

# Installation Manual for Network HD Camera

## Statement :

Thanks for purchasing from us. Please feel free to contact our service whenever you need help.

This is universal product manual for Network HD Cameras. Features and functions vary with different products, please refer to our physical commodity and the fast manual.



This manual is your reference for operations and encodings. Related functions, specific orders, detailed menu-tree as well as fast manual are included. Please read it before installation or use.

This manual might contain some technical or print errors. Any enhancement in product features shall be added into the manual consistently without further notice.

## Safety Instruction

This manual is intended to ensure that user can use the product properly without danger or any property loss. Please read it carefully and take care of it for further reference.

Precaution measures are divided into “warnings” and “cautions”,as below: Warnings: Neglecting any of the warnings may cause death or serious injury. Cautions: Neglecting any of the cautions may cause injury or equipment damage.

 <p><u>Warning</u> Follow these safeguards to avoid death or serious injury</p>	 <p><u>Caution</u> Follow these precautions to prevent potential injury or property loss</p>
--	---



### Warnings

Electrical safety regulations of the nation and the region must be strictly followed during installation or use.

1. Please use the matched power adapter from standard company.
2. Do not connect multiple IPCs with one single power adapter(Overload for adapter may lead to over-heat or fire hazard.
3. Shut down the power while connecting or dismounting the device. Do not operate with power on.
4. The device should be firmly fixed when installed onto the wall or beneath the ceiling.
5. Shut down the power and unplug the power cable immediately when there is smoke,odor or noise rising from the IPC. Then contact the dealer or service center.
6. Please contact the local dealer or latest service center when IPC works abnormally. Do not attempt to disassemble or modify the device yourself. (We shall shoulder no responsibility for problems caused by unauthorized repair or maintenance.



### Cautions

1. Do not drop anything onto the dome, avoid it from physical strike. Keep it away from high electromagnetism radiation surroundings. Do not install it at vibration surface or places subjecting to strike. (Ignorance can cause equipment damage).
2. Do not aim the camera at ultra-bright objects, such as the sun, filament lamp, or will damage the camera.
3. Use it inside and keep it away from rain and moisture
4. Avoid exposing to direct sunlight, poor-ventilation or heat source such as heater, radiator(Ignorance can cause fire hazard)
5. To avoid physical damage, extreme environments such as lamp black, water vapour, too hot or dusty are not allowed.
6. Please use soft and dry cloth to clean the shell. Use neutral cleaner instead of alkaline when the dirt is difficult to get rid of.

# Catalog

Chapter 1 Product Introduction .....	4
Chapter 2 Functional Characteristics .....	4
2.1. Network management .....	4
2.2. User management .....	4
2.3. Alarm linkage function .....	4
2.4 storage function .....	4
2.5. Color/black and white conversion function .....	5
2.6. Backlight compensation function.....	5
Chapter 3 performance feature .....	5
3.1. The built-in network video server.....	5
Chapter 4 Through the WEB access control network cameras.....	5
4.1 The installation of the plugi .....	5
4.2 Log on to the WEB client .....	7
4.3. PTZ control .....	9
4.3.1 PTZ horizontal and vertical movement.....	9
4.3.2 set of Step length .....	10
4.3.3. Camera control .....	10
4.3.4. Add and call preset .....	11
4.3.5.add and call cruise .....	11
4.4. Color Settings .....	11
4.4.1. Color setting .....	11
4.4.2. Other Settings .....	12
4.5. Client configuration .....	13
4.6. Playback.....	13
4.6.1. Remote playback .....	13
4.6.2.Local playback .....	15
4.7 log.....	15
4.8 exit.....	15
Chapter 5 Network Camera Config .....	15
5.1.Record.....	16
5.1.1. Record settings .....	16
5.1.2. Snapshot Storage .....	17
5.2. Alarm Function .....	17
5.2.1. Motion Detect .....	18
5.2.2. Video Blind .....	19
5.2.3. Video Loss .....	20
5.2.4. Alarm input .....	20
5.2.5 .Alarm output .....	21
5.2.6. Intelligent analysis .....	21
5.3System Setting.....	23
5.3.1. General .....	23
5.3.2 Encode setup .....	24
5.3.3. Network setup .....	25
5.3.4. Net Service .....	26
5.3.5. Output mode .....	29
5.3.6. PTZ setting .....	29
5.3.7. Camera parameters .....	29

5.4 Management Tool .....	31
5.4.1. HDD management .....	31
5.4.2. User Management .....	32
5.4.3. Auto Maintenance .....	32
5.4.4. Restore Default .....	33
5.4.5. Import and Export .....	33
5.4.6. Restart .....	34
5.4.7. System Upgrade .....	34
5.5 System Info .....	34
5.5.1. HDD info .....	34
5.5.2. Log info .....	35
5.5.3. Version Info .....	35
Chapter 6 After-sale Service & Maintenance.....	36
6.1 Installation and service .....	36
6.2 Product Repair .....	36

## Chapter 1 Product Introduction

Network camera is easy to install and use, without cumbersome integrated wiring and can carry real-time compressed image and transfer through the network to different users at the same time. You can browse the real-time image, storage and control by connecting to the network camera at any places of network coverage in the world. Support for multiple network protocols such as HTTP, TCP, UDP and FTP, etc. Using a remote centralized management platform, can easily from the remote to manage and control more than one network camera. The built-in WEB server, as long as a normal browser can monitor, support for multiple users to browse the images at the same time.

The features of network camera make it suitable for large area, moving target surveillance in all walks of life, and it is widely used in monitoring situation, such as electric power systems, telecommunications sector, bank security, factories and mines enterprises, intelligent building, intelligent community, urban roads, airports, stations, as the image monitoring equipment of security and fire monitoring system.

## Chapter 2 Functional Characteristics

### 2.1. Network management

By Internet explorer to browse WEB page or centralize managing software, can realize remote network management; It can be set through the network to implement all the features of network cameras. In addition, the network camera's biggest advantage is that it does not need too many other devices, as long as there is a PC machine and cables which will connect computer and network camera to the network, through IP address access control the network camera directly, so that make it simple to operate and easy to manage, access by IP address is convenient for centralized control management of network cameras.

### 2.2. User management

Each group has different administrative authority and can edit, each user belongs to a group. In the condition of no user login, monitoring permissions can be set freely. Configuration user group and user information, can have multiple users log on to the same network cameras at the same time, according to the set of permissions to control the operating of network camera.

### 2.3. Alarm linkage function

The network camera has 2 roads of grounding alarm input, 1 road of relay output. In addition of the alarm linkage PTZ control, it also can be linked to video, screenshots, alarm output and play the function of the network, send email to linkage, and the functions such as uploading files Settings. Attention: see detailed setting method in the specific Settings of fourth and fifth chapter.

### 2.4 storage function

According to user's configuration and strategies, such as through alarm and timing set make the storage of corresponding video data set to the center server, the user can according to the need to video by local WEB side, video files can be stored in the WEB client of the running computer. Network camera video can also be stored in the front end of TF card.

## 2.5. Color/black and white conversion function

It can be set to automatic low illumination conversion and manual low illumination conversion, in the automatic conversion mode, the camera according to the variation of environmental light converts sensor illumination automatically. Manual conversion mode is through the button to select the color or black and white display.

## 2.6. Backlight compensation function

When there is a highlight in background, objects will become dark, like a shadow. Backlight compensation function is the camera under the background of strong light can be automatically on a dark target brightness compensation, to adjust brightness of background, avoid the background brightness is too high to cause the whole picture of a ball of light, the target is because of the dark and invisible, so as to get a clear image.

# Chapter 3 *performance feature*

## 3.1. The built-in network video server

- Through the network, transmit one road of video data which is compressed by network cameras to the network terminal after decompression
- Establish a connection of 1 to 5 at the same time
- Support HTTP, TCP, UDP, RTSP, etc network protocols
- Support WEB access system, used in a wide area network environments
- Support free domain name such as peanut shells, net, etc
- Support IP address allocated dynamically
- Support advocating and complementary double stream output

# Chapter 4 *Through the WEB access control network cameras*

## 4.1 The installation of the plug-in

### Installation preparations

After the ball with a user's computer network to ensure that all hardware connections are complete and the device is powered properly, turn on the computer, run the ball ping network IP address (Note: The network of the ball in the LAN IP address must be unique), such as network IP for the ball 192.168.1.10, run ping 192.168.1.10, if the network has shown the following responses ball, which means that the network connection is normal, you can download the plug-in.

```
正在 Ping 192.168.1.10 具有 32 字节的数据:
来自 192.168.1.10 的回复: 字节=32 时间=4ms TTL=64
来自 192.168.1.10 的回复: 字节=32 时间<1ms TTL=64
来自 192.168.1.10 的回复: 字节=32 时间<1ms TTL=64
来自 192.168.1.10 的回复: 字节=32 时间<1ms TTL=64

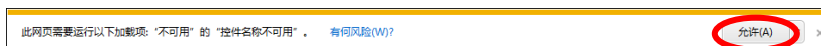
192.168.1.10 的 Ping 统计信息:
    数据包: 已发送 = 4, 已接收 = 4, 丢失 = 0 (0% 丢失),
    往返行程的估计时间<以毫秒为单位>:
        最短 = 0ms, 最长 = 4ms, 平均 = 1ms
```

Start downloading plug-ins

Open IE browser, enter the IP address of the network the ball in the address bar (default is 192.168.1.10) the system will prompt whether to install this plug-in, click *Install*, the browser will automatically load the IE plugin.  
**Note:** If the user's computer related controls to intercept such software, they will load the plug-in to intercept, then this software settings to allow the installation.

