

# AHD/DVR/XVR User Manual

## Attentions:

Do not place heavy objects on the equipment;

Do not allow any solid or liquid to fall or penetrate into the device;

Please periodically use the brush on the circuit board, connectors, chassis fan, chassis, etc. for dust, please turn off the power and unplug the adapter before dedusting;

Do not disassemble, repair, or replace the unit yourself.

## Usage environment:

Please place and use this device at a temperature of  $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$ , avoid direct sunlight or near heat source;

Do not install the device in a humid environment;

Do not expose the device to smoke, dusty environment;

Avoid strong collisions, please do not drop the device;

Please keep this product installed horizontally, installed in a stable place, pay attention to prevent the product falling;

Please install in ventilated place, do not block the vents of the device;

It can be used only within the rated input and output range.

**Note: The operations and pictures in this manual are based on 16-channel XVR.**

Part One Basic Operation.....	1
1. Basic Installation.....	1
1.1 Hard Disk Installation.....	1
1.2 Mouse Connection .....	1
2. Starting .....	1
3. Turn Off .....	1
4. Login.....	2
5. Preview .....	2
6. Record.....	4
6.1 HDD Manage .....	4
6.2 Recording Setting.....	4
7. Playback .....	6
7.1 Playback main interface .....	7
7.2 Slice playback.....	10
7.3 Split channel playback.....	11
7.4 Tag playback .....	11
8. Network .....	13
8.1 Network setting .....	13
8.2 DDNS .....	14
8.3 UPNP .....	14
8.4 Email .....	15
8.5 WIFI .....	16
8.6 Wireless Config .....	16
8.7 Net Service.....	17
9. Camera .....	19
9.1 Channel status.....	19
9.2 Channel Type.....	19
9.3 Remote Device .....	19
10. Alarm function .....	22
10.1 Motion detect .....	23
10. 2 Video Blind.....	28
10. 3 Video Loss .....	29
10. 4 Alarm Input.....	29
10. 5 Abnormality .....	29
11. System .....	29
11.1 General settings .....	29
11.2 Account .....	29
11.3 Auto Maintain .....	31
11.4 Restore .....	31
11.5 Upgrade .....	31
12. PTZ/Coaxial Control .....	32
12.1 Premise.....	32
12.2 Basic Settings.....	32
12.3 Function setting.....	33
13. Version .....	34
14. Online User .....	34
Part Two Remote Control .....	35

1. WEB Remote View.....	35
2. CMS Remote View.....	36
3. E-Video .....	37
4. Mobile Phone Monitoring .....	38
Appendix 1. Remote controller operation.....	41
Appendix 2. Mouse operation .....	42

This product is an excellent digital surveillance equipment with high definition designed specifically for the field of security. Embedded LINUX operating system, making the system more stable; using standard H.264MP video compression algorithms and a unique spatial and temporal filtering algorithm to achieve a high-quality, low bit-rate synchronous audio and video surveillance; powerful network services greatly enhance the ability of network data transmission and remote control capabilities.

## **Part One Basic Operation**

### **1. Basic Installation**

#### **1.1 Hard Disk Installation**

For the first time use, please install the hard disk. The quantity of Hard Disk is based on requirement and specifications of the device.

**Remark:** AHD / DVR &XVR can run and monitor normally without hard disk, while it can't record and playback.

#### **1.2 Mouse Connection**

There are 2 USB ports with the device. These 2 USB ports could be used for mouse, U disk and WIFI module. Mouse connection is depend on products specifications based on different products.

### **2. Starting**

Plug the power supply and turn on the power supply switch (Some modes are without the switch). Power supply indicator light shining indicates turning on the video recorder. After finishing the start up you will hear a beep, and the default setting of video output is multiple-window output mode.

**Remark:** Restart the power after the abnormal power off, AHD/DVR &XVR will automatically recover the state before power off.

### **3. Turn Off**

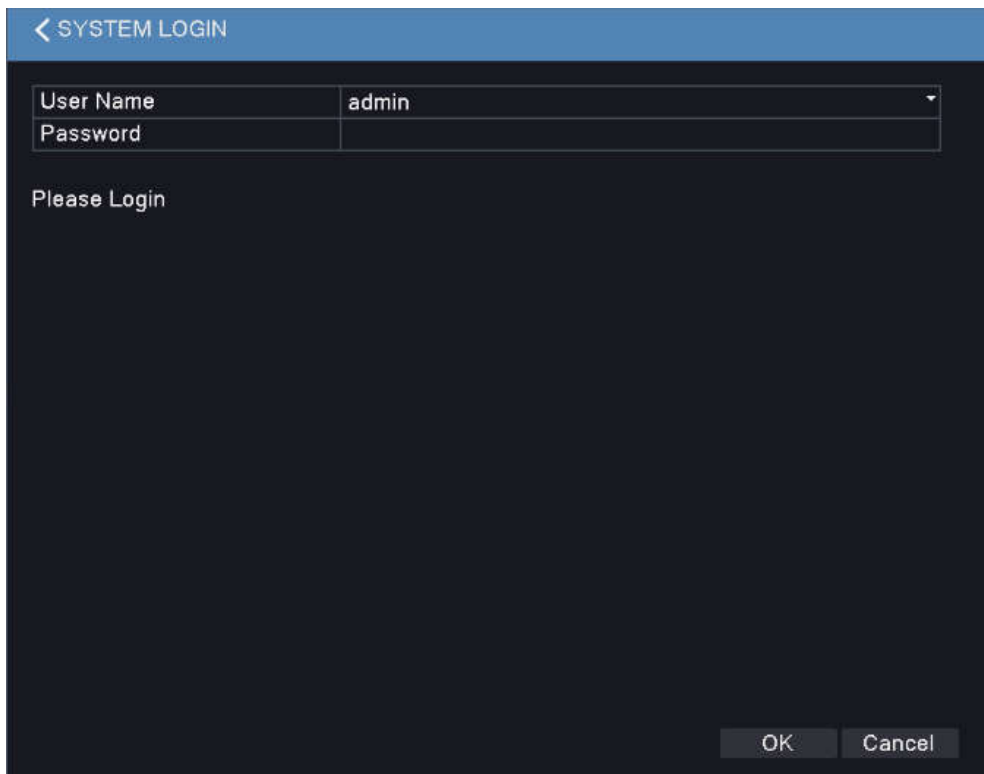
There are two methods to turn off the AHD / DVR &XVR which are soft switch and hard switch. Entering [Main menu] and choosing [Log out] in the [Turn off the system] option is called soft switch. Pressing the power supply switch is called hard switch.

**Remark:** The setting information must be saved before replacing the battery

otherwise information will lose.


## 4. Login

When the device boots up, user must login and the system provides the corresponding functions with the user purview. There are two user settings which are admin and guest; and the password is 123456 .“admin” is the super user purview; “guest” is the common user purview which have right to preview and recording playback. User “admin” and “guest” can change the password, but can’t change the right.

A screenshot of a 'SYSTEM LOGIN' interface. At the top, there is a blue header bar with a back arrow and the text 'SYSTEM LOGIN'. Below this, there are two input fields: 'User Name' with the value 'admin' and a dropdown arrow, and 'Password' which is empty. Below the input fields, the text 'Please Login' is displayed. At the bottom right, there are two buttons: 'OK' and 'Cancel'.

**Password protection:** If the password is continuous wrong seven times, the alarm will start. (Through reboot or after half an hour, the account will be unlocked automatically) For your system security, please modify your password in “User management” after first login.

## 5. Preview

After the device logs in normally, it enters the multi-screen preview state. In the preview interface, you can display the date, time and channel name. Each channel picture can display the video and Signal switching icon  (switch video display signal), alarm status of the monitoring channel, and there is a function navigation bar at the top of the channel, including: instant playback, burning, PTZ control, and color setting;

Normal interface has the following icons: channel name, channel recording logo,

channel audio flag. When the alarm is triggered: motion detection, video occlusion, video loss and other alarm status flag.

The bottom of the preview interface hides the menu bar, which has the main menu, multi-screen switching and polling control (pause and start).





Figure 5 preview interface

1	Instant Playback	2	Burning
3	Channel PTZ Control	4	Color Setting
5	Main Menu Button	6	Single Multi-screen Switching
7	Round-Lock button		

**Note:**

1.Instant playback:playback of the current time 5 minutes before the video, user-friendly view of the recent emergency video;

2.If the front-end camera signal and the device side of the signal does not match, click  to switch the device video signal to make it with the front-end camera signal, there are three signal modes: CVI, TVI, AHD, such as equipment to switch to CVI signal, the icon  Become CVI letters

## 6. Record

### 6.1 HDD Manage

Hard disk management includes formatting hard disk, recovery errors and attributes (read-write disk / read-only disk, redundant disk) settings.

**Note:** If the device is working properly, at least one of the installed hard disk is set to read-write disk.

**Read and write disk:** can read data, but also write data;

**Read-only disk:** the device can only read the hard disk data, can not write data;

**Redundant Disk:** In the case of the existing read and write disk, you can double-backup the recording file with the read-write disk.

### 6.2 Recording Setting

Video settings include the length of the video, pre-recorded time, time, video mode settings. You can find the interface of the function setting in the following ways: [Main Menu] → [Record] → [Record]. The interface is shown as below:

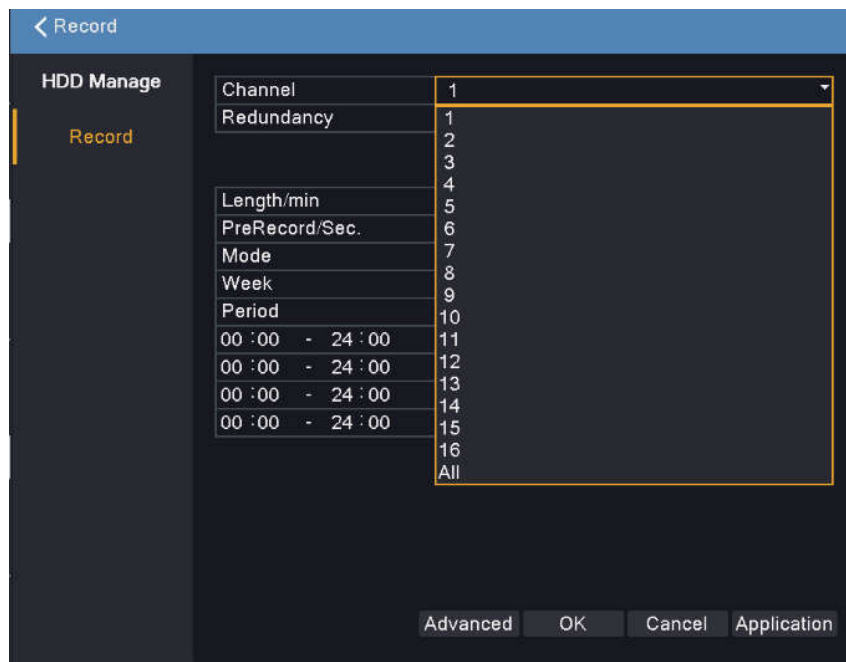
Channel	1																				
Redundancy	<input type="checkbox"/>																				
Length/min	60																				
PreRecord/Sec.	5																				
Mode	<input checked="" type="radio"/> Schedule <input type="radio"/> Manual <input type="radio"/> Stop																				
Week	Tue																				
Period	<table border="1"><thead><tr><th></th><th>Regular</th><th>Detect</th><th>Alarm</th></tr></thead><tbody><tr><td>00 :00 - 24 :00</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td>00 :00 - 24 :00</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>00 :00 - 24 :00</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>00 :00 - 24 :00</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></tbody></table>		Regular	Detect	Alarm	00 :00 - 24 :00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	00 :00 - 24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00 :00 - 24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00 :00 - 24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Regular	Detect	Alarm																		
00 :00 - 24 :00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
00 :00 - 24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																		
00 :00 - 24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																		
00 :00 - 24 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																		

#### 6.2.1 Select Channel

Two ways:

1. Click drop-down button, choose channel, if choose "all", it will set all channel unified.

2. Put mouse cursor on channel number, scroll mouse wheel to find channel to set.



### 6.2.2 Redundancy

Redundancy function is to keep record file double backup. It needs two hard disk to record, one is used as read/write disk, the other is used as redundancy disk.

