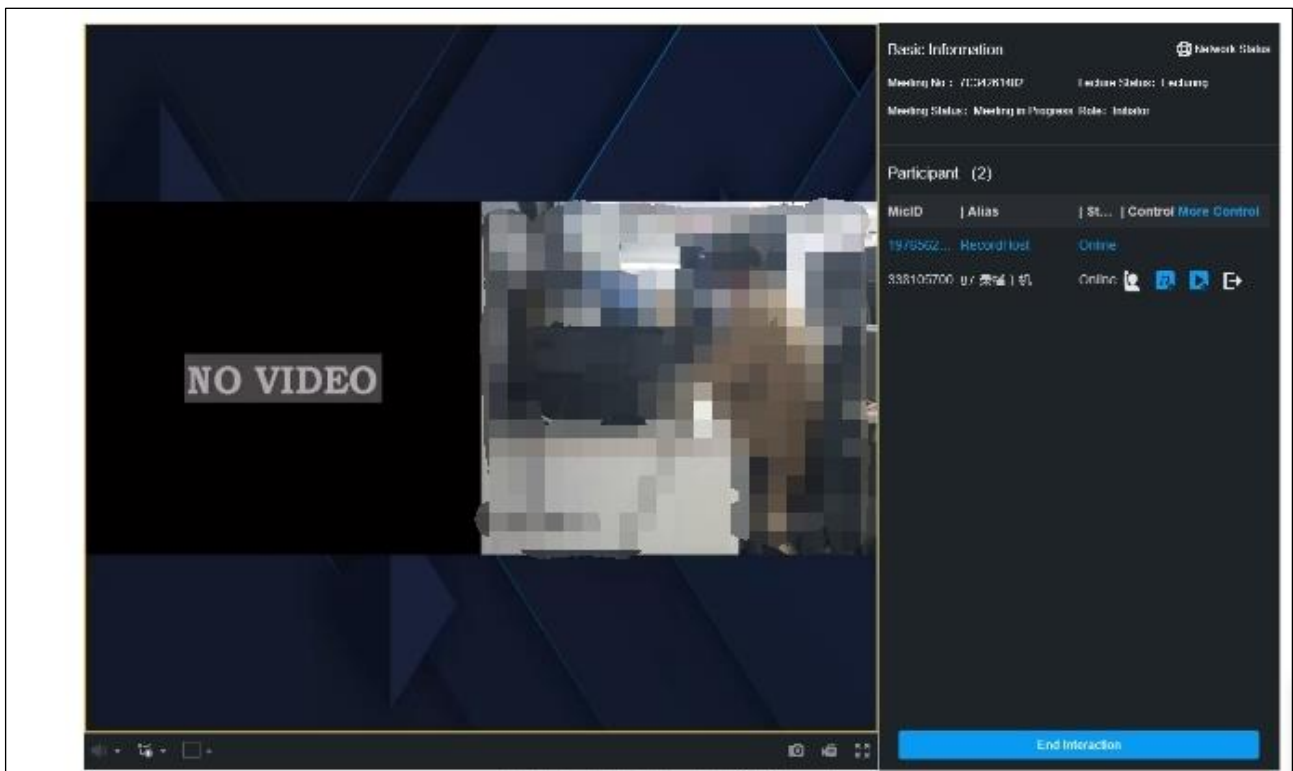







Figure 4-33 Interaction


More Control			
MicID	Alias	Status	Control
1976562079	RecordHost	Online	
338105700	[REDACTED]	Online	

Figure 4-34 More Control

Table 4-4 Interaction and Other Procedures

Icon	Description	Remarks
	Adjust view mode.	This function is only available when the view mode is 'manual' (Go to Configuration > Interaction Settings > Cloud Interactive Class > Interactive View).
	Capture current view.	Go to Configuration > System Settings > System Settings > WEB Config > Save Snapshots in Live View to.
	Start recording.	Go to Configuration > System Settings > System Settings > WEB Config > Save Record Files to .
	Control button of the participant list. Function is as same as the more control.	Blue indicates on, white indicates off, grey indicates channel is offline and unavailable.
	Click and you can control more options.	Null.
	Receive audio. To receive or decline the audio sent by	Blue indicates on, black indicates off, grey indicates channel is offline and unavailable.

Icon	Description	Remarks
	the participant. Only available when video stream is enabled.	
	Receive video stream. To receive or decline the audio and video sent by the participant.	
	Ask question. The initiator can ask questions to the participant, when you go to Configuration > Interaction Settings > Cloud Interactive Class > Interactive View , select auto mode and enable this function.	
	Receive audio. To receive or decline the audio sent by the participant. Only available when video is enabled.	<p>Only available for initiators.</p> <p>Blue indicates on, black indicates off, grey indicates channel is offline and unavailable.</p>
	Receive video. To receive or decline the audio and video sent by the participant.	
	To show or hide student name in the meeting room. Only available when individual behavior analytics is configured and when the camera	

Icon	Description	Remarks
	supports this function.	
	Remove meeting. Remove other device from the interaction.	

 **NOTE**

If the interactive view prompts unstable network connection, please check and adjust the network environment.

4.7 Point-to-Point Video Meeting

Purpose:

For certain models, point-to-point video meetings can be initiated or attended through H.323 protocol.

Before you start:

Ensure interaction is not enabled.

Step 1 Go to **Configuration > Interaction Settings > Video Meeting H323**.

Calling Response Type	Auto-Answer	▼
Channel No.	[M1] Direct	▼
Stream Type	Main Stream	▼
Audio Encoding Format	AAC-LC	▼
Transfer Protocol	UDP	▼

Figure 4-35 Configure Point-to-Point Video Meeting

Step 2 Configure **Channel No.**, **Audio Encoding Format**, and **Stream Type**.

 **NOTE**

- The point-to-point video meeting input channel includes recording channel, analog channel, and IP channel of image streaming.
- For recording channel, analog channel, and IP channel

Step 3 Configure **Calling Response Type** and **Transfer Protocol**.



NOTE

- **Calling Response Type** includes **Auto-Answer**, **Auto-Reject** and **Manual-Answer**. **Calling Response Type** only supports H.323 protocol.
- Point-to-point video meeting devices should use the same **Transfer Protocol**.

Step 4 Configure **Calling Operation**.



NOTE

System URL is the IP address of remote point-to-point video meeting device. Calling Speed should be between 32 and 6144 Kbps.

Step 5 Click **Meeting Status** to view the current meeting status.

Step 6 Optional: If a frequently-used terminal device IP address is fixed, its IP address can be added to contacts, and the meeting could be initiated more conveniently. Click **Contacts** to add terminal devices.



NOTE

- The number of devices in the contacts is limited. And only certain models support the contacts function.
- After a devices is added to **Contacts**, you can select it to edit or delete it.
- When you are initiating a point to point video meeting through the local menu, you can directly use the contacts to call a terminal device.

4.8 Course Playback and Download

4.8.1 Play Back Course Videos


Step 1 Go to **Playback**.





Figure 4-36 Playback

Step 2 Click **Video**.

Step 3 Select a channel in the left channel list.

