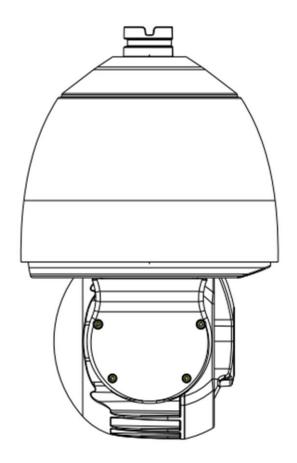
IP Intelligent Speed Dome Manual





Version 1.1.0

JF TECH(Co.,Ltd)

Thanks for purchasing our products, if you have any questions or need, please feel free to contact us.

The manual is the network high-speed IP camera generic product manuals, support functions due to the different models differ, please prevail in kind.

This manual is intended for you as an operating system and programming reference tool. You can find information about the features and commands in this manual, as well as a detailed menu tree and Quick Start Guide. Installation section provides the setup and installation of network IP camera information needed. Before installing and using the system to fully understand the information in this manual.

This manual may contain technical inaccuracies, or does not match the product features and operations, or typographical errors. We will update the contents of this manual is based on product enhancements, and will regularly update the product or process improvements or described in this manual. Updated content will be added in the new version, without notice.

Safety Precautions

The purpose of this content is to ensure that users use the product correctly to avoid danger or damage to property. Before using this product, please read this instruction manual carefully and retain it for future reference.

As shown below, precautions are divided into "WARNING" and "CAUTION" in two parts:

WARNING: ignoring warnings could result in death or serious injury.

Note: ignore the precautions could result in injury or property damage.



WARNING Precautions to prevent the potential danger of death or serious injury.

CAUTION Precautions to prevent the potential danger of injury or property damage.

WARNING:

In the product installation, you must strictly follow all electrical safety procedures and the use of regional countries.

- 1. Please use regular factory supplied power adapter, power supply minimum requirements for the DC12V/4A (standard) and AC24V/2A (optional).
- 2. Do not connect multiple network IP camera to the same power (adapter overload may cause excessive heat or
- 3. When wiring, disassembly operations, please be sure to disconnect the power supply, not live action.
- 4. When installing the product on a wall or ceiling, fixed firmly IP camera.
- 5. If smoke appears in the IP camera, or produce odor, or noise, turn off the power immediately and unplug the power cord, and contact with your dealer or service center.
- 6. If the device does not work properly, please contact the store to purchase equipment or the nearest service center, do not disassemble or modify the device in any way. (On the issue of unauthorized modification or repair caused by the Company is not liable).

CAUTION:

1. Do not make objects fall to vigorously shake the device or equipment, and to place the device away from the presence of magnetic interference. Avoid installing the surface vibration or vulnerable areas (ignore this may damage the device).

- 2. Do not point the IP camera at bright objects, such as the sun, incandescent, otherwise it will cause damage to the camera.
- 3. Installed may not be exposed to rain or very humid areas.
- 4. Avoid placing the device in direct sunlight place, or poorly ventilated location, or near a heat source such as a heater or heating, etc. (ignore this may cause a fire hazard).
- 5. In order to avoid damage to the camera, do not have the camera set up in smoke or steam, the temperature is too high or there is a lot of dust in the workplace.
- 6. When cleaning, use a soft cloth to wipe off the dirt on the housing. When cleaning up dirt, dry cloth should be cleaned when the dirt is hard to remove, use neutral detergent gently wipe clean, do not use alkaline detergents. If there is sticky dust on the lens, use a special lens paper wipes.

About Default

Equipment factory default super administrator account: admin

Equipment factory default admin password: Empty Equipment factory default IPV4 address: 192.168.1.10



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1 Introduction

1.1 Product Description

Introducing high definition integrated movement, HD network speed dome is featured with automatic focusing and auto white balance, combining PTZ with digital decoder inside. With précised motor drive, it works without jitter at any speed, sensitive and stable. Moreover, built-in web also allows customers to browse via IE. All in all, extraordinary performance and perfect features make it superior with high technology in security and surveillance field.

Divided into common speed dome and IR speed dome, it can be applied for areas where high-speed mat is needed or places with poor light, such as, river, forest, railway, airport, port, oil field, sentry, plaza, park, scenic spot, street, station, large venue, outside of the residential area, etc.

2 Features

2.1 Infrared Function(Apply to IR speed dome)

- ➤ Quick cooling cast aluminum design
- > CCVE and PWM design ensure IR LED work steadily for a long time
- > IDS, IR brightness adjusted with magnification, distance and brightness.
- > Individual MCU infrared control system, flexible and multiple IR modes
- ➤ 10 grade IR power and illumination
- > Perfect IR vision via IR control and AIO optical filter switch
- CGS radiating system
- ➤ IP66 , TVS4000V lightning and surge protection.

2.2 System Functions

- Integrated design, highly reliable
- CGS radiating system
- ➤ IP66, TVS4000V lightning and surge protection.
- ➤ 3ch digital temperature control system, live monitoring over system, camera, IR panel, auto control over fan and module
- ➤ Multi-axis design
- ➤ Built-in heat balance, fog-proof
- ➤ Precise motor drive, accuracy less than 0.1,no shake of pic.
- Support online upgrade, convenient and cost-effective.

- ➤ Support 3D positioning
- ➤ Easy DIP, configured protocol
- ➤ Multi-language and friendly OSD menu
- ➤ Support preset/patrol/pattern/linear scan/frame etc.
- ➤ Support title display
- ➤ Support menu code protection
- > Low consumption, environmental friendly.

2.3 PTZ

- ➤ Horizontal:0° ~360° rotation; Vertical:-5° ~92° ,auto flip, no blind zone.
- ➤ 255 presets, power-off memory
- ➤ 4 preset cruise scanning, each can add another 32 presets.
- ➤ Support pattern scanning, record time is over 10 min or 1000 orders.
- > Support proportional zoom, rotation speed adjust automatically with lens.
- ➤ Built-in RTC clock,16 timing task, individual cycle execution.

2.4 Built-in HD Integrated Camera

- > Auto IRIS & BLC
- ➤ Auto/manual white balance
- ➤ Auto/manual focus
- ➤ Auto brightness control



3 Functions

In this chapter, most principles for the functions of the speed dome are described, Specific operations are not included. Different platform system operate in multiple ways. We recommend you to follow the operation manual. For special requirement and operations, please contact the dealer.

- ➤ Multi-lingual OSD Menu: With multiple languages, you can check the info and status, and also config the parameters.
- ➤ Self-adaptive to multiple protocols: Compatible with PELCO-D、 PELCO-P、 TA、 HKV,DH and other protocols.
- ➤ Control: Pan/tilt movement and lens zoom can be controlled via keyboard, DVR, matrix, etc.
- ➤ Limit stops: Enable this function, speed dome can only monitor within configured areas(left/right, up/down) via keyboard, DVR or client, areas out of the limit cannot be monitored.
- ➤ Auto scan: Four scanning modes: preset scanning, horizontal scanning, auto scanning, pattern scanning. Speed can be set via OSD menu from level 1 to 40, the corresponding speed ranging from 1° to 40° per sec.
- ➤ Preset: Each contains the PTZ horizontal position, vertical position and lens zoom. Speed dome move to the defined position when preset is called.
- Auto flip: Under manual mode, when the targeted object goes beneath the speed dome, the camera flips 180 degrees automatically to track it.
- ➤ Privacy mask: User can define areas which cannot be viewed, the masked area moves with the speed dome, horizontally and vertically. The shield area adjust with the lens (Note: Speed dome should support this function)
- ➤ Proportion zoom: Horizontal and vertical speed changes with the proportion of the zoom. When zoom increases, the camera moves slower; when zoom decreases, the camera moves faster.
- Auto focus: Under this mode, the camera will focus automatically to maintain clear images. When adjusted as "near" and "far" manually, focus distance can be changed. Control the camera to move horizontally, vertically, zoom the lens, then the integrated movement will restore auto focus.
- ➤ Day/night: 3 modes: auto, day, night. Under auto mode, the integrated movement turns into color or black/white according to the surroundings. Under manual mode, you can choose color or black/white image via the day and night options from the menu.
- ➤ Low-illumination electronic shutter: Shutter speed goes down automatically and extend the exposure time to get clear and bright images under low-illumination environment.
- White balance: Compensate the color to get vivid images.
- ➤ Preset cruise scan:4 presets cruise scan, each can add another 32 presets, speed and time can be set alone.
- ➤ Pattern scan: To re-play the PTZ operations including horizontal and vertical movement ,zoom, calling presets, Focusing and aperture are default auto.
- ➤ Power-off memory: Position info of the speed dome is stored when the power is off. Reboot the camera, the dome goes back to previous status. The default power-off memory time is 3min.

