

# High Definition Video Decoder User Manual

Manual Version: V1.02

Thank you for purchasing our product. If there are any questions, or requests, please do not hesitate to contact the dealer.

## Trademark Acknowledgement

The trademarks, company names and product names contained in this manual are the property of their respective owners.

## Disclaimer



---

### CAUTION!

The default password is used for your first login. To ensure account security, please change the password after your first login. You are recommended to set a strong password (no less than eight characters).

---

- To the maximum extent permitted by applicable law, the product described, with its hardware, software, firmware and documents, is provided on an “as is” basis.
- Best effort has been made to verify the integrity and correctness of the contents in this manual, but no statement, information, or recommendation in this manual shall constitute formal guarantee of any kind, expressed or implied. We shall not be held responsible for any technical or typographical errors in this manual. The contents of this manual are subject to change without prior notice. Update will be added to the new version of this manual.
- Use of this manual and the product and the subsequent result shall be entirely on the user’s own responsibility. In no event shall we be liable to you for any special, consequential, incidental, or indirect damages, including, among others, damages for loss of business profits, business interruption, or loss of data or documentation, or product malfunction or information leakage caused by cyber attack, hacking or virus in connection with the use of this product.
- Video and audio surveillance can be regulated by laws that vary from country to country. Check the law in your local region before using this product for surveillance purposes. We shall not be held responsible for any consequences resulting from illegal operations of the device.
- The illustrations in this manual are for reference only and may vary depending on the version or model. The screenshots in this manual may have been customized to meet specific requirements and user preferences. As a result, some of the examples and functions featured may differ from those displayed on your monitor.
- This manual is a guide for multiple product models and so it is not intended for any specific product.
- Due to uncertainties such as physical environment, discrepancy may exist between the actual values and reference values provided in this manual. The ultimate right to interpretation resides in our company.




## Environmental Protection

This product has been designed to comply with the requirements on environmental protection. For the proper

storage, use and disposal of this product, national laws and regulations must be observed.

## Symbols

The symbols in the following table may be found in this manual. Carefully follow the instructions indicated by the symbols to avoid hazardous situations and use the product properly.

Symbol	Description
 <b>WARNING!</b>	Indicates a hazardous situation which, if not avoided, could result in bodily injury or death.
 <b>CAUTION!</b>	Indicates a situation which, if not avoided, could result in damage, data loss or malfunction to product.
 <b>NOTE!</b>	Indicates useful or supplemental information about the use of product.

# Contents

---

<b>1 Introduction</b> .....	<b>1</b>
<b>2 Login</b> .....	<b>1</b>
<b>3 System</b> .....	<b>2</b>
Basic .....	2
Time .....	3
Serial .....	4
RS232 .....	4
RS485 .....	5
Play .....	6
Window .....	7
Running Mode .....	8
Service .....	8
Video Output .....	9
Media Stream .....	9
Security .....	10
Telnet .....	10
SNMPv3 .....	11
Authentication .....	12
Secure password .....	12
<b>4 Network</b> .....	<b>13</b>
TCP/IP .....	13
<b>5 Maintenance</b> .....	<b>14</b>
Device Status .....	14
Capture Packets .....	15
Decode Message .....	16
Maintenance .....	17

# 1 Introduction

---

This manual describes how to manage the device on a Web browser. The figures in this manual are only for illustration purpose. The parameters, options and values actually displayed on the Web pages of your device may be different from those in this manual.

## 2 Login

---

Before you start, check that:

- The device is operating properly.
- The computer is connected to the device.

The computer is installed with Microsoft Internet Explorer (IE) 7.0 or higher, and no proxy server is being used.

