

Video Decoder User Manual

Manual Version: V1.04

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

Contents

1 Introduction	1
2 Login	1
3 System	2
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
4 Network	13
TCP/IP	13
5 Maintenance	14
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.

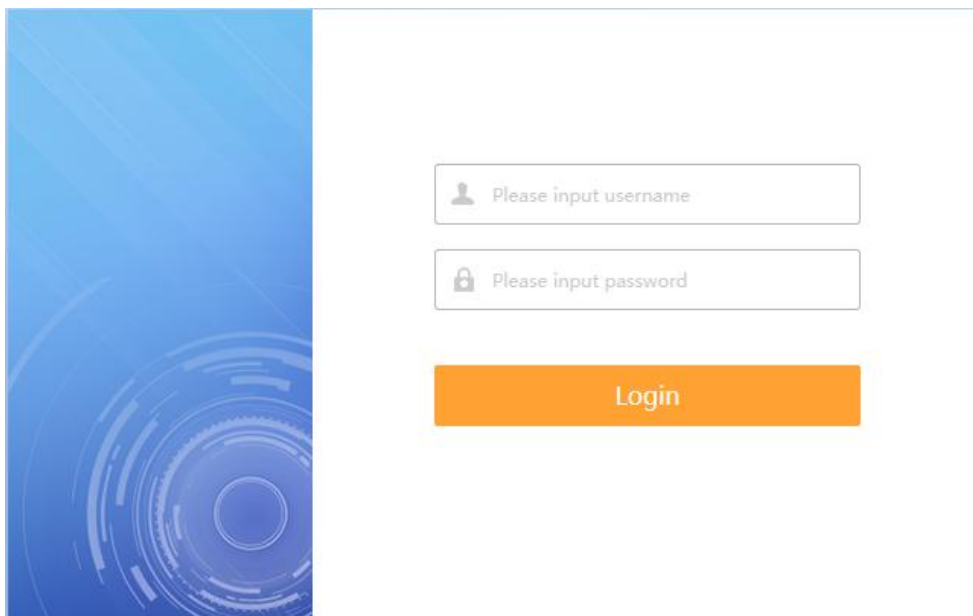


NOTE !

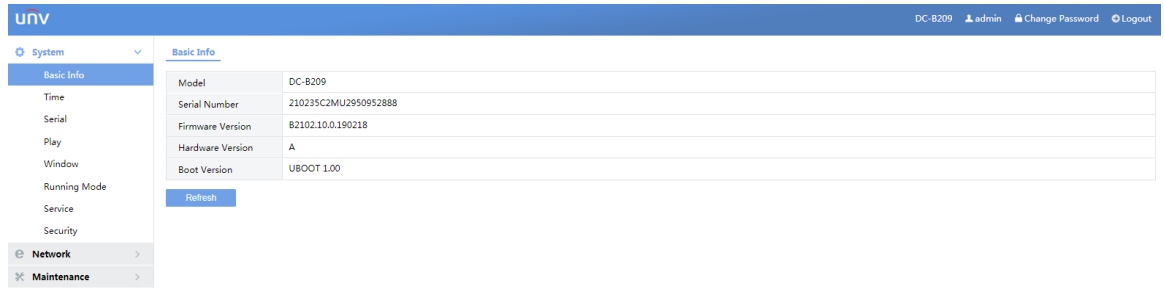
- The default IP address of your device is 192.168.1.14; the default subnet mask is 255.255.255.0; the default gateway is 192.168.1.1.
- Use **admin** as the username and **123456** as the password for first-time login. Please change the default password under admin to ensure account security.

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.