Step 4 Set date and time. The day with  mark means it has videos.

Step 5 Click .

Step 6 Drag the time bar at the bottom, or click  and  to adjust time.

Step 7 Click  to start playback.

Step 8 Optionally, click **Course** to play back by searched courses.

4.8.2 Download Courses via Web Browser

Step 1 Go to **Playback**.

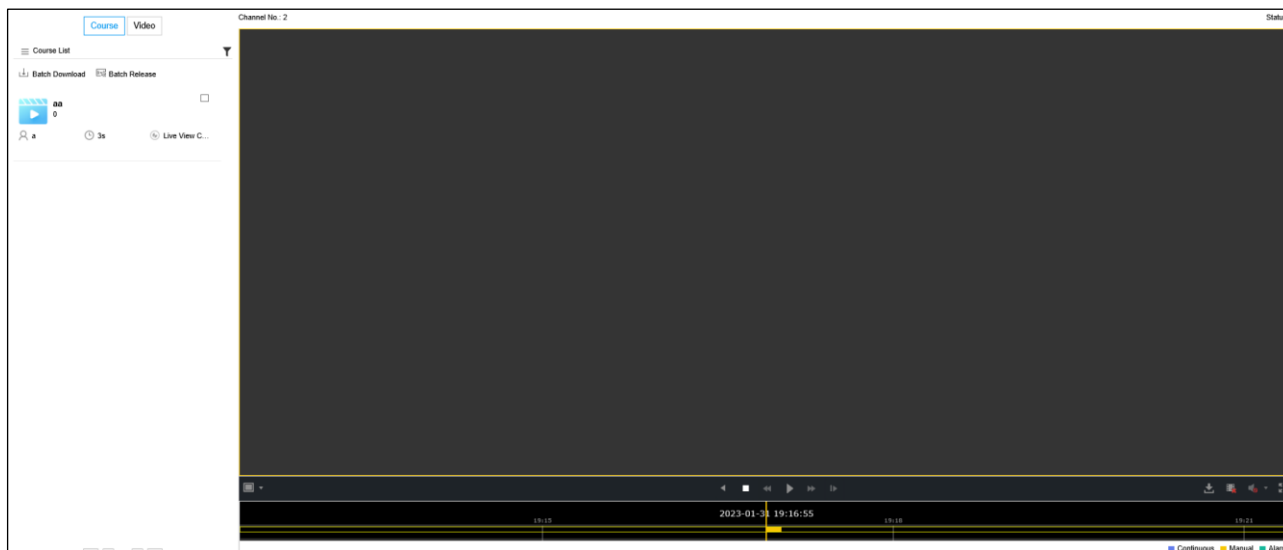



Figure 4-37 Playback

Step 2 Click  at the lower-right corner.

Step 3 Set the search conditions.

Step 4 Select the course(s) from the search result for downloading.

Step 5 Click **Download** to start downloading.

 **NOTE**

The record file will be downloaded locally. You can set the download path in **Configuration > System Settings > System Settings > Web Config**.

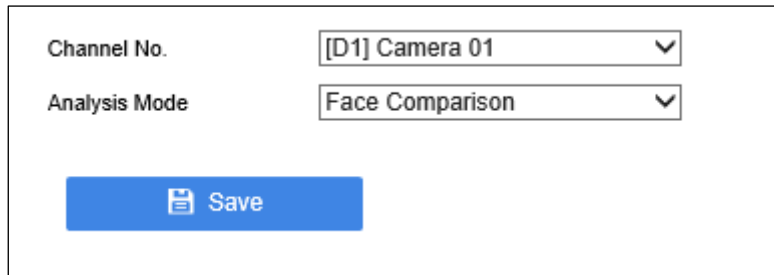
4.9 Smart Settings

4.9.1 Configure Analysis Mode

Purpose:

Before using a smart function, you shall select a channel and set its analysis mode.

Step 1 Go to **Configuration > Smart Settings > Analysis Mode**.



Channel No.	[D1] Camera 01
Analysis Mode	Face Comparison
<input type="button" value="Save"/>	

Figure 4-38 Analysis Mode

Step 2 Select a channel.

Step 3 Set **Analysis Mode**.

Step 4 Click **Save**.

4.9.2 Class Statistics Data

Enable Class Statistics Data

Purpose:

You can count view and alarm information via the feature. By default, the feature is turned off.

Step 1 Go to **Configuration > Smart Settings > Class Data** via web browser.

Step 2 Check **Enable Course Data Statistics**.

Step 3 Click **Save**.

Search Class Statistics Data

Step 1 Go to **Smart Data > Class Data** via web browser.

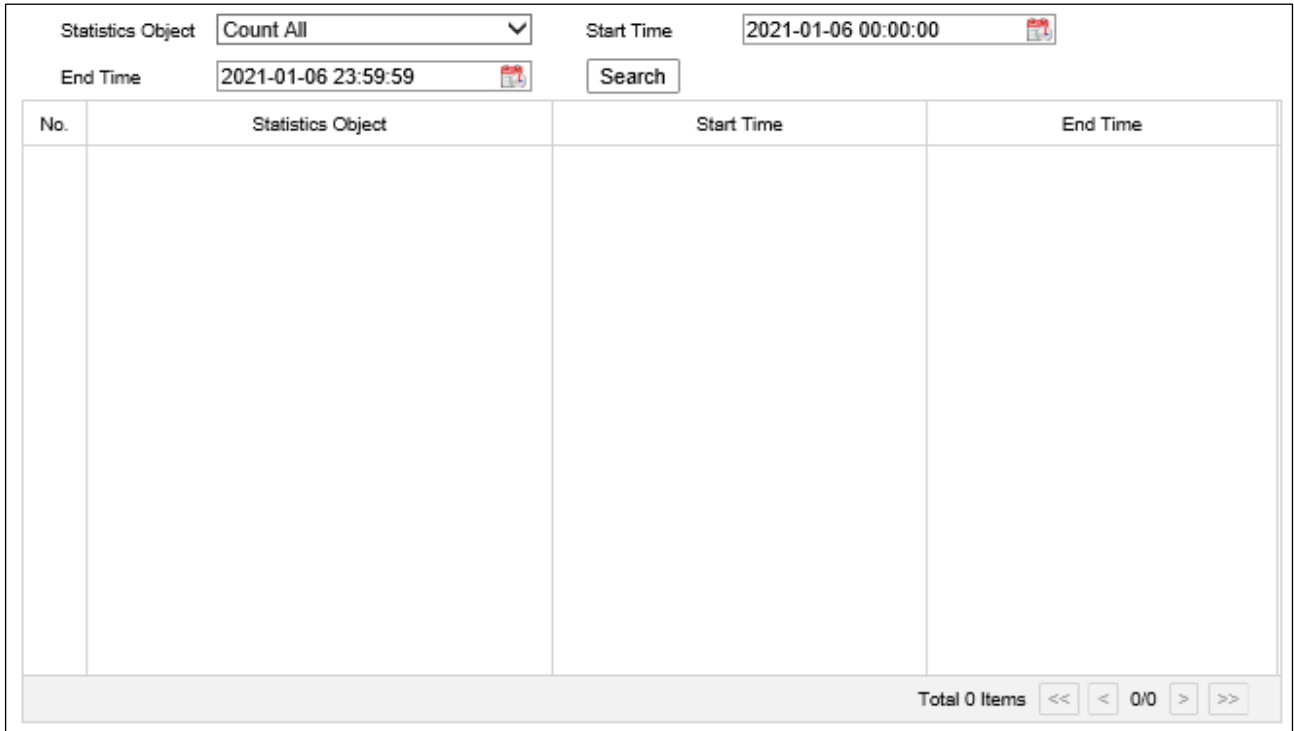


Figure 4-39 Class Data

Step 2 Select **Statistics Object**. 7 views and 10 alarms are selectable.