➤ Patrol mode: When speed dome stays without operations, it starts patrol, supported mode: preset 1 to 8,pattern scanning 1 to 4,cruise scanning 1 to 8,horizontal scanning, two points scanning. You can also close this function.

4 Speed Dome Installation

4.1 Install Preparation

4.1.1 Basic Requirements

Please read the following info before installation:

- 1) Installation and maintenance should be carried out by professional staff and obey the local electrical regulations. All electric work should follow the latest electrical regulations. Check whether the accessories are complete and confirm whether the place and installation mode is in accordance with requirements. If not, please contact the local dealer and use the product according to the actual environment.
- 2) Indoor speed dome only applies for inside environment, installed or exposed in rainy or humid place is not allowed.
- 3) After re-installation or maintenance, resistance between the circuit and the shell need to be checked to make sure there is no short-circuit and the insulation is good.
- 4) Confirm there is enough space for the speed dome and structure components. Make sure that the total weight of the speed dome and its structure components are within the capability of the ceiling, wall and bracket. Materials should be capable of holding four times weight of the speed dome.
- 5) Follow the below working environment:

Temperature	-30∼65℃	atmospheric	86∼106KPa	
		pressure		
humidity	< 90%RH no	power	DC12V/5A(standard)	
	condensing			

4.1.2 Wire preparation

The below chart is recommended max. distance for 12DC. (The max. voltage is about 10% for DC/AC device). For more information, please refer to appendix 3—Wire gauge & transmission distance.

cable diameter	max distance(m/ft)	
0.75mm2	6m(20ft)	
1mm2	9m(30ft)	
1.5mm2	12m(40ft)	
2mm2	15m(50ft)	

Please take care of the product package

Please keep the orginal package properly after unpacking the camera. Send us the

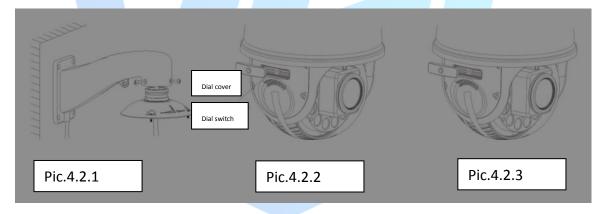
package when there is any problem.

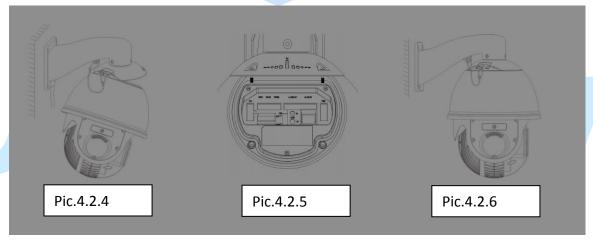
4.2 Installation

4.2.1. Speed dome installation

For various bracket installation, please refer to chapter 2 and 3 of this manual. Take wall bracket for example:

- 1) Take out the cable from the speed dome, connect the bracket and cover with 3pcs of screws, then fix it to the wall.(As pic.2.2.1).Note: Waterproof folder is needed.
- 2) Open dip switch with screw driver, configure the protocol, baud rate and speed dome address(as pic.2.2.2),refer to chapter 2.4—dip switch setting.
- 3) Remove the gummed tape(as pic.2.2.3), check whether the seal ring on top of the dome is well put.
- 4) Connect the safe rope of the speed dome to the bracket, then hook up the dome to the connected cover(as pic.2.2.4)Then plug the cable into the right pin according to the reference.(as pic.2.2.5)
- 5) Fix the speed dome with screws.(as pic.2.2.6)





4.2.2 Default setting

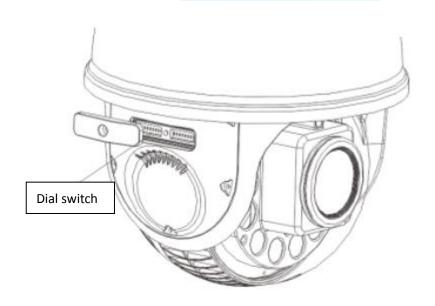
protocol: auto match

address: NO.1

Baud rate: 2400-N-8-1 120Ω ohmic resistance: OFF

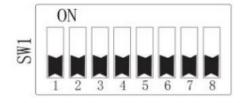
4.2.3 Dial Switch Setting

Configure the protocol, baud rate and address before installation. The dip switch is on side of the speed dome(as pic.2.4.7)

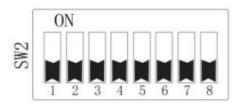


Pic.4.2.7 Speed Dome Dip Switch

SW1-configure the protocol, baud rate and 120 Ω ohmic resistance;SW2-configure the communication address.

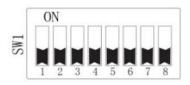


SW1 protocol & baud rate switch

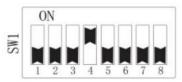


SW2 address switch

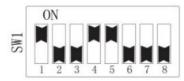
eg: part of dip switch(protocol & baud rate)



Auto match



PELCO-D&2400BPS



PELCO-P&9600BPS

1) protocol rule

protocol	SW1-1	SW1-2	SW1-3
Auto match	OFF	OFF	OFF
/PELCO-D			
TA	OFF	OFF	ON
PELCO-P	ON	OFF	OFF
HKV	ON	ON	OFF
DH	ON	OFF	ON

2) baud rate rule

baud rate	SW1-4	SW1-5
Auto match /1200BPS	OFF	OFF
2400BPS	ON	OFF
4800BPS	OFF	ON
9600BPS	ON	ON

- 3) 120Ω ohmic resistance configuration
 - SW1-8 is the 120 Ω ohmic resistance of RS485.Please config in accordance with <appendix 2 RS485BUS connection>.
- 4) communication address configuration
 - SW2 is for speed dome address configuration. With binary system, NO.8 is MSB, NO.1 is LSB. For PELCO-D / TA, please refer to appendix 6—table of address code>.
 - 2.5 Alarm Wire

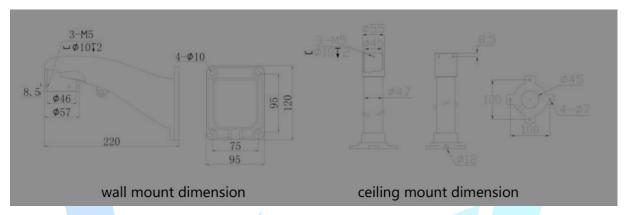
Speed dome support 4ch alarm input and 2ch alarm output. As follows:

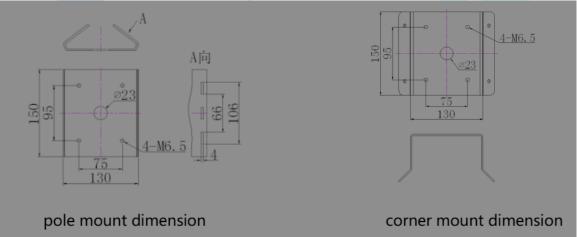
Port name	description		
COM1	alarm output channel ,1common port		
NO1	alarm NO output channel 1		
COM2	alarm output channel ,2common port		
NO2	alarm NO output channel 2		
GND	alarm output GND		
IN 4	Alarm input channel 4		
IN 3	Alarm input channel 3		
IN 2	Alarm input channel 2		
IN 1	Alarm input channel 1		
GND	Alarm input GND		

5 Bracket Installation Instruction

This chapter is applied for common bracket installation, just for reference, for more info, please read the fast manual.