### 6.2.3 Length

Each record file time length is defaulted 60 minutes. (no alarm record produced)

### 6.2.4 Prerecord

Prerecording means detect /alarm record start at the pre-recorded time before alarm signal occurs.

### 6.2.5 record mode

Recording mode includes: manual, stop, schedule.

**[Manual]** Manual record all the time no matter what status the channel is

**[Stop]** No record no matter what status the channel is.

**[Schedule]** If choose this type, need to set record types and time periods.

**Record type:** There are three types of record: standard, detect, alarm

**[Standard]** Record file format is "R". It records by regular type when no special situation occurs in the time you set.

**[Detect]** Record file format is "M". When one of the three signals triggered in the time period you set, which are "motion detect", "video blind" and "video loss", it will record by detect type.

[**Alarm**] Record file format is “A”. When “alarm input “signal triggered in the time period you set, it will record by alarm type.

**Time period:** Set the recording time period, will not start the recording within the set time range.

Set the parameters on week and period. There are four time period which can be continuous or discontinuous or repeated. Three record types are behind each time period to choose.

**For example :** As picture shown below (Tuesday), the record plan is as below:

00:00–03:00    Record all the time from 0 o'clock to 3 o'clock, and the record file format is “R”.

03:00–08:00    Record only motion detected, and the record file is “M”.

08:00–09:00    Stop recording.

09:00–11:00    If motion detected and enable linkage record, then start recording, and the record file format is “M”. If there is an I/O alarm and enable linkage record, then start recording, and the record file format is “A”.

The screenshot shows the 'Record' configuration window. On the left, there is a sidebar with 'HDD Manage' and 'Record' (highlighted in orange). The main area contains the following settings:

- Channel: 1 (dropdown)
- Redundancy: ☐
- Length/min: 60
- PreRecord/Sec.: 5
- Mode: ☒ Schedule ☐ Manual ☐ Stop
- Week: Tue (dropdown)
- Period: Regular Detect Alarm

Period	Regular	Detect	Alarm
00 :00 - 03 :00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
03 :00 - 08 :00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
08 :00 - 09 :00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
09 :00 - 11 :00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

At the bottom, there are buttons: Advanced, OK, Cancel, and Application.

## 7. Playback

Video playback, including slice playback, split channel playback, tag playback and other operations.

There are two ways to open video playback:

The first: right-click in the preview interface, pop-up menu, select the menu

【PlayBack】；

The second: Click right button of mouse → [Main Menu] → [PlayBack].

## 7.1 Playback main interface

Video playback main interface as shown below:

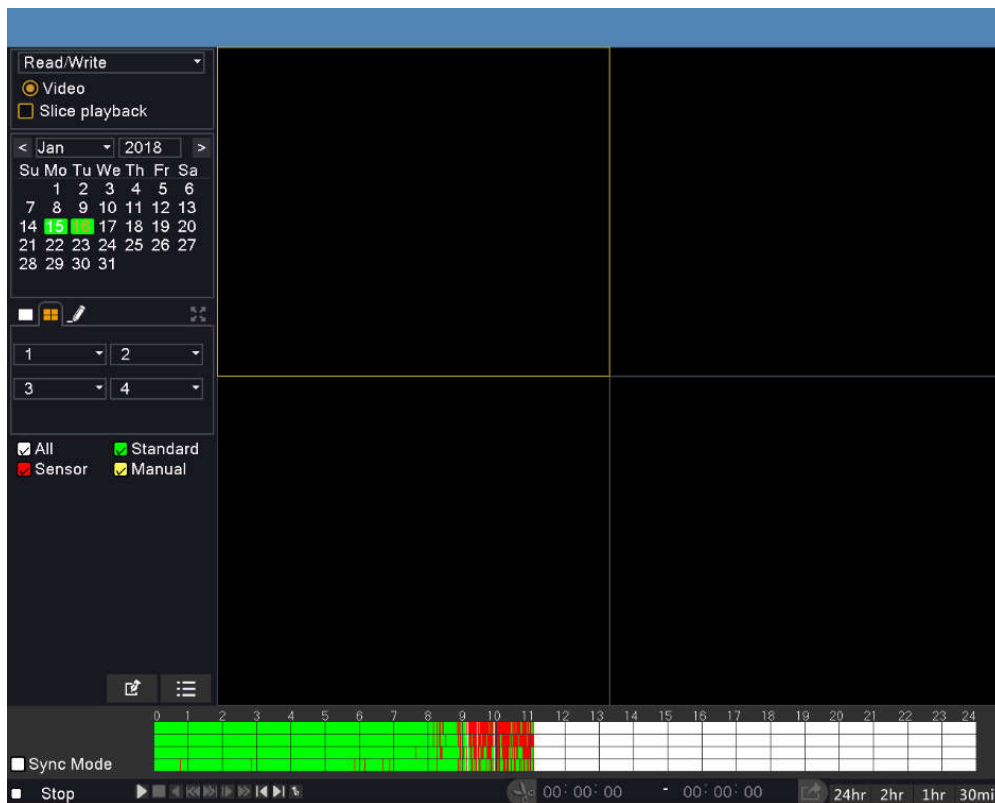













Figure 7.1.1 playback

- ❖ The corresponding functions of the function keys which below the playback area are shown in the following table:




Icon	Key function
	play
	recording playback
	stop playback
	slow play
	fast play

	The previous day when not playing back; Last file when playing back
	The next day when not playing back; the next file when playing back
	previous frame
	next frame
	Add tags
	Video clip


When playback record, you can take the above operation except “previous frame” and “next frame”.

When pause playback, the operation on “previous frame” or “next frame” works.



#### ❖ Video clip function

Click the video clip icon , the first click to set the start time, click the progress bar to select the end time point, click the video clip button again,  as shown in the left time frame, click the backup button , the pop-up display has 09:57:40-09:57:42 time period of the video file backup interface. Can be inserted into the U disk to the video clip backup to U disk.

#### ❖ Add tags

When playing back the video, left-click the progress bar to select the time point, click the Add Tag button , input the tag name in the pop-up dialog box and click OK to successfully add the tag. The tag file can enter the tag list interface for viewing.

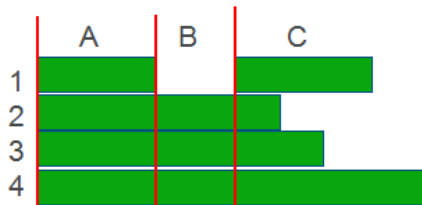
#### ❖ Backup

In addition to video clip backup, but also for each video file backup. Select the channel number, enter the video file list interface, click the search button , select the check box in front of each video file, and then click the backup button  to enter the video backup interface, then click the “Backup” button to backup success. (Use the backup function, you must insert U disk device)

### ❖ Synchronous playback



Before multi-channel playback, choose the synchronization mode in the lower left corner, and then start playback, you can achieve multi-channel synchronous playback.

Principle: The selected channel-based, the remaining channels are synchronized to the main channel for playback



The above picture shows the playback time progress bar. Since channel 1 is the focus channel, there is no video record in section B of channel 1. Therefore, channels 2, 3 and 4 also skip section B during the synchronous playback, and section A directly enters into section C to playback.

### ❖ Video search

Select the date, channel, video file type, click on the button  to jump to the playback file list, set the start time in the upper left corner, click  search, as shown below:

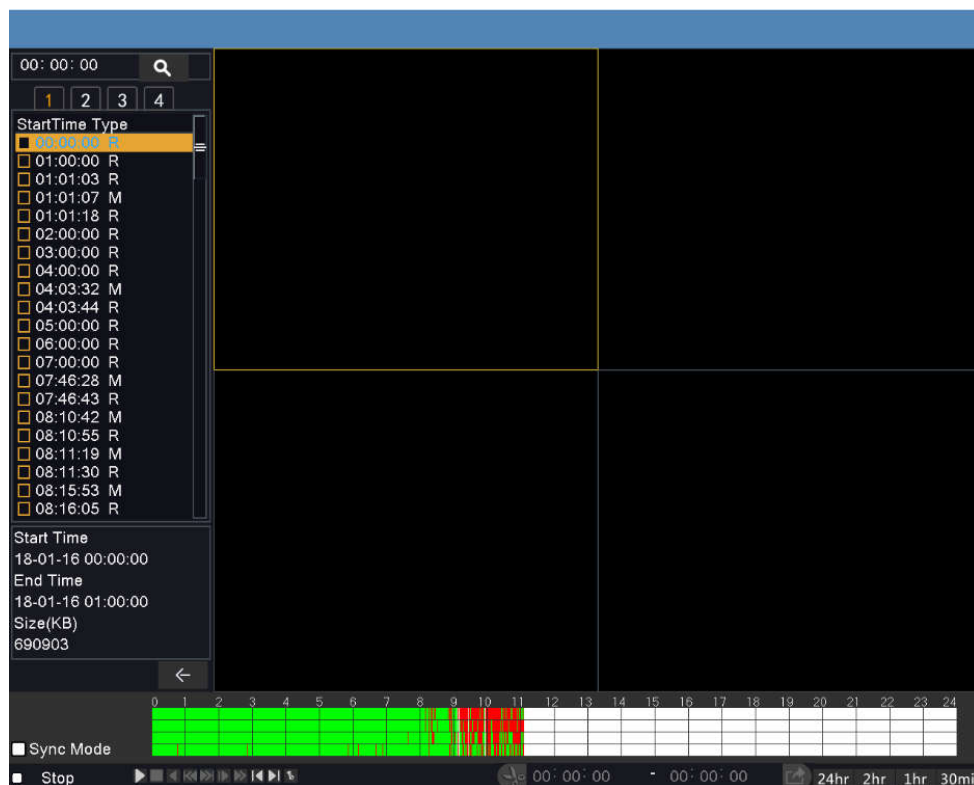


Figure 7.1.2 Video file list

If there are record, it will appear in the list on the left of the interface. It would show mostly 128 files at the same time. You can double-click the file in the file list or click the start playback button to playback the video.