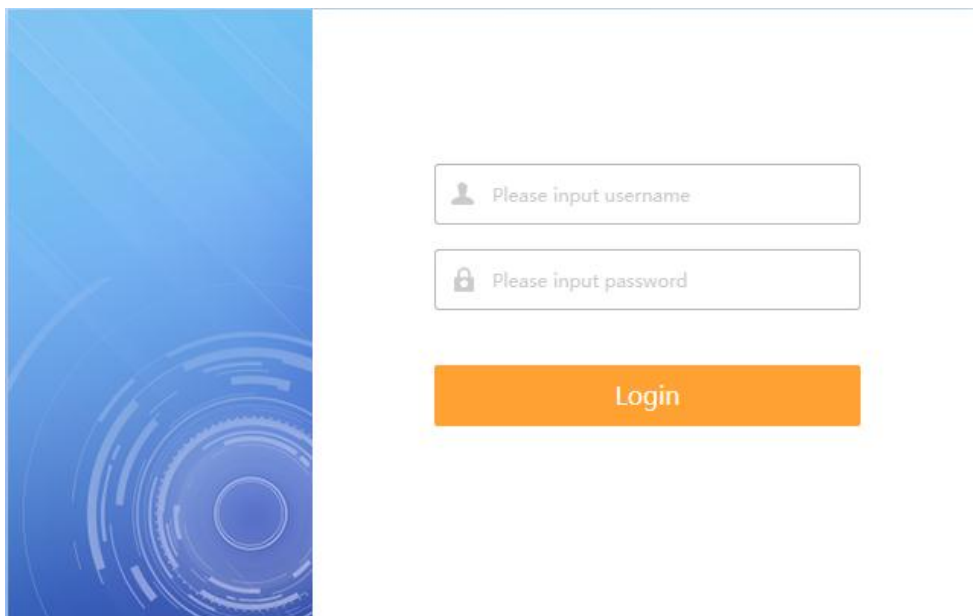


### NOTE !

- The default IP address of your device is 192.168.1.14; the default subnet mask is 255.255.255.0; the default gateway is 192.168.1.1.
- Use **admin** as the username and **123456** as the password for first-time login. Please change the default password under admin to ensure account security.

Follow the steps to log in to the device:

1. Enter the device's IP address in the address bar and then press **Enter**.



2. Log in with the correct username and password.

The screenshot shows the UNV system management interface. At the top, there is a blue header with the UNV logo on the left and user information (ADU8612-E, admin, Change Password, Logout) on the right. A left sidebar contains a 'System' menu with a dropdown arrow, and sub-items: Basic Info (highlighted), Time, Serial, Play, Window, Running Mode, Service, and Security. Below these are 'Network' and 'Maintenance' sections with right-pointing arrows. The main content area is titled 'Basic Info' and contains a table with the following data:

Model	ADU8612-E
Serial Number	210235C2WU3181000045
Firmware Version	B8780P10
Hardware Version	A
Boot Version	GRUB 2.02

Below the table is a blue 'Refresh' button.

## 3 System

Set system settings include Basic information, Time, Serial, Running Mode, and Security.

### Basic

The **Basic** page lists the basic information including device type, serial number, software version, hardware version and boot version.

1. Click **System > Basic**.

This screenshot is a larger version of the interface shown in the previous image. It shows the 'System' menu expanded to 'Basic Info'. The table of system information is as follows:

Model	ADU8612-E
Serial Number	210235C2WU3181000045
Firmware Version	B8780P10
Hardware Version	A
Boot Version	GRUB 2.02

A blue 'Refresh' button is located below the table.

2. Click **Refresh**.

# Time

Set system time for your device and how to update time.

## 1. Click **System** > **Time**.

The screenshot shows the 'System' settings menu with 'Time' selected. The 'Time' configuration panel includes a dropdown for 'Time Zone' set to '(GMT+08:00) Beijing, Hong Kong', a text input for 'System Time' showing '2019-4-24 09:33:36 AM' with a 'Sync with PC' checkbox, and radio buttons for 'Auto Update' set to 'Off'. A blue 'Save' button is located below the settings.