5.1 Bracket Dimension





5.2 Wall Mount Installation

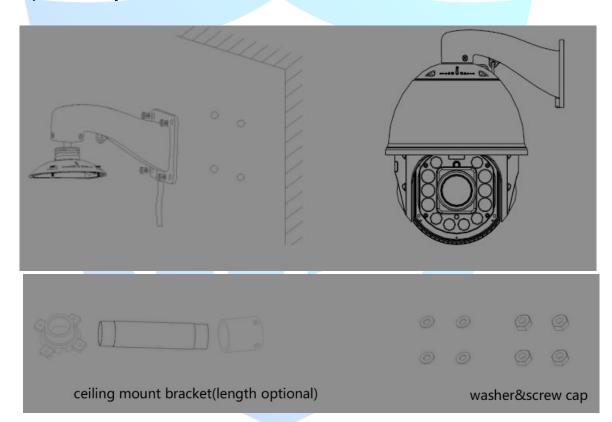
1) accessory installation



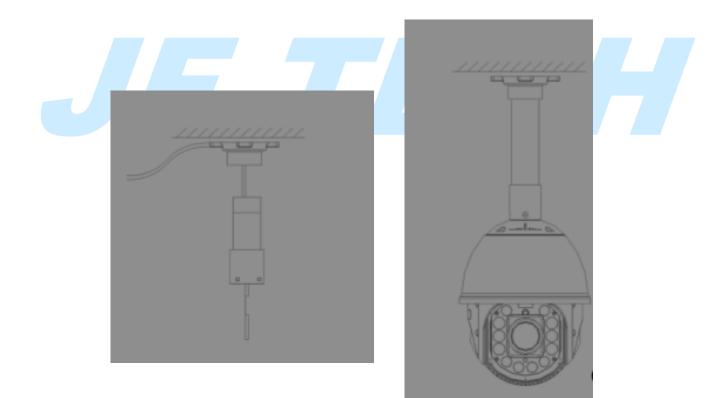
2) mount step

5.3 Ceiling Mount Bracket Installation

1) accessory installation

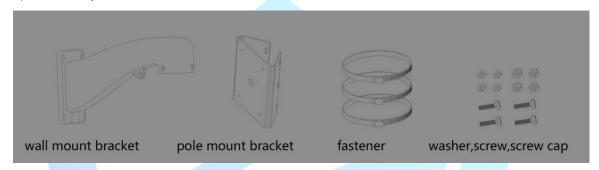


2) mount step

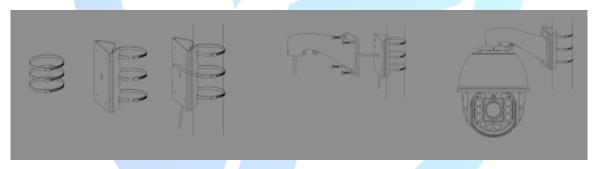


5.4 Pole Mount Bracket Installation

1) accessory installation

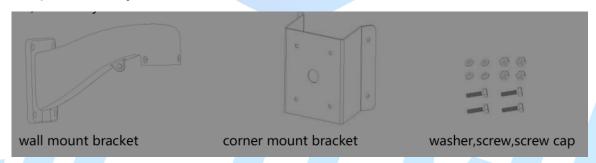


2) mount step

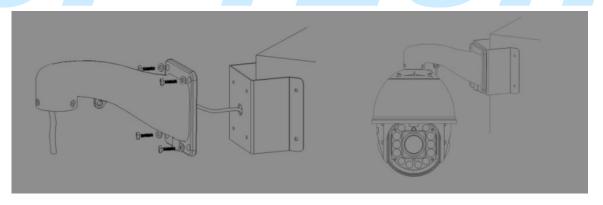


5.5 Corner Mount Bracket Installation

1) accessory installation



2) mount step



6 Operation Instruction

6.1 Power on self test(POST)

Speed dome goes self test after power on. Sequential: system preheat (if necessary), camera test, horizontal test and tilt test. The whole process takes about 40 seconds.

Note: 1, Confirm the power is matched, turn on the power switch when cable is well connected.

- 2, External power requirement: 220V±10%/50Hz.
- 3,We recommend stable power with less interference. UPS protection is needed when allowed.

6.2 Reboot

There is soft-reboot and hard-reboot. Go to<device config>-<management tool>, choose reboot-hard-reboot, plug the power, recharge it to reboot the device.

Instruction:

Power failure recovery: When the power goes off abnormally, reboot the device, previous record info will be saved automatically and recovered after reboot.

6.3 prepare

After ensuring that the network camera, the user's computer and all the hardware devices connected to the normal power supply is complete, boot the computer, run ping network camera (note: IP address of the network camera in LAN must be unique), such as IP network cameras is 10.10.208.112, run ping 10.10.208.112, if the network camera has shown the following responses, which means that the network connection is normal, you can download the plug-in.

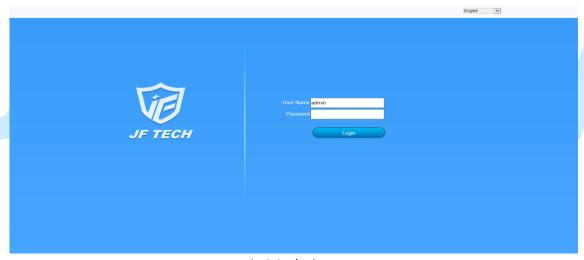


```
X
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.
                                           All rights reserved.
                                                                                 Ξ
C:\Users\Administrator>ping 10.10.208.112
Pinging 10.10.208.112 with 32 bytes of data:
Reply from 10.10.208.112: bytes=32 time=1ms TTL=63
Reply from 10.10.208.112: bytes=32 time=1ms TTL=63
Reply from 10.10.208.112: bytes=32 time<1ms TTL=63
Reply from 10.10.208.112: bytes=32 time=1ms TTL=63
Ping statistics for 10.10.208.112:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\Users\Administrator>
```

Pic.4.3

6.4 Log WEB Client

Login after the device boots up. Corresponding functions are provided according to user authority. Default IP: 192.168.1.10, Sub-mask: 255.255.255.0, Gateway: 192.168.1.1.Reserved one user "admin", default no password. Admin is super user, can change the password but not the authority.

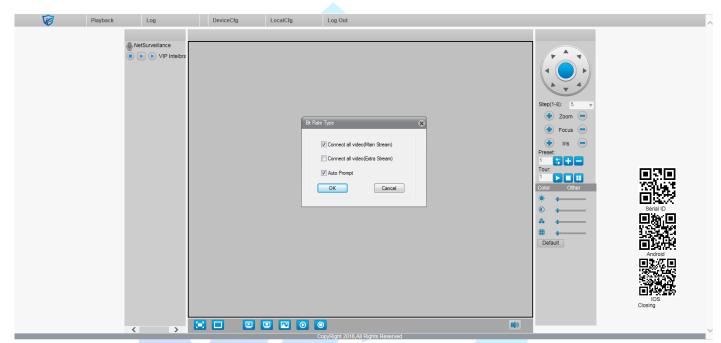


pic.4.4 login

For safety, go to user management to change user name and password when you first login.

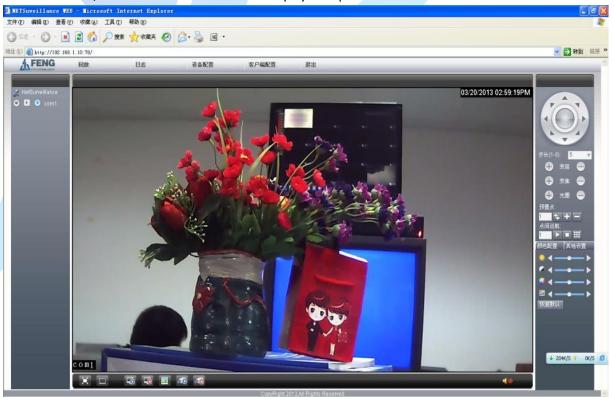
6.5 Preview

After login, pic.4.5 pops up, you may choose main stream or sub-stream with the left preview the recordings.



Pic.4.5 Stream selection

Date, time and channel info will be displayed at preview interface.



Pic.4.6

Playback: Playback video and capture local and remote file browsing

Logs: Query network camera alarm, operating information

Device configuration: network camera feature configuration, detailed in Section 5

Client: WEB client configuration

Exit: Exit landing

Color settings: WEB client preview color settings

Other settings: network camera network camera color settings and restart

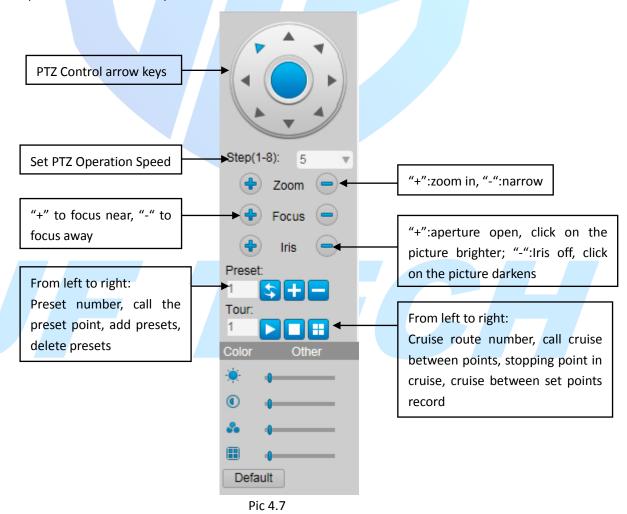
PTZ control: detailed description, see section 4.6.