## 7.2 Slice playback

In the upper left corner of the playback main interface, select the slice playback. The slice playback is mainly for segment playback of each video file in the single channel. In the slice playback mode, you can choose single-screen playback or four-screen playback. As shown below:

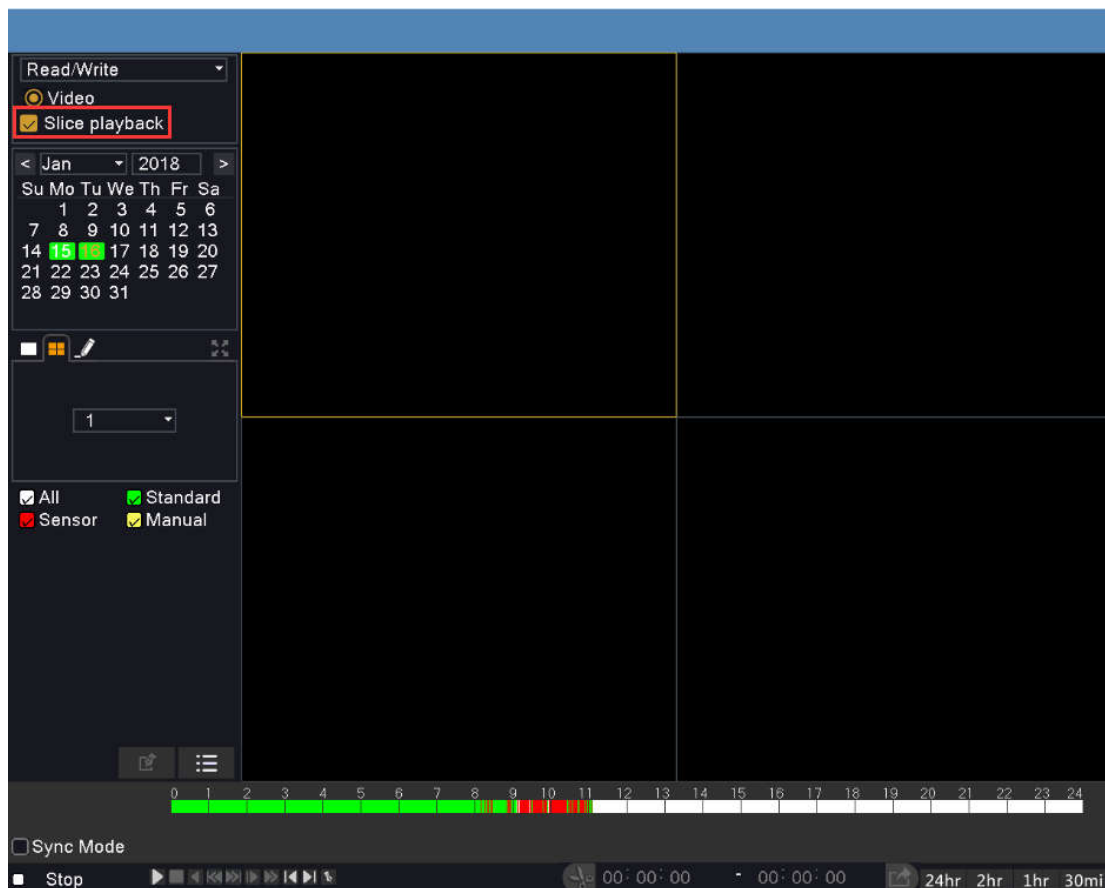


Figure 7.2 Slice playback

After selecting the channel number, you can click the start playback button or switch to the video file list interface, double-click the video file in the file list to slice back.

Four-screen slice playback principle is as follows:

1) A period of 6 minutes of video automatically generate a slice;

2)  $\text{minutes} \leq \text{video file} < 24 \text{ minutes}$ , the remainder of the algorithm can not form a slice within 6 minutes, for example: 20 (minutes) = 6 + 6 + 6 + 2, so channel one or


two video recording for 6 minutes , Channel three video for 8 minutes;

3) video file  $\geq 24$  minutes, the average number of slices corresponding channel.

For example, 26 (minutes)  $\div$  4 (channel) = 6.5, that is, all four channels of video recording are 6.5 minutes.

Slice playback helps users quickly play back a video file.

## 7.3 Split channel playback

Click on the button , split playback channel to choose the number of channels for playback, you do not need to choose the "slice playback." In the red box four check boxes are free to choose the channel number, you can repeatedly select the same channel, all select "1" that four channels are played back channel 1 of the video. As shown below:

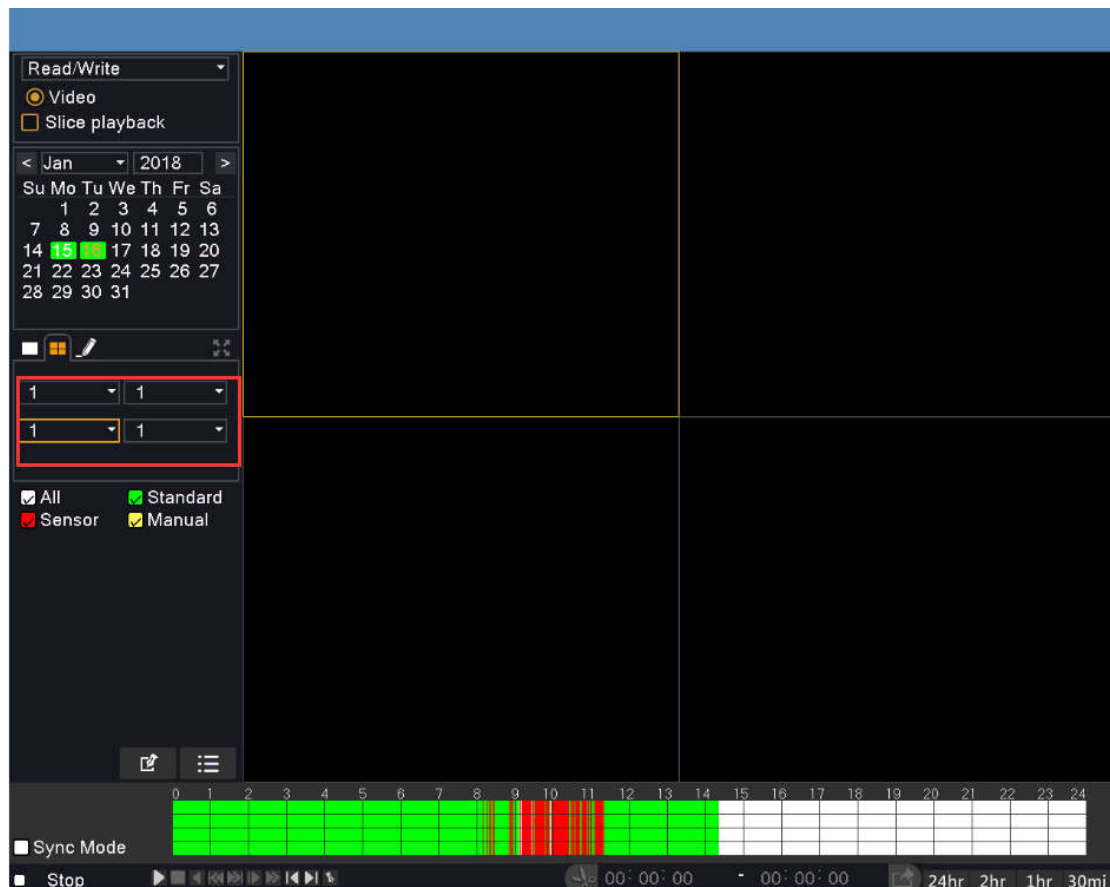



Figure 7.3 Split playback

## 7.4 Tag playback

Click on the button  to enter the tag playback interface, double-click

the file in the label list to play. As shown below:

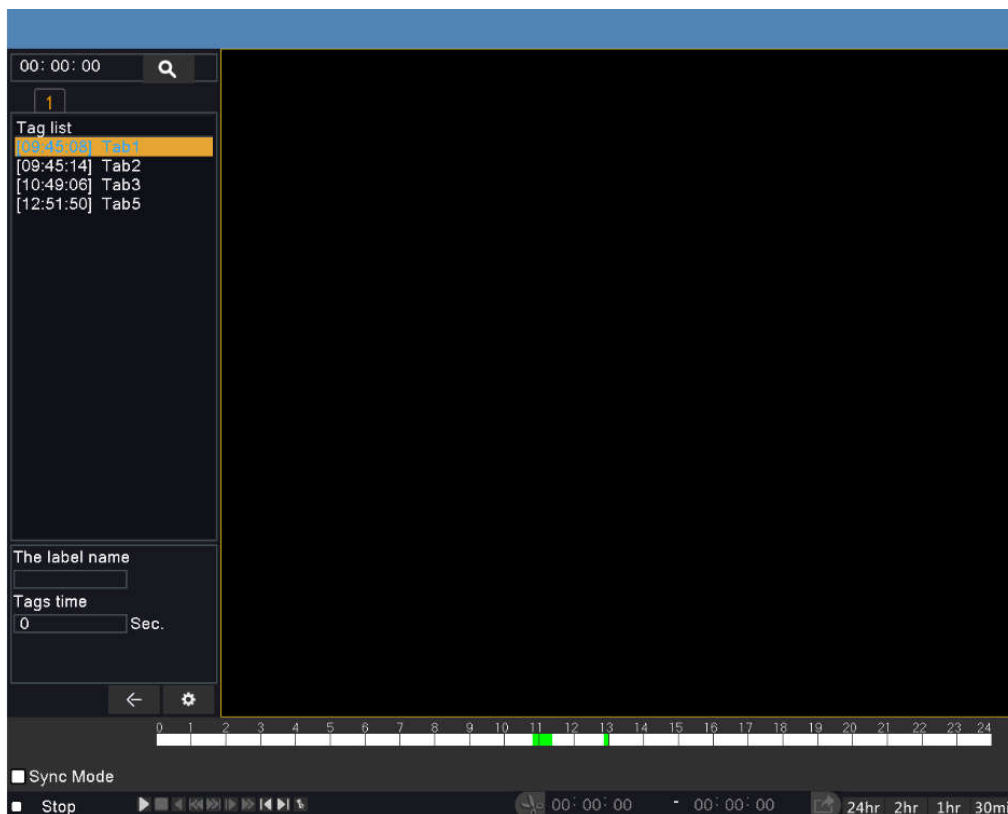



Figure 7.4.1 Tags playback

**The label name:** In the text box below the label name, enter the name of the tag to be queried. The tag list will display the tag file that matches the entered tag name.

**Tags time:** Enter the tags time to play the tags file in the corresponding text box below the tags time. The playback start time is the sum of the label file start time plus the tags time. Such as, the tag file start time is 09:45:08, label time input 3 (seconds), click play, the start time becomes 09:45:11.

**Tag Management:** Click the tag management icon  to enter the management tag interface, you can search, edit and delete label files, as shown below:

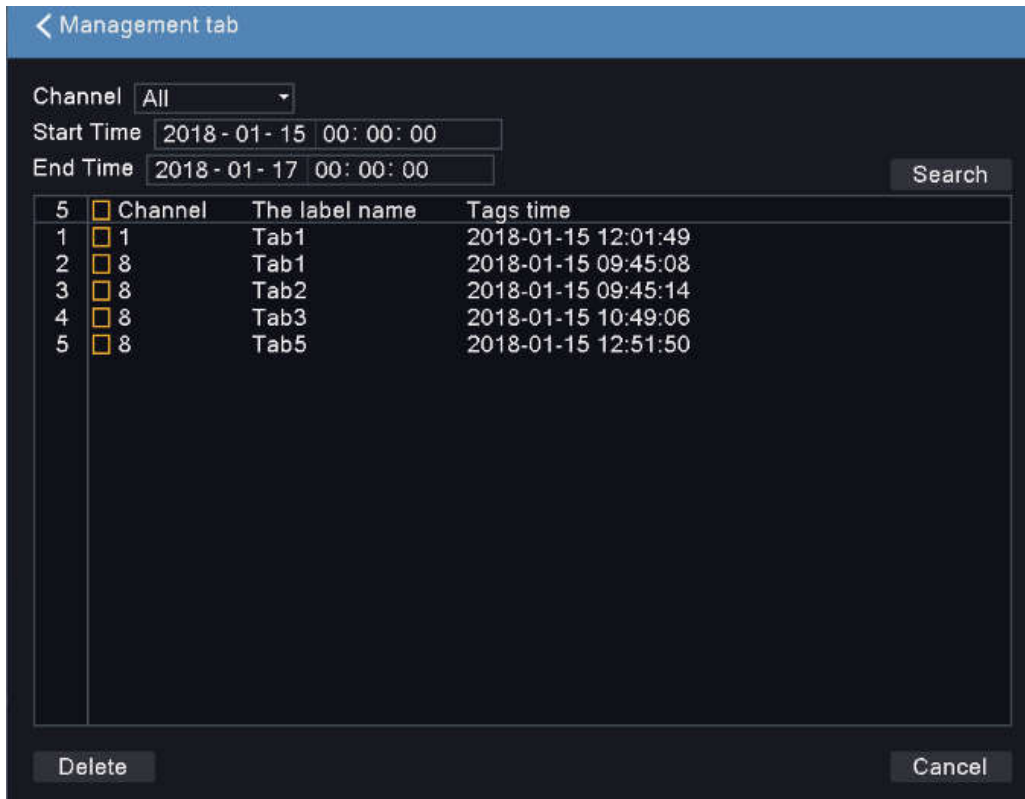


Figure 7.4.2 Tags management

**Search label files:** Select channel, you can select a single channel or all channels, set the query time period, click the "Search" button. The eligible label file will be displayed in the table below.