**After the exclusion of the above reasons, plug-in installation still fails, then please change the security level of IE browser and allows to start some control. Specific methods are as follows:** 1 . Do the following to install in the default level

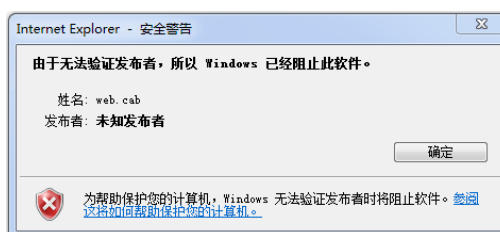
① In the address bar enter IP, the system displays the following message:



② 单击上图中的“允许”，出现如下图标标注所示提示：



③ Click "Install" pop-up dialog box as shown below:



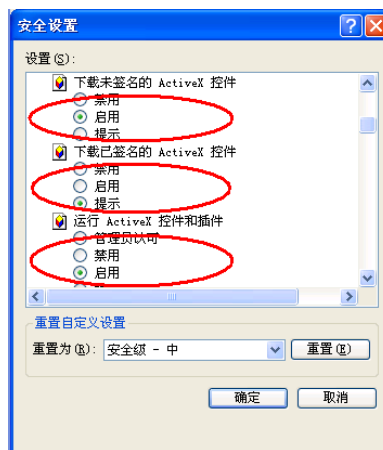
Plug-in installation fails, you need to modify the IE security level, so that the plug has permission to install, modify the permissions as follows.

2. In IE interface to select Tools-Internet Options-Security-Custom Level conduct shown IE security level custom settings, as shown below.



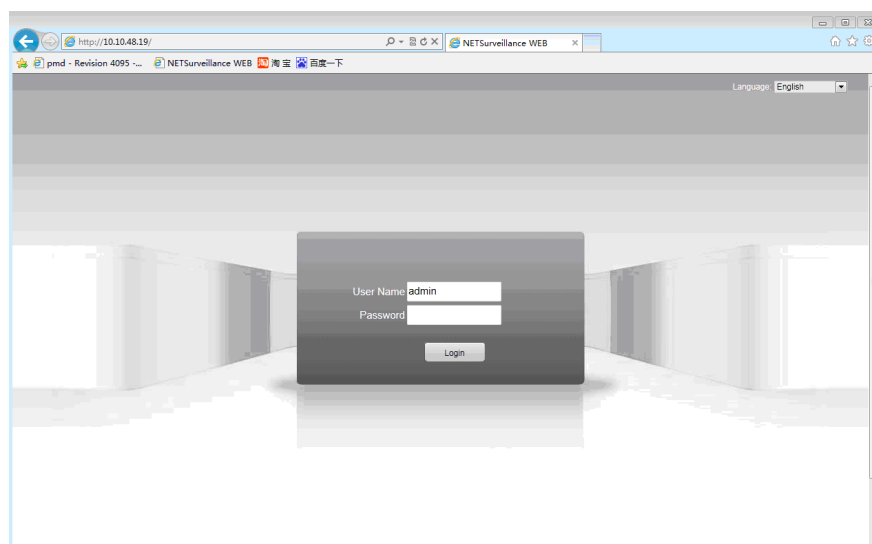


Enable permission to download and install Activex controls and plug-ins, as shown in the following figure. After confirming the application, refresh the IE browser to begin downloading and installing IE controls.



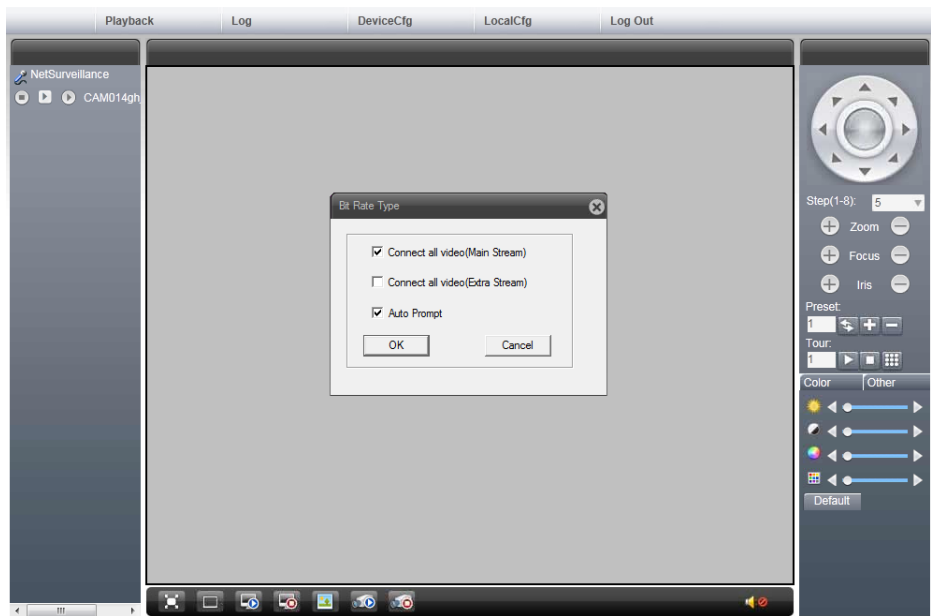
#### 4.2 Log on to the WEB client

Open the IE page, in the address bar enter the IP address of the network camera. Factory network camera's default IP is 192.168.1.10., the default subnet mask is 255.255.255.0. After the connection is successful, as shown in the following figure 4-1 interface

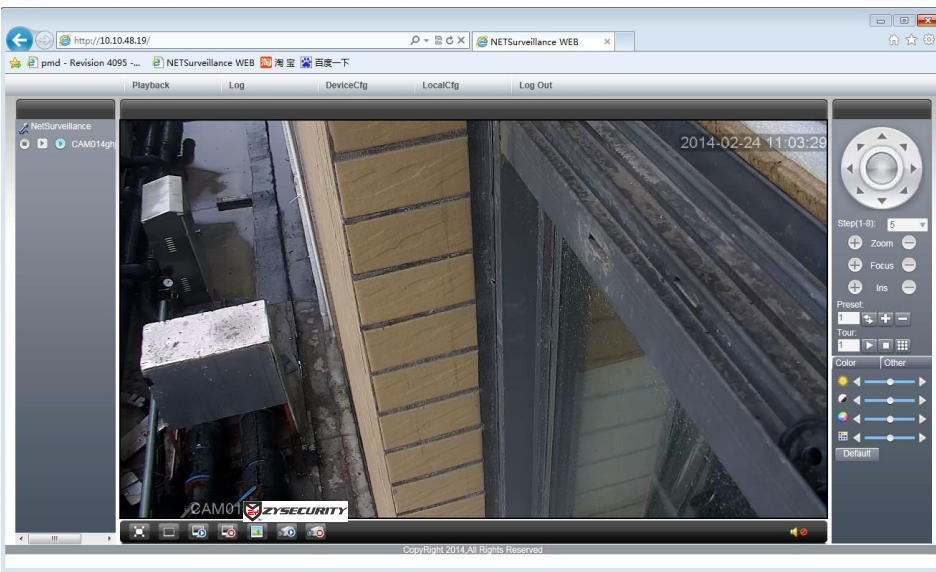








Reserved one user “admin”, is default no password. Admin is super user, can change the password but not the authority. If there is invalid login account or password error system will be a corresponding hint. Use the admin user login, the pop-up dialog box to choose the main stream or auxiliary stream join preview screen, as shown in figure 4-2







Select mainstream connection preview screen,click show preview picture,for sure,asshown infigure 4-3



- Playback: local and remote video and the playback browsing of screenshots file
- The alarm logs: query alarm of network camera, the operation information
- Equipment configuration, network camera function configuration, details see section 5 Client: WEB client configuration
- Exit: log out
- Color Settings: WEB side preview picture color Settings
- Other Settings: network camera color Settings and restart of network cameras

	intercom		client video		Auxiliary stream		main stream
---	----------	---	-----------------	---	---------------------	---	----------------