Other icons function:

<u>_</u>	intercom	Local record	Extra stream	Main stream
	audio	snapshot	Disconnect all video	Full scream
(D)	All channel record	Close all record	Connect all video	

6.6 PTZ Control

Note: PTZ control, please enter System Settings - PTZ configuration settings to set correct protocol, address, baud rate, data bit of information, otherwise it will not control the PTZ.



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PTZ control can achieve the following functions:



6.6.1 PTZ Horizontal And Vertical Movement

Users can operate up, down, left and right to control the image above and oblique direction so up and down arrow keys to control PTZ turning left and upper left, lower left, upper right, lower right direction of rotation. The

speed can be modified in step settings.



6.6.2 Step Settings

Step is mainly used to control PTZ operation speed, the greater the greater the PTZ operation step magnitude smaller step size smaller magnitude PTZ operation; There are eight steps of 1-8 grades to choose from, step 1 is the lowest, the highest step 8.

6.6.3 Lens Control

PTZ camera control functions through the focus, zoom, iris to control the network camera's lens.



a. Zoom Control

Users can control the focal length by the zoom control buttons, click left " " to enlarge, click right " to narrow. Adjust the focus distance; get a panoramic view of the screen or close-range required.

b. Focus Control

Hold down the left button ", distant objects or scenes clear up, blurred objects from the past; if you hold down the right button ", then the object or scene from nearly clear, distance blur. Initialization and

network camera horizontally or vertically as well as zoom operations, focusing both auto focus mode.

When any of the following situations will not be on the network camera auto-focus camera goals: Target is not the center of the screen.

At the same time distant and close observation of the target, while ensuring that the front and rear are clearly not.

Targets are light objects.

Target moves too fast.

Target is a large area of monotonous goals. Such as walls

Target is too dark or fuzzy.

c. Iris control

Aperture is used to adjust the brightness of the PTZ screen. When holding down the left button " " preview screen is lit, hold down the right " " preview screen dimmed, by clicking on the left and right keys to adjust screen brightness. When initialization and head for horizontal or vertical position of the operation or operations carried zoom, aperture are automatic state, that is, through automatic Senses ambient light changes, make quick adjustments, so that the output image brightness and stability.



6.6.4 Add And Call Preset

Network camera preset function is the current position and lens focal length, aperture and other parameters are stored in memory, you can quickly call these parameters will be adjusted to the head and camera function of the position when needed.

Turn a network camera to the preset operating position, fill preset number, and click " to add this preset, can add up to 255 preset points.

Enter a preset point has been added successfully preset number, click " to call the preset point.

Enter a preset point has been added successfully preset number, click " to delete this preset.

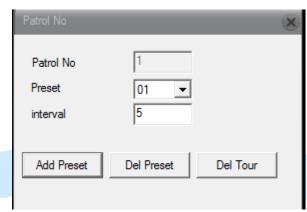
6.6.5 Add And Call Cruise Between Points



Inter cruise features multiple points preset network cameras will have been added to the composition of a route stored in memory, you can quickly call when needed, in order to make the network camera can be added after the preset points along the route and at each preset dwell time length settings.

Enter a cruise number to be added in the cruise between points box.

Click " will pop up settings box, to add the already exists preset point to cruise line.



[Preset]: Select the preset number you want to add to the cruise line (the preset point should have been set).

[Interval]: When cruising, the time interval between two preset points.

[Add Preset]: Select preset to increase the number of cruise lines.

[Clear Preset]: delete the number selected in the preset cruise route point.

[Clear cruise line]: delete the whole number of cruise lines.

Select a line which has been set, click " to call this cruise line.

Select a number of cruising line, click " " to stop cruise.

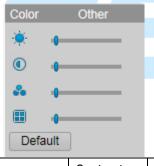
6.7 Color Setting

Set the preview screen display of WEB.

6.7.1 Color Settings

Set the screen color of WEB, shown as follows.

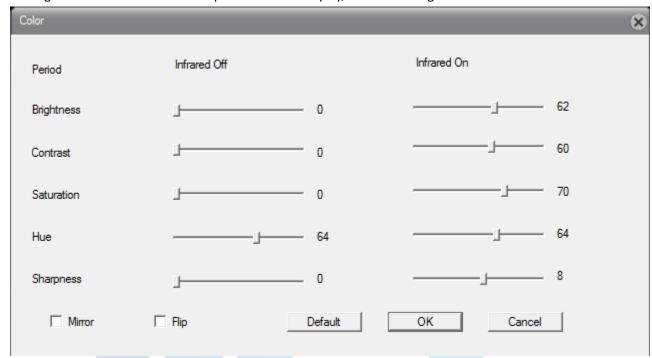
Note: This feature is only regulating the current screen colors; it will not affect the color of the camera.



. ₩-	Brightness	•	Contrast	&	Saturation		Hue
Default	Restore brightness, contrast, saturation, hue to their default values						

6.7.2 Other Settings

- a. Reboot: reboot the camera via the client software.
- b. Switch proportions: the preview screen display ratio between 4:3 and 16:9 to switch.
- c. Image Color: Set the camera-side preview screen display, as shown in Figure 4.6.



Pic.4.8

[Brightness]: Adjust the light or dark the preview screen.

[Contrast]: Adjust the preview screen permeability.

[Saturation]: adjust the color of the preview screen.

[Tone]: Adjust the preview screen cool and warm tones.

[Infrared light to open]: When infrared light is turned corresponding brightness, contrast, saturation, hue and effective.

[Mirror]: When you enable the preview screen flip around.

[Flip]: When you enable the preview screen upside down.

[Restore Default]: restore image color configuration to its default state.

6.8 Client Configuration

- a. Alarm settings: Set the external linkage alarm, motion detection alarm, such as the linkage alarm monitoring, alarm tone functions.
- b. System settings: Set video capture client information.

[Video directory: Set the storage path of client video.

[Length]: The length of a single client video file, you can choose between 1-120 minutes.

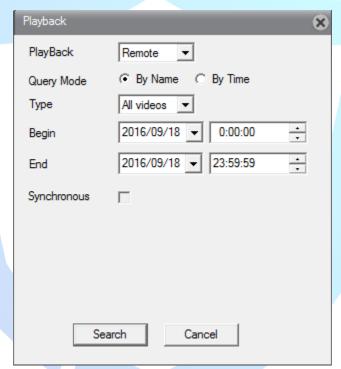
[Image directory]: Set the storage path of the client capture.

[Local video saved as AVI format]: Set the local video saved as AVI format, the default format is H.264.

c. About: Display version information of each WEB controls module.

6.9 Playback

Click " Playback " will pop up [playback] dialog box, shown in Figure 4.7. There are remote playback and local playback two ways.



Pic.4.9

6.9.1 Remote Playback

Playback mode selection remote playback, will playback videos and images in the TF card.

[Playback Mode]: by file and by time two kinds of playback mode.

[Type]: According to the classification of the query selected video and capture file that contains all the video,

external alarm, video detection, normal recording, manual recording, all the Pictures, alarm capture, video

capture detection, manual capture other types.

[Start, end time]: Query the period of the video and capture file.

a. Query by file

[Video query]: return to the video query dialog box.

[Play]: Select the file you want to playback, click the play button to start playback.

Note: Double-click the file you want to playback, you can play back the file.

[Download]: Select the file you want to download, click on the download button to download the file

storage

path settings pop-up box and download format selection box, there are two formats AVI and H264 optional.

Note: Support for select multiple files sequentially download.

[Previous, Next]: Paging video files automatically when the number exceeds 64, the flip operation can be performed by this function.

b. Query by time

Show a video file, which can only query-to-day video files, double-check the video file to start playback, and

then double-click a time corresponding video files can be played back on the timeline.

Note: By the time the query to file its color appears in the timeline are: red is the external alarm recording,

manual recording blue, green as an ordinary video. Gray is the detection of video (including motion detection,

video blind, video loss record).

6.9.2 Local Playback

Playback mode selection local playback, will playback videos and images from local files. Click the play button to select the file path to play.

6.10 Log

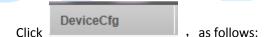
WEB client log information, include alarm logs and operation logs; alarm log logging camera alarm information; operation log record user login information.