Step 3 Specify statistic **Start time** and **End time**.

Step 4 Click **Search** to start searching.



After statistics finished, wait for 5 minutes to write data into hard disk before shutdown.

4.10 Network Settings

4.10.1 PPPoE Settings

Purpose

The device can access Internet via dialing up.

Step 1 Go to **Configuration > System Settings > Network Settings > PPPoE** via web browser.



The screenshot shows a configuration form for PPPoE. At the top, there is a checked checkbox labeled "Enable PPPoE". Below this, there are four input fields: "Dynamic IP" with the value "0.0.0.0", "User Name", "Password", and "Confirm". At the bottom of the form is a blue button with a floppy disk icon and the text "Save".

Figure 4-40 PPPoE Settings

Step 2 Check **Enable PPPoE**.

Step 3 Enter user name and password of your dial-up account.

Step 4 Click **Save**.

4.10.2 DDNS Settings

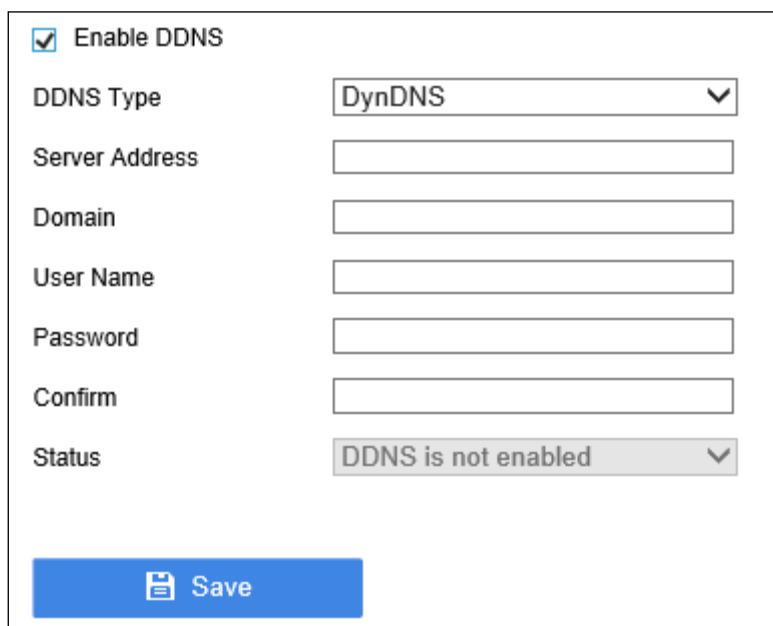
Purpose:

If your device is set to use PPPoE as its default network connection, you may set Dynamic DNS (DDNS) to be used for network access.

Before you start:

Prior registration with your DDNS Provider is required before configuring the system to use DDNS.

Step 1 Go to **Configuration > System Settings > Network Settings > DDNS** via web browser.



The screenshot shows a configuration form for DDNS. At the top, there is a checked checkbox labeled "Enable DDNS". Below this, there are several fields: "DDNS Type" is a dropdown menu showing "DynDNS"; "Server Address", "Domain", "User Name", "Password", and "Confirm" are text input fields; and "Status" is a dropdown menu showing "DDNS is not enabled". At the bottom of the form is a blue button with a floppy disk icon and the text "Save".

Figure 4-41 DDNS Settings

Step 2 Check **Enable DDNS**.

Step 3 Select **DDNS Type** as **DynDNS**, **PeanutHull**, or **NO-IP**.

- DDNS Type: DynDNS
 - 1) Enter **Server Address** for DynDNS server.
 - 2) Enter the domain obtained from the DynDNS website in **Domain**.
 - 3) Enter user Name and password registered in the DynDNS website.
 - 4) Click **Save** to save the settings.

The screenshot shows a web form for configuring DDNS settings. At the top, there is a checked checkbox labeled "Enable DDNS". Below this, there is a dropdown menu for "DDNS Type" with "DynDNS" selected. The form contains several text input fields: "Server Address", "Domain", "User Name", "Password", and "Confirm". At the bottom, there is a "Status" dropdown menu showing "DDNS is not enabled". A blue "Save" button with a floppy disk icon is located at the bottom left of the form.

Figure 4-42 DynDNS Settings

-
- DDNS Type: PeanutHull
 - 1) Enter the user Name and password obtained from the PeanutHull website.

The screenshot shows a configuration form for DDNS. At the top, there is a checked checkbox labeled "Enable DDNS". Below it, the "DDNS Type" is set to "PeanutHull" in a dropdown menu. The "Server Address", "Domain", "User Name", "Password", and "Confirm" fields are empty text boxes. The "Status" dropdown menu shows "DDNS is not enabled". At the bottom, there is a blue "Save" button with a floppy disk icon.

Figure 4-43 PeanutHull

-
- 2) Click **Save** to save the settings.
- DDNS Type: NO-IP
 - 1) Enter **Server Address** for NO-IP.
 - 2) Enter the domain obtained from the NO-IP website (www.no-ip.com) in **Domain**.
 - 3) Enter the user name and password registered in the NO-IP website.
 - 4) Click **Save** to save the settings.

The screenshot shows a configuration form for DDNS. At the top, there is a checked checkbox labeled "Enable DDNS". Below it, the "DDNS Type" is set to "NO-IP" in a dropdown menu. The "Server Address", "Domain", "User Name", "Password", and "Confirm" fields are empty text boxes. The "Status" dropdown menu shows "DDNS is not enabled". At the bottom, there is a blue "Save" button with a floppy disk icon.

Figure 4-44 NO-IP

4.10.3 Email Settings

Purpose:

The system can be configured to send an Email notification to all designated users if an alarm event is detected, etc., an alarm or motion event is detected or the administrator password is changed.

Before configuring the email settings, the education sharing system must be connected to a local area network (LAN) that maintains an SMTP mail server. The network must also be connected to either an intranet or the Internet depending on the location of the email accounts to which you want to send notification.

Before you start:

Configure IPv4 Address, IPv4 Subnet Mask, IPv4 Gateway, and the Preferred DNS Server in the basic network setting interface. For detailed steps, refer to *4.1 Basic Operation*

Activate Your Device

Purpose:

You can get access to the device via web browser. The supported resolutions include 1024*768 and above.

Step 1

Step 2 Default administrator account: admin.

Step 3 Default IPv4 address: 192.168.1.64.