PTZcontrol: in section Other ICONS

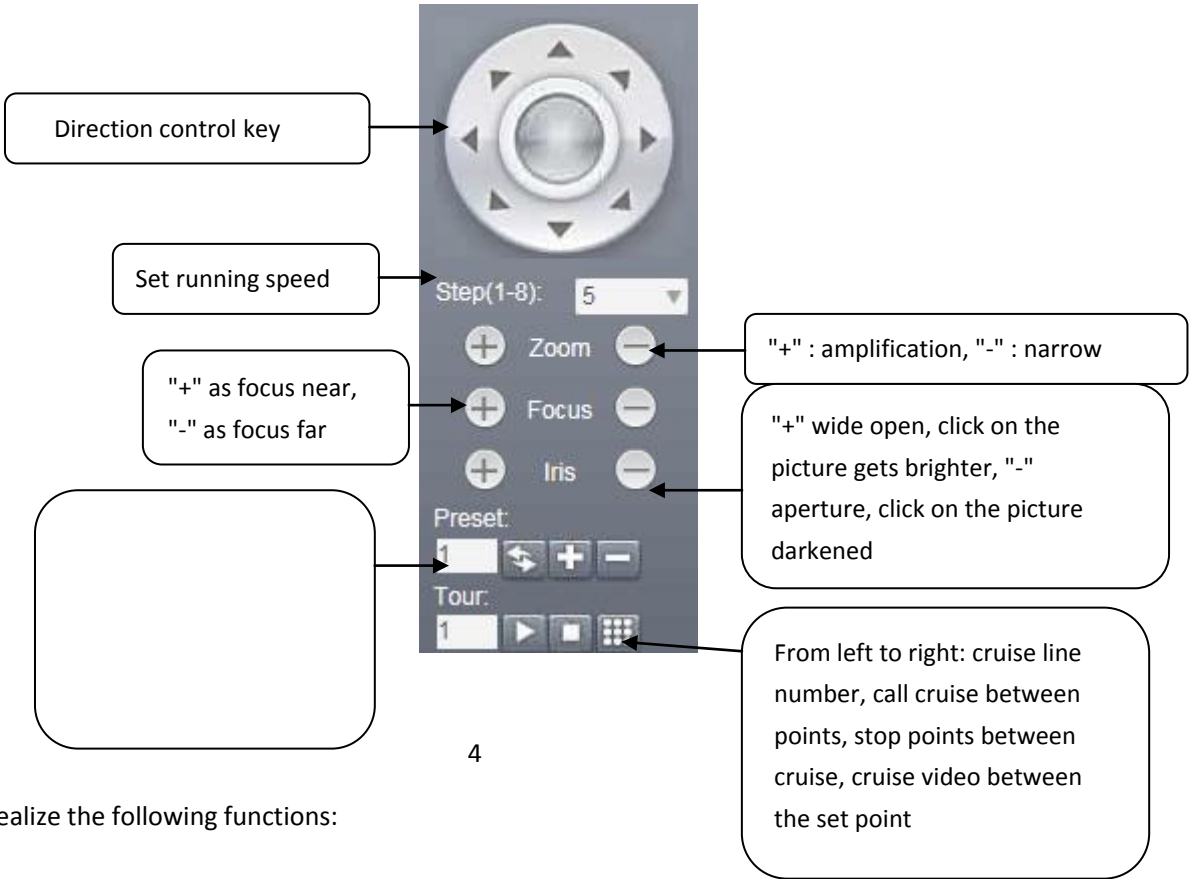
	audio		client screenshot s		Close all channel		Full screen
	Close all channel video		All channel video		Open all channel		

see details 4.2. functions:

4.3. PTZ control

PTZ control interface is as shown in figure 4-4.

Attention: When control the PTZ, please go to system Settings–PTZ Settings configure the correct protocol, address, baud rate, data bits and other information, otherwise will not be able to control PTZ.



PTZ control can realize the following functions:

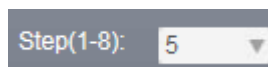
4.3.1 PTZ horizontal and vertical movement



Users can operate the up and down and oblique direction of the direction key to control the fluctuation

of the PTZ to turn right or left, and the rotation of the upper left, lower left, upper right, lower right direction. Among them the size of the velocity can be modified in the step set.

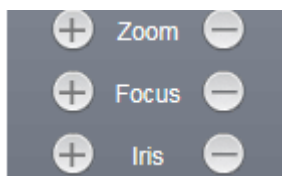
#### 4.3.2 set of Step length



Step size is mainly used to control the running speed of PTZ, the greater the step length, the larger PTZ runs, the smaller the step length PTZ's operation of the amplitude is smaller; There is a total of 1-8 eight step levels to choose from, 1 is the lowest step length, 8 is the highest step length.

#### 4.3.3. Camera control

Camera control function is through the changed times, zoom, aperture of PTZ to control the network cameras.



##### (1) variable times control

Users can be realized by controlling the variable x button to control the focal length, in the figure above though change times to control, clicking left key to zoom in, right-click to narrow, adjust the focal distance, get the panoramic images or close shot view.

##### (2) zoom control

Zoom is to adjust the clear degree process of camera images of an object or scene, after click , far distance of the object or scene gets clear, distance nearly is faint objects, hold down the left key , closer distance of the object or scene gets clear, far distance is fuzzy, around by clicking on the button, can make monitoring scene clear. After Initialization and network camera horizontal or vertical movement and changing times, focus is in focused automatically mode. Network camera will not be able to automatically focus on taken targets when in the following case : Aim is not at the center of the picture

Observe distance and near targets at the same time, can't guarantee that front and back are all clear at the same time  
Target is light objects.

The target moves too fast

The target is drab large area. Such as the wall

The goal is too dark or already fuzzy

##### (3) the aperture control

Aperture is used to regulate the screen brightness of PTZ , when click "" , previewing images get brighter, and hold down the right "" previewing picture get darkened, by clicking on the buttons to adjust the picture brightness. Initialization and horizontal or vertical position as well as operating or changing times, the aperture are automatic state, through the dynamic measuring light conditions change, adjust quickly, make the output image brightness stability.

#### 4.3.4. Add and call preset



Preset point is network camera stores the current position and the lens focal length, aperture parameters, etc in the memory, when it is needed can call these parameters quickly and adjust PTZ and camera to the location of the function. Network camera goes to the position of adding a preset point, fill in the preset point number, click the “+”, add the preset point, up to 255 preset points can be added.

Preset point inputs a preset point number has been added successfully, click the “↔” call the preset point.

Preset point inputs a preset point number has been added successfully, click “-” delete this preset point.

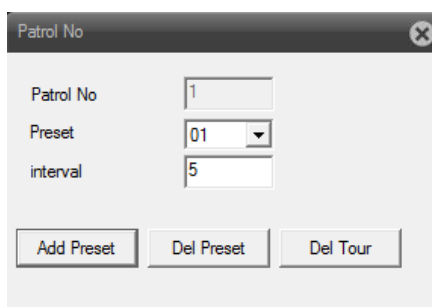
#### 4.3.5. add and call cruise



Cruise function is network camera composes the added multiple preset point to a route, stored in the storage, can quickly call when needed, and make the network camera can along the route, in turn, go by the added preset point and in each preset point for setting the length of time.

At point between cruise input a point to add the serial number.

Click on the “ ”, as the chart Settings box, add to the cruise line of preset point to the serial number.



【Preset point】: choose the preset point number of which should add to the cruise line (should have set the preset point).

【Interval】 during the cruise, the interval length of calling two preset points.

【increasing preset】: add the selected preset point to the serial number of the cruise line.

【remove preset point】: delete the serial number of the selected preset point in the cruise route. 【remove cruise line】: delete the serial number of the whole cruise route.

Select a route number which has been set, click the “ ” to call the cruise route.

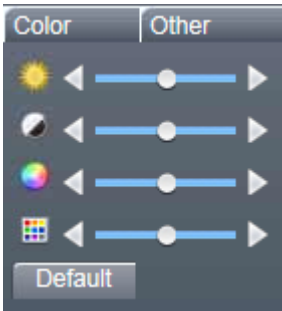
Select a route number which is cruising, and click “ ” to stop the cruise.

### 4.4. Color Settings





#### 4.4.1. Color setting

Set the picture color of the WEB side, as shown in figure 4-5.

Attention: this function is only to adjust the picture color of the current WEB side, it will not affect the picture color on the camera.

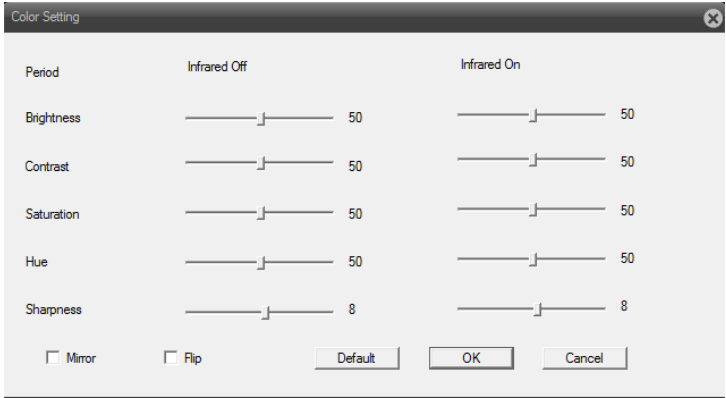


4-5

	Brightne ss sadjustme nt		Contrast adjustment		Saturation adjustment		Tone adjustme nt
Restoredefaults		Restore the brightness, contrast, saturation and tone to the default values					

4.4.2. Other Settings

- 1. Resume: soft reset the camera by client.
- 2. Switch scale: preview images showing proportional to switch between 4:3 and 16:9.
- 3. The image color: set the camera preview screen display effect, as shown in figure 4 to 6.