**Delete label files:** Choose the box in front of the label file, click the "delete" button, then click OK.

**Edit labels:** Single-channel search, double-click the label file, pop-up editing tab window, you can edit the label's name.

## 8. Network

### 8.1 Network setting

Enter [Main Menu]>[Network]

**【IP address】** : Set the IP address. Default: 192.168.1.18

**【Subnet Mask】** : Set the subnet mask code. Default 255.255.255.0

**【default gateway】** : Set the default gateway. Default 192.168.1.1

The screenshot shows a 'Network' configuration window. On the left is a sidebar with menu items: Network (highlighted), DDNS, UPNP, EMAIL, Cloud, Wifi, Wireless Config, E-Video, and Net Service. The main area contains the following settings:

Net Card	Wire Netcard
DHCP Enable	<input type="checkbox"/>
IP Address	192 . 168 . 90 . 130
Subnet Mask	255 . 255 . 255 . 0
Gateway	192 . 168 . 90 . 1
Primary DNS	8 . 8 . 8 . 8
Secondary DNS	114 . 114 . 114 . 114

Below these is a 'Network Testing' section:

TCP Port	8200
HTTP Port	80
Aux Port	34567
Mobile Port	34600
MTU	1500
HS Download	<input type="checkbox"/>
Transfer Policy	Quality Preferred

At the bottom right are three buttons: OK, Cancel, and Application.

Make the equipment's IP address and the router at the same network segment. if the router IP address is 192.168.1.1, and the subnet mask is 255.255.255.0. It works by default network setting. generally the default gateway is the router IP address.

## 8.2 DDNS

Resolve the server address by dynamic domain name. Select the DDNS type.

**Native Domain Name:** The domain name registered at the service provider that provides the domain name resolution;

**User Name:** the account provided in the domain name resolution service providers registered;

**Password:** in the provision of domain name registration service provider to register the password;

When the DDNS is successfully configured and enabled, you can directly enter the domain name in the IE address bar to access the device, access format: http: // domain name: HTTP port.

**Note:** The correct DNS settings need to be set in the network settings, use the domain name to log in, to enter the correct HTTP port.

## 8.3 UPNP

UPNP implements automatic port forwarding on the router. When this function is enabled, make sure that the UPNP function is enabled on the router.

**【Enable】** : Turn on the UPNP function, select the enable, the setting can be

effective;

**【HTTP】** : The port number that the router assigns automatically for this device, when IE browsing, need to add the port number to carry on the visit;

**【TCP】** : The port number that the router assigns automatically to the device. When the client software monitors, it needs to pass the port number.

## 8.4 Email

Email function is mainly to the alarm in the form of e-mail messages clearly available to the user. Open: **【Main Menu】** → **【Network】** → **【EMAIL】**, the interface is as follows:

Network	
Enable	<input type="checkbox"/>
SMTP Server	* smtp.gmail.com
Port	465
Need SSL	<input type="checkbox"/>
User Name	
Password	
Sender	
Receiver	
Title	Alarm Message

Mail Testing OK Cancel Apply

Email function is enabled, the back box is yellow to open, otherwise it is off.

**SMTP server:** mail server address, can be the IP address and domain name (if the domain name is required to confirm the correct DNS settings, the domain name can be correctly resolved);

**Port:** Mail server port number;

**SSL:** whether the server requires the use of Secure Sockets Layer protocol layer (Secure Socket Layer) login;

**Sender:** Set the email address of the sender;

**Receiver:** Set the e-mail recipient's e-mail address. When an alarm is generated, it will be e-mailed to the recipients. Up to 3 recipients can be set.

**Title:** the subject of the message, can be set;

In order to confirm the Email configuration is correct, whether to successfully send mail, you can click on the interface below the "Mail Testing" button, there will be the corresponding prompt message.

## 8.5 WIFI

Through the wireless module to connect to the wireless router. Access to the device through the IP, the use of the premise that the device has access wifi module.

**【Search】** : Click **【Search】** to search out the available wireless devices in the current range;

**【Enable】** : Enable to set.

**【DHCP】** : When you select Enable, the device will automatically obtain the IP address of wifi.

**【SSID】** : wireless LAN name, automatically match the wireless device you are connected;

**【Password】** : the wireless network router password;

**【IP Address】** : Set the IP address of the device, default: 192.168.1.12

**【Subnet Mask】** : set the subnet mask of the device, default: 255.255.255.0

**【Default Gateway】** : Set the default gateway of the device, default: 192.168.1.1;

## 8.6 Wireless Config

Through the 3G network card for dial-up Internet access, client access to equipment, the equipment configuration.

**【Enable】** : Enable, the setting is valid.

**【Type】** : dial type

**【Wireless AP】** : 3G access point

**【Dial number】** : 3G dialing number

**【User Name】** : Dial the 3G user name

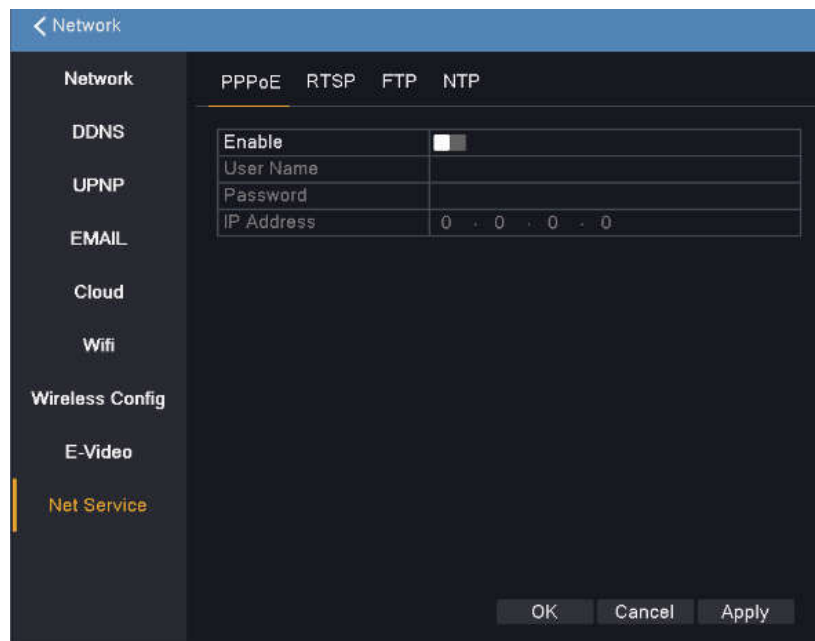
**【Password】** : the password of the dial-up user

**【IP Address】** : IP address number obtained by dialing

## 8.7 Net Service

### 8.7.1 PPPOE

Configure the advanced network function, select the network service item for parameter configuration.



The screenshot shows a web-based configuration interface for network services. On the left is a sidebar menu with options: Network, DDNS, UPNP, EMAIL, Cloud, Wifi, Wireless Config, E-Video, and Net Service (which is highlighted with an orange bar). The main area is titled 'Network' and contains tabs for PPPoE, RTSP, FTP, and NTP. The PPPoE tab is selected. It features an 'Enable' toggle switch, which is currently turned on. Below the toggle are three input fields: 'User Name', 'Password', and 'IP Address'. The 'IP Address' field contains the value '0 . 0 . 0 . 0'. At the bottom right of the main area are three buttons: 'OK', 'Cancel', and 'Apply'.

Figure 8.7.1 Network services

#### 【PPPOE Setting】

**Enable:** Enabled, the setting is enabled.

Enter the PPPOE user name and password provided by the ISP (Internet Service Provider), and then restart the system after saving. After the boot, the DVR will automatically establish the network connection with PPPOE. After successful, the IP address will be automatically modified to obtain the dynamic IP address of the WAN.

**Operation:** After the PPPOE dial-up is successful, check the IP address on the [IP address] to obtain the current IP address of the device, and then use the IP address to access the device through the client.

### 8.7.2 RTSP

The video of the device is monitored through the browser (Apple browser, Firefox browser, Google Chrome) and VLC software. This function can only monitor video uncontrollable devices.

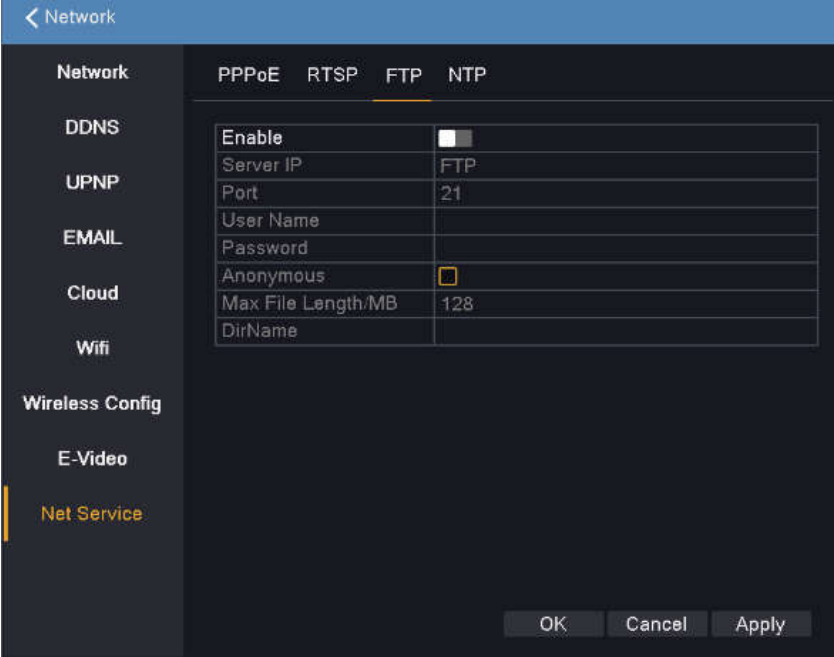
**【Enable】** : Enable to set.

**【Port】** : The default port of the device is 554;

### 8.7.3 FTP

FTP can be used to upload specific video files to specified FTP server when alarm occurs or alarm linkage recording.