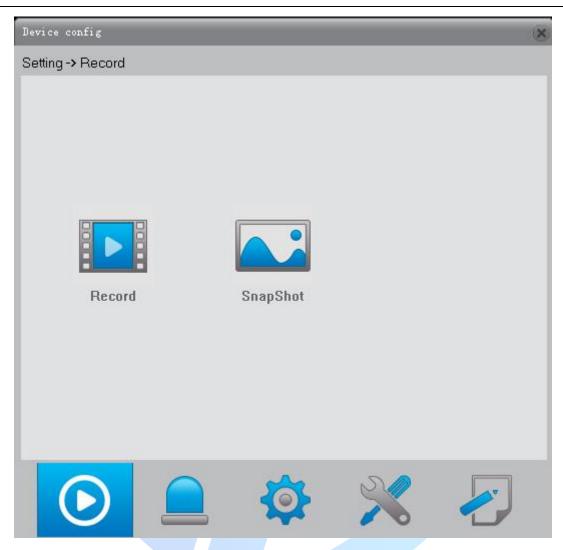
Note: In the alert log can choose whether to log the interface automatically prompts enabled.

6.11 Quit

Exit WEB login, the screen return to the WEB login interface.

7 Network config





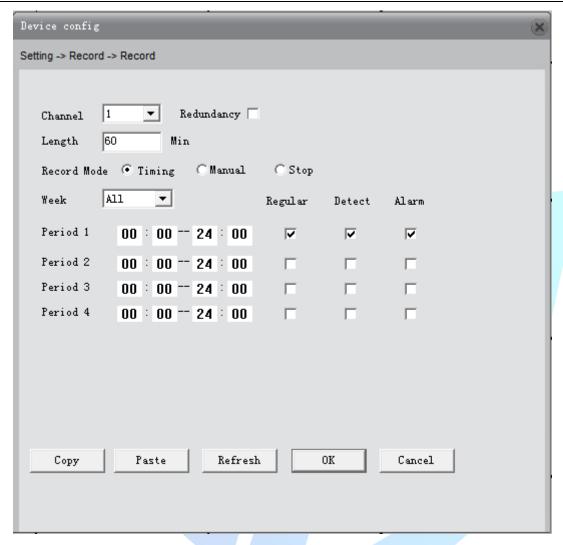
Pic.7.1

7.1 record



7.1.1 record settings





Pic.7.2

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.

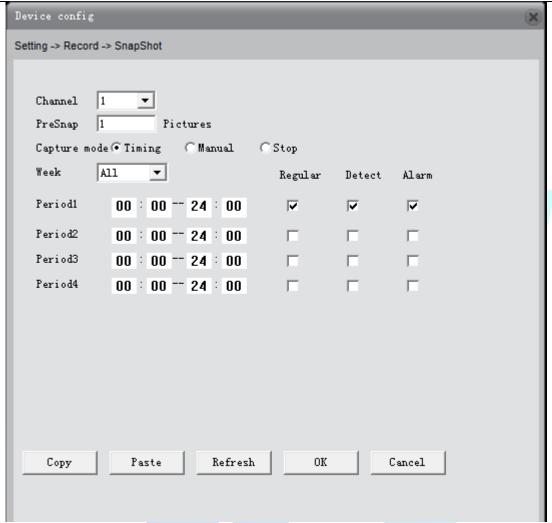
Stop: Network camera stops recording.

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.

7.1.2 Snapshot Storage

Click as follows:



Pic.7.3

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

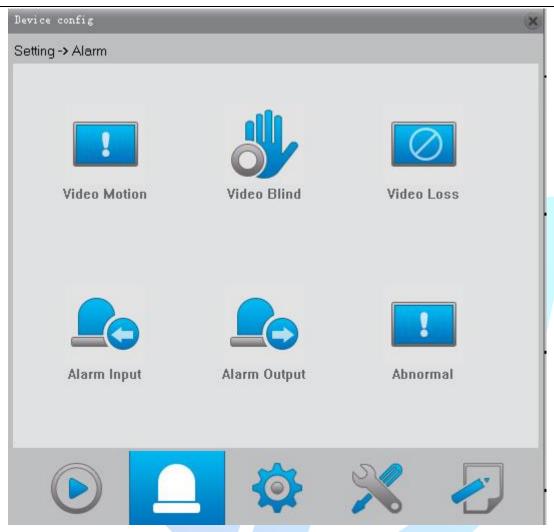
- 1. configuration: Configure timing capture among different dates. Timing capture include common snapshot, detect snapshot and alarm snapshot. User can configure four different time interval snapshot at most.
- 2. continuous: Network camera captures pictures non-stop.
- 3. close: Network camera stops capturing pictures.

 $\label{lem:note:1} \textbf{Note:1. Detect and alarm snapshot should match with capture functions.}$

- 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.

7.2 Alarm Function





Pic.7.4

Alarm functions include: motion detection, video blind alarm, and video loss alarm, alarm input alarm, alarm output, abnormal handle.

7.2.1. Video Motion



Device config				*
Setting -> Alarm -> Vi	deo Motion			100
Channel Enable Sensitivity	1 V Middle V	Region	Setting	
Period Alarm Output	Setting 1	Interval Delay	2 Sec 10 Sec	
Record Channel	1			
Snapshot	1			
PTZ Activation	Setting	Delay	10 Sec	
		Send Email		
☐ Buzzer		FTP		
│ Write log				
Сору	Paste Ref	resh OK	Cancel	

Pic.7.5

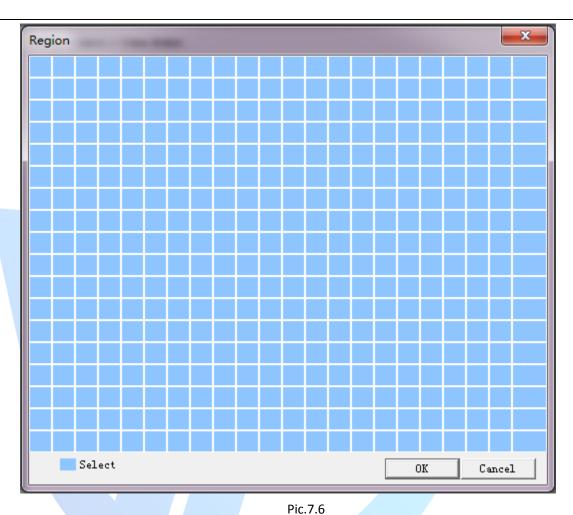
[Channel]: Choose the set motion detect channels, default is one channel.

[Enable]: means that the motion detect function is on. [Sensitivity]: Choose in the six options according to the

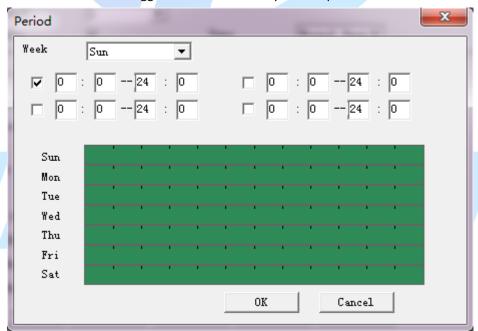
sensitivity: lowest/lower/medium/high/higher/highest.

[Region]: Config the trigger region. Max.396 regions can be set.

JF TECH



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



Pic.7.7

[Interval]:Shortest time interval between two alarming. The range is $0^{\sim}600$ seconds. [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 should be enabled.

[Tour]:Not supported now.

[Snapshot]: Local capture starts when triggered. Snapshot detect should be enabled.

[PTZ linkage]: Link to PTZ or presets or cruise when alarm is on.

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

[Send EMAIL]: Alarm emails will be sent to configured email address when triggered. Email address config refer to network service.

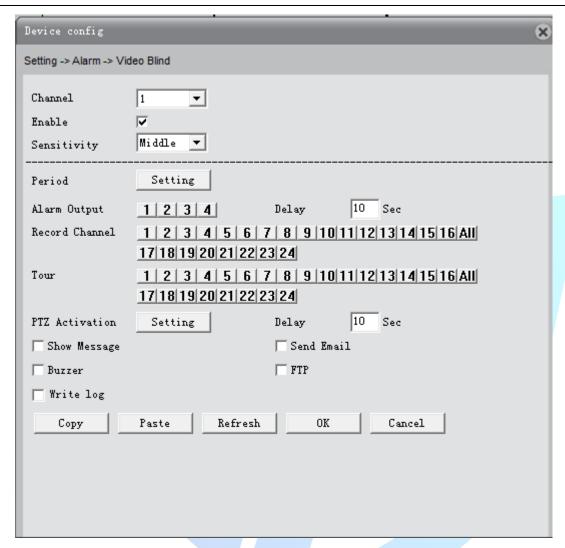
[FTP]: Snapshot pictures and record files will be sent to configured FTP server when triggered. FTP config refer to network service.