- 【Brightness】 : adjust the light or dark of the preview picture shows.
- 【contrast】 :adjust the permeability of the preview picture.
- 【saturation】 : adjust the color of the preview picture.
- 【color】 : adjust the tone changes in temperature of the preview picture.
- 【infraredlampopen】 :thecorrespondingbrightness,contrast,saturation,colorandothereffective when open the lamp.
- 【images】 : enable preview screen to turn around.
- 【Flip】 : enable preview picture to turn upside down.
- 【Restore default】 :image color configures to the default state.

## 4.5. Client configuration

1. The alarm Settings: set the external alarm, mobile detection alarm linkage set, such as linkage alarm monitoring, alarm prompt, and other functions
2. The system Settings: set the client information such as video capture.

【video directory】: set up the client video storage paths.

【length】: the length of a single client video file, can choose between 1-120 minutes.

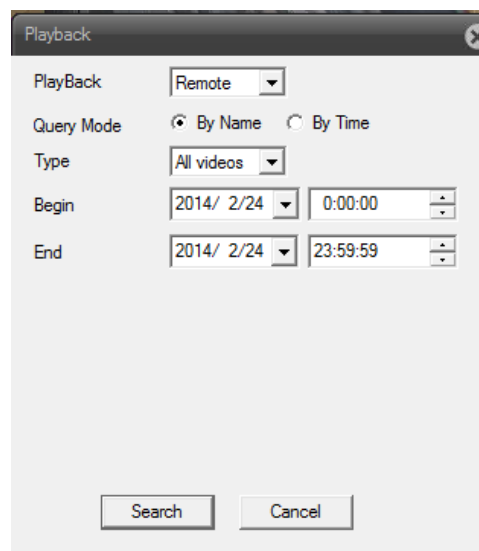
【the images directory】: set the store path of the client.

Local videos saved as AVI format: set up the local videos saved as AVI format, for H264 format by default.

3. About: display the version of the WEB control module information.

## 4.6. Playback

Click the **Playback** pop-up **【replay】** dialog box, as shown in figure 4-7. It can through the remote playback and local playback two ways.



### 4.6.1. Remote playback

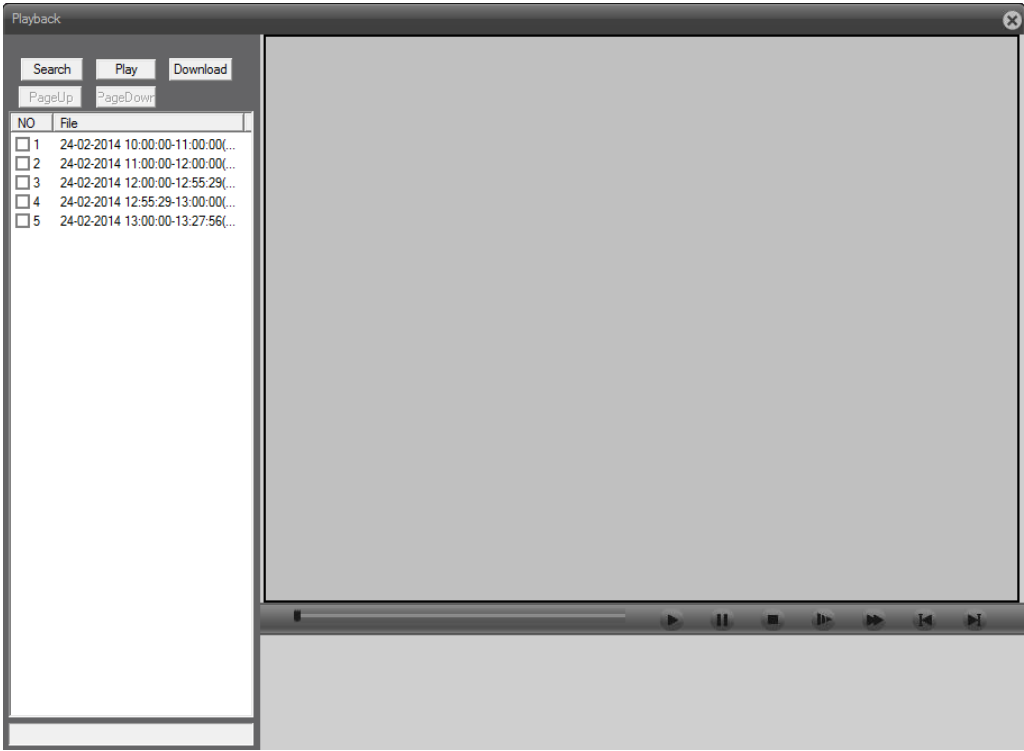
The playback mode selects remote playback, playback videos and screenshots of TF card file of the video camera.

【Playback modes】: two playback modes according to the time and the document.

【type】: classified according to the selected query video capture file, containing all the videos, external alarm, video detection, ordinary video, video manual, all images, alarm capture, video detection capture, manual capture type, etc.

【The start and end time】: query the video capture file of the time period.

1. According to the file query, as shown in figure 4-8.



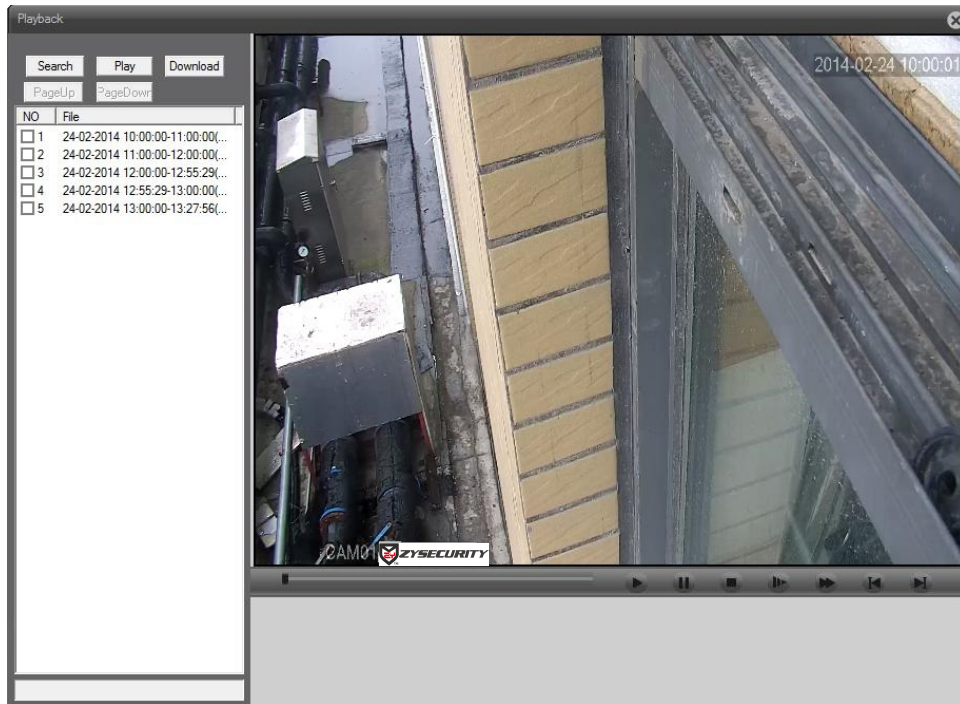
4-8

	Play		Pause		Stop		Slow		Fast		Previous frame		Next frame
--	------	--	-------	--	------	--	------	--	------	--	----------------	--	------------

- 【video query】: return to the video query dialog box.
- 【play】: select needed playback file, click the play button to start the file playback.
- 【Attention】: double click needed playback file, also can play back the file.
- 【Download】: select the needed downloading file, click the download button, pop-up download file storagepath settingboxanddownloadformatselectionbox,withAVIandH264bothformatsareoptional. Attention: support to select multiple files to download in order.
- 【prev, next】: when video file number is more than 64, it will automaticlly page, flip through the function for operation.

2. Query by the time

Display a video file, it at most can only query one day of the video file, double click the query to the video file to start playback, then double click on the timeline can replay the corresponding video files in a certain time. As shown in figure 4-9.



Attention: the file queried according to its time on time axis color display respectively: red for external alarm video, blue for manual videos, green for the common video. Ash for detecting video (including mobile detection, video screening, loss of video footage).

#### 4.6.2. Local playback

The playback mode selects local playback, and playback client videos and screenshots file. Click the play button to select the file path, the rest of the operating see.

#### 4.7 log

WEB log information, including the alarm log and log operation, alarm log records the camera alarm information; Logging operation records user login information.

Attention: in the alarm log interface can choose whether to enable logging automatic reminders.

#### 4.8 exit

Quit the WEB log in, return to the login WEB interface.

## Chapter 5 Network Camera Config

Click , as follows:





5-1

5.1.Record

Click , as follows:

5.1.1. Record settings

Click , as follows:



5-2

This function allows you to config the time length and pre-record time for each record. We have three settings: Configuration, manual or stop.

Configuration: Record according to the set video type (common, detection and alarm). Max. four different time interval can be set per day.

Manual: Enable this function, network camera starts record consistently.

Stop: Network camera stops recording.

Note: 1. Detect and alarm recording should match with recordings.