This screenshot shows the 'Time' settings page with 'Auto Update' set to 'On'. It includes additional NTP-related fields: 'NTP Server Address' (empty), 'NTP Port' (0), and 'Update Interval' (0 Min). A blue 'Save' button is at the bottom.

## 2. Set the parameters. Some are described in the table below.

Parameter	Description
Time Zone	Choose a time zone for your device.
Auto Update	Enable this function if you have a Network Time Protocol (NTP) server on the network. The device synchronizes time with the NTP server at the set interval when enabled. The NTP server's IP address, port number, and update interval are required.

Parameter	Description
System Time	Current system time of the device. Click the <b>Set Time</b> text box and then set the time manually, or select <b>Sync with PC</b> and then the device automatically synchronizes time with your computer.



### NOTE !

The device synchronizes time with the central server when operating in server mode.

## Serial

Set the serial port on the device, including the interface, baud rate, parity check, and flow control method.

### RS232

1. Click **System > Serial > RS232**.
2. The **RS232** page lists the RS232 interface and can set parameters accordingly. The figure below shows the RS232's parameters.

Parameter	Description
No.	1
Serial Mode	Screen Control
Baud Rate	115200
Data Bit	8
Stop Bit	1
Check Bit	None
Flow Control	None

3. Click **Save**.
4. Some parameters are described in the table below.

Parameter	Description
NO.	Select the serial port to set.



Parameter	Description
Serial Mode	Screen Controll.
Baud Rate	Transmission rate in bps. The baud rate must be consistent with that on the connected external device.
Data Bit	Number of data bits per character.
Stop Bit	Number of stop bits per character.
Check Bit	Two kinds of parity bits: even parity bit or odd parity bit.
Flow Control	Whether and how to control flow of data through the serial port.

## RS485

1. Click **System** > **Serial** > **RS485**.
2. The **RS485** page lists the RS485 interface and can set parameters accordingly. The figure below shows the RS485's parameters.

The screenshot shows a web interface for configuring RS485. On the left, a navigation menu is expanded to 'System', with 'Serial' selected. The main content area has two tabs: 'RS232' and 'RS485', with 'RS485' active. Below the tabs is a form with the following parameters and values:

No.	1
Serial Mode	Screen Control
Duplex Mode	Full-duplex
Baud Rate	115200
Data Bit	8
Stop Bit	1
Check Bit	None
Flow Control	None

A blue 'Save' button is located below the form.

3. Click **Save**.
4. Some parameters are described in the table below.

Parameter	Description
NO.	Select the serial port to set.
Serial Mode	Screen Controll.
Duplex	Full duplex or half duplex. Available in <b>RS485</b> page.

Parameter	Description
Baud Rate	Transmission rate in bps. The baud rate must be consistent with that on the connected external device.
Data Bit	Number of data bits per character.
Stop Bit	Number of stop bits per character.
Check Bit	Two kinds of parity bits: even parity bit or odd parity bit.
Flow Control	Whether and how to control flow of data through the serial port.



### NOTE !

In server mode, only **Duplex** can be configured on the Web browser, and all the other parameters can be configured only on the central server.

## Play

Play configuration is mainly set in different network environments, and different decoding modes are chosen: **Real Time Priority** and **Fluency Priority**. When the network environment is good, please set it as **Real Time Priority**, when the network environment is poor, please set it as **Fluency Priority**.

### 1. System > Play.

The following is the setting of the playmode set to a **Real Time Priority**.

The screenshot shows a web interface for system configuration. On the left, a sidebar menu is visible with 'System' expanded and 'Play' selected. The main content area is titled 'Play' and contains a 'Play Mode' dropdown menu set to 'Real Time Priority' and a blue 'Save' button.

2. The following is the setting of the playmode set to a **Fluency Priority**.

The screenshot shows a configuration interface. On the left, a sidebar under 'System' has 'Play' selected. The main panel, titled 'Play', features a 'Play Mode' dropdown menu with 'Fluency Priority' selected and a 'Save' button below it.