[Write log]: Once checked in System Information - query log information to police information, log shows the type of alarm, start and end times. As shown below:

7.2.2. Video Blind



, as follows:

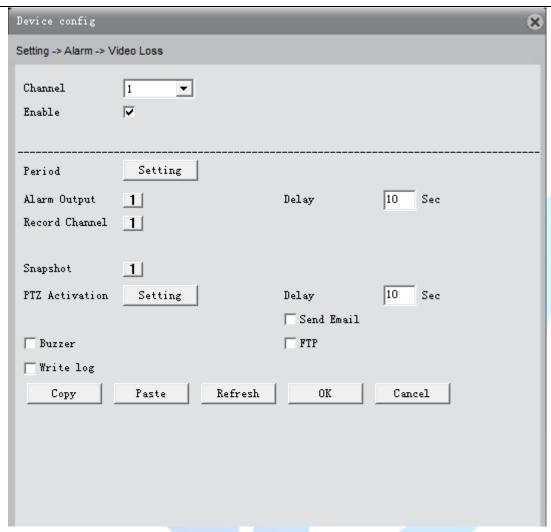


Pic.7.8

Set method: refer to chapter 5.2.1.. Video Motion.

7.2.3. Video Loss





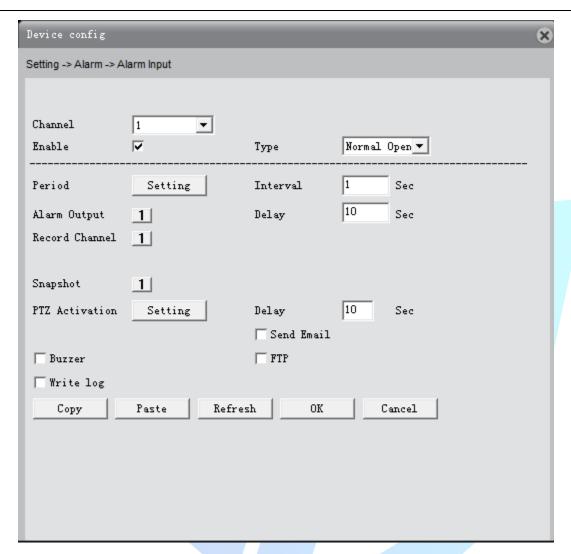
Pic 7.9

Set method: refer to chapter 5.2.1.. Video Motion.

7.2.4 Alarm Input

Click "

" to pop up [Alarm Input] dialog box, as shown in Figure 5.8. All kinds of external alarm can be added.



Pic.7.10

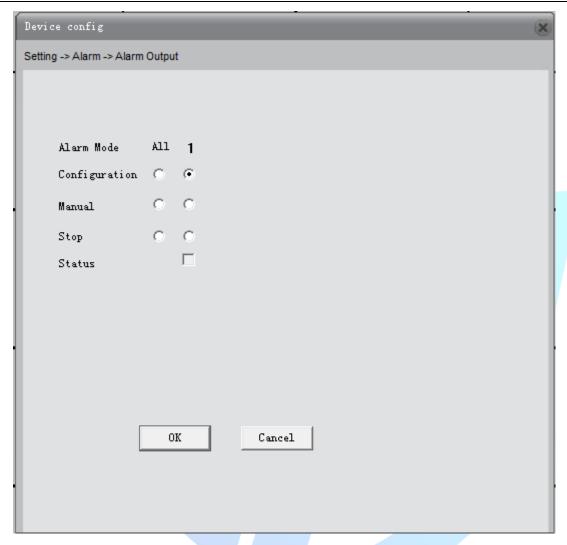
[Channel]: Select the number of channels to be set, the network camera defaults to a channel.

[Type]: Normally open: alarm channel circuit, forming pathway generates an alarm output when an alarm is triggered. NC: Alarm channel path is formed when an alarm is triggered when the circuit generates an alarm output.

Other configurations please refer to 5.2.1 Motion Detection section.



Alarm lights, warning devices can be linked.



Pic.7.11

[Configuration]: whether output alarm single or not depends on whether alarm output is enabled.

[Manual]: manual alarm signal output. If enabled, alarm signal will been output always.

[Stop]: Alarm output stop, even if the alarm function is enabled, there will not be alarm signal output.

[Status]: Display alarm output status, playing V expressed alarm output.

7.2.6. Abnormal handle

Device respond to abnormal events.

Device config	8
Setting -> Alarm -> Abnormal	
Event Type Storage Deiv	ce Not Exist
Buzzer	
│ Send Email	
Refresh	OK Cancel

Pic.7.12

[Event Type]:

[No storage device]: When the camera is not loaded or loaded TF card TF card is not recognized alarm.

[Storage space is insufficient]: alarm when the camera is loaded TF card free space is less than the value set.

[Memory Error]: The camera can detect TF card, but there is an error, when the alarm is not working.

[IP conflict]: When the camera's IP address with the same network to other cameras, video recorders and other IP addresses are the same, to generate an alarm.

[Disconnection event]: When the camera disconnected from the network, an alarm.

[Send EMAILL]: When an alarm is triggered, the alarm messages sent to the specified mailbox, mail settings, see section 5.3.4 of network services.

[Phone] alarm: When an alarm is triggered, the alarm message is sent to the specified server PMS, PMS set of network services, see section 5.3.4

7.3 System Setting



to enter the system settings dialog fox. As shown in Figure 5.11. Including ordinary settings,

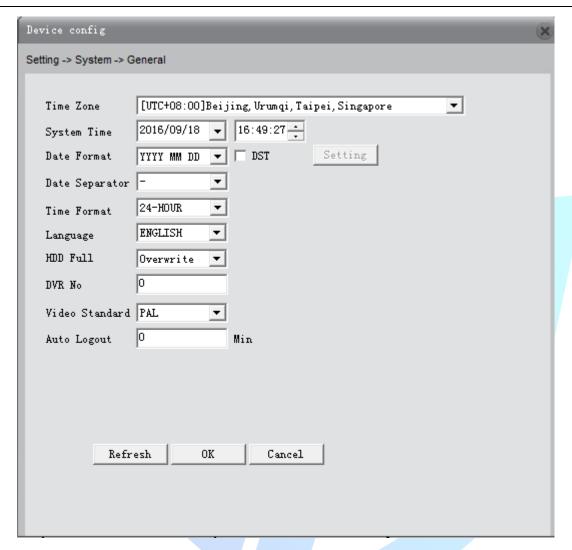
encoding settings, network settings, network services, output mode, PTZ settings, serial port settings and camera features.



Pic.7.13

7.3.1. General



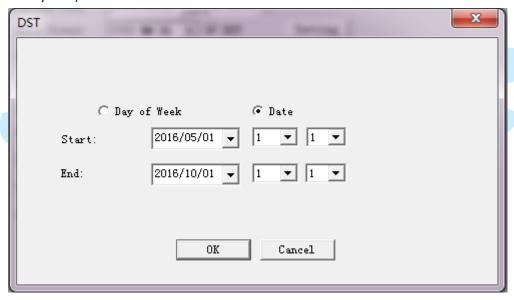


Pic.7.14

[System time]:Set the system data and time.

[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)



Pic.7.15

[Date Separator]: Choose list separator of the data format. Three modes: "-"" /"" ."

[Time Format]: Choose time format: 24-hour or 12-hour.

[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.

camera operations.

7.3.2 Encode setup



Click

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



Device config			*
Setting -> System -> End	code		
Channel	1		
Compression	Н. 264 ▼	Н. 264 ▼	
Resolution	D1 🔻	QCIF _	
FPS	24 🔻	7	
Bit Rate Type	CBR ▼	VBR ▼	
Quality	Good	Good	
Bit Rate(Kb/S)	1863 ▼	97	
I Frame Interval	▼	4 ▼	
Vi deo/Audio	▽ ▼	V V	
Static	high profile		
	_		
Сору	Paste Refresh OK	Cancel	

Pic.5.16

[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.

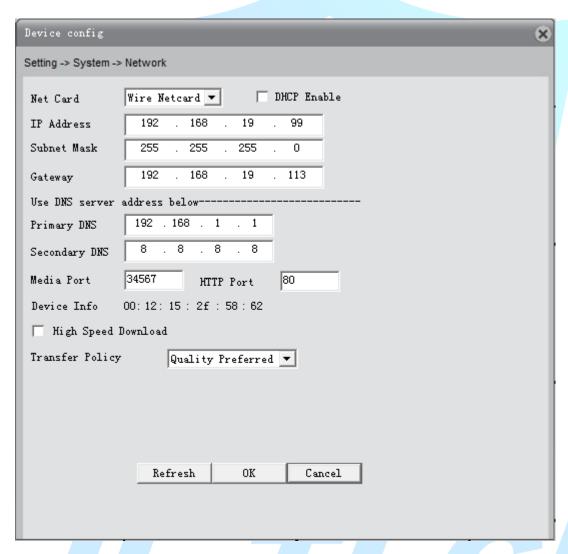
Note: 1) Sub stream should be enabled when used for mobile monitoring.