2. Record end time should be longer than start time,

3. Record files are stored into TF card, make sure TF card is plugged in and confirm it.

4. TF card should have enough space for cycle overwrite.

5. Default open, plug TF card, boot up, then record starts.

### 5.1.2. Snapshot Storage

Click  as follows:



5-3

Configure the number of snapshot pictures. We have three snapshot modes: configuration, continuous, close.

1. configuration: Configure timing capture among different dates. Timing capture include common snapshot, detect snapshot and alarm snapshot. User can configure four different time intervals snapshot at most.

2. continuous: Network camera captures pictures non-stop.

3. close: Network camera stops capturing pictures.

Note: 1. Detect and alarm snapshot should match with capture functions.

2. Snapshot end time should be longer than start time,

3. Snapshot files are stored into TF card, make sure TF card is plugged in and define it as snapshot disk.

4. TF card should have enough space for cycle overwrite.

5. Default closed, enable it first.

### 5.2. Alarm Function

Click  as follows:

Alarm functions include: motion detect, video blind, video loss, abnormal handle.



5-4

### 5.2.1. Motion Detect

Click  , as follows:



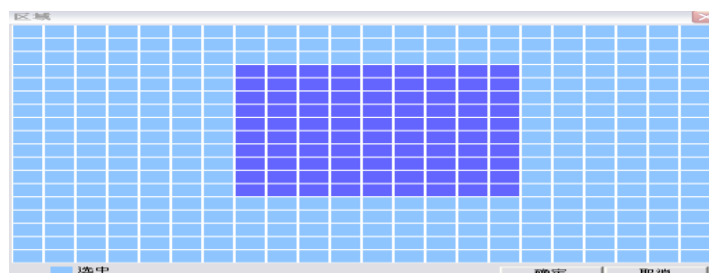
5-5

【Channel】 Choose the set motion detect channels, default is one channel.

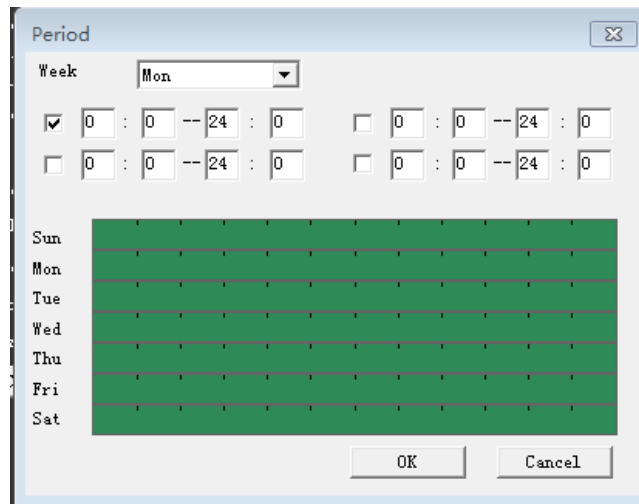
【Enable】 ☒ means that the motion detect function is on.

【Sensitivity】 Choose in the six options according to the sensitivity: lowest/lower/medium/high/higher/highest.

【Region】 Config the trigger region. Max.396 regions can be set.



【Period】 You can set four periods each day per week. Motion detect alarm won't be triggered when time is beyond the period.



【Interval】：Shortest time interval between two alarming. The range is 0~600seconds.

【Alarm output】：Enable to link alarm output.

【Delay】 Delay a few moments and stop when the alarm state is turned off. The range is 10~300 seconds.

【Record channel】：Local recording starts when triggered. Record detect would be enabled.

【Tour】：Not supported now.

【Snapshot】：Local capture starts when triggered. Snapshot detect would be enabled.

【PTZ linkage】：Links to PTZ or presets or cruise when alarm is on.


【Delay】 When alarm is over, recording will last some seconds(10~300sec),then stop.

【SendEMAIL】：Alarmemails will be sent to configured email address when triggered. Email address config refer to network service.

【FTP】：Snapshot pictures and record files will be sent to configured FTP server when triggered. FTP config refer to network service.


【Mobile phone alarm】：The alarm information will be sent to configured FTP server when triggered..

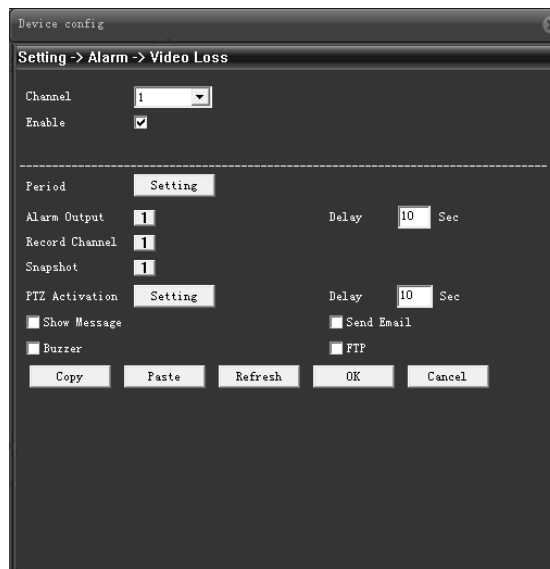
### 5.2.2. Video Blind

Click  as follows:



### 5.2.3. Video Loss


Click , as follows:



5-7

Set method: refer to chapter 5.2.1. video loss.

### 5.2.4. Alarm input

Click  pop-up the alarm input dialog box, as shown in figure 5-8. Alarm input can be external connection with all kinds of alarm.




**【channel】** : select the number of channels needed to set, the default of network cameras is 1 channel.

**【type】** : normally open: alarm channel is open circuit, when trigger the alarm forms pathways for producing alarm message output.

Normally closed: alarm channel accesses, when trigger the alarm open circuit is formed to produce alarm information output.

Other configuration, please refer to 5.2.1. Motion detecting section.

### 5.2.5 .Alarm output

Click  pop-up the 【alarm output】 dialog box, as shown in figure 5-9. Alarm output can be an external lights, alarm warning devices, etc.




【Configuration】: according to the alarm function is enabled the alarm output to decide whether output alarm signal or not.

【manual】: operate alarm signal output manually, after the commissioning the alarm signal output all the time.

【stop】: stop alarm output, even if the alarm function enable alarm output, there will be no alarm signal output.

【state】: display the state of alarm output, a Vsays alarm output.

### 5.2.6. Intelligent analysis

Click  the pop-up 【intelligent analysis】 dialog box, as shown in figure 5-10.

Attention: this function only supports some models.

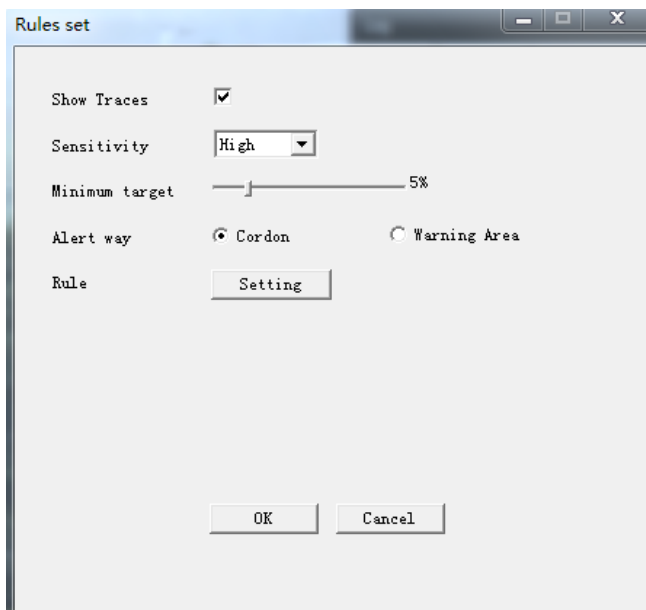


【channel】：select the number of channels needed to set, network cameras default 1 channel.

【Enable】：enable intelligent analysis of alarm function.

【method】：a perimeter alarm algorithm.

【rule】：click "Settings" button, open the rule "rulesSettings" dialog box. As shown in figure 5-10-01.



[Traces show]: if checked can display trigger alarm objects moving trajectory.

[Sensitivity]: a smart analysis of sensitivity, there are the high/medium/low three grades optional. [The minimum target size] : set the minimum target size of the target object.

[Cordon way]: here are "cordon and border area" two lines.

[Line] : click on the inside of the rule set, you can set the stage, with 2 points forming a line, and can achieve it at most eight cordon.

It is divided into horizontal and vertical lines.

Set the stage for the transverse, banned direction from top to bottom, from bottom to top and two-way banned.

Set the stage for the longitudinal, banned direction from left to right, from right to left and two-way banned.


[warning region] : click on the inside of the rule set, you can set the alert area, at multiple points constitute an alert area, up to 8 points makes up a warning area, only can set up an alert area.

Set the warning area, click on the "right" set direction, band direction is divided into two-way points, enter and leave.

[Rule] : click "Settings" set the boundary line and the alert area.

Other relevant configuration, please refer to 5.2.1 motion detecting section.