**Access Path:** [Main Menu] → [Network ] → [Net Service]→ [FTP], the interface is as follows:



The screenshot shows a network configuration interface with a sidebar on the left and a main settings area on the right. The sidebar includes options like Network, DDNS, UPNP, EMAIL, Cloud, Wifi, Wireless Config, E-Video, and Net Service (which is highlighted). The main area has tabs for PPPoE, RTSP, FTP, and NTP, with FTP selected. Below the tabs is a table of settings.

FTP	
Enable	<input type="checkbox"/>
Server IP	FTP
Port	21
User Name	
Password	
Anonymous	<input type="checkbox"/>
Max File Length/MB	128
DirName	

At the bottom right of the main area are buttons for OK, Cancel, and Apply.

Figure 8.7.3 FTP Settings

FTP function is highlighted when the white box is enabled, check to enable the FTP settings, otherwise it is turned off.

**Server IP:** corresponding to the IP address of the FTP server;

**Port:** Domain port number when FTP is set up, default port 21;

**User Name:** User name with the right to log in to the FTP server.

**Password:** the user's password;

**Anonymous:** If you select anonymous, you can not set the user name and password;

**Maximum file length:** the maximum length of each package upload file, the default is 128M;

**Remote directory:** the file directory of the uploaded file;

**Note:** Make sure that the user you are using has permission to create the file on the server.

#### 8.7.4 NTP

**Server IP:** Enter the address where the NTP Server PC is installed;

**Port:** the default NTP port is 123, according to the actual NTP server port settings;

**Time zone:** select the corresponding time zone;

**Update interval:** The interval between the NTP server and the NTP server. The default is 10 minutes.

### 9. Camera

Channel management mainly includes channel status and channel type, mixed mode and pure digital mode and remote device page

#### 9.1 Channel status

Open path: [Main Menu] → [Camera] → [Channel Status].

Channel Status You can view the supported maximum resolution, current resolution, frame rate, and current connection status for each channel.

#### 9.2 Channel Type

Open the way: The first: Right-click in the preview interface, pop-up menu, select the menu “Channel Type”; second: 【Main Menu】 → 【Camera】 → 【Channel Type】 .

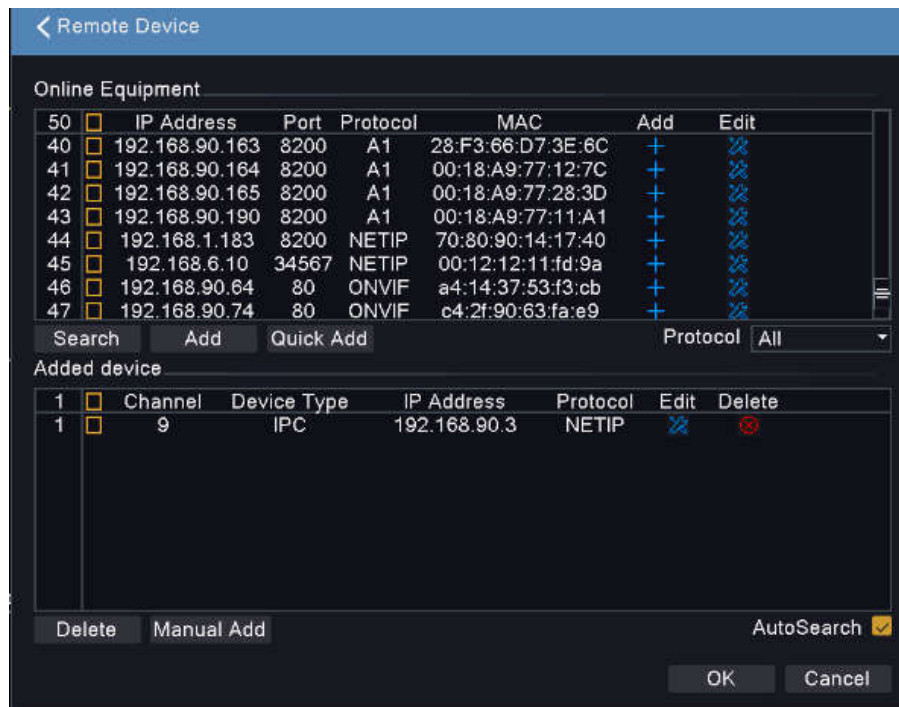
The Channel Mode page shows several channel modes that can be switched by the device. Different types of equipment have different channel modes. Users can switch channel modes according to their own needs.

#### 9.3 Remote Device

Remote devices can be divided into two parts: network-connected devices and added devices. Open the way:

The first way: Right-click in the preview interface, pop-up menu, select the menu 【Remote Device】 ;


The second way: 【Main Menu】 → 【Camera】 → 【Remote Device】 .



**Online Equipment:** Displays the IP address of the online device (IPC) in the same network.


**Search:** Click this button to search the online IPC in the LAN.

**Add:** Click the IPC to be added and click it to add.

You can also click the Add icon after the online IPC  to add, or double-click the IPC to add online.

**Quick Add:** Click this button to add IPC (A1 protocol priority) to all the empty channels.

**Protocol:** Select the protocol to access IPC, the common protocol is ONVIF protocol;

**Modify IP:** Click the edit button  on the back of IPC in the area of "Online Equipment", a dialogue box will pop up to modify the IP of IPC.

**Added device:** The area mainly shows the remote device that has been added;

**Delete:** Click the added IPC, click it to delete, or click the delete button  to delete.

**Manual Add:** Add the front-end IPC, manually add the interface selection protocol, enter the IPC address, port, user name and password;

You can according to their actual needs can be selectively added and no purpose of [Quick Add] equipment.

**Auto Search:** When this box is checked, the device sends the broadcast packet in the network;

❖ Remote Configuration IPC:

< Remote access configuration

Channel	9
Time synchronization	<input checked="" type="checkbox"/>
Protocol	NETIP
Device Type	IPC
Stream	Main Stream
Remote access	1
Device address	192.168.90.3
Port	8005
Username	admin
Password	

	Type	Set
1	Device information	
2	System time	
3	Remote reboot	
4	Restore default	
5	Video encode	
6	Color settings	
7	Machine Name	

Delete Binding

OK

Cancel

Figure 9.3 Channel Configuration

Select the IPC double-click in the added device box, or click the Edit button after the IPC to display the remote access configuration interface.

**Protocol:** You can modify the protocol that adds IPC, This protocol has a more RTSP protocol than the remote device interface protocol, The RTSP protocol is set as shown in Figure 9.4. RTSP protocol format: rtsp: / /IP address / 11 (the latter 11 only for Anni production of IPC).

< Remote access configuration

Channel	3
Protocol	RTSP

Device address	rtsp://192.168.90.10/11
Device address2	rtsp://192.168.90.10/12
Username	admin
Password	●●●●●

Delete Binding

OK

Cancel

**Time Synchronization:** Synchronize the IPC time with the local NVR time

**User name:** Login to the IPC user name

**Password:** Password for logging into IPC

**Delete Binding:** Delete the added IPC

#### ❖ **List of remote operations**

**Device Information:** Double-click or click the Edit icon to view the basic IPC information

**System Time:** The time to modify the front IPC

**Remote Reboot:** Restart the front-end IPC



**Restore Default:** Restore the front-end IPC default configuration

**Video Encode :** Configure the front-end IPC video parameters, such as resolution, frame rate, code stream value, picture quality and so on.

**Color Setting:** Adjusts the Brightness, Contrast and Saturation of the front IPC image.

**Device Name:** Modify the channel name of the front IPC.

**Note:** Modify the channel name of AHD / XVR in the main menu -> Video -> GUI Display interface to modify.

**Shortcut:** Click the icon  to add the remote device. Click the icon  to configure the IPC remotely.

**Note:** When the screen is multi-screen, it shows the resolution of the sub-stream. When the screen is single screen, it shows the resolution of the main stream.

**Note:** When the current resolution of a channel exceeds the maximum resolution, the channel preview screen will be displayed in red "X".

**Added Device:** The area shows the IP address of the remote device (IPC) that has been added.

You can according to their actual needs for selective add and no purpose **【Quick Add】** add a device and delete the equipment has been added;

## **10. Alarm function**

Alarm features include: motion detection, video blind, video loss, alarm input, alarm output and exception handling.

## 10.1 Motion detect

Digital Channels Before motion detection is enabled, make sure that the front IPC motion detection alarm is on, and then make the following settings.

**Access Path:** Main Menu → Sensor → Motion Detect.

### 10.1.1 Motion detection Setting

Choose the channel you want to open alarm, click “Enable”.

Channel	1
Enable	<input type="checkbox"/>
Sensitivity	Middle
Region	Set
Period	Set
Interval/Sec.	1
Delay/Sec.	10
Alarm Output	1
Record delay/Sec.	10
Record Channel	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Tour	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PTZ Activation	Set
Other Setting	<input type="checkbox"/> Show Message <input type="checkbox"/> Send Email <input type="checkbox"/> Buzzer <input type="checkbox"/> FTP upload

Advanced OK Cancel Application

### 10.1.2 Period setup

Click [Period], pop-up interface as pic shown below (the default is 24 hours of testing, recommended to default, not modified).

At first, choose the date you want to set in the drop-down box , then setup the time period of this date. You can set up four times at most, this four time periods can be continuous, intermittent, overlapping. It is valid when time period in front of the box is "yellow", otherwise it is invalid.

This is the "channel" as an example of a week removal time period setup.

**Remark:** The time period should be correspond the time period Gantt chart display, click the [OK], save and up window. Click [Cancel], would cancel the setup this time, then up window.

### 10.1.3 Time interval

In the interval of time setup (default 1 second), multiple motion detection only trigger an alarm signal.

### 10.1.4 Linkage setup

Linkage setup is to make reactions when alarm occurs.

### 10.1.5 Alarm output

When moving detection, set up corresponding linkage alarm output port of the external equipment (such as alarm), external alarm to produce the corresponding reaction equipment, after alarm output port should choose, some equipment is one of the output ports, some are two, please note which one you want to choose. When the color turn to yellow, it is be selected, otherwise it is not selected.

The [Delay] which behind of [Alarm output] is the continuous time of the alarm output after alarm triggered. the default time is 10s. Users can accord their own demands to set.

### 10.1.6 Record channel

The recording channel function is when motion detective in the channel. it will begin to motion detective in the channel which is selected, and then package into a file type which type model is "M". The choosing of recording channel could be one to one, also can be one to many. Channel corresponding box be yellow is be selected, otherwise it is not selected, below picture is the channel setup, channel 1(one to one), channel 1(one to many).Generally suggest user choose one to one type.

**[One to one]** When generate an alarm in this channel, only linkage this channel to recording. For example, picture, when channel 1 generate an alarm, corresponding channel will generate linkage recording, and packaged a M recording profile.

Channel	1
Enable	<input checked="" type="checkbox"/>
Sensitivity	Middle
Region	Set
Period	Set
Interval/Sec.	1
Delay/Sec.	10
Alarm Output	1
Record delay/Sec.	10
Record Channel	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Tour	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PTZ Activation	Set
Other Setting	<input type="checkbox"/> Show Message <input type="checkbox"/> Send Email <input type="checkbox"/> Buzzer <input type="checkbox"/> FTP upload

Advanced OK Cancel Application

**[One to many]** When generate an alarm in this channel, linkage the channel you choose to recording, see below picture, when channel 1 generate an alarm, linkage the channel(2,3,4,...,15,16) to recording , packaged a M type recording profile.