[Encoder static configuration]: Set the camera coding level, switch between baseline/main profile/high profile, The higher the level, the larger the stream, the better the preview quality.

7.3.3 Network setup



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



Pic.7.17

[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.

[Transfer Policy]: There are four strategies: Adaptive / Quality Priority / Smooth priority / Network transmission Priority.

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

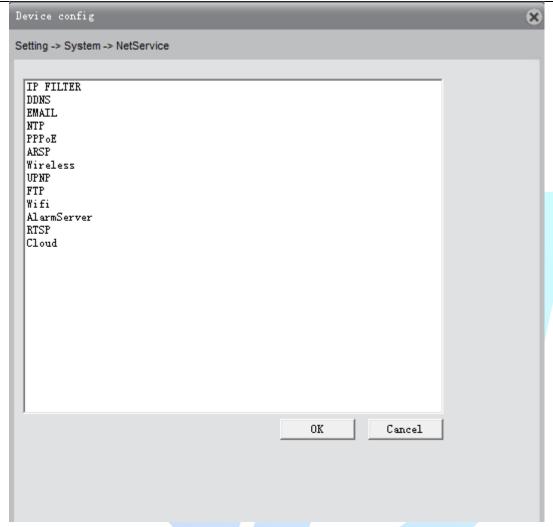
Quality Priority: Whether the network bandwidth is large enough, the preview screen is always displayed in the main stream, when the bandwidth is not large enough ,screen will Caton. Smooth priority: Change encoder settings and lower the stream without reducing frame rate to ensure the smooth screen.

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

7.3.4 NetService



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



Pic.7.18

[IP permission]: Config the blacklist and whitelist.

blacklist: Address under blacklist cannot access to the camera, max. 64 addresses can be added.

whitelist: Address under whitelist can access to the camera, those haven't been added have no access, max.64 addresses can be added.

Note: The same IP address cannot 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.

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

Note: NetEase mailbox registered before November, 2006 can support SMTP.

[Port, SSL]: Consistent with mailbox configuration, you can log in to view the mailbox settings.

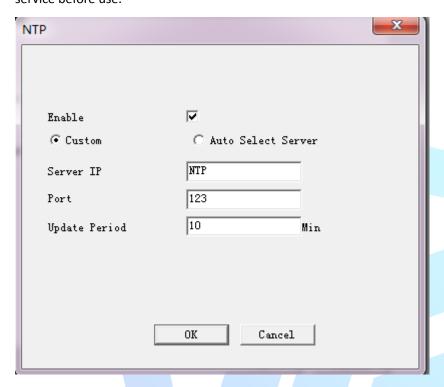
[User name]: Just fill in the e-mail address before the @ part.

[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 time synchronize with the designated PC, enable the NTP service before use.



Pic.7.19

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

Note: Some 80 ports are sealed by the operator,pls change the http port as non-80 port. [ARSP]: We provide domain name service,user can setup 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 monile, support Android, iOS, Windows Phone.

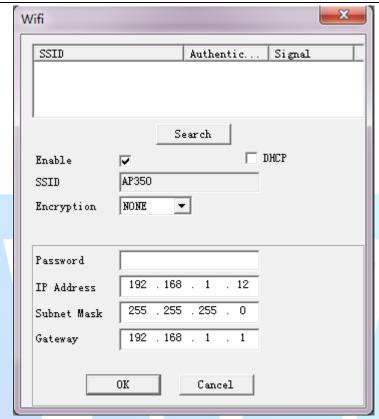
Note: Confirm the phone is connected with network, sub-stream is enabled.

[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.

[WIFI]: The camera is connected to the public network via WIFI or LAN. As shown in Figure 5.16.



Pic.7.20

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

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

[Alarm Center]: Upload alarm info to alarm center of the designated IP address.

[RTSP]: Support cross browsr, 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.

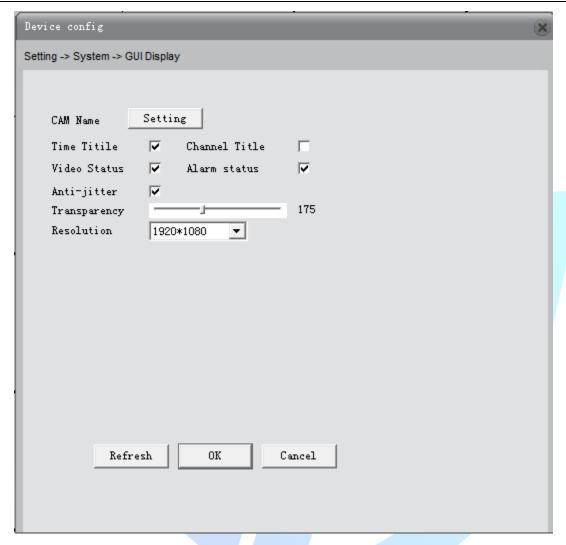
[Port]: input server port for push.umeye.cn.

Note: Add the serial number to EyeCloud mobile client.

7.3.5. GUI Display



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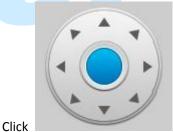
Pic.7.21

[Channel Name]: Set the camera channel name, up to 26 characters, special characters are not supported.

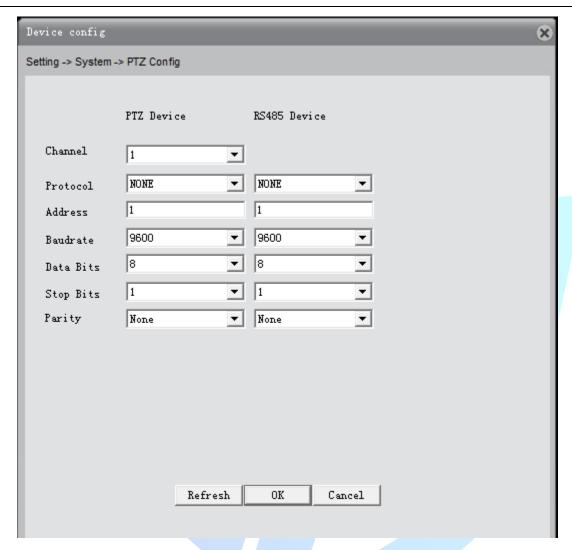
[Regional coverage]: Set the camera coverage area number, location and size, can set up four coverage area.

[Time title, channel title]: Config whether the time title and channel title are displayed and the display area.

7.3.6. PTZ setting



, as follows:



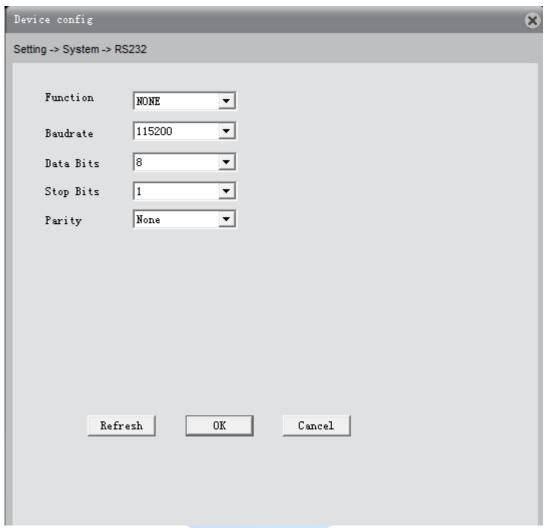
Pic.7.22

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

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

7.3.7. Serial port settings

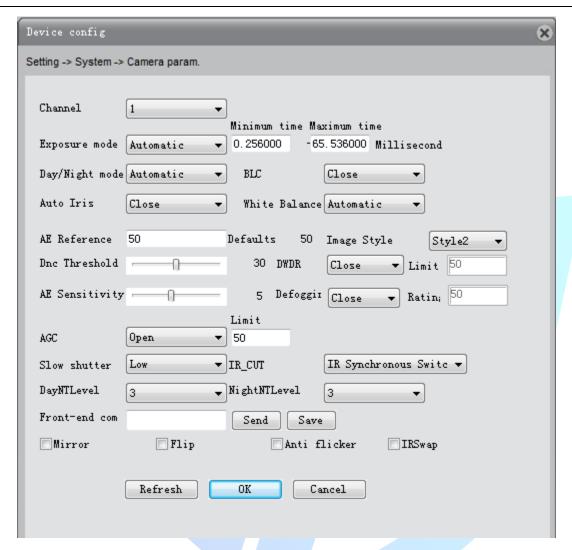
Click RS232, to pop up [RS232] dialog box, as follows:



Baud rate, data bits, protocol configuration of port functions are inconsistencies will cause the camera to PC serial port is disabled.

7.3.8. Camera parameters

Click , as follows: to pop up [Camera Parameters] dialog box, as follows:



Pic.7.23

[Exposure Mode]: 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.

[E Slow Shutter] : 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 $^{\circ}$.

[Flip]: When you enable it,the preview screen turn upside down 90 $\,^{\circ}\,$.

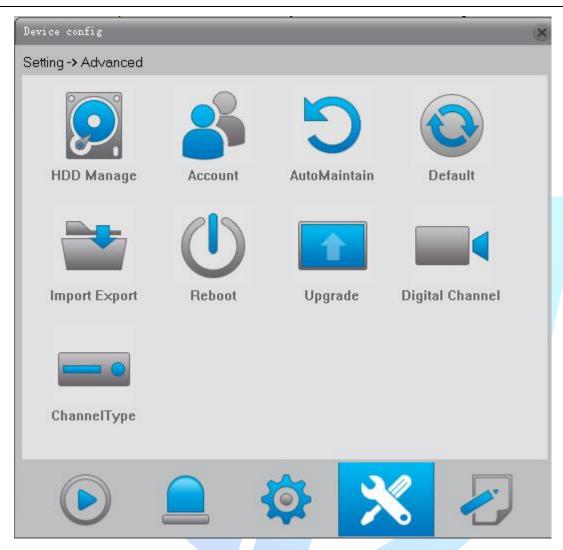
[Fluorescent anti-flash]:To get rid of the horizontal fluorescent stripes of preview screen with fluorescent lamp.

[IR lens reverse order]: IR_CUT reverse order.

7.4 Management Tool

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

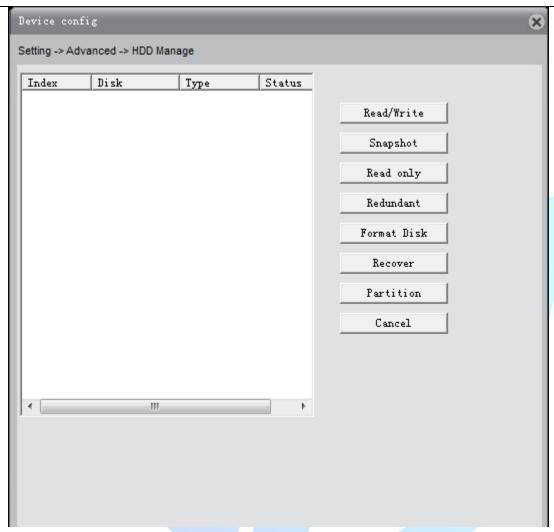




Pic.7.24

7.4.1 HDD management





Pic.7.25

[Set as read and write disk]: After setting the partition used only for video.

[Set as snapshot disk]: After setting the partition used only for capture.

, as follows:

Click

[Set as read-only disk]: After setting the partition can not write a new video or capture files can only be played back.

[Format Disk]: format the selected partition, deleted all the contents of the sub-region.

[Partition]: the TF card partition, which can read and write disk and snapshot disk respectively.

7.4.2 Account Click Account



Pic.7.26

[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 cannot 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.

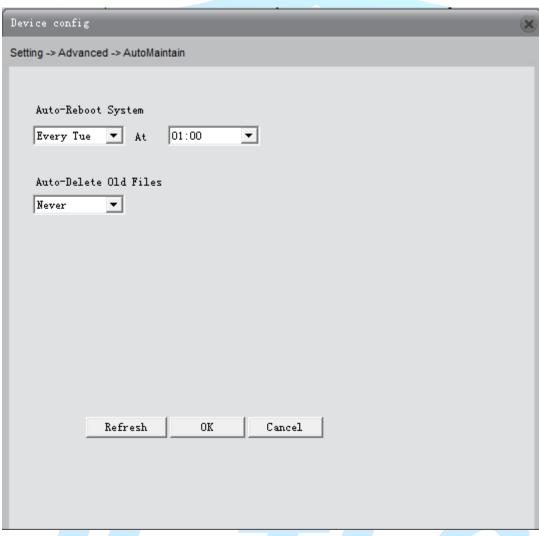
[delete user]: Delete the selected user, cannot delete the registry.

[delete group]: Delete the selected user group, when the group contains the user, it cannot be deleted.

Note: Reserved user and combined user cannot be deleted.

7.4.3 Auto Maintenance





Pic.7.27

[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.

7.4.4 Restore Default



				(00)			
Device config				×			
Setting -> Advanced -> Default							
Please select setting entries that you want to default							
Select all	Г						
General	Г						
Record	П	Alarm Set	П				
Network	Г	NetService	П				
GUI Display	П	Account	П				
RS232	П						
OK	Cancel						

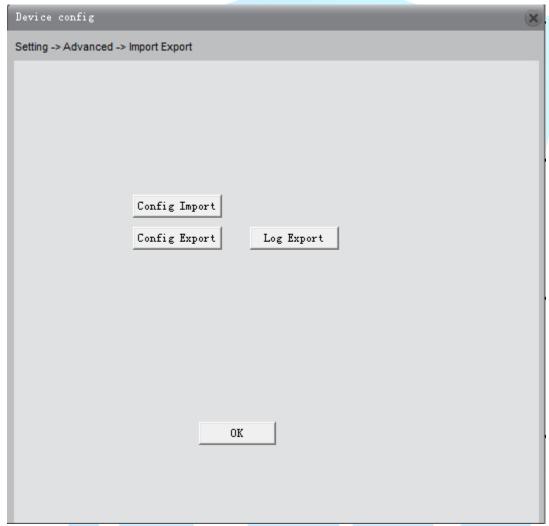
Pic.7.28

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

7.4.5 Import and Export



Click , as follows:



Pic.7.29

[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.

 $\hbox{\tt [Export Log]: Export camera log information.}\\$

7.4.6 Restart

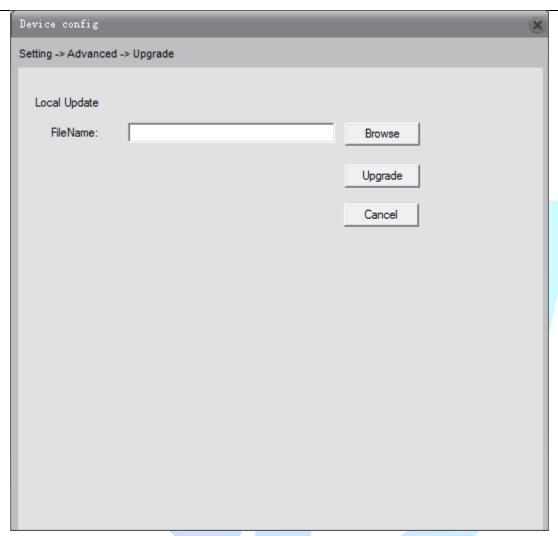


Click , to pop-up dialog box of restart the camera, choose OK to restart, restart the camera through the client software.

7.4.7 Upgrade

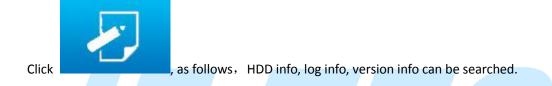


Click , as follows. Select the correct upgrade file via browsing, click Upgrade to begin the upgrade, the upgrade process will be displayed, pop-up dialog box when upgrade is successful, the camera automatically soft reboot when the upgrade is complete.



Pic.7.30

7.5 System Info





Pic.7.31

7.5.1 HDD info

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



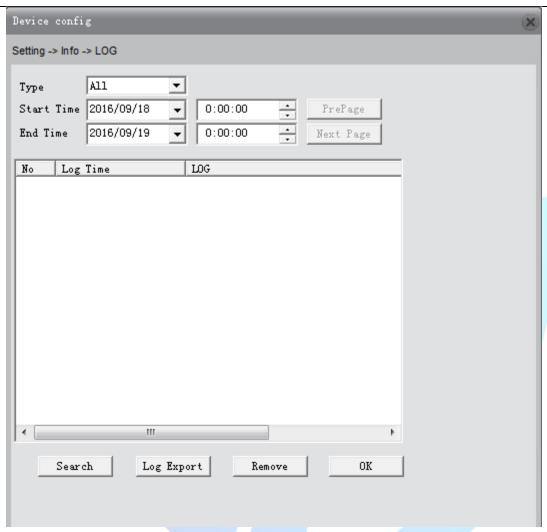
Pic.7.32

[drive type and capacity]: check the partition type, total capacity, remaining capacity, and status information.

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

7.5.2 Log info





Pic.7.33