3. Click **Save**.

## Window

Set window border

1. **System > Window.**

The screenshot shows a configuration interface. On the left, a sidebar under 'System' has 'Window' selected. The main panel, titled 'Border', contains the following settings: 'Border' (radio buttons for On and Off, with 'On' selected), 'Win ID' (radio buttons for On and Off, with 'Off' selected), 'Border Color' (a black color picker), and 'Border Width' (a slider set to 1). A 'Save' button is located at the bottom.

2. Set the parameters. Some are described in the table below.

Parameter	Description
Boder	Off by default, Display window border after opening
Win ID	Off by default, Display Win ID after opening
Border Color	Set border color
Border Width	Set border width

3. Click **Save**.

## Running Mode

Set the running mode and protocol of the device.

1. Click **System > Running Mode**.
2. The **Running Mode** page lists the running mode and protocol.

The screenshot shows a web interface for configuring a device. On the left is a navigation menu with a gear icon and the word 'System'. Below it are several menu items: 'Basic Info', 'Time', 'Serial', 'Play', 'Window', 'Running Mode' (which is highlighted in blue), 'Service', and 'Security'. At the bottom of the menu are 'Network' and 'Maintenance' with right-pointing arrows. The main content area is titled 'Running Mode' and contains two configuration fields: 'Running Mode' with a radio button selected for 'Master device', and 'Protocol' with a dropdown menu set to 'ONVIF'. A blue 'Save' button is located below these fields.

3. Click **Save**.

## Service

Set the video stream on the web.

## Video Output

### 1. Click **Service > Video Output**

The screenshot shows the 'Service' menu on the left with 'Video Output' selected. The main content area is titled 'Video Output' and 'Media Stream'. It contains three dropdown menus: 'Channel' (set to 'Channel1'), 'Split Type' (set to '1'), and 'Standard' (set to '1920x1080@60'). A blue 'Save' button is located below the dropdowns.

### 2. Set the parameters. Some are described in the table below.

Parameter	Description
Channel	Set the current channel
Split Type	Set the Split Type
Standard	Set the output format

### 3. Click **Save**.

## Media Stream

### 1. Click **Service > Media Stream**

The screenshot shows the 'Service' menu on the left with 'Media Stream' selected. The main content area is titled 'Media Stream'. It contains several fields: 'Channel' (dropdown, 'Channel1'), 'Layout' (dropdown, '1'), 'Stream Address(Win1)' (checkbox, 'Unicast', 'UDP', 'Client', 'Send IP' (0.0.0.0), 'Receive Port' (0), 'Live Vn' (dropdown), 'Nat' (checkbox), 'SessionId' (text input)), and 'RTSP stream address for...' (text input, 'rtsp://206.8.0.10:554/media/video1'). A blue 'Save' button is located below the fields.

### 2. Set the parameters. Some are described in the table below.

Parameter	Description
Channel	Select channel
Layout	Split Type sketch
Stream Address(Unica)	<ul style="list-style-type: none"> <li>• UDP:Set the Send IP, Receive Port</li> <li>• TCP: Set the Client/Server,Send IP, Send Port/Receive Port,Live View/Playback, Nat SessionId</li> <li>• RTSP:Set the RTSP stream address, Username, Password, Transmission Protocol</li> </ul>
Stream Address(Multicast)	<ul style="list-style-type: none"> <li>• UDP:Set the Send IP, Receive Port</li> <li>• RTSP:Set the RTSP stream address, Username, Password, Transmission Protocol</li> </ul>
RTSP stream address for format	RTSP stream address for format

3. Click **Save**.



#### NOTE !

- TCP settings are not supported for the time being.
- The use of this function requires that the device is not connected to any platform.
- Ensure clearance of existing configurations of other management platforms for the first time.
- If this feature is no longer used, make sure that all configurations are cleared before accessing other platforms.
- Clear all configurations:Click **Maintenance > Maintenance > Default**.