Step 4 You may have to close the web browser to finish the installation of the plug-in.

Step 5 It is recommended to use Chrome or Edge web browser.

Step 6 Open web browser, input the device IP address. The default IP address is 192.168.1.64.

Step 7 Press Enter.

Step 8 Enter the admin password twice.



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 9 Click **OK**.

Optional: If new user accounts or facial login function are needed, please set the parameters via web browser. Refer to *4.12 User Management* for details.

Configure Network Parameters.

Step 10 Go to **Configuration > System Settings > Network Settings > Email** via web browser.

Step 11 Configure the following Email settings:

- **Authentication (optional):** Check the checkbox to enable the server authentication feature.
- **User Name:** The user name of sender's account registered on the SMTP server.
- **Password:** The password of sender's account registered on the SMTP server.
- **Confirm:** Enter the password again.
- **SMTP Server:** The SMTP Server IP address or host name (e.g., smtp.263xmail.com).
- **SMTP Port:** The SMTP port. The default TCP/IP port used for SMTP is 25.
- **Enable SSL/TLS (optional):** Click the checkbox to enable SSL/TLS if required by the SMTP server.
- **Sender:** The name of sender.
- **Sender's Address:** The Email address of sender.
- **Select Receivers:** Select the receiver. Up to 3 receivers can be configured.
- **Receiver:** The name of user to be notified.
- **Receiver's Address:** The Email address of user to be notified.
- **Enable Attached Picture:** Check the checkbox of Enable Attached Picture if you want to send email with attached alarm images. The interval is the time of two adjacent alarm images. You can also set SMTP port and enable SSL here.
- **Interval:** The interval refers to the time between two actions of sending attached pictures.

Step 12 Click **Save**.

4.10.4 NAT Settings

Purpose:

Two ways are provided for port mapping to realize the remote access via the cross-segment network, UPnP™ and manual mapping.

UPnP™ Settings

Universal Plug and Play (UPnP™) can permit the device seamlessly discover the presence of other network devices on the network and establish functional network services for data sharing, communications, etc. You can use the UPnP™ function to enable the fast connection of the device to the WAN via a router without port mapping.

Before you start:

If you want to enable the UPnP™ function of the device, you must enable the UPnP™ function of the router to which your device is connected. When the network working mode of the device is set as multi-address, the Default Route of the device should be in the same network segment as that of the LAN IP address of the router.

Step 1 Go to **Configuration > System Settings > Network Settings > UPnP** via web browser.

<input checked="" type="checkbox"/> Enable UPnP™				
Port Mapping Mode <input type="text" value="Auto"/>				
Port Type	External Port	External IP Address	Internal Port	Status
HTTP	80	0.0.0.0	80	Not Valid
RTSP	554	0.0.0.0	554	Not Valid
Server Port	8000	0.0.0.0	8000	Not Valid
HTTPS	443	0.0.0.0	443	Not Valid

Figure 4-45 UPnP™ Settings Interface

Step 2 Check **Enable UPnP™**.

Step 3 Select **Port Mapping Type** as **Manual** or **Auto**.

- OPTION 1: Auto

If you select **Auto**, the port mapping items are read-only, and the external ports are set by the router automatically.

- OPTION 2: Manual

If you select Manual as the mapping type, you can edit the external port as your demand.



NOTE

- You can use the default port No., or change it according to actual requirements.
- External Port indicates the port No. for port mapping in the router.
- The value of the RTSP port No. should be 554 or between 1024 and 65535, while the value of the other ports should be between 1 and 65535 and the value must be different from each other. If multiple devices are configured for the UPnP™ settings under the same router, the value of the port No. for each device should be unique.

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

Manual Mapping

Purpose:

If your router does not support the UPnP™ function, perform the following steps to map the port manually in an easy way.

Before you start:

Make sure the router support the configuration of internal port and external port in the interface of Forwarding.

Step 5 Go to **Configuration > System Settings > Network Settings> UPnP** via web browser.

Step 6 Uncheck **Enable UPnP™**.

Step 7 Click on a value of **External Port**. And enter the external port No. for server port, http port, RTSP port, and https port respectively.



The value of the RTSP port No. should be 554 or between 1024 and 65535, while the value of the other ports should be between 1 and 65535 and the value must be different from each other. If multiple devices are configured for the UPnP™ settings under the same router, the value of the port No. for each device should be unique.

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

Step 9 Enter the virtual server setting page of router; fill in the blank of Internal Source Port with the internal port value, the blank of External Source Port with the external port value, and other required contents.



Each item should be corresponding with the device port, including server port, http port, RTSP port and https port.

Delete	External Source Port	Protocol	Internal Source IP	Internal Source Port	Application
<input type="checkbox"/>	81	TCP	192.168.251.101	80	HTTP

Figure 4-46 Setting Virtual Server Item



The above virtual server setting interface is for reference only, it may be different due to different router manufactures. Please contact the manufacture of router if you have any problems with setting virtual server.

4.10.5 HTTPS Settings

Purpose:

HTTPS provides authentication of the web site and associated web server that one is communicating with, which protects against Man-in-the-middle attacks. Perform the following steps to set the port number of https.

For example, if you set the port number as 443 and the IP address is 192.0.0.64, you may access the device by inputting `https://192.0.0.64:443` via the web browser.

Step 1 Go to **Configuration > System Settings > Network Settings > HTTPS** via web browser.

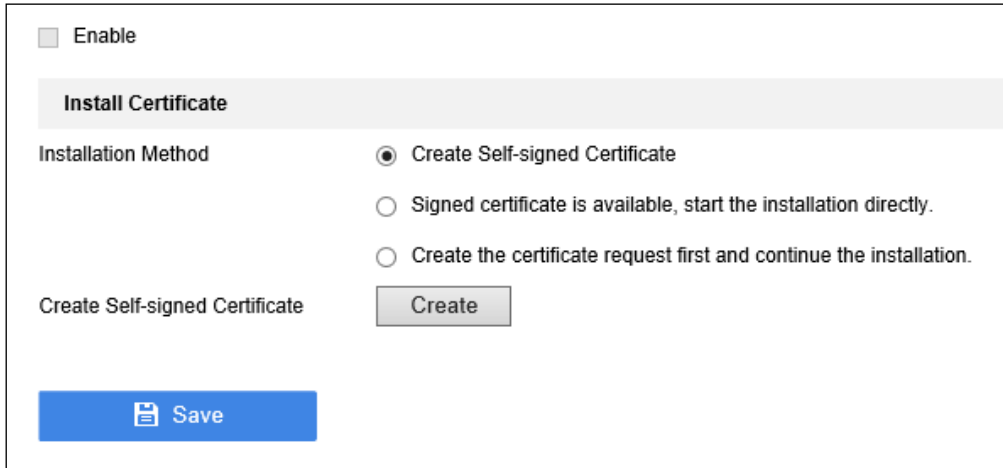


Figure 4-47 HTTPS Interface

Step 2 Check **Enable HTTPS** to enable the function.

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

4.10.6 SSH Settings

Purpose:

You can enable SSH feature, thus to effectively prevent information leakage during remote management.