### 5.3 System Setting

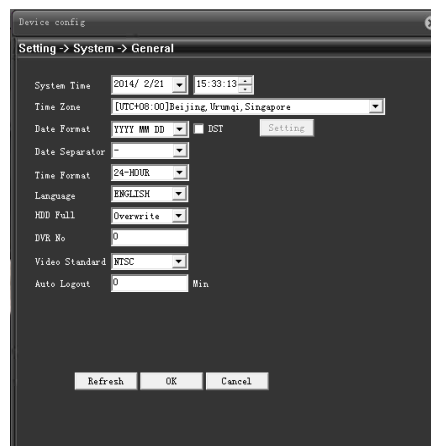
Click  as follows. Configurations include general settings, encoding settings, network settings, network service, output mode, PTZ config, serial port config and camera operations.



5-11

#### 5.3.1. General

Click , as follows:



5-12

【System time】 Adjust system of minutes when (date) (month) (year) artificially.

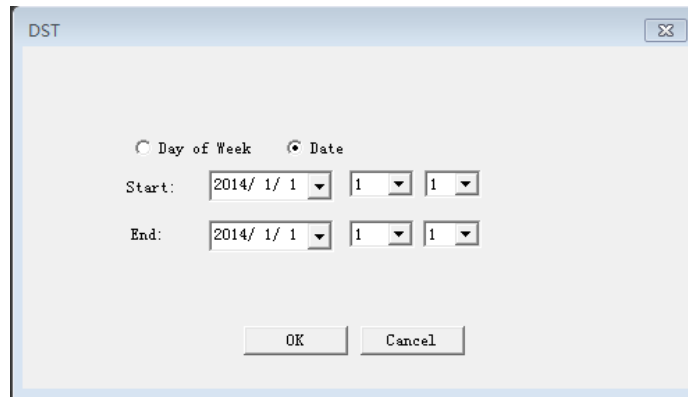
【Time zone】 : Default to CMT + 8, London is GMT + 0, Berlin is GMT + 1, Cairo GMT is + 2 GMT, new Delhi, Moscow GMT are + 3 + 5, Bangkok GMT is + 7, in Tokyo, Hong Kong Beijing are GMT + 8 GMT + 9, Sydney is GMT + 10, Hawaii is GMT-10, Alaska is GMT - 9, Pacific time is GMT - 8, American mountain time is GMT-7, us central time is GMT-6, est is GMT5, Atlantic time is GMT-4, Brazil is GMT-3, central Atlantic GMT - 2.

【Date format】 Choose the data format: YMD, MDY, DMY.

【Daylight Saving Time】 : Open and effective time and effective model (effective by week and by



date)



【Date Separator】 Choose list separator of the data format. Three modes: “—” “/” “.”

【TimeFormat】 Choose time format: 24-hour or 12-hour. The default system in the preview image shows in 24 hours.

【Language】 : Config system language: Simplified Chinese, Traditional Chinese, English and other 20 languages.

【HDD full】 : Measures taken by the camera when the HDD is full.


overwrite: TF card file overwrites the oldest file when video or capture is full and continue recording and capture.

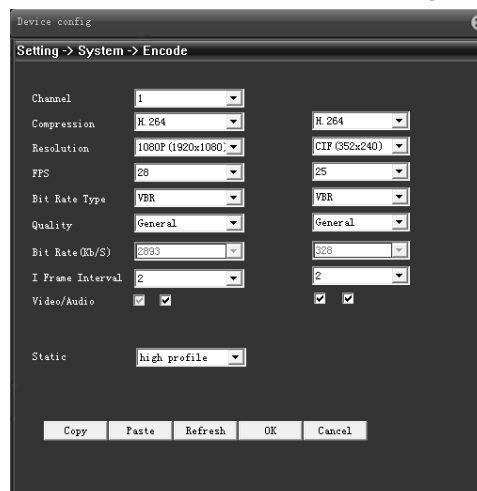
stop recording: Recording and capture stops when TF card recording and capture is full.

【Video Standard】 : Video system switch between PAL and NTSC.

Device NO. and standby time are not supported now.

### 5.3.2 Encode setup

Click  as follows: main stream is on the left, sub-stream is on the right.



5-11

【Resolution】 Config for different device.

Note: Max. sub-stream resolution can't exceed the main stream.

【Frame Rate】 P: 1 frame/s~25 frame/s; N: 1 frame/s~30 frame/s

Note: Low frame rate will lead to caton, reducing stream transmission.

【Bit Rate Type】 You can choose limited code stream or variable code stream.

【image quality】 Effective when it is variable code stream. Switch between

worse/bad/general/good/better/best. The larger code stream value the better image quality.

【I frame interval】 : Camera capture key frame time interval, can be set between 2-12S.

Note: When I frame interval is too large, the preview screen will Caton.

【video/audio】 : When main stream is open, it is default not to be modified. Sub-stream needs to be enabled manually. Audio for both the streams needs to be enabled manually.

Attention: ①Sub stream should be enabled when used for mobile monitoring.

【Encoderstaticconfiguration】: Setthecameracodinglevel, switchbetweenbaseline/mainprofile/high profile, The higher the level, the larger the stream, the better the preview quality.

### 5.3.3. Network setup

Click , as follows: Configure the camera's IP address, gateway, DNS, etc..



5-12

【Automatically obtain an IP address】: Camera connect to the router(DHCP should be enabled),then IP address will be obtained automatically.

【IP address】 Set the IP address. Default: 192.168.1.10.

【Subnet mask】 Set the subnet mask code. Default: 255.255.255.0.should match with the PC.

【Gateway】 Set the default gateway. Should match with the PC.

【DNS server】: Config the DNS server, should match with the PC, wrong DNS will get the cloud service out of work.

【TCP port】 Default: 34567.

【HTTP port】 Default: 80.

Note: When camera is connected to public network via PPPOE, 3G or port mapping, HTTP port required to change the non-80 ports.

【MAC】: Show the physical address of the camera, MAC address for ARSP and other functions.

【TransferPolicy】 There are four strategies: Adaptive/QualityPriority/Smooth priority/Network transmission Priority.


Adaptive: when network bandwidth is small, the preview screen automatically jump to sub-stream to ensure smooth preview

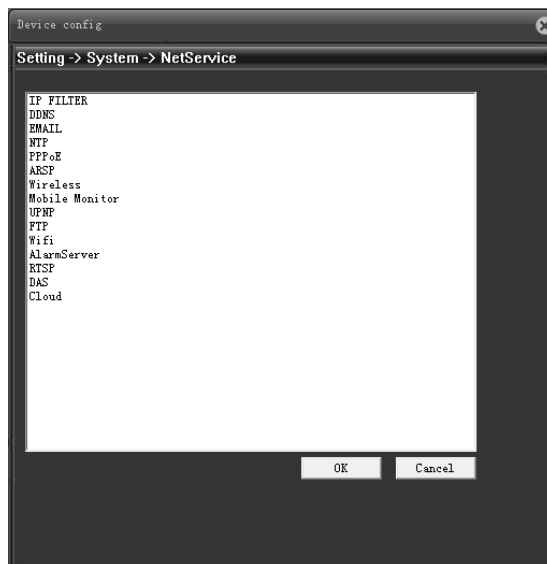
Quality Priority: Whether the network bandwidth is large enough, the preview screen is always displayed in the main stream, when the bandwidth is not large enough ,screen will Caton.

Smoothpriority:Changeencodersettingsandlowerthestreamwithoutreducingframeratetoensure the smooth screen.

Network transmission priority: When multiple users login the same camera, limit the user with the smallest bandwidth.

#### 5.3.4. Net Service

Click  as follows :to config the email, wifi and other functions.



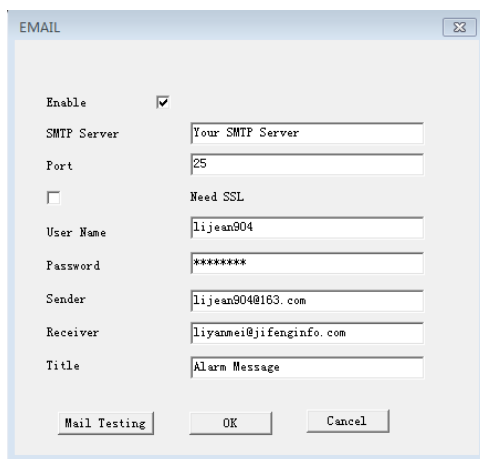
5-15

【IP permission】: Config the blacklist and white list.

blacklist: Address under blacklist cannot access to the camera,max.64 addresses can be added. Whitelist: Address underwhitelistcanaccesstothecamera,thosehaven'tbeenaddedhavenoaccess, max.64 addresses can be added.

Attention: The same IP address can not be added into blacklist and white list at the same time. 【DDNS】: Set DDNS, support CN99, Oray and other mainstream free domain names.

Note: Got to domain website, register CN99 and obtain domain name, account and password before use. 【Email】: Config email address for alarm messages sending and receiving, support QQ, sina, Gmail, mobile email, netease mailbox. Confirm SMTP is enabled before use.



5-14 Email settings

[SMTP server]: Login mailbox to search for how to fill in SMTP server.

Attention: Net Ease mailbox registered before November, 2006 can support SMTP.