## Security

Set the security of the device.

### Telnet

Enable Telnet if you want to access the device from a computer with Telnet. By default the admin username cannot be changed.

1. Click **System > Security > Telnet**.

2. Select the check box to enable Telnet, and then click **Save**.

## SNMPv3

Through SNMP the central server synchronizes audio/video channel configurations and some of the scheduled tasks to the device, and the device reports device alarms to the central server.

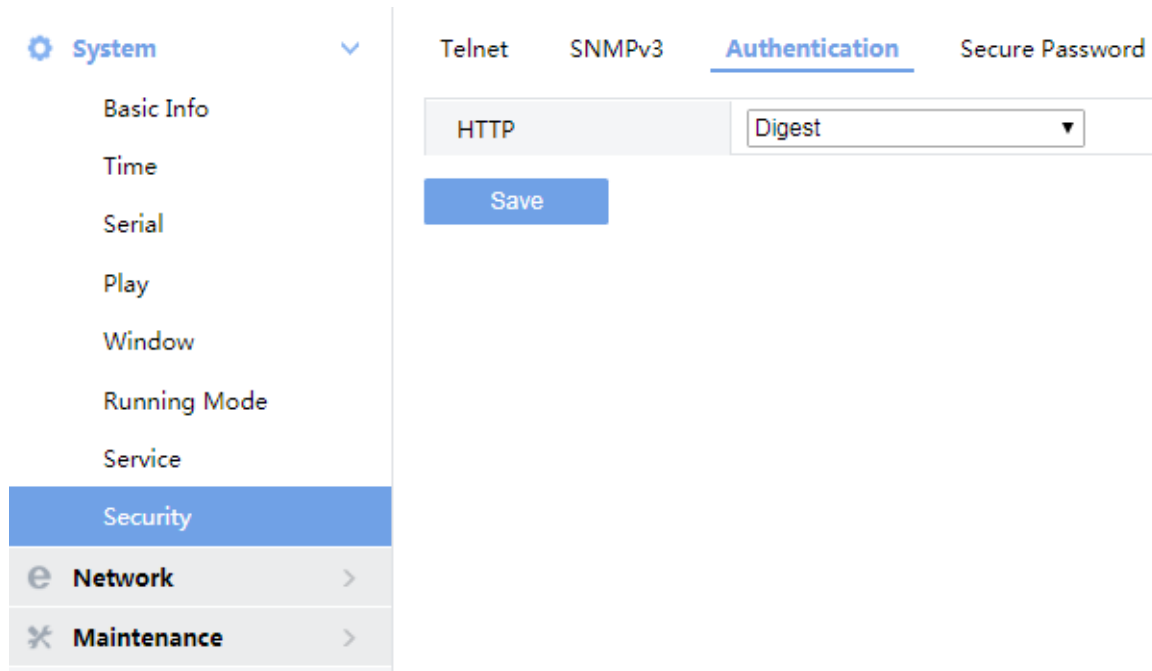
1. Click **System > Security > SNMPv3**.

2. This page can't be configured.

## Authentication

Select digest or null in the **Authentication** page. Digest access authentication is one of the agreed-upon methods a web server can use to negotiate credentials with server.

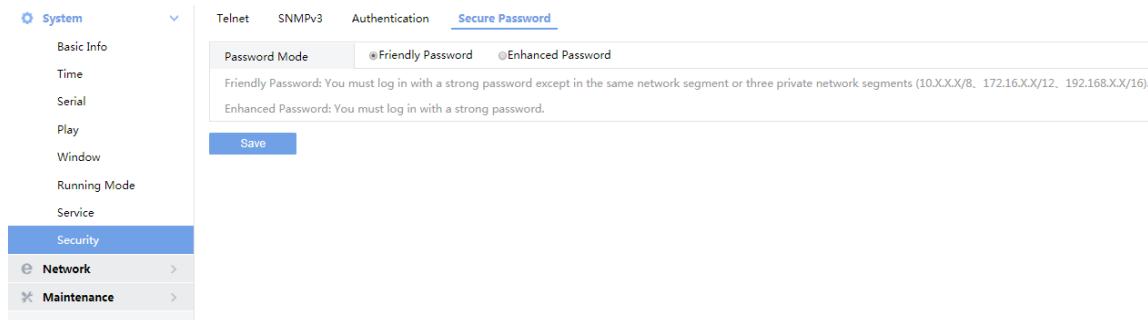
1. Click **System > Security > Authentication**.