Step 1 Go to **Configuration > System Settings > Maintenance > Security Service** via web browser.

Step 2 Check **Enable SSH**.

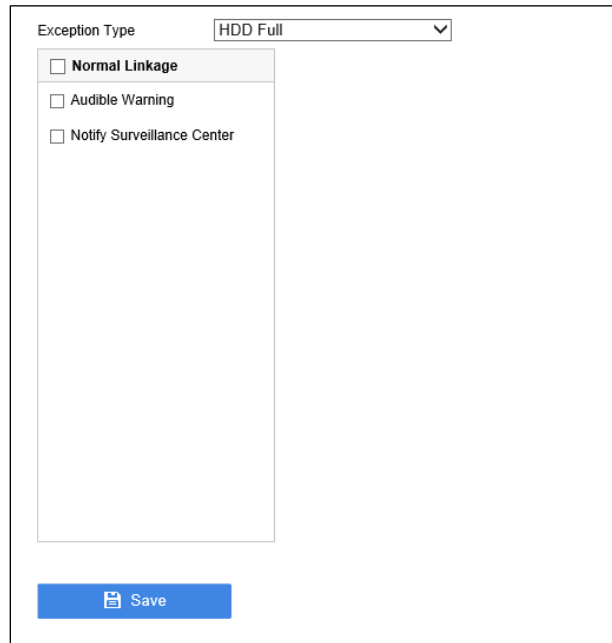
Step 3 Click **Save** to save the settings.

4.11 Alarm Settings

Purpose:

You can specify the triggered linkage action when exception occurs.

Step 1 Go to **Configuration > System Settings > Event Configuration > Exception** via web browser.



The screenshot shows a web interface for configuring exceptions. At the top, there is a dropdown menu labeled 'Exception Type' with 'HDD Full' selected. Below this, there is a list of three options, each with an unchecked checkbox: 'Normal Linkage', 'Audible Warning', and 'Notify Surveillance Center'. At the bottom of the form, there is a blue button with a floppy disk icon and the text 'Save'.

Figure 4-48 Exception

Step 2 Select **Exception Type**.

Step 3 Select **Normal Linkage**.

- **Audible Warning:** When an alarm is triggered, the device would play an audio file as the linkage action.
- **Notify Surveillance Center:** The device can send an exception or alarm signal to the remote alarm host when an event occurs. The alarm host refers to the PC installed with client software (e.g., iVMS-4200, iVMS-5200).

Step 4 Click **Save**.

4.12 User Management

Purpose:

You can add, edit, and delete users.

Step 1 Go to **Configuration > System Settings > User Management > User Management** via web browser.

User List			Add	Modify	Delete
No.	User Name	Level			
1	admin	Administrator			
2	test	Operator			

Figure 4-49 User Management

4.12.1 Add a User

Step 1 Click **Add**.

Figure 4-50 Add User

Step 2 Enter user name and password.



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 3 Select **Level** as **Operator** or **User**.

- **Operator:** The *Operator* user can view live image, and achieve playback operation which includes course search and course download.
- **User:** The Guest user only has permission of viewing live image.

Step 4 Optional: Click **Upload Face Picture** for facial login. After a face picture is uploaded, facial login function would be available for **Operator** through local menu.



- The facial login function is only available for **Operator** through local menu.
- The face picture format should be JPG, and its resolution cannot exceed 1080p.
- Ensure the face picture only contains one face.
- After a face picture is uploaded, you can edit the face picture comparison parameters in **Configuration > System Settings > User Management > Upload Face Picture**.

Step 5 Click **OK** to add the user.

4.12.2 Modify a User

Step 1 Select a user account.

Step 2 Click **Modify**.

Figure 4-51 Modify User

Step 3 Edit the user account, including password and level.



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 If **Operator** has uploaded face picture before, you can click **Upload Face Picture** to replace the previous face picture. If **Operator** has not uploaded face picture before, you can click **Upload Face Picture** for facial login. After a face picture is uploaded, facial login function would be available for **Operator** through local menu.



NOTE

- The facial login function is only available for **Operator** through local menu.
- The face picture format should be JPG, and its resolution cannot exceed 1080p.
- Ensure the face picture only contains one face.
- After a face picture is uploaded, you can edit the face picture comparison parameters in **Configuration > System Settings > User Management > Upload Face Picture**.

Step 5 Click **OK**.

4.12.3 Delete a User

Step 1 Select a user account.

Step 2 Click **Delete**, and a message box will pop up.

Step 3 Click **OK** to delete the selected user account.

4.13 Maintenance

Purpose:

You can restart, restore default, repair database index, export/import configuration file, and upgrade device in **Configuration > System Settings > Maintenance > Upgrade & Maintenance** via web browser.

Reboot	
<input type="button" value="Reboot"/>	Reboot the device.
Default	
<input type="button" value="Restore"/>	Reset all the parameters, except the IP parameters and user information, to the default settings.
<input type="button" value="Default"/>	Restore all parameters to default settings.
Export	
<input type="button" value="Device Parameters"/>	
<input type="button" value="IP Camera Parameters"/>	
Import Config. File	
Device Parameters	<input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Import"/>
Status	
IP Camera Parameters	<input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Import"/>
Status	
Upgrade	
Firmware <input type="button" value="v"/>	<input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Upgrade"/>
Status	
Note: The upgrading process will be 1 to 10 minutes, please don't disconnect power to the device during the process. The device reboots automatically after upgrading.	

Figure 4-52 Maintenance

4.13.2 Reboot the Device

Step 1 Click **Reboot** to restart the device.

4.13.3 Default Settings

Step 1 Select the restoring type as **Restore** or **Default**.

- **Restore:** Restore all parameters, except the network (including IP address, subnet mask, gateway, MTU, NIC working mode, default route, server port, etc.) and user account parameters, to the factory default settings.
- **Default:** Restore all parameters to the factory default settings.

4.13.4 Export/Import Configuration File

- Import configuration file.
 - 1) Click **Browse**.
 - 2) Select configuration file path.

- 3) Click **Import** to import the selected file.
- Export configuration file.
 - 1) Click **Export**.
 - 2) Select exporting path.
 - 3) Click **Save** to save the configuration file.

4.13.5 Import/Export IP Camera Configuration File

Purpose:

You can export the education sharing system's IP camera adding configuration file to the computer. And import the IP camera adding configuration file into the education sharing system.

- Import IP camera configuration file.
 - 1) Click **Browse**.
 - 2) Select IP camera configuration file path.
 - 3) Click **Import** to import the selected file.
- Export IP camera configuration file.
 - 1) Click **Export**.
 - 2) Select exporting path.
 - 3) Click **Save** to save the configuration file.

4.13.6 Remote Upgrade

Step 1 Click **Browse**.

Step 2 Select upgrade file.

Step 3 Click **Upgrade** to upgrade.

4.14 Other Settings

4.14.1 Video Settings

Purpose:

By configuring the video parameters you can define the parameters which affect the image quality, such as the resolution, video quality, and so on.

Before you start:

Ensure the hard disk has already been installed.