[Port, SSL]: Consistent with mailbox configuration, you can log in to view the mailbox settings. [User name]: Just fill in the e-mail address before the @ part.

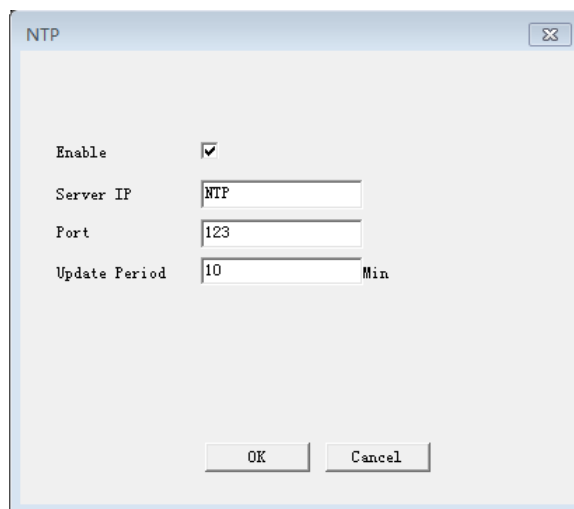
[Code]: the password for the user name.

[Person]: set the mail sender's EMAIL address.

[Addressee]: You can config 3 email addresses, separated by a semicolon, can be the same with outbox. [Theme]: Config email theme, can be modified.

[Mail Test]: After configuration, click mail test to config whether the email is valid.

【NTP settings】: Camera system times synchronize with the designated PC, enable the NTP service before use.



[Server address]: PC and the camera should be within the same LAN and same IP subnet.

[Port]: the default port 123 (NTP), can be set according to the actual NTP server port

[Time zone]: London is GMT + 0, Berlin is GMT + 1, Cairo GMT is + 2 GMT, new Delhi, Moscow GMT are + 3 + 5, Bangkok GMT is + 7, in Tokyo, Hong Kong Beijing are GMT + 8 GMT + 9, Sydney is GMT + 10, Hawaii is GMT -10, Alaska is GMT - 9, Pacific time is GMT - 8, American mountain time is GMT -7, us central time is GMT - 6, est is GMT 5, Atlantic time is GMT -4, Brazil is GMT -3, central Atlantic GMT - 2.

[Updating cycle]: the interval time with the NTP server, default is 10 minutes.

【PPPOE】: Camera connect to the public network via PPOE dial-up, contact the network operator for the user name and password. After successful dialing, public IP address will be displayed. Attention: Some 80 ports are sealed by the operator, plus change the http port as non-80 port. 【ARSP】: We provided domain name service, user can set up their own DNS server or use our free DNS server. Server address: <http://xmsecu.com:8080>  
Register at website to get user name and password.

【Phone monitoring】: Login camera via mobile, support Android、IOS、 Windows Phone, For details, see Appendix I. Attention: Confirm the phone is connected with network, sub-stream is enabled.

【UPNP】: Router goes port mapping and fixed port automatically towards the camera.

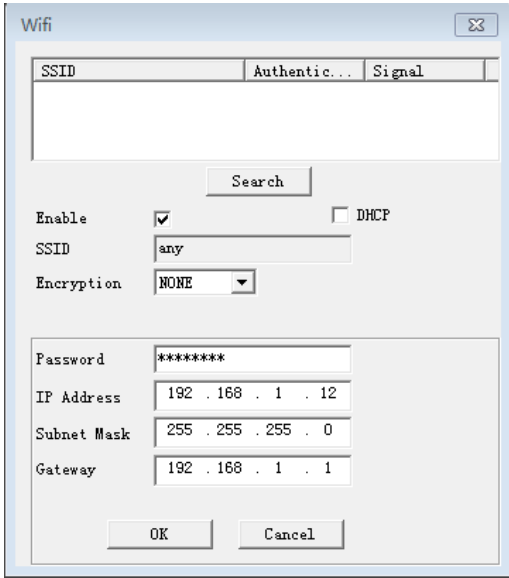
Note: Make sure UPNP is enabled, camera and router share the same network.

【FTP】: Upload the alarm recording or capture to designated FTP server.

[Server address]: Designated FTP server address, can be local network or public FTP server.

[Port, username, password, etc.]: Plus contact FTP server administrator.

【WIFI】: The camera via WIFI connects to the public or local area network or LAN.




5-16 WIFI 设置

- [Search]: click on the search button, search wireless router within the scope, displaying in a bar above.
- [DHCP]: wireless function of obtaining IP address automatically.
- [SSID]: specify the name of the wireless router.
- [Code]: connection password of wireless router.
- [IP address]: set the camera wireless IP address.
- Encryption mode, subnet mask, default gateway is the same to the wireless router.
- 【3Gnetwork】:camerasviaanexternal3Gcardrealizethefunctionofonline,supportmobile,telecom and China Unicom and other operators of 3G network.

	Type	Insert point	Dial Number	User name	code
telecom	Automatic or EVDO,CDMA1.	ChinaNet	#777	ctnet@mycdma.cn	vnet.mobi
unicom	Automatic or WCDMA	3gnet	*99#	empty	empty
mobile	Automatic or TD-SCDMA, GPRS	cmnet	*99***1#	card	card

- 【Alarm Center】: Upload alarm info to alarm center of the designated IP address.
- 【RTSP】: Support cross browser, VLC preview screen.
- Note: Support Apple, Google, Firefox browser, PTZ control, main and sub stream switching, install QUICKTIME plug-in before use.
- 【DAS】: Enable it, then dock to MYEYE monitoring platform, refer to Appendix II MYEYE monitoring platform instruction.
- 【Cloud Services】: Cloud service instructions, refer to Appendix III cloud instructions.
- 【PMS】: Alarm information push, enabled it, then speed dome can deliver alarm info to mobile with EyeCloud.
- [Server address]: input server address for push.umeye.cn.
- [Port]: input server port for push.umeye.cn.
- Attention: Add the serial number to EeyeCloud mobile client.

5.3.5. Output mode

Click  as follows: to config channel name.



5-17

【ChannelName】: Setthecamerachannelname,upto26characters,specialcharactersarenotsupported. 【Regional coverage】: Setthecameracoverageareanumber,locationandsize,cansetupfourcoverage area.

【Time title, channel title】: Config whether the time title and channel title are displayed and the display area.

5.3.6. PTZ setting

Click  as follows:



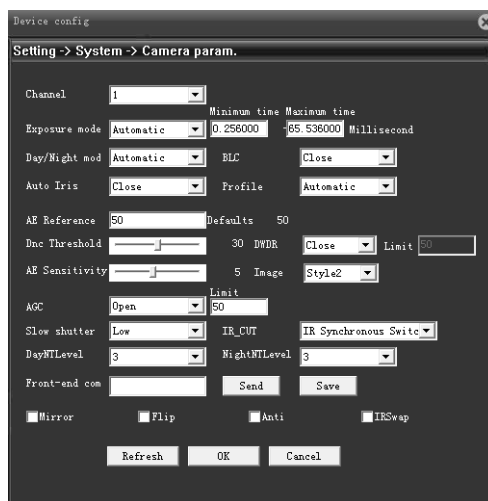
5-16

Check PTZ protocol, address, baud rate and save the configuration information.

Note: PTZ might break down when any of the following mismatch with the PTZ: protocol, address, baud rate.

5.3.7. Camera parameters

Click , as follows:



5-20

**【ExposureMode】:** Config the exposure time, can be switched between auto/manual, 1/50 to 1/10000S. the shorter the exposure time, the darker the preview screen.

[Day/Night Mode]: Modify day/night mode manually.

Auto: The camera automatically control color of the preview screen according to the actual ambient light.

Color: The camera remains color preview screen instead of turning black and white when there is insufficient ambient light.

Black/white: Camera preview turns black/white when there is sufficient ambient light.

[BLC]: Turn off or turn on the backlight compensation. With BLC on, main scenery of the center can be seen under bright environment.

[Auto Iris]: Turn off or turn on auto-iris

[Profiles]: automatic, indoor and outdoor.

[Auto Exposure Reference]: Set the camera's exposure, selectable between 0 and 100, the larger the reference value, the brighter the preview screen, whereas darker.

[Day & Night Threshold]: associated with IR\_CUT switching modes.

IR\_CUT automatic switching mode: automatic day and night mode is the critical point, the threshold greater the higher the brightness, whereas lower.

IR\_CUT IR synchronous switching mode: 10-20 to close the switching threshold stabilizer, 21-30 Debounce time 3s, 31-40 Debounce time 4s, 41-50 Debounce time 5s.

[WDR]: Set the WDR closed or open. When WDR is on, adjust the cap under bright background to see the main scenery clearly.

[AE Sensitivity]: When ambient light dramatically changes, the length of time the camera takes to adapt to the light changes. The higher the sensitivity, the shorter to adapt.

[AGC]: Set AGC turned off or turned on. Auto adjust the sensitivity of the camera according to the ambient light changes to change the screen brightness.

[ESlowShutter]: Set the electronic shutter off, weak, medium and strong to increase the brightness by accumulation, to prolong the exposure time to enhance the image sensor under low light illumination.