2. Select **Digest** to enable the digest authentication, and then click **Save**.

## Secure password

1. Click **System > Security>Secure Password**.
2. Select password mode ,and then click **Save**



3. Some parameters are described in the table below.

Parameter	Description
Friendly Password	You must log in with a strong password except in the same network segment or three private network segments (10.X.X.X/8、 172.16.X.X/12、



Parameter	Description
	192.168.X.X/16).
Enhanced Password	You must log in with a strong password.

## 4 Network

Set network settings include TCP/IP and Telnet so that the device can communicate with other devices on the network.

### TCP/IP

Assign a static IP address manually, or obtain one using the DHCP server.

1. Click **Network > TCP/IP**.

TCP/IP	
Working Mode	Load Balance
Select NIC	NIC1
IPv4 Address	204.12.3.51
IPv4 Subnet Mask	255.255.0.0
IPv4 Default Gateway	204.12.1.1
MAC Address	66-E0-79-4A-B4-88

Save

2. Set the parameters. Some are described in the table below.

Parameter	Description
Working Mode	Load Balance.
Select NIC1	Select the network interface.
IPv4 Address	Set the IP Address.
IPv4 Subnet Address	Set the subnet address.
IPv4 Default Gateway	Set the gateway.
MAC Address	Display the mac address.

Parameter	Description
Working Mode	Load Balance.
Select NIC1	Select the network interface.

3. Click **Save**.

## 5 Maintenance

---

The major functions provided on the **Maintenance** menu are listed in the table below.

Parameter	Description
Device Status	View device information. For more details, see <b>Device Status</b> .
Packets Capture	Capture packets. For more details, see <b>Packets Capture</b> .
Decoding Info	View decoding message. For more details, see <b>Decoding Info</b> .
Maintenance	<ul style="list-style-type: none"> <li>• Restart the device.</li> <li>• Restore factory default settings.</li> <li>• Import and export configuration file.</li> <li>• Export diagnostic information.</li> <li>• Upgrade the software.</li> </ul> For more details, see <b>Maintenance</b> .

### Device Status

Click **Maintenance** > **Device Status** to view information of the device, its basic information and running status. The following shows an example.

**System** >

**Network** >

**Maintenance** ▾

- Device Status
- Packet Capture
- Decode Info
- Maintenance

### Device Status

#### Basic Info

Model	ADU8612-E
Serial Number	210235C2WU3181000045
Firmware Version	B8780P10
Hardware Version	A
Boot Version	GRUB 2.02

#### Running Status

Running Mode	Master device
Access Mode	Multi-screen Controller
Protocol	ONVIF
System Time	2019/04/24 09:40:26
Running Time	0 Day(s) 1 Hour(s) 16 Minute(s)
Temperature	38°C
CPU Usage	3%
Memory Usage	19%

Refresh

## Capture Packets

The **Capture Packets** page can help to capture packets when some problems occurred.

1. Click **Maintenance > Capture Packets**.

**System** >

**Network** >

**Maintenance** ▾

- Device Status
- Packet Capture
- Decode Info
- Maintenance

### Packet Capture

IP Address	<input type="text"/>
Port	<input type="text"/>

Start Stop

2. Set the parameters. Some are described in the table below.

Parameter	Description
IP Address	Input the device's IP address which sends the video to the decoder.
Port	Input the device's IP port which sends the video to the decoder.