Step 1 Go to **Configuration > Audio/Video > Video Settings > Video.**

Channel No.	[A1] Teacher	▼
Front-end Resolution	NO VIDEO	
Stream Type	Main Stream(Normal)	▼
Video Type	Video&Audio	▼
Resolution	1920*1080P	▼
Bitrate Type	Variable	▼
Video Quality	Medium	▼
Frame Rate	Full Frame Rate	▼ fps
Max. Bitrate	2048	Kbps
Video Encoding	H.264	▼

Figure 4-53 Video Settings

Step 2 Select **Channel No.** to configure.

Step 3 Select **Stream Type** as **Main Stream (Normal), Third Stream, Sub-Stream**. Main stream is for recording and sub-stream is for network transmission.

Step 4 Configure the video parameters as your desire, including **Resolution, Bitrate Type, Video Quality, Frame Rate, Max. Bitrate**. The video encoding format and audio encoding format will be shown in **Encoding Format** and **Audio Format**.

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

4.14.2 Display Settings

Menu Output

Purpose:

You can set the local menu output interface and HDMI/VGA output resolution.

Step 1 Go to **Configuration > System Settings > System Settings > Menu Output** via web browser.

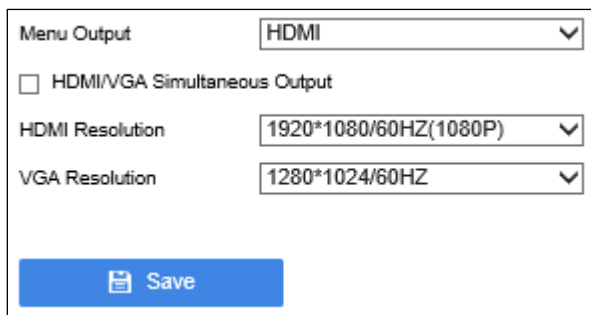


Figure 4-54 Menu Output

Step 2 Edit **Menu Output**, **VGA Resolution**, **HDMI Resolution** and **HDMI/VGA Simultaneous Output**.

- **HDMI/VGA Simultaneous Output:** It means that the screens connected by different interfaces (e.g. HDMI, VGA) share the same output source, so their images are the same, so do the mouse operation and menu content.

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

HDMI/VGA Output Image Parameter Settings

Purpose:

You can adjust display effect of courseware image and HDMI/VGA output image.

Step 1 Go to **Configuration > System Settings > System Settings > Output Image Parameter Adjustment** via web browser.

Step 2 Select **Configuration Port**.

Step 3 Set image parameters, including brightness, contrast, saturation, hue, and sharpness.

Configure OSD

Purpose:

You can configure parameters of OSD (On Screen Display) menu.

Step 1 Go to **Configuration > Audio/Video > Video Settings > OSD and Subtitle** via web browser.

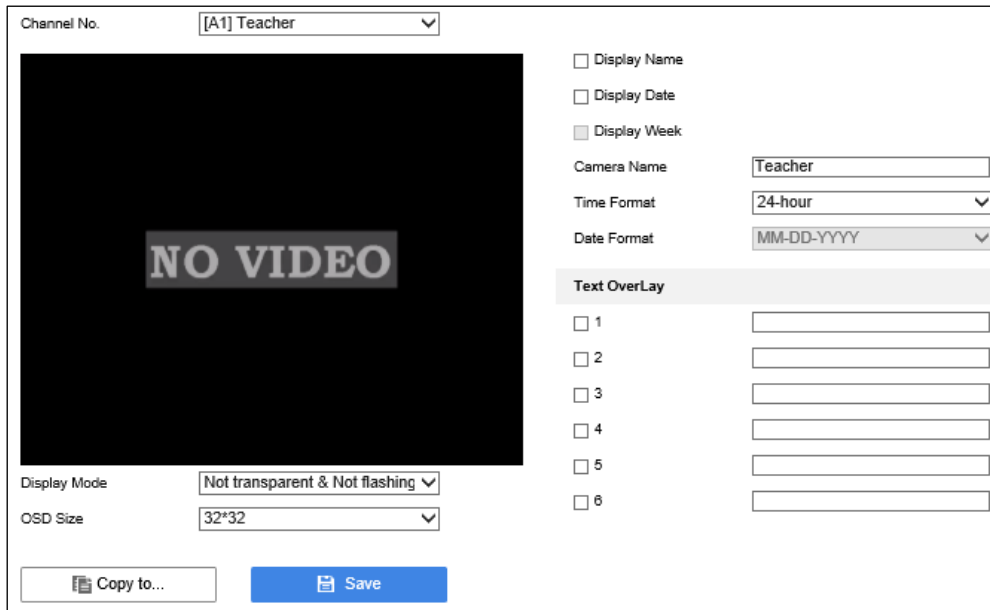


Figure 4-55 Display Settings

Step 2 Select **Channel No.**

Step 3 Configure parameters as your desire.

Step 4 Optionally, you can overlay text on the selected channel.

- 1) Check the number of **Text OverLay**.
- 2) **Enter text content.**
- 3) You can drag the OSD on screen to move its position.
- 4) Set the **Display Mode** and **OSD Size** as your desire.

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

Sound Mix Settings

Purpose:

You can configure the sound mix parameters, including output volume, input volume, and audio gain.

Step 1 Go to **Configuration > Mix Settings > Output Volume** via web browser.

Step 2 Click to view and set audio volume. It is recommended to use the default value.

- **Local Output:** The audio output(s) at the device panel, such as audio out and HDMI out.
- **Input Volume:** The audio input(s) at the device panel, the input volume is adjustable at each tab.
- **Interactive Output:** The audio that sends to other remote devices during multi-classroom interaction (cloud interaction) or point-to-point meeting.

- **View Video:** The audio during live view for each channel. For example, if the video at the web browser interface or playback is low, you can adjust the corresponding parameter.
- **USB Output:** The audio output from USB interface at the device panel.