[IR\_CUT]: can be set as automatically switch or infrared synchronous switch. Automatic switch: ICUT switch according to the brightness level of the actual environment Infrared Salvos: ICUT switch is determined by the state of infrared light.

[Day Noise level]: Eliminate the screen lit when the light is sufficient, the higher the level, the better the reduction.

[Evening Noise level]: Eliminate the preview screen noise level when there is insufficient light, the higher the noise level, the better.

**【Front-end command】:** Send orders to front-end to adjust camera parameters [Mirror]:


When you enable it, the preview screen flip around 90°.

[Flip]: When you enable it, the preview screen turn upside down 90 °.

[Fluorescent anti-flash]: To get rid of the horizontal fluorescent stripes of preview screen with fluorescent lamp.

[IR lens reverse order]: IR\_CUT reverse order.

## 5.4 Management Tool

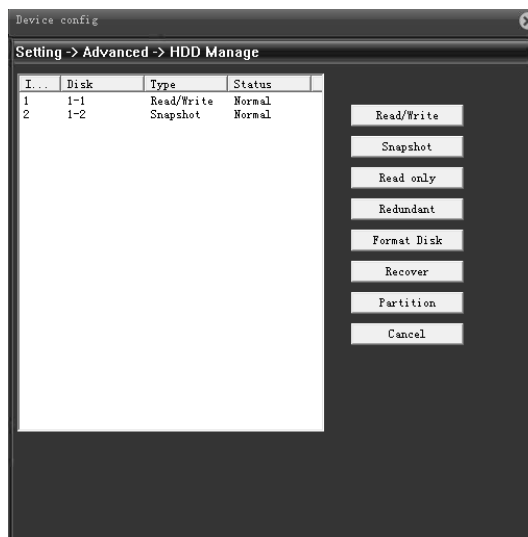
Click  as follows. You can config HDD management, user management, automatic maintenance, restore default, import and export, restart, system upgrades and other functions.



5-21

### 5.4.1. HDD management

Click  as follows:



5-22

[Drive is set to read-write] : The partition or TF card can be used for recording only.

【Drive is set to snapshot】: The partition or TF card can be used for capture only.

【Drive is set to read-only】: New recordings or capture files can not be written in the partition or TF card cannot, can playback only.


【Format the disk】: Format the partition or TF card and delete all.

【Partition】: TF card for partition.



- Attention:
- ① We recommend Genuine Kingston TF card, capacity greater than or equal 4G.
  - ② Make sure that each partition is larger than 1024M.
  - ③ Format TF card before partition, data will be lost.

#### 5.4.2. User Management

Click , as follows:



5-21

[Modify User]: Modify the added user name, whether reuse, notes, group, class, and permissions. [Modify Group]: modify the added group name, notes and permissions.

Note: Reserved group and user name can not be modified.

【Change Password】: Change the password.

【Add user】: Set new user name, password, notes, owning group, permissions and other information, can add up to 64 user names.

【Add Group】: Config the added group name, notes, permissions and other information.

【delete user】: Delete the selected user, can not delete the registry.

【deletegroup】: Deletetheselectedusergroup,whenthegroupcontainstheuser,itcannotbedeleted. Attention: Reserved user and combined user can not be deleted.

#### 5.4.3. Auto Maintenance


Click , as follows:



5-22

[Automatic restart]: Set the camera automatically restart at some point during the day, the default restart 1:00 Tuesday.  
[Automatically delete old files]: System will automatically delete videos and drawings within 1-255 days, the default is never deleted.

#### 5.4.4. Restore Default


Click  , as follows:



5-23

It is available for general configuration, encoding settings, video settings, alarm settings, network settings, etc. Single, multiple or all the settings can be restored factory settings.

#### 5.4.5. Import and Export

Click  , as follows:



5-24

[Configuration Export, Import]: Export current config file, the CFG file format can be imported into another camera with same configuration.


Note: Import one config file into multiple cameras, the IP address are the same, user need to modify the IP address manually.

[Export Log]: Export camera log information.

#### 5.4.6. Restart

Click  , as follows, click restart, camera soft-reboot via client.


#### 5.4.7. System Upgrade

Click  as follows, Select the correct upgrade file via browsing, click Upgrade to begin the upgrade, the upgrade process will be displayed, pop-up dialog box when upgrade is successful, the camera automatically soft reboot when the upgrade is complete.



5-25


### 5.5 System Info

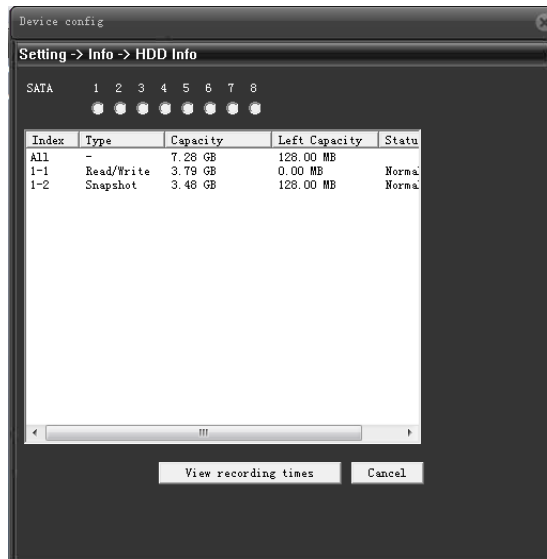
Click  as follows, HDD info, log info, version info can be searched.



5-26

#### 5.5.1. HDD info

Click  as follows, total capacity, remaining capacity, begin and end recording time and other information can be searched.




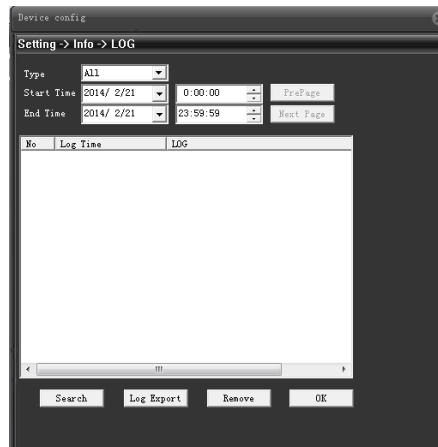
5-27

[Drivetypeandcapacity]:checkthepartitiontype,totalcapacity,remainingcapacity,andstatus information.

[DVR time]: check start time and end time of the recordings and capture.

### 5.5.2. Log info

Click  as follows, all info or parted info can be searched.



5-28

[Type]: Check the log info, including all, system operation, configuration operations, data management, alarm events, recording operation, user management, file operations


[Start,endtime]:Checkthestarttimeandendtimeofthelog.Resultsshowonlytheloginformation within time period.

[Query]: Query all logs.

[Export Log] : Export log information. [Empty]:

Clear all log information.

### 5.5.3. Version Info

Click  as follows, HDD info, program version and serial number can be searched.



## 5-29

[Video channel, extended channel, alarm input, alarm output]: Display the current camera hardware, support alarm input and output.

[System Version]: Display the camera model and other information.

[Release Date]: The current program release time.

Attention: Contact company's technical staff, provide system version and release dates for technical support.

[System uptime]: Cumulative running time after the powering on.

Attention: After reset, the system uptime is cleared.

[Serial number]: 16-bit serial number, for cloud services.

[NAT state] : When the camera is connected to cloud server, the connection is successful, otherwise remarkable is probing DNS.

[NAT status code] : Camera connect to cloud services, displays IP address of the server.

## Chapter 6 After-sale Service & Maintenance

### 6.1 Installation and service

Contact our maintenance department when you have questions during installation. Barcode should be well kept for fast and convenient service.

### 6.2 Product Repair

Please return the product in accordance with the relevant provisions of the transport of the product, ensure that the product suffers no damage during the way back, avoiding unnecessary disputes. Remember not to try to dismantle the cover and repair yourself to avoid electric shock or other risks. We recommend that all maintenance services done by professionals.

#### Warranty Information

Warranty period: one year. The warranty card work for the products you bought from us.

1. Within warranty period, when there is breakdown under normal conditions, we will provide free repair service with the warranty card and purchase bills you have;

2. The following situations need extra pay during the warranty period:

- (1) Physical damage;
- (2) Beyond the warranty expiration date or free maintenance period;
- (3) Any failure or damage caused during use, maintenance or custody against the manual book;
- (4) Abnormal situations caused by illegal copy, non-standard, self-written or third-party software.

- (5) Abnormal situations caused by falling, squeezing, high temperature, corrosion, foreign objects entering, poor electrical environment or other non-normal reasons.
- (6) Breakdown or damage caused by natural disasters, war and other force majeure factors.
- (7) Breakdown caused by unauthorized service agencies or disassemble, repair, installation confirmed by their personnel.
- (8) Without company name, company address, production date, serial number, warranty card, or serial number and stickers blurred, damaged, unknown.

warranty card

Product name		Model	
Purchase Date		Dealer	
Purchase Market			
Customer name		Profession	
Telephone number		Zip code	
Work units			
Current Address			

1. Please send the device back with the warranty card and bill if you need Warranty and Maintenance, transportation costs are on the user.
2. Plus take care of the card for better service.