Channel	1
Enable	<input checked="" type="checkbox"/>
Sensitivity	Middle
Region	Set
Period	Set
Interval/Sec.	1
Delay/Sec.	10
Alarm Output	1
Record delay/Sec.	10
Record Channel	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Tour	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PTZ Activation	Set
Other Setting	<input type="checkbox"/> Show Message <input type="checkbox"/> Send Email <input type="checkbox"/> Buzzer <input type="checkbox"/> FTP upload

Advanced OK Cancel Application

**[Delay]** when alarm signal triggered, the record last for the delay time. Range: 10.–300 second.

After completing the recording channel setup, it still depends on the record setting.

Enter [main menu] -> [Record] -> [Record].

Record

HDD Manage

Record

Channel

1

Redundancy

☐

Length/min

60

PreRecord/Sec.

5

Mode

☒ Schedule
☐ Manual
☐ Stop

Week

Tue

Period

RegularDetectAlarm

00 :00 - 24 :00

☒

☒

☒

00 :00 - 24 :00

☐

☐

☐

00 :00 - 24 :00

☐

☐

☐

00 :00 - 24 :00

☐

☐

☐

Advanced

OK

Cancel

Application

If you want to record motion detection image, you need to set the time period corresponding to the channel, so that the "disarm period" in the "recording setting period", generally select "00:00 - 24:00" button and here [Motion] the box below to select, after saving setup. For more information, see chapter "Record Setting".

### 10.1.7 Tour

When alarm signal triggered, it will tour channel by channel.

Alarm

Motion Detect

Video Blind

Video Loss

Alarm Input

Alarm Output

Abnormality

Channel

1

Enable

☒

Sensitivity

Middle

Region

Set

Period

Set

Interval/Sec.

1

Delay/Sec.

10

Alarm Output

1

Record delay/Sec.

10

Record Channel

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Tour

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

PTZ Activation

Set

Other Setting

☐ Show Message
☐ Send Email
☐ Buzzer
☐ FTP upload

Advanced

OK

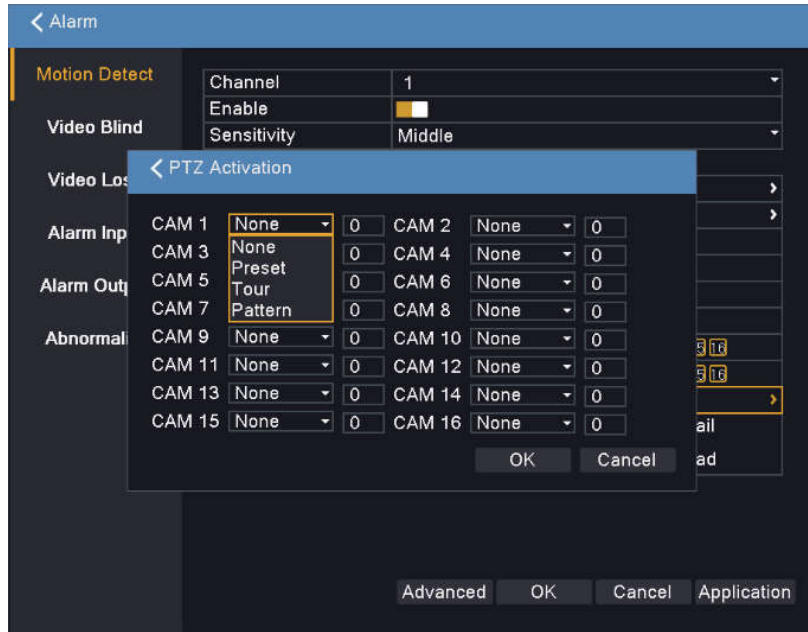
Cancel

Application

### 10.1.8 PTZ Activation

When alarm signal triggered, the PTZ react.

Click [PTZ Activation] , pop-up settings interface is as follows:



**Remark:** Linkage PTZ function, set the parameter in “PTZ activation” interface. On the pop-up interface, user can set preset, tour and pattern.

### 10.1.9 Send EMAIL

The box in the white show in yellow. When alarm signal triggered, sending email at the same time

**Remark:** For Email linkage, request to do settings under [Network]>[EMAIL].

### 10.1.10 Show Message

Alarm status prompt will be shown on screen when alarm triggered.

### 10.1.11 Buzzer

When alarm triggered, it will beep. (The box next to “Buzzer” is yellow color after enabled successfully, otherwise, it has not been enabled. )

### 10.1.12 FTP Upload

[FTP upload] before the box is displayed as "yellow" for the selected, otherwise not selected.

When an alarm signal is generated, the local device uploads the recorded alarm file to the corresponding FTP server.

## 10. 2 Video Blind

Check to enable the video masking alarm. When the video image acquired by the device is affected by the outside world, the light is dark to set the sensitivity parameter, which triggers the video masking alarm and starts the linkage function.

**Access Path:** Main Menu → Sensor → Video Blind.  
Setting method: Refer to chapter "10.1 Motion Detect".

## 10. 3 Video Loss

Check to enable the video masking alarm. When the device can not acquire the channel video signal, it triggers the video loss alarm and starts the linkage function.

**Access Path:** Main Menu → Sensor → Video Loss;  
Setting method: Refer to chapter "10.1 Motion Detect".

## 10. 4 Alarm Input

When the device access to the external alarm device connected to the alarm signal, that is set to start the alarm function.

**Access Path:** Main Menu → Sensor → Alarm Input;  
Setting method: Refer to chapter "10.1 Motion Detect".

## 10. 5 Abnormality

Analysis of the current equipment to detect some of the hardware and software, when an abnormal event is detected, the device to respond accordingly, for example, the screen prompts, buzzing and so on.

**Access Path:** Main Menu → Sensor → Abnormality.

# 11. System

## 11.1 General settings

General settings include the system time, date format, time format, hard disk full time processing, video format adjustment and language settings.

## 11.2 Account

Manage user rights for this machine.

**Note:** 1. The following user name and user group name, etc., the composition of the characters and the length of up to 8 bytes, the string of the first and last space is invalid, the middle can have spaces. Legal characters: letters, numbers, underscores,

minus signs, dots, other characters are not allowed;

2. Users and groups of unlimited number of user groups according to user-defined increase or delete groups: factory settings include user \ admin two levels, the user can set their own group, the group of users in the group permissions to any function Authority;

3. User management in group and user level, group name and user name can not be repeated, each user must belong to a group, a user can only belong to a group.

**Interface as follows:**

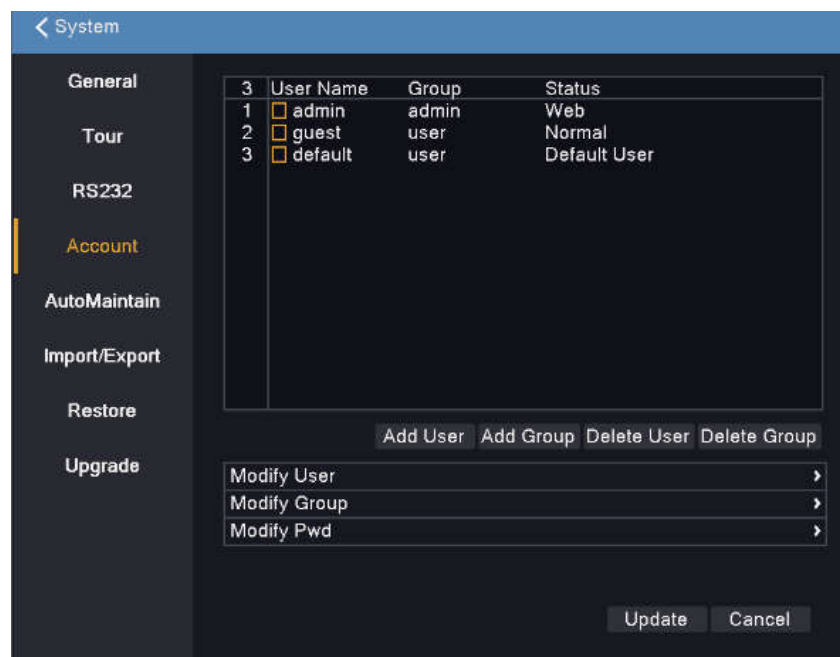


Figure 11.2 User Management

**【Modify User】** Modify the attributes of the existing user.

**【Modify Group】** Modify the attributes of an existing group.

**【Modify password】** Modify the password of the user account, the password can be set from 1 to 6, the password is invalid, the space between the end and the end can be blank.

**Note:** Users who have the User Account Control privilege can modify their own passwords in addition to their own passwords.

**【Add User】** Add the users in the group, and set the user's functional rights. Enter the user interface, enter the user name and password, select which group belong to, and choose whether to reuse this user. Multiplexing means that the account can be used by multiple clients at the same time.

Once you select a group, the user's permissions can only be a subset of the group, can not exceed the group's permissions attribute.

To facilitate user management, it is recommended that users in the definition of ordinary users than the lower power users.

**【Add Group】** Add a new user group, and set the functional permissions of the group. Including close the device, real-time monitoring, playback, video settings, video file backup.

**【Delete User】** Delete an existing user. Select the user you want to delete, click the Delete User button;

**【Delete Group】** Delete the existing group (there is no user in this group). Click the Delete Group button, select the group you want to delete, and click the Delete button.

### 11.3 Auto Maintain

Auto Maintenance Mainly set the device to automatically restart at the specified time. You can select "Never", "Everyday", "Every Sunday", "Every Monday", "Every Tuesday", "Every Wednesday", "Every Thursday" "Every Friday", "every Saturday", restart time in hours, divided into "0-24" hours;

Automatically delete files with "Never" and "Custom" options. "Never" is not always delete the video file; "Custom" to delete the existing day of the video file, in the "1-255" between the optional.

### 11.4 Restore

Restore Defaults You can change the [General], [Encode], [Record], [Alarm Set], [Network], [Network Service], [Output Settings], [Account], [RS232] to factory default. The user can choose according to their own needs to restore the default.

### 11.5 Upgrade

System upgrade in two ways: network upgrade and U disk upgrade.


**Network upgrade:** the software on the PC, enter the IP address of the device through the WEB login, enter the [Devicecfg] → [Advanced] → [Upgrade], select the software to open the upgrade, click [upgrade] You can, upgrade the device will automatically restart after successful;

**U disk upgrade:** the upgrade software into the U disk, U disk inserted in the device on the USB interface, and then enter the [Main Menu] → [System ] → [Upgrade], select the file to upgrade, click **【upgrade】** Button to upgrade the device will automatically restart after completion.

## 12. PTZ/Coaxial Control

PTZ/Coaxial control supports control the direction, range, zoom, focus, iris, preset spots, cruising, light switch, horizontal rotating, etc

The following is a description of the PTZ control:

You can find the interface for this function setting in the following ways: Choose the channel and click  on the navigation bar. The interface is as follows:



### 12.1 Premise

Before use the PTZ function, you need to set up the control type to 'Serial' and set other parameters in the "PTZ Config" interface. The functions of PTZ is up to the PTZ protocol, namely, it is determined by the function of PTZ dome bought by the user.

The path to enter PTZ Config interface: [Main Menu] → [Video] → [PTZ Config], and then choose the control type of serial.