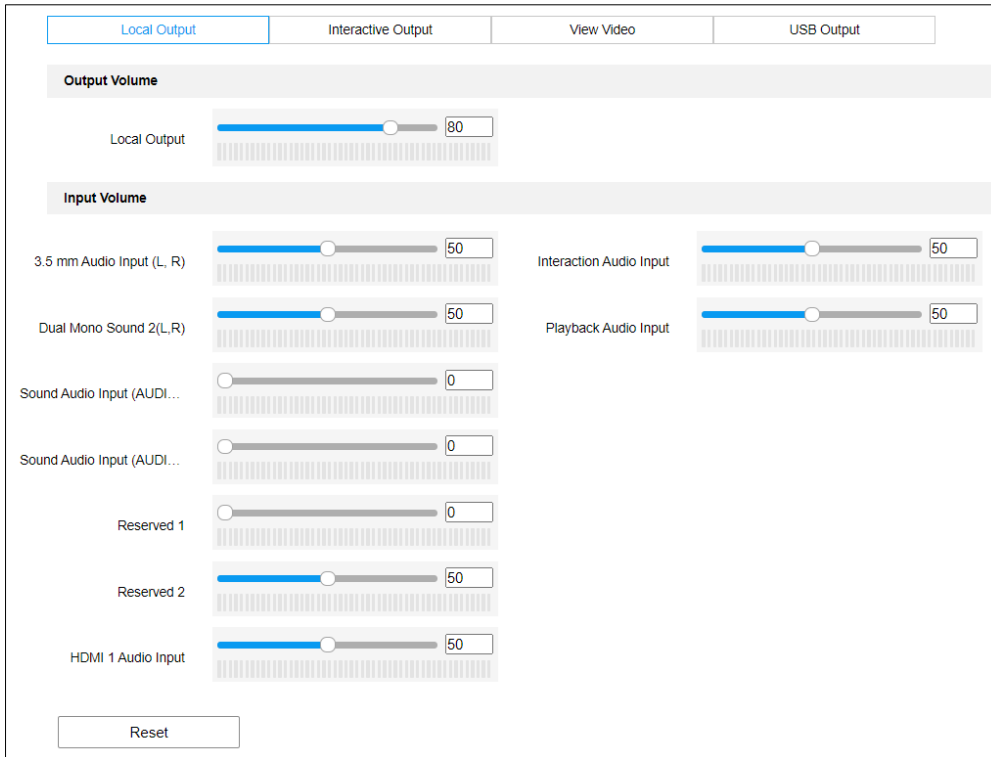


Figure 4-56 Audio Volume

Step 3 Click **More Configure > Advance Gain**.

Step 4 Set the audio gain. Audio gain adjusts the input audio, after the adjustment, the mixed sound will be applied to the audio output at rear panel. The gain value ranges from 1 to 100. When it is set as 1, the audio gain reaches to the minimum, and when it is set as 100, it reaches to the maximum.

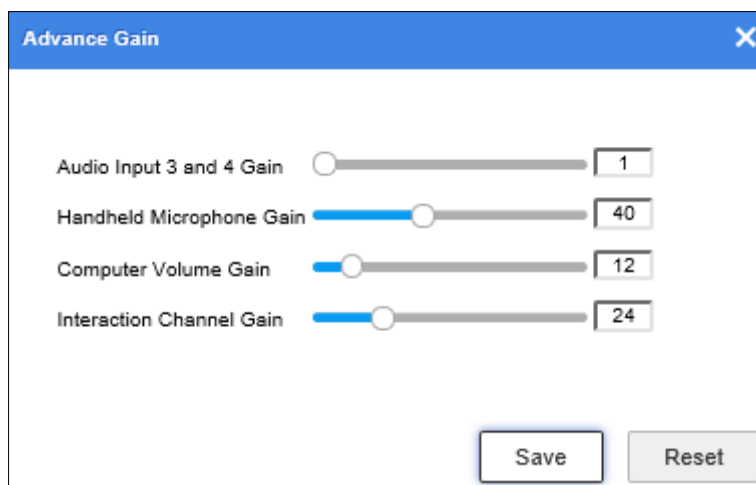


Figure 4-57 Advanced Gain

Step 5 Click **Save**.

Time Settings

Purpose:

You can manually sync the device time, or let the device automatically sync time with NTP (Network Time Protocol) server.

Step 1 Go to **Configuration > System Settings > System Settings > Time Settings** via web browser.

Time Zone: (GMT+08:00) Beijing, Urumqi, Singapore

NTP

NTP

Server Address: []

NTP Port: 123

Interval: 60 minute(s)

Manual Time Sync.

Manual Time Sync.

Device Time: 2018-09-20T18:43:58

Set Time: 2018-09-20T18:42:39 Sync. with computer time

DST

Enable DST

Start Time: Jan First Sun 00

End Time: Jan First Sun 00

DST Bias: 30minute(s)

Save

Figure 4-58 Time Settings via Web Browser

Step 2 Select **Time Zone**.

Step 3 Select the clock synchronization mode as **NTP** or **Manual Time Synchronization**.

- **NTP**: Enter NTP server, port and interval time.
- **Manual Time Sync**: Set the time in **Set Time**. Or you can check **Synchronize with computer time**.

Step 4 Click **Save**.

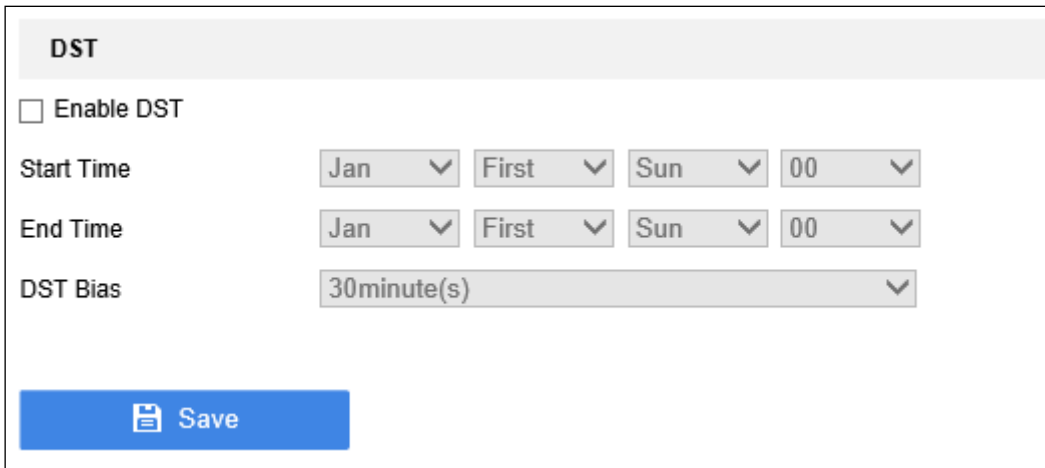
4.14.3 DST Settings

Purpose:

DST (daylight saving time) refers to the period of the year when clocks are moved one period ahead. In some areas worldwide, this has the effect of creating more sunlit hours in the evening during months when the weather is the warmest.

We advance our clocks ahead a certain period (depends on the DST bias you set) at the beginning of DST, and move them back the same period when we return to standard time (ST).

Step 1 Go to **Configuration > System Settings > System Settings > Time Settings** via web browser.



DST

Enable DST

Start Time: Jan ▼ First ▼ Sun ▼ 00 ▼

End Time: Jan ▼ First ▼ Sun ▼ 00 ▼

DST Bias: 30minute(s) ▼


 Save

Figure 4-59 DST Settings

Step 2 Check **Enable DST**.

Step 3 Set **Start Time** and **End Time** of the DST period.

Step 4 Select **DST Bias**.

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

Chapter 5 Appendix

5.1 SADP Software Introduction

- Description of SADP
SADP (Search Active Devices Protocol) is a kind of user-friendly and installation-free online device search tool. It searches the active online devices within your subnet and displays the information of the devices. You can also modify the basic network information of the devices using this software.
- Search active devices online

- Search online devices automatically

After launch the SADP software, it automatically searches the online devices every 15 seconds from the subnet where your computer locates. It displays the total number and information of the searched devices in the Online Devices interface. Device information including the device type, IP address and port number, etc. will be displayed.

