

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

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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.

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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.

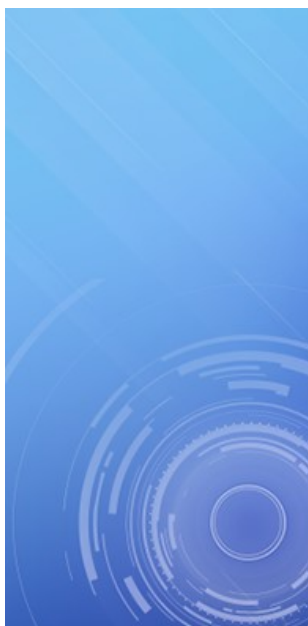


NOTE !

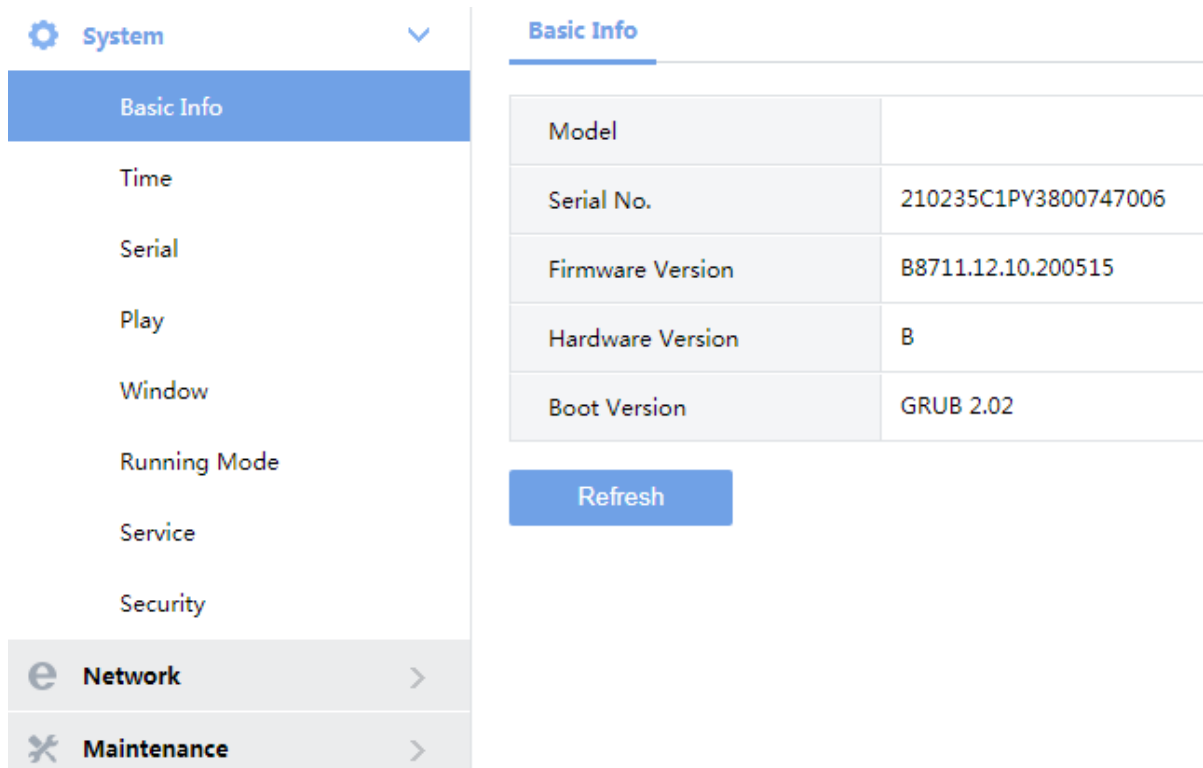
- The default IP address of your device is **192.168.1.14**; the default subnet mask is **255.255.255.0**; the default gateway is **192.168.1.1**.
- Use **admin** as the username and **123456** as the password for first-time login. Please change the default password under admin to ensure account security.

Follow the steps to log in to the device:

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

A login form with two input fields and a button. The first field is labeled 'Please input username' and has a person icon. The second field is labeled 'Please input password' and has a lock icon. Below the fields is an orange button labeled 'Login'.

(2) Log in with the correct username and password.



The screenshot shows a web interface for system settings. On the left is a sidebar menu with a 'System' header (gear icon) and a dropdown arrow. The menu items are: 'Basic Info' (highlighted in blue), 'Time', 'Serial', 'Play', 'Window', 'Running Mode', 'Service', 'Security', 'Network' (with an 'e' icon and a right arrow), and 'Maintenance' (with a wrench icon and a right arrow). The main content area is titled 'Basic Info' and contains a table with the following data:

Model	
Serial No.	210235C1PY3800747006
Firmware Version	B8711.12.10.200515
Hardware Version	B
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.

3.1 Basic

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

3.1.1 Basic Info

(1) Click **System > Basic Info > Basic Info**.

The screenshot shows a sidebar menu on the left with a 'System' header and a dropdown arrow. The 'Basic Info' option is highlighted in blue. Below it are 'Time', 'Serial', 'Play', 'Window', 'Running Mode', 'Service', and 'Security'. At the bottom of the sidebar are 'Network' and 'Maintenance' options, each with a right-pointing arrow. The main content area on the right is titled 'Basic Info' and contains a table with the following data:

Model	
Serial No.	210235C1PY3800747006
Firmware Version	B8711.12.10.200515
Hardware Version	B
Boot Version	GRUB 2.02

Below the table is a blue 'Refresh' button.

(2) Click **Refresh**.

3.1.2 About

(1) Click **System > Basic Info > About**.

The screenshot shows the same sidebar menu as above, but now the 'About' option is highlighted in blue. The main content area on the right has two tabs: 'Basic Info' and 'About', with 'About' being the active tab. Below the tabs are two blue buttons: 'Open Source Software Licenses' and 'Privacy Policy'.

- (2) Click **Open Source Software Licenses** or **Privacy Policy** to view the corresponding documentation.



NOTE !

A privacy policy window may appear when you log in to some devices for the first time. You must read and agree to the privacy policy to access the device's Web interface.

3.2 Time

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

- (1) Click **System > Time**.

The screenshot shows the 'Time' settings page in a web interface. The left sidebar has a 'System' menu with 'Time' selected. The main content area is titled 'Time' and contains the following settings:

Time Zone	(GMT+08:00) Beijing, Hong Kong
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	<input type="text" value="0 Min"/>

A blue 'Save' button is located below the settings table.

(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.
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.

3.3 Serial

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

3.3.1 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.

The screenshot shows a web interface for configuring serial ports. On the left, a navigation menu under 'System' has 'Serial' highlighted. The main content area is titled 'RS232' (selected) and 'RS485'. Below the title is a table of configuration parameters, each with a dropdown menu. The parameters and their values are: No. (1), Serial Mode (Screen Control), Baud Rate (115200), Data Bit (8), Stop Bit (1), Check Bit (None), and Flow Control (None). A blue 'Save' button is located below the table.

Parameter	Description
No.	Select the serial port to set.
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.

- (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.
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.

3.3.2 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.

System ▼

- Basic Info
- Time
- Serial
- Play
- Window
- Running Mode
- Service
- Security

Network >

Maintenance >

RS232 RS485

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 ▼

Save

(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.
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.

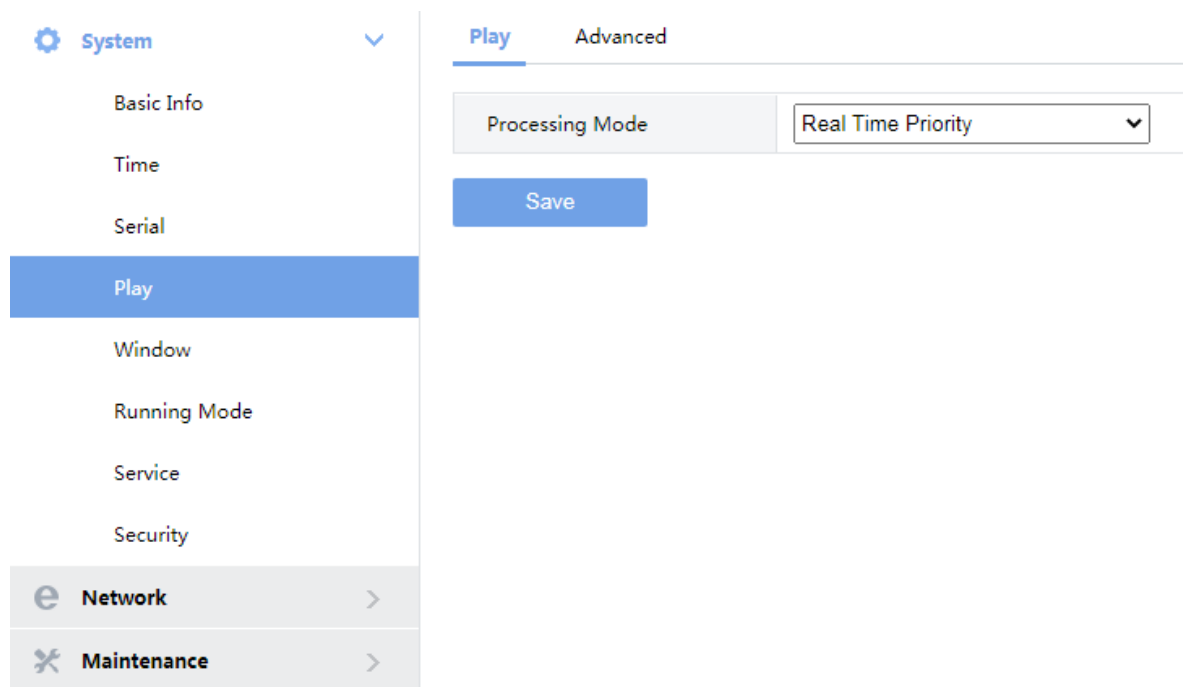
3.1 Play

3.1.1 Play

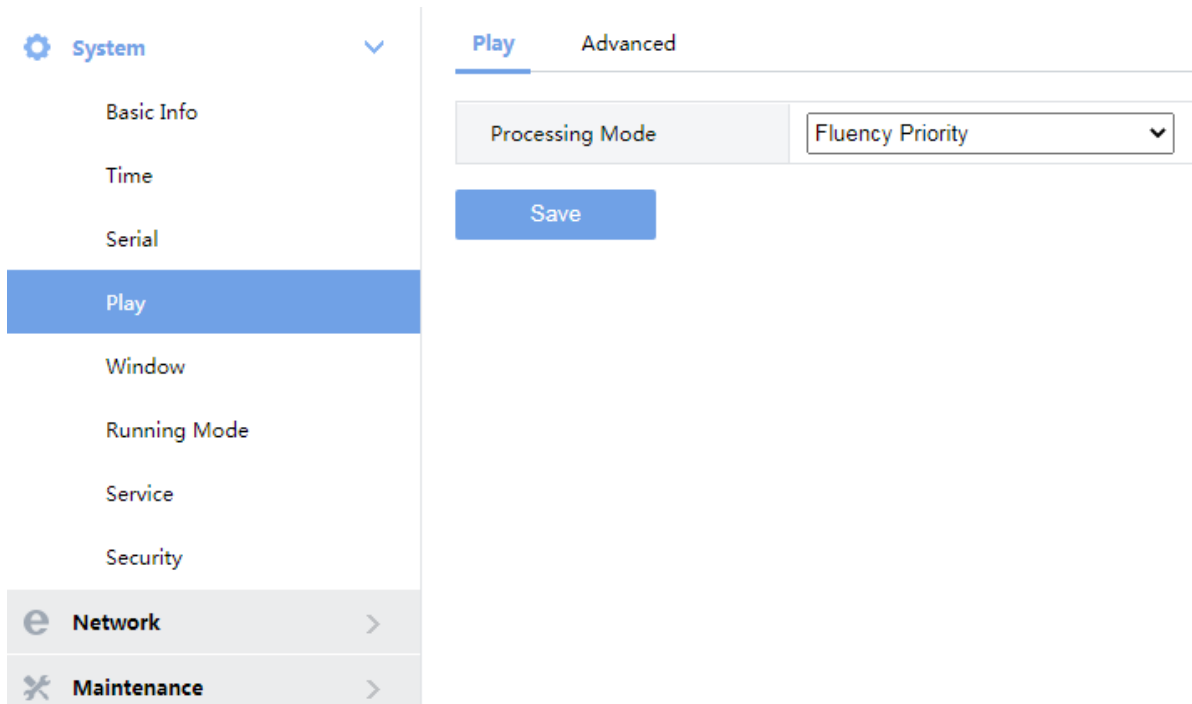
Play configuration is mainly set in different network environments, and different decoding modes are chosen: **Real Time Priority** and **Fluency Priority**. When the network environment is good, please set it as **Real Time Priority**, when the network environment is poor, please set it as **Fluency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

(1) Click **System > Play > Play**.

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



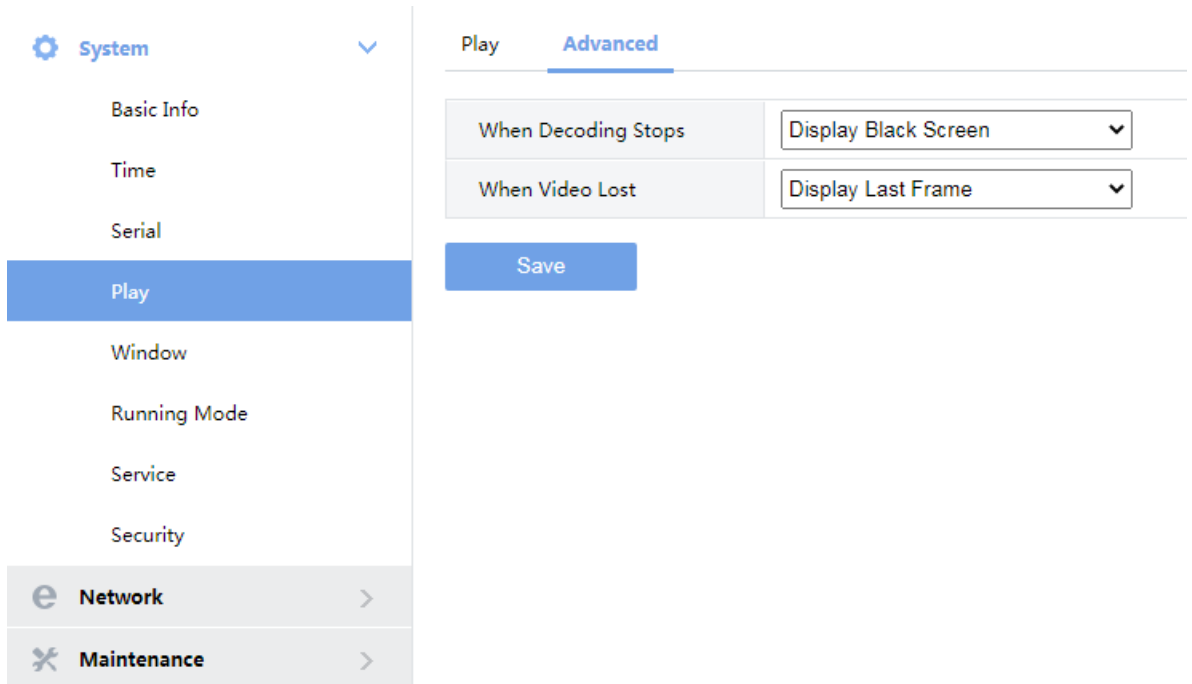
(2) The following is the setting of the **Processing Mode** set to a **Fluency Priority**.



(3) Click **Save**.

3.1.2 Advanced

(1) Click **System > Play > Advanced**.



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

Parameter	Description
When Decoding Stops	<ul style="list-style-type: none"> • Display Last Frame • Display Black Screen
When Video Lost	<ul style="list-style-type: none"> • Display Last Frame • Display Black Screen

(3) Click **Save**.

3.2 Window

Set window border.

(1) Click **System > Window**.

The screenshot shows the 'System' configuration menu with 'Window' selected. The 'Border' settings are as follows:

Parameter	Value
Border	On
Win ID	Off
Border Color	Black
Border Width	1

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

Parameter	Description
Border	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**.

3.3 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 the device's running mode. On the left is a navigation menu under the 'System' category, with 'Running Mode' selected. The main content area is titled 'Running Mode' and 'VSS Local'. It 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.

Running Mode		VSS Local
Running Mode	<input checked="" type="radio"/> Master device	
Protocol	ONVIF	

Save

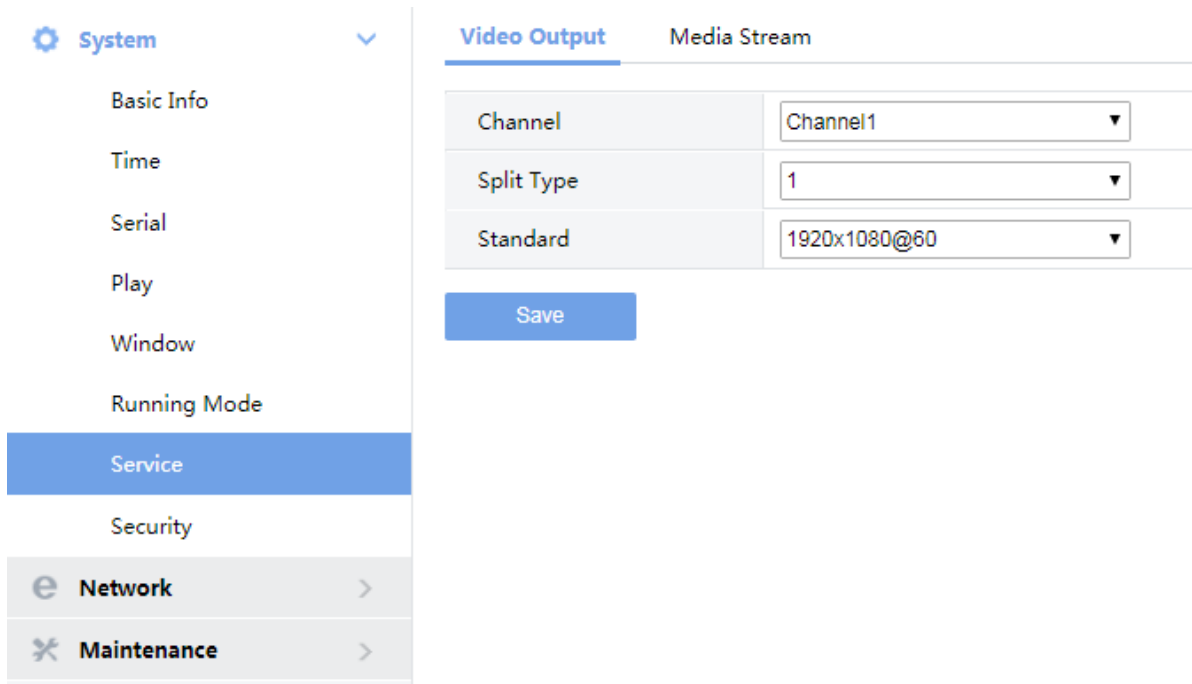
- (3) Click **Save**.

3.4 Service

Set the video stream on the web.

3.4.1 Video Output

- (1) Click **System > Service > Video Output**



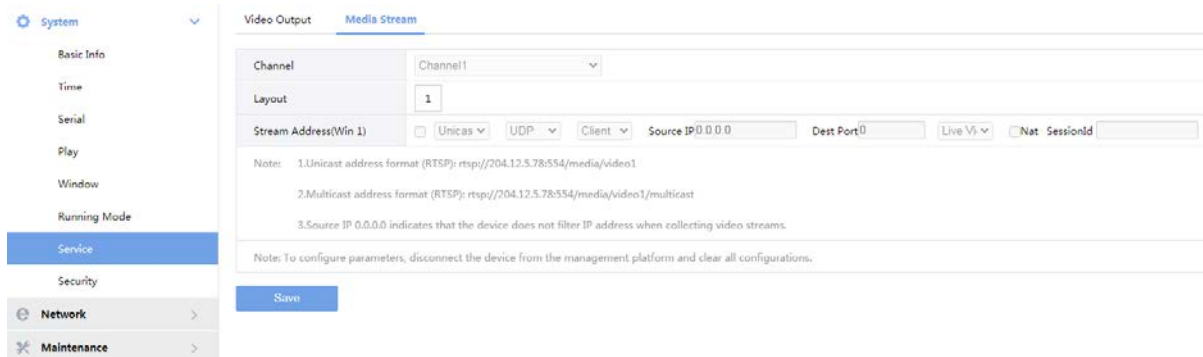
(2) Set the parameters. Some are described in the table below.

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

(3) Click **Save**.

3.4.2 Media Stream

(1) Click **System > Service > Media Stream**



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

Parameter	Description
Channel	Select channel
Layout	Split Type sketch
Stream Address(Unicast)	<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**.
- Refer to "Note" for stream address configuration.

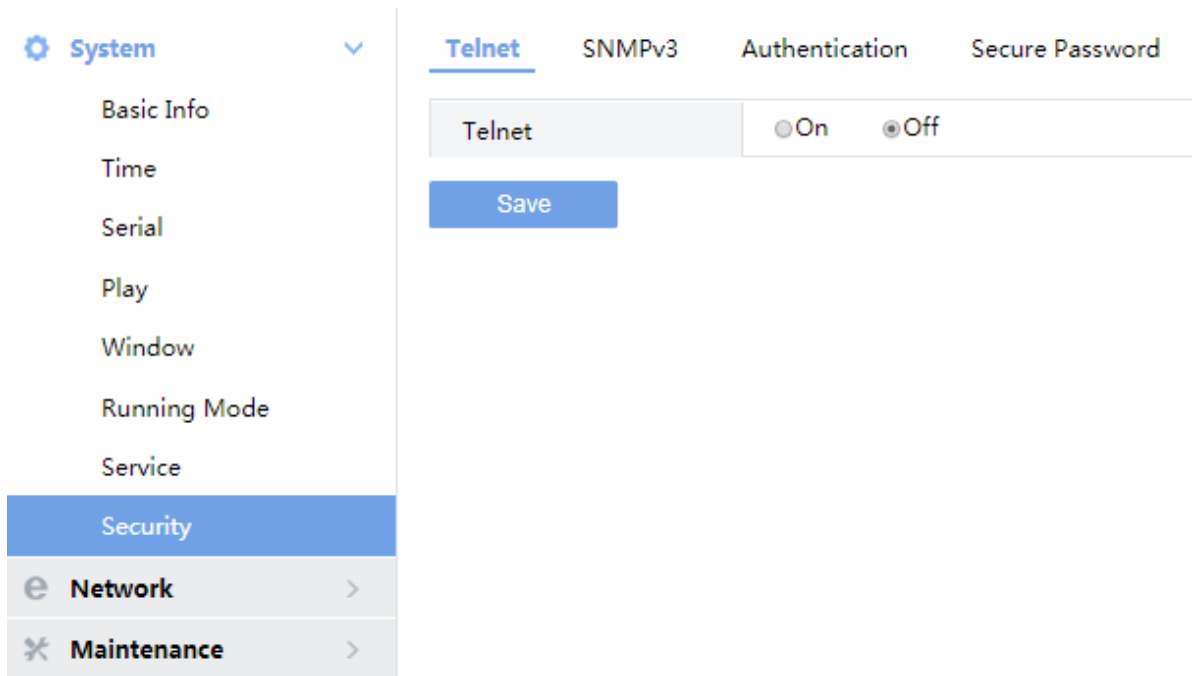
3.5 Security

Set the security of the device.

3.5.1 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**.

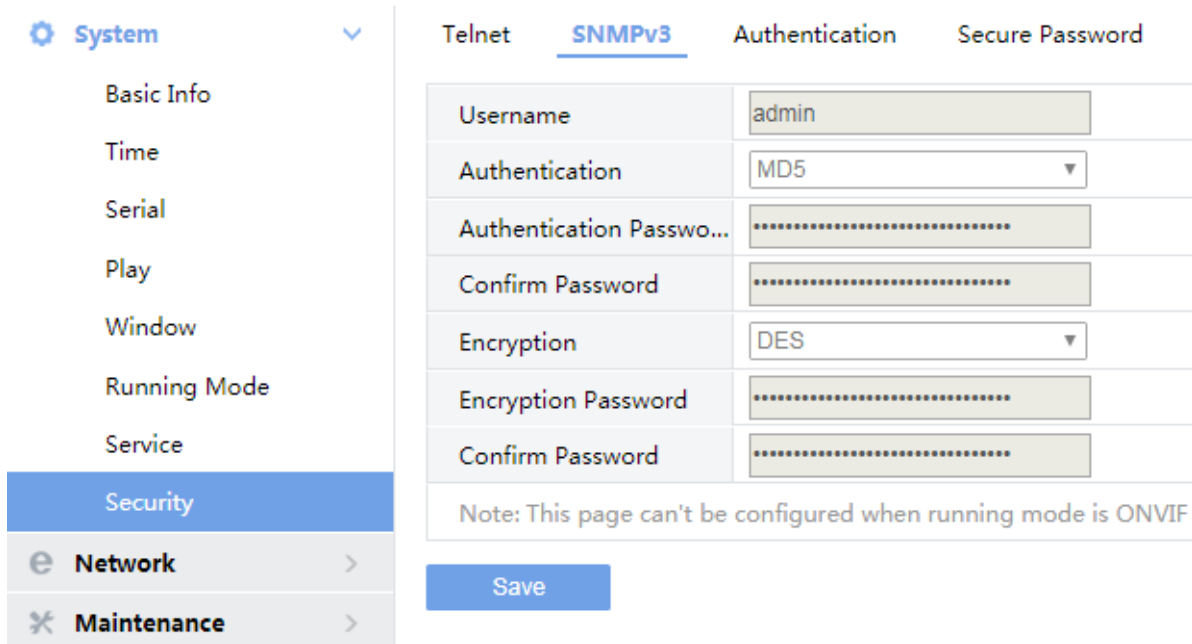


(2) Select the check box to enable Telnet, and then click **Save**.

3.5.2 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**.

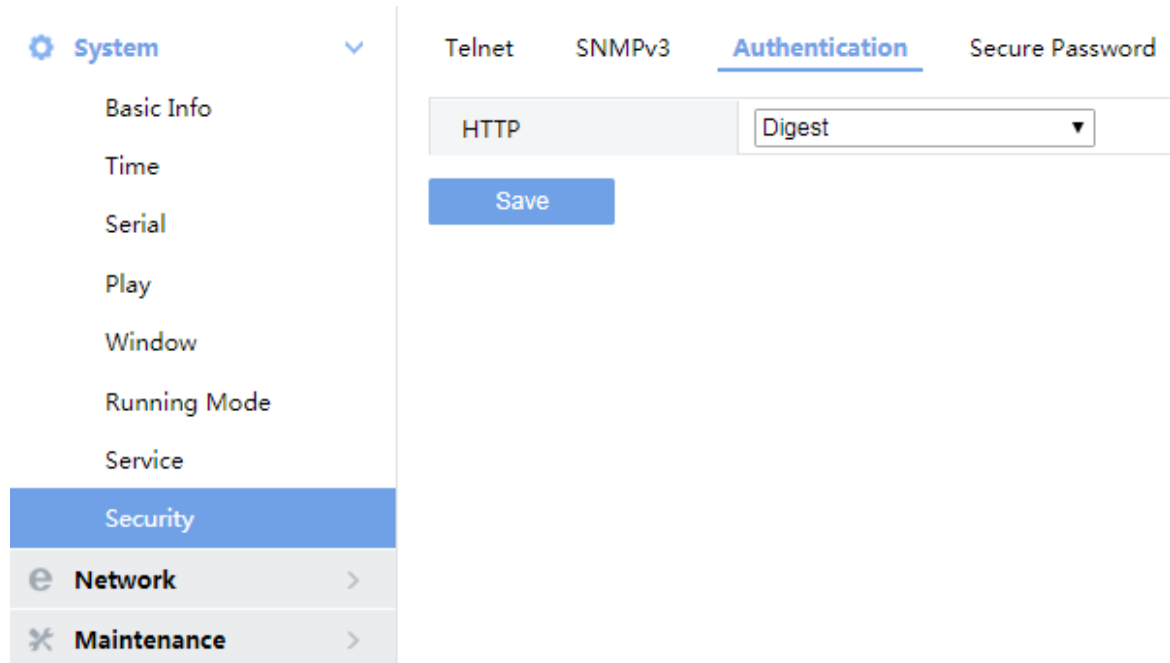


(2) This page can't be configured.

3.5.3 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.

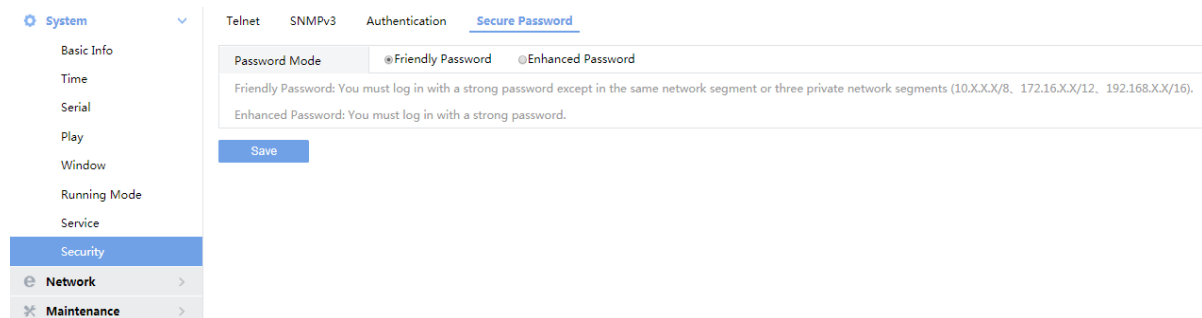
- (1) Click **System > Security > Authentication**.



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

3.5.4 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、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.

4.1 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	209.2.192.174
IPv4 Subnet Mask	255.255.255.0
IPv4 Default Gateway	209.2.192.1
IPV6Mode	manual
IPv6 Address	2014:88:88:1:88:88:E0A8:010E
IPV6 Subnet prefix length	64
IPv6 Default Gateway	2014:88:88:1:1:1:1:1
MAC Address	9A-5F-1F-28-2F-D9

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.

Parameter	Description
IPv6 Mode	Set the IPv6 Mode.
IPv6 Address	Set the IPv6 Address.
IPv6 Subnet prefix length	Set the IPv6 Subnet prefix length.
IPv6 Default Gateway	Set the IPv6 Default Gateway.
MAC Address	Display the mac address.

(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 .

5.1 Device Status

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

Device Status

Basic Info

Model			
Serial No.	210235C1PY3800747006	Firmware Version	B8711.12.10.200515
Hardware Version	B	Boot Version	GRUB 2.02

Running Status

Running Mode	Master device		
Access Mode	Multi-screen Controller	Protocol	ONVIF
System Time	2020/06/09 16:55:47		
Running Time	7 Day(s) 2 Hour(s) 24 Minute(s)	Temperature	38°C
CPU Usage	64%	Memory Usage	24%

Refresh

5.2 Capture Packets

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

- (1) Click **Maintenance > Capture Packets**.

Packet Capture

IP Address

Port

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.

5.3 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	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	319430463	
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.

5.4 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, auto restart, and upgrade the device.

System >	Maintenance
Network >	
Maintenance v	
Device Status	
Packet Capture	
Decode Info	
Maintenance	
Restart	Restart device
Default	Keep the current network and user settings and restore other settings to factory defaults.
Export	Export configuration file
Export	Export diagnostic information
Auto Restart	Never v 00:00 v OK
Configurations	Import
Local Upgrade	Upgrade
Note: Do not disconnect power or perform any other operation during upgrade.	