3. Click **Start**.
4. Wait for a moment, click **Stop**.
5. Save the packets in your computer.


## Decode Message

Click **Maintenance > Decode Message** to view decoding information. The following shows an example.

No.	Wall Name	Win ID	Split Scrn No	Source	Src Port	Dst Port	Protocol	Resolution	Frame Rate	Video	Audio	Format	Realtime Packet Loss Rate	Total Packets Lost	Total Packets Received	Operation
1	180	1	1	209.2.101.187	11850	10694	TCP	1920*1080	60	H.264	G.711A	TS	0	0	319430557	↕
2	160	1	2	209.2.101.187	11852	10696	TCP	1920*1080	60	H.264	G.711A	TS	0	0	319430463	↕
3	160	1	3	209.2.101.187	11854	10698	TCP	0*0	0				0	0	0	↕
4	180	1	4	209.2.101.187	11856	10700	TCP	0*0	0				0	0	0	↕
5	160	2	1	0.0.0.0	0	0		0*0	0				0	0	0	↕
6	160	3	1	0.0.0.0	0	0		0*0	0				0	0	0	↕
7	160	4	1	0.0.0.0	0	0		0*0	0				0	0	0	↕

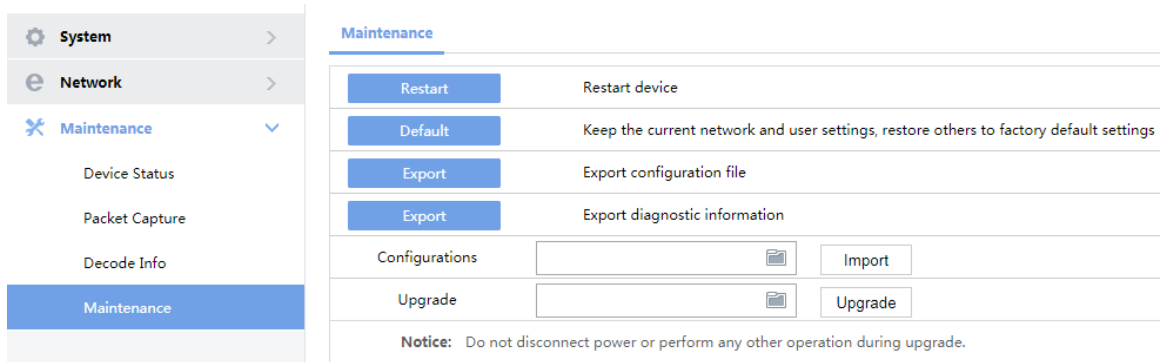
The information is listed in the table below.

Parameter	Description
NO.	The number of the information.
Wall Name	Show the Wall Name.
Win ID	Show the window ID.
Split Scrn NO.	Show the split screen ID.
Source	Show IP address of the source.
Scr Port	Show the port of the source.
Destination	Show IP address of the destination.
Dst Port	Show the port of the destination
Protocol	The transmission protocol of the network.
Resolution	The resolution of the video.
Frame Rate	The rate of the frame.
Video Compression	The video compression
Audio Formats	The audio compression.
Encapsulation	The encapsulation of the video.
Realtime Packet Loss Rate	The rate of the lost packet.



Parameter	Description
Total Packet Lost	The total number of the lost packets.
Total Packet Received	The total number of the packets.
Operation	Click  to refresh the decode information.

## Maintenance

Click **Maintenance** > **Maintenance** and then perform maintenance operations as needed. You can restart the device, restore some factory default settings, import and export configuration files, export diagnostic information, and upgrade the device.



**Maintenance**

- Restart** Restart device
- Default** Keep the current network and user settings, restore others to factory default settings
- Export** Export configuration file
- Export** Export diagnostic information
- Configurations**   **Import**
- Upgrade**   **Upgrade**

**Notice:** Do not disconnect power or perform any other operation during upgrade.