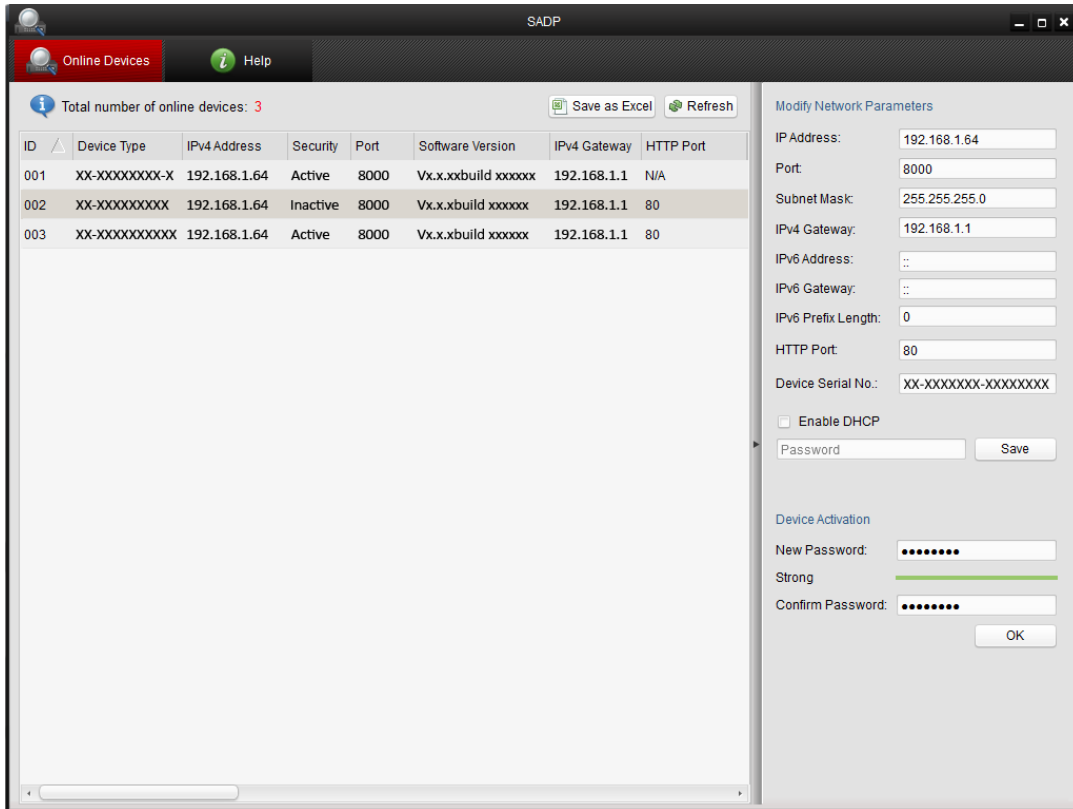
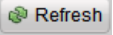


Figure 5-1 Searching Online Devices





NOTE

Device can be searched and displayed in the list in 15 seconds after it went online; it will be removed from the list in 45 seconds after it went offline.

- Search online devices manually

You can also click  to refresh the online device list manually. The newly searched devices will be added to the list.

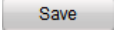
NOTE

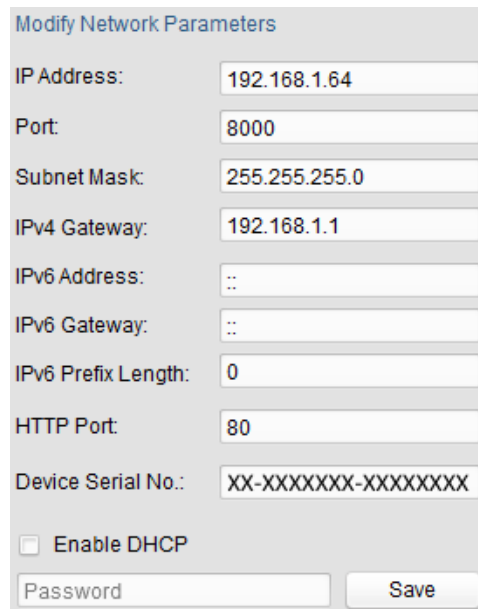
You can click  or  on each column heading to order the information; you can click  to expand the device table and hide the network parameter panel on the right side, or click  to show the network parameter panel.

- Modify network parameters

Step 1 Select the device to be modified in the device list and the network parameters of the device will be displayed in the **Modify Network Parameters** panel on the right side.

Step 2 Edit the modifiable network parameters, e.g. IP address and port number.

Step 3 Enter the password of the admin account of the device in the **Password** field and click  to save the changes.



Modify Network Parameters

IP Address: 192.168.1.64

Port: 8000

Subnet Mask: 255.255.255.0

IPv4 Gateway: 192.168.1.1

IPv6 Address: ::

IPv6 Gateway: ::

IPv6 Prefix Length: 0

HTTP Port: 80

Device Serial No.: XX-XXXXXXXX-XXXXXXXX

Enable DHCP

Password

Figure 5-2 Modify Network Parameters

5.2 Glossary

Dual-Stream

Dual-stream is a technology used to record high resolution video locally while transmitting a lower resolution stream over the network. The two streams are generated by the DVR, with the main stream having a maximum resolution of 1080P and the sub-stream having a maximum resolution of CIF.

DVR

Acronym for Digital Video Recorder. A DVR is device that is able to accept video signals from analog cameras, compress the signal and store it on its hard drives.

HDD

Acronym for Hard Disk Drive. A storage medium which stores digitally encoded data on platters with magnetic surfaces.

DHCP

Dynamic Host Configuration Protocol (DHCP) is a network application protocol used by devices (DHCP clients) to obtain configuration information for operation in an Internet Protocol network.

HTTP

Acronym for Hypertext Transfer Protocol. A protocol to transfer hypertext request and information between servers and browsers over a network.

PPPoE

PPPoE, Point-to-Point Protocol over Ethernet, is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames. It is used mainly with ADSL services where individual users connect to the ADSL transceiver (modem) over Ethernet and in plain Metro Ethernet networks.

DDNS

Dynamic DNS is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system using the Internet Protocol Suite, to notify a domain name server to change, in real time (ad-hoc) the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.

Hybrid DVR

A hybrid DVR is a combination of a DVR and NVR.

NTP

Acronym for Network Time Protocol. A protocol designed to synchronize the clocks of computers over a network.

NTSC

Acronym for National Television System Committee. NTSC is an analog television standard used in such countries as the United States and Japan. Each frame of an NTSC signal contains 525 scan lines at 60Hz.

NVR

Acronym for Network Video Recorder. An NVR can be a PC-based or embedded system used for centralized management and storage for IP cameras, IP Domes and other DVRs.

PAL

Acronym for Phase Alternating Line. PAL is also another video standard used in broadcast televisions systems in large parts of the world. PAL signal contains 625 scan lines at 50Hz.

PTZ

Acronym for Pan, Tilt, Zoom. PTZ cameras are motor driven systems that allow the camera to pan left and right, tilt up and down and zoom in and out.

USB

Acronym for Universal Serial Bus. USB is a plug-and-play serial bus standard to interface devices to a host computer.