### 12.2 Basic Settings

[Control direction] Control the PTZ to turn in eight different directions;

[Speed] Adjust the speed of PTZ turning;

[Zoom] Adjust camera magnification by  / 

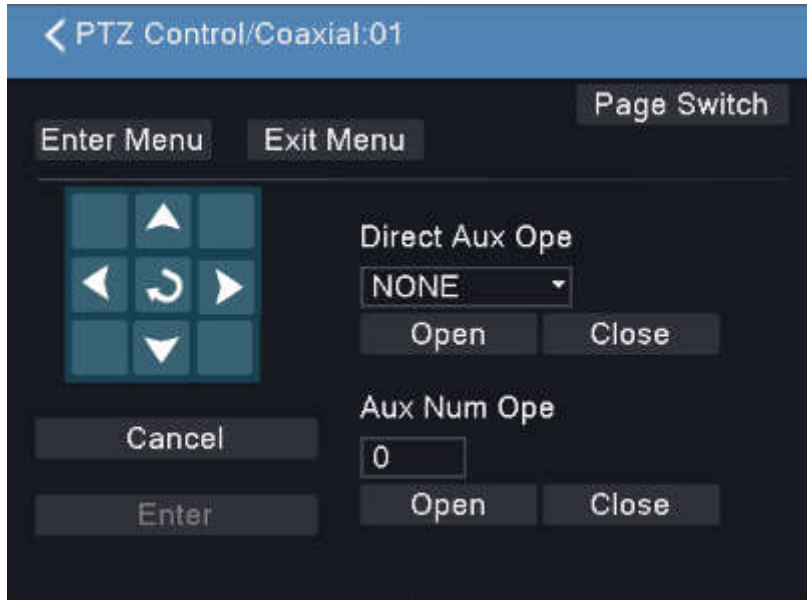
[Focus] Narrow camera focus by adjusting  / 

[Iris] Adjust camera iris by  / 

[PTZ Trace] press mouse left key, PTZ turn quickly.

[Page Switch] Switch between the pan top function control menu interface.

If you need to call the coaxial camera menu, you need to click “Page Switch” into interface, as shown below:



Then,click ‘Enter Menu’ or the icon  to call the coaxial camera menu.

## 12.3 Function setting

### 1.Preset

Set certain position as preset point. Then when call the preset point value, PTZ will turn that position automatically.

#### 1) Preset setting and calls

Step1: Turn PTZ to the position you want, enter the preset value, and then click the “+” below the preset ;

Step2: Input the preset value,click the”Begin” below the preset, and then PTZ will turn to the position you set;

#### 2) Delete preset

Input the value of the preset which you want to delete,and then click “-” below the preset.

### 2.Tour

#### 1) Tour setting and calls

Step1: Click the “+” below the tour to enter the PTZ Control interface ;

Step2: Input the Value of Patrol No and preset and interval,click "Add Preset";

Step3: Repeat the second step, add all the preset to the patrol no, click the right mouse button return to PTZ Control/Coaxial interface;

Step4: Input the tour value,click the"Begin" below the tour, and then PTZ will turn on by the tour;

#### 2) Delete tour

Input the value of the tour which you want to delete,and then click "-" below the tour.

### **3.Pattern**

#### 1) Pattern setting and calls

Step1: Enter the pattern value,click the "+" below the pattern, then Control the PTZ rotation;

Step2: When the pattern setup is complete, click the end button

Step3: Input the pattern value,click the"Begin" below the pattern, and then PTZ will turn on by the pattern;

#### 2) Delete pattern

Input the value of the pattern which you want to delete,and then click "-" below the pattern.

## **13. Version**

Display the basic information of the device, including hardware information, software version, release time, serial number, and NAT status.

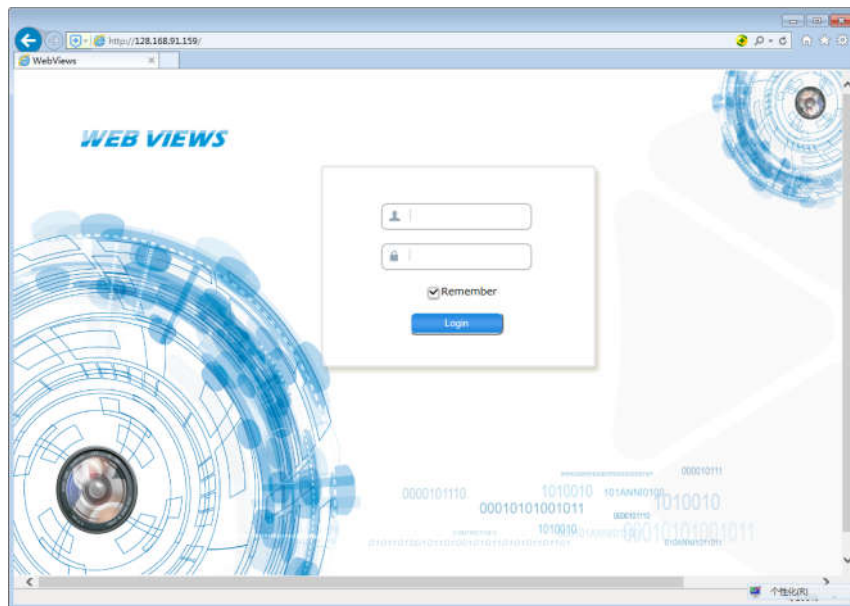
## **14. Online User**

View the information about the network users connected to the local device. You can also select the network user (check box tick ☒) disconnect, disconnect the user will be frozen until the restart the device in order to use the user login.

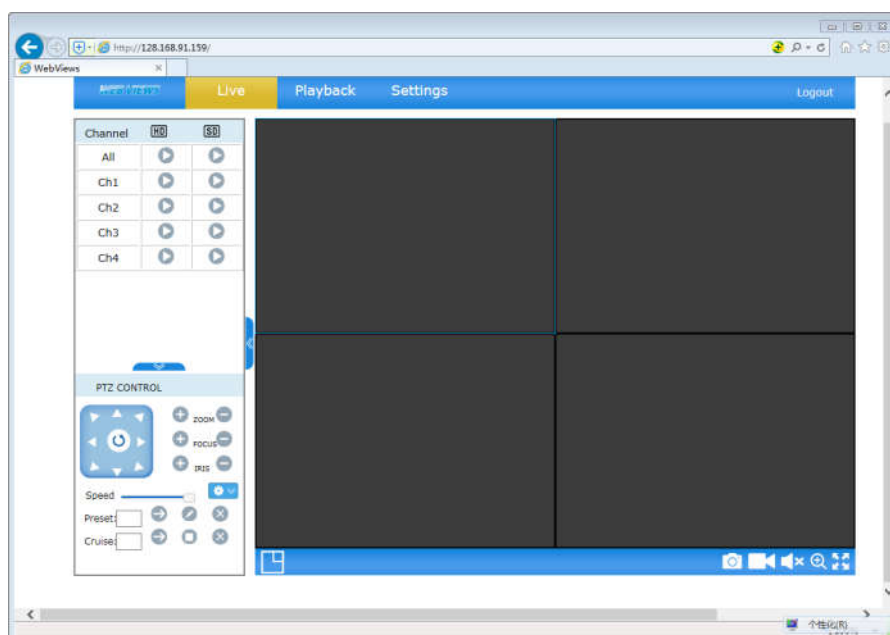
## Part Two Remote Control

### 1. WEB Remote View

After connecting network, open IE browser, input device IP address to enter into the device. For details please refer to the web client user manual.



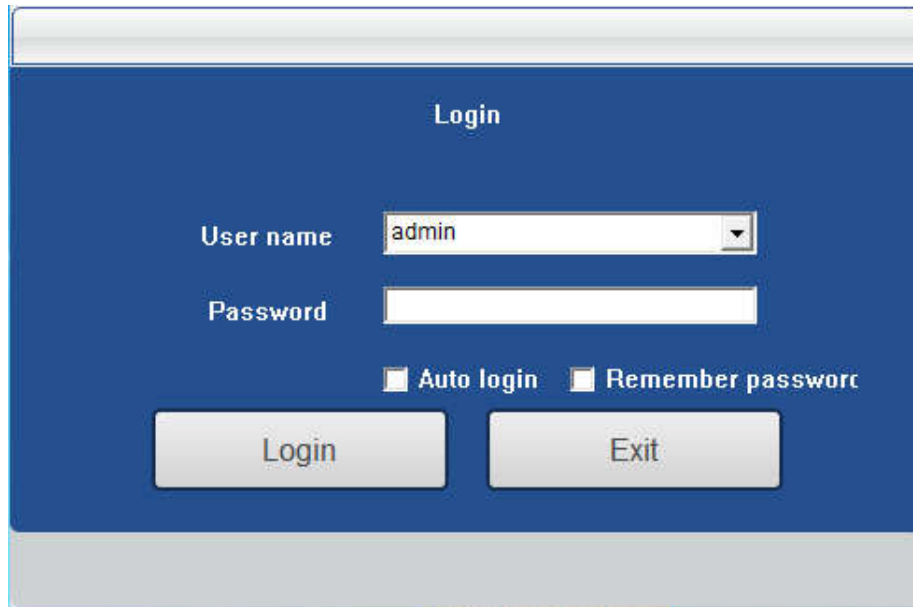
Web login interface



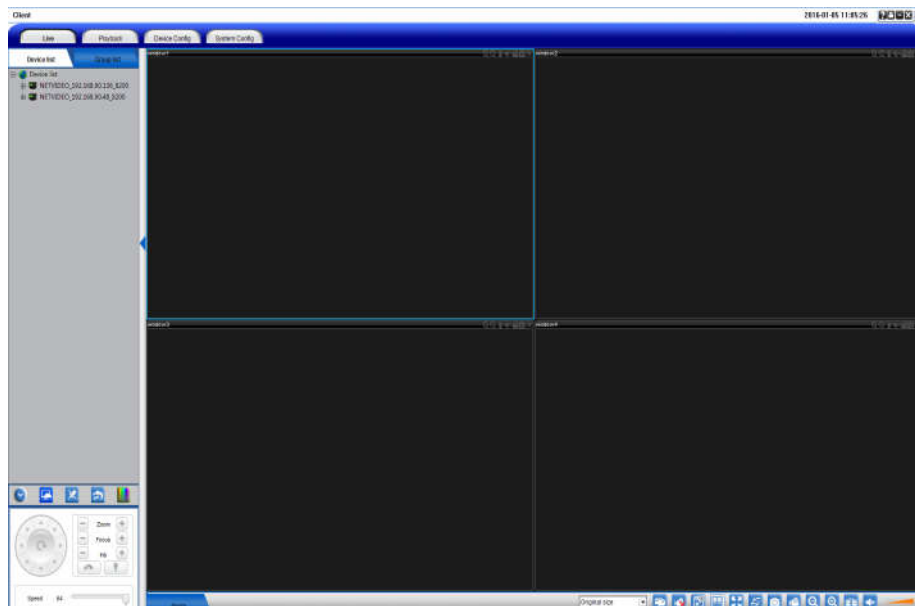
Web main interface

## 2. CMS Remote View

CMS software is used in a computer, and manipulates several device at the same time. See “Video Surveillance Management Software(V6.2)” for specific operation.