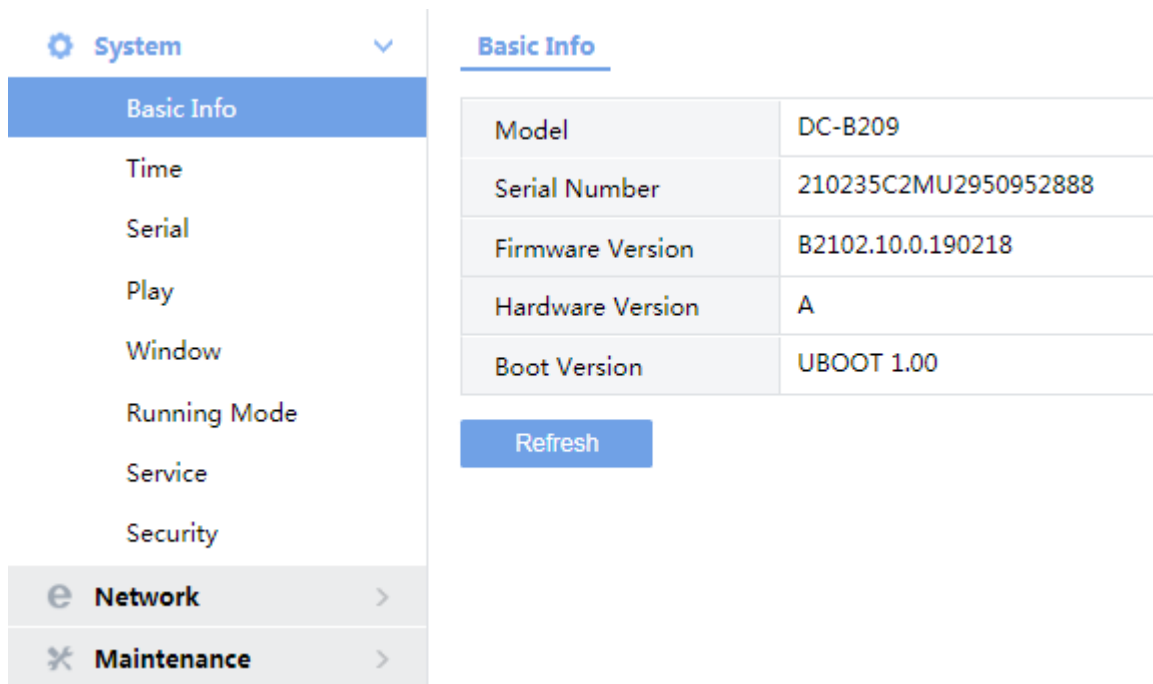
3 System

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**.



2. Click **Refresh**.

Time

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

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

The screenshot shows the 'Time' configuration page. On the left is a navigation menu with 'System' expanded and 'Time' selected. The main content area has a 'Time' header and a table with the following fields:

Time Zone	(GMT+08:00) Beijing, Hong K
System Time	2019-2-18 08:05:56 PM <input type="checkbox"/> Sync with PC
Auto Update	<input type="radio"/> On <input checked="" type="radio"/> Off

Below the table is a blue 'Save' button.

This screenshot shows the 'Time' configuration page with additional NTP settings. The 'Auto Update' radio button is now selected as 'On'. The table includes the following fields:

Time Zone	(GMT+08:00) Beijing, Hong K
System Time	2019-2-18 08:05:56 PM <input type="checkbox"/> Sync with PC
Auto Update	<input checked="" type="radio"/> On <input type="radio"/> Off
NTP Server Address	<input type="text"/>
NTP Port	<input type="text" value="0"/>
Update Interval	0 Min

Below the table is a blue 'Save' button.

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 Set Time text box and then set the time manually, or select Sync with PC 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 configuration table 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

At the bottom of the configuration area is a blue 'Save' button.

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 RS485 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

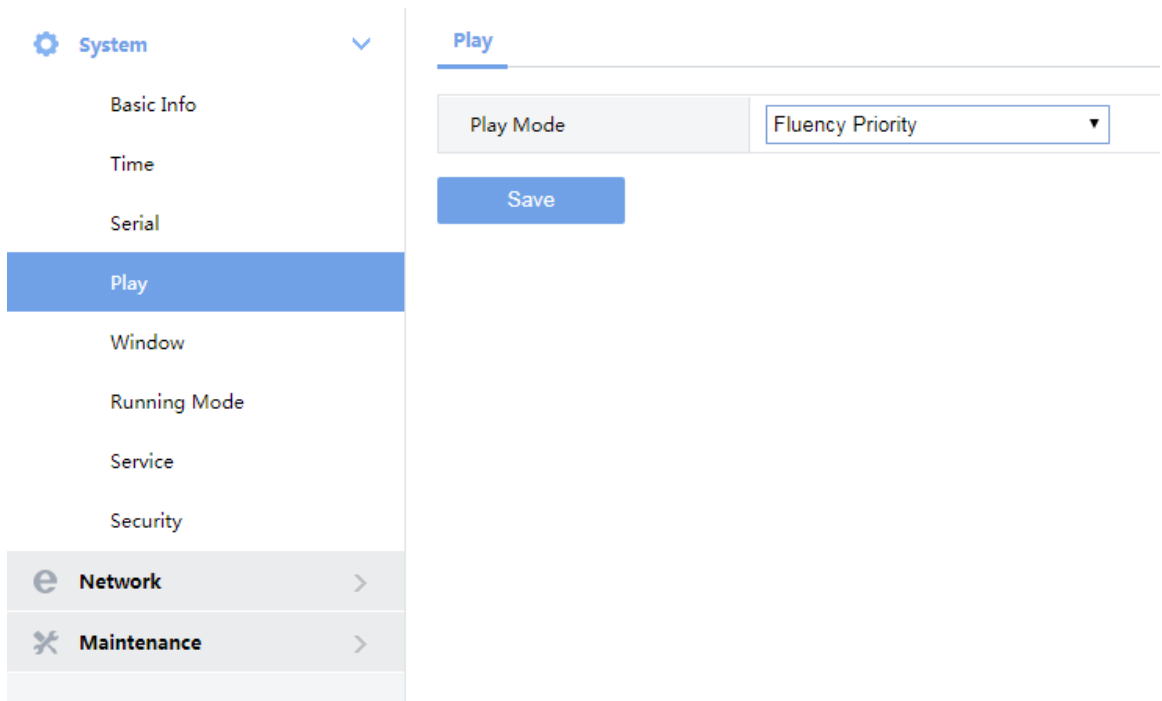
Play configuration is mainly set in different network environments, and different decoding modes are chosen: **Real Time Priority** and **Fluency Priority**. When the network environment is good, please set it as **Real Time Priority**, when the network environment is poor, please set it as **Fluency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

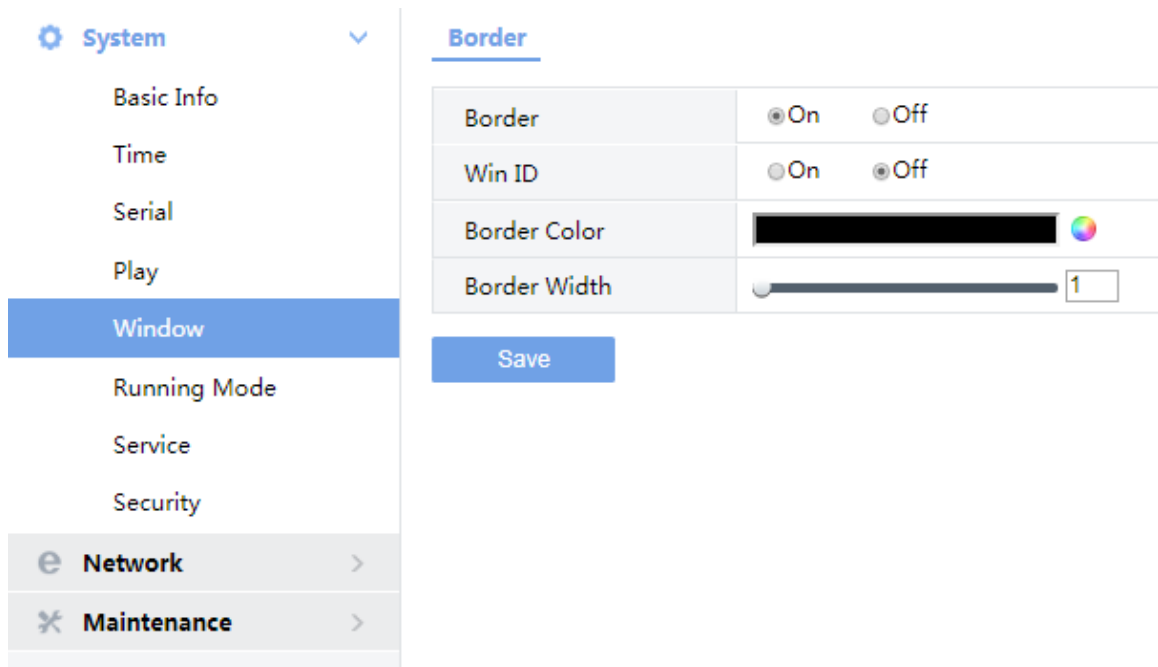


3. Click **Save**.

Window

Set window border

1. **System > Window.**



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

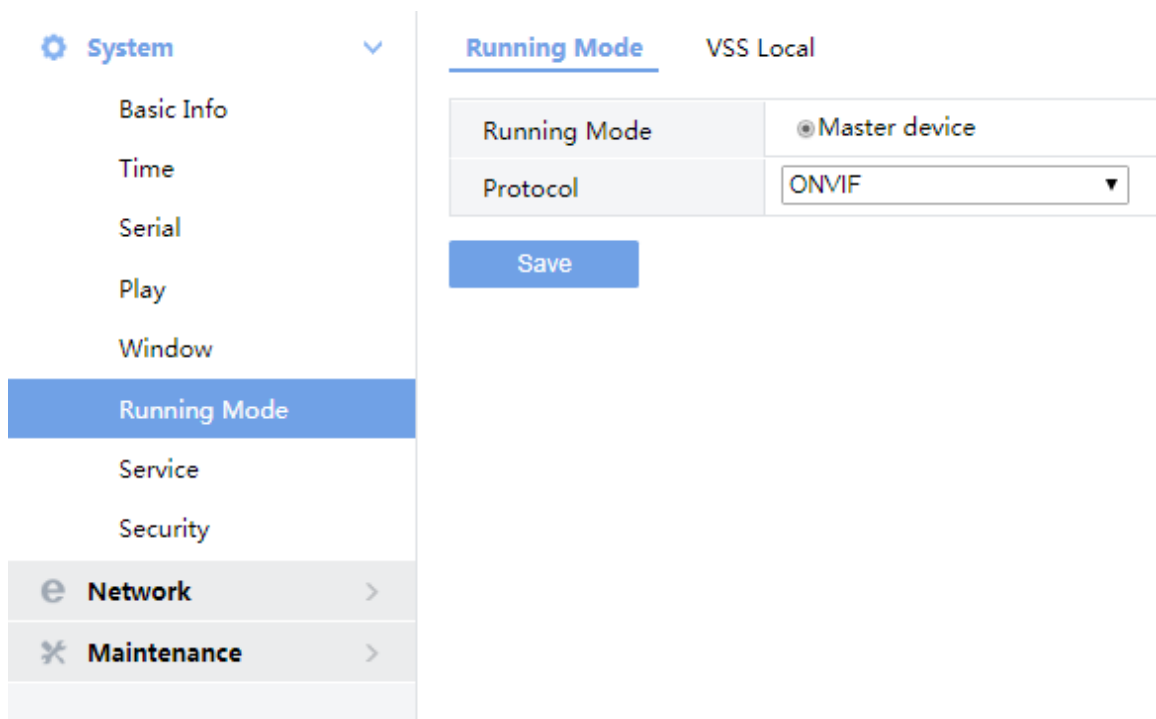
Parameter	Description
Boder	Off by default, Display window border after opening
Win ID	Off by default, Display Win ID after opening
Border Color	Set border color
Border Width	Set border width

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.



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' dropdown, 'UDP' dropdown, 'Client' dropdown, 'Send IP' text input '0.0.0.0', 'Receive Port' text input '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"> • UDP:Set the Send IP, Receive Port • TCP: Set the Client/Server,Send IP, Send Port/Receive Port,Live View/Playback, Nat SessionId • RTSP:Set the RTSP stream address, Username, Password, Transmission Protocol
Stream Address(Multicast)	<ul style="list-style-type: none"> • UDP:Set the Send IP, Receive Port • RTSP:Set the RTSP stream address, Username, Password, Transmission Protocol
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**.

System (gear icon) ▾

- Basic Info
- Time
- Serial
- Play
- Window
- Running Mode
- Service
- Security**
- Network (e icon) >
- Maintenance (x icon) >

Telnet SNMPv3 Authentication Secure Password

Telnet On Off

Save

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**.

System (gear icon) ▾

- Basic Info
- Time
- Serial
- Play
- Window
- Running Mode
- Service
- Security**
- Network (e icon) >
- Maintenance (x icon) >

Telnet **SNMPv3** Authentication Secure Password

Username	admin
Authentication	MD5 ▾
Authentication Passwo...
Confirm Password
Encryption	DES ▾
Encryption Password
Confirm Password

Note: This page can't be configured when running mode is ONVIF

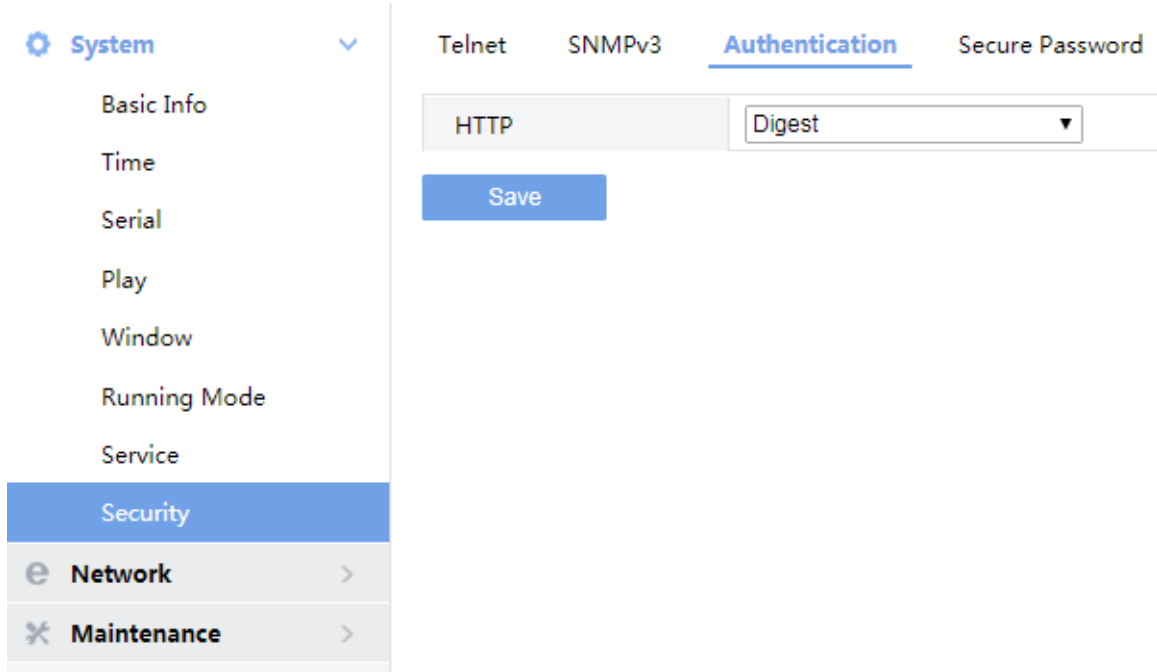
Save

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.

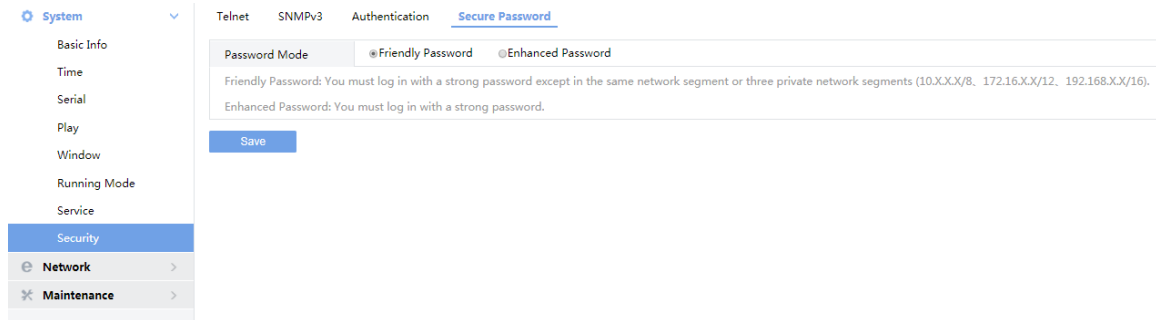
1. Click **System > Security > Authentication**.



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

Device Status

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

Capture Packets

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

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

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.

The screenshot shows a web interface with a sidebar on the left containing 'System', 'Network', and 'Maintenance' sections. The 'Maintenance' section is expanded, showing 'Device Status', 'Packet Capture', 'Decode Info' (highlighted), and 'Maintenance'. The main area displays a 'Decode Info' table with a 'Refresh' button above it. The table has 15 columns: 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, and Operation. The table contains 7 rows of data.

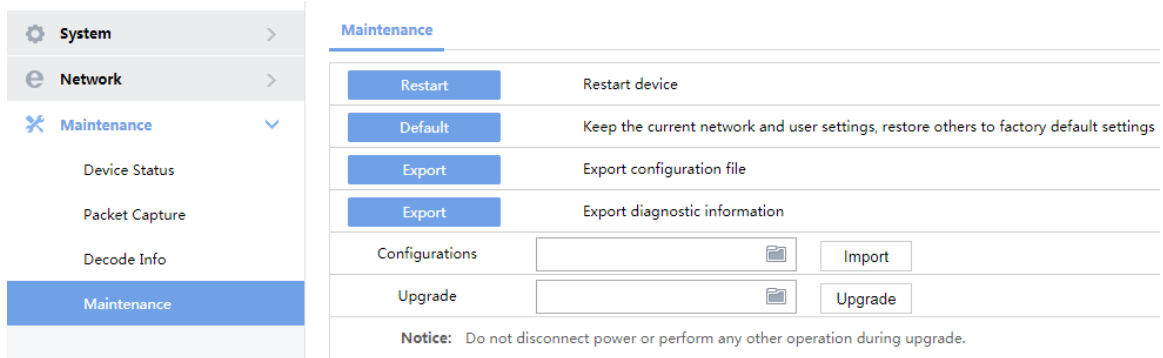
No.	Wall Name	Win ID	Split Scrn No.	Source	Src Port	Dst Port	Protocol	Resolution	Frame Rate	Video	Audio	Format	Realtime Packet Loss Rate	Total Packets Lost	Total Packets Received	Operation
1	160	1	1	209.2.101.187	11650	10694	TCP	1920*1080	60	H.264	G.711A	TS	0	0	319430557	↻
2	160	1	2	209.2.101.187	11652	10696	TCP	1920*1080	60	H.264	G.711A	TS	0	0	319430468	↻
3	160	1	3	209.2.101.187	11654	10698	TCP	0*0	0				0	0	0	↻
4	160	1	4	209.2.101.187	11656	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.
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.



System	>
Network	>
Maintenance	▼
Device Status	
Packet Capture	
Decode Info	
Maintenance	

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	<input type="text"/>  <input type="button" value="Import"/>
Upgrade	<input type="text"/>  <input type="button" value="Upgrade"/>
Notice: Do not disconnect power or perform any other operation during upgrade.	