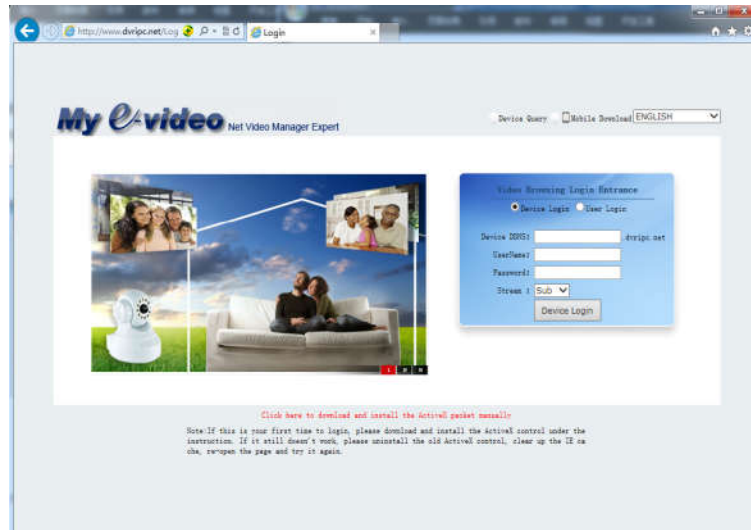
CMS login screen



CMS main interface

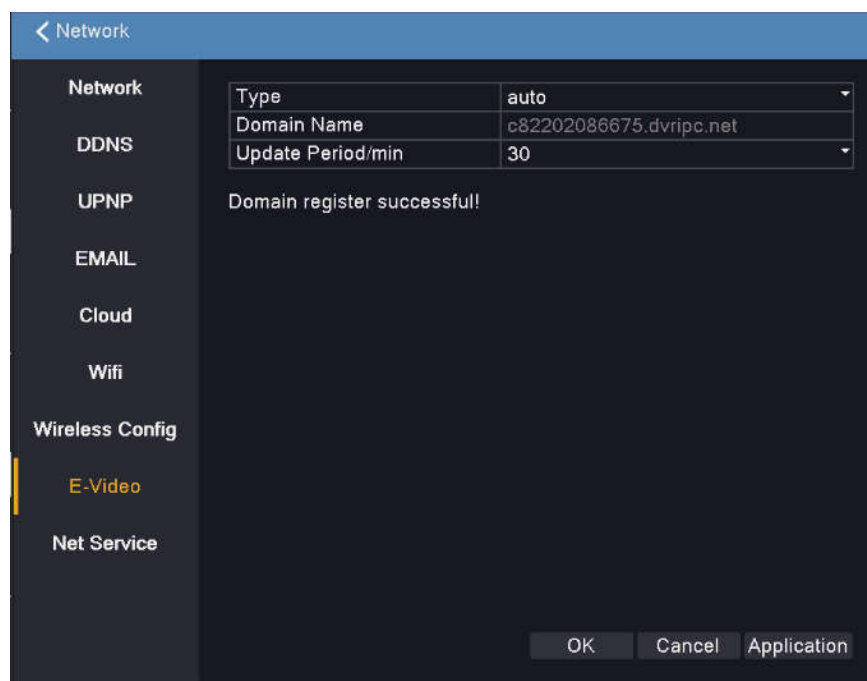
### 3. E-Video

Open IE browser, input <http://www.dvripc.net>, login web client. If first time use, please install plug-in Active-X control first, and then enter device ID, user name and password to login.



Login interface

**Remark:** Enter [System]>[Network]> [E-Video], check out Server IP and device ID. As below,

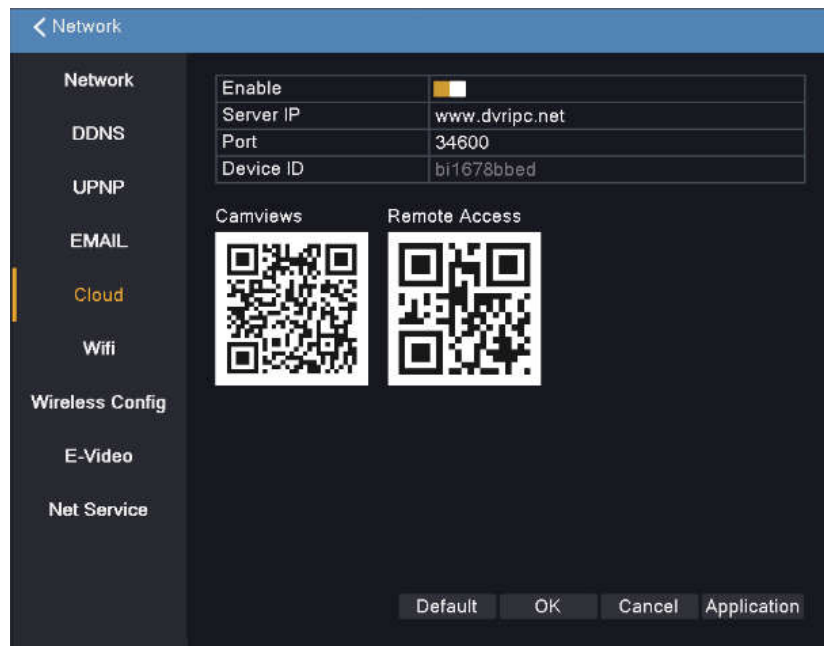


## 4. Mobile Phone Monitoring

Our device support mobile phone monitoring, like iPhone or Android system phone.

- ❖ setting mobile monitor service

Open [Main menu]→[Network]→[Cloud] as follows.

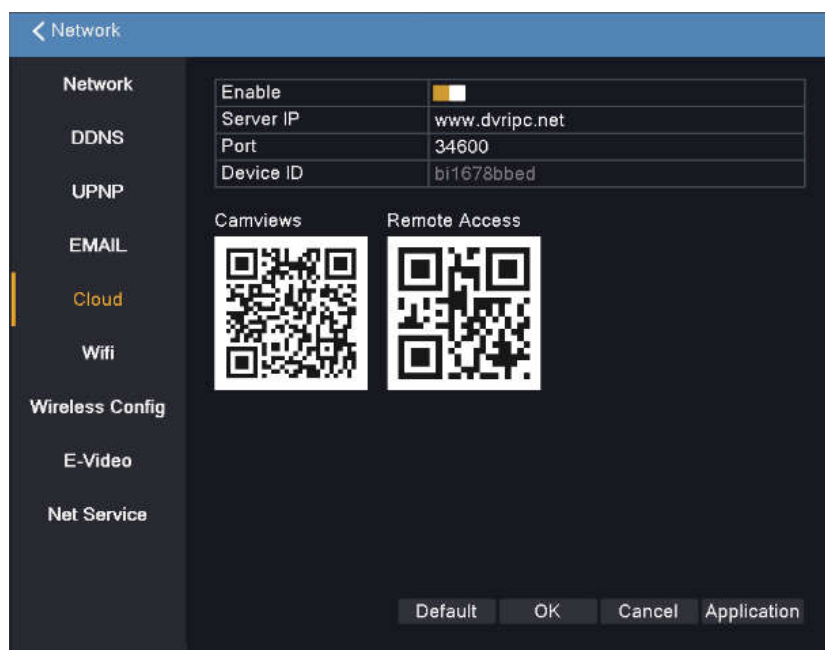


**Remark:** Defaulted Mobile Monitoring service is enable. mobile phone client software is “CamViews”, Port is “34600”

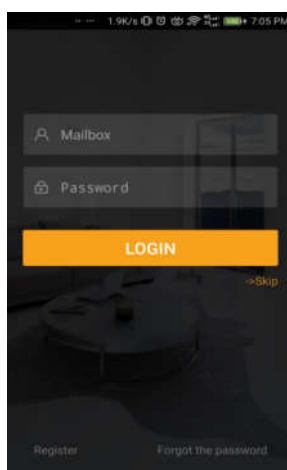
- ❖ Login and monitor

Take Android phone for example,

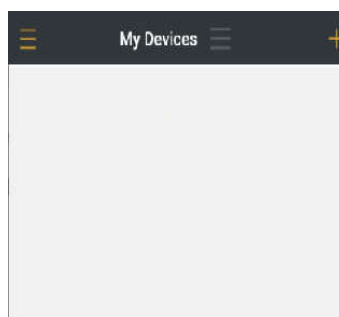
Step1, login 【Main menu】->【Network】->【Cloud】 , scan QR-Code to download mobile APP “CamViews” (download from mobile phone store is also available.)



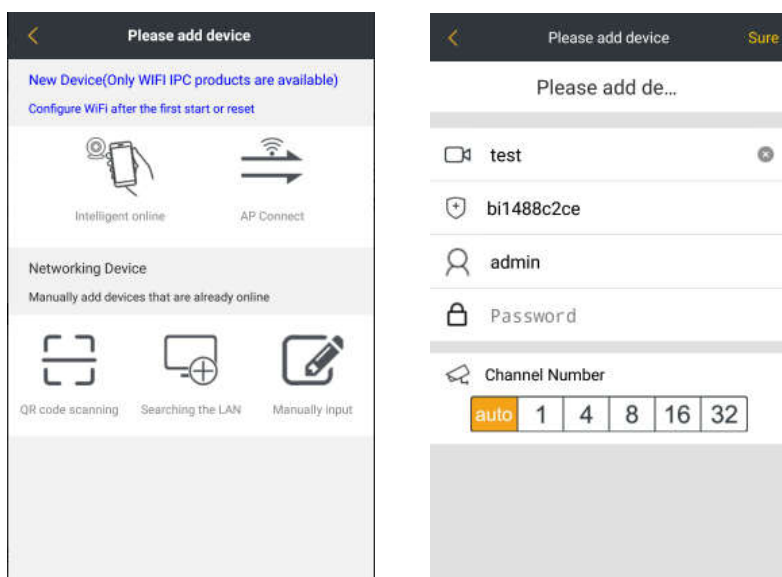
Step2, Open “AnniCam” to Login. If you don’t have an account, please register a new account first.



Step3, Enter the main interface, as shown



Step4, After login,click **+** in upper right corner to add device (three ways provided to add device: QR code scanning, Searching the LAN, and Manually input. Please choose “QR code scanning”.



Scan QR code (the QR code named “Remote Access” in step1 ) to add device. Enter DVR user name and password to finish adding. Default Mobile Monitoring service is enable.

Step 5,If the device had been added ,it would display on the list.And then,you can view the device by app.

**Remark:**

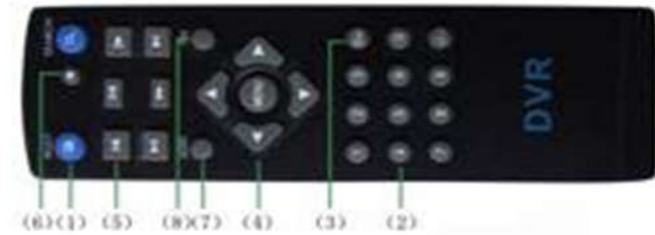
- 1、 Device need to be connect to public net when mobile monitor.
- 2、 If you use iPhone mobile similar operation. You also can use mobile to search "Camviews " in the app store and install it online.

**Specific operations, see ”CamViews Mobile Client User ManualV2.3”.**

## Appendix 1. Remote controller operation



E-series of remote control



A, B, C-series of remote control

Serial No.	Name	Function
1	Multi-channels button	Multi-channels preview
2	Number button	Password input/number input/ channel switch
3	【Esc】	Back to up window
4	Direction button	Direction and OK button
5	Playback operate	Playback Basic operation
6	Record control	Enter into record menu
7	Remote controller	Input the number of device to control it
8	FN	Assistant function

## Appendix 2. Mouse operation

\*Take right hand as an example

Operation	Function
Double left click	Double click one item in the file list to playback the video Double click the playback video to zoom in or out the screen
	Double click the channel to make it full screen display in preview double click again back to the multi-channel display
Left click	Choose according option in the menu
Right click	Pop up desktop shortcut menu in preview interface
	Pop up shortcut menu when operating menu
Wheel button	Add or subtract number value in the number setting
	Switch the items in the combo box
	Page up or down in the list
	Zoom in/out when prevoew and playback
Move mouse	Choose the widget or move the item in the widget
Drag mouse	Set the motion detect area
	Set the cover area

**Thank you for reading. If you have any questions, please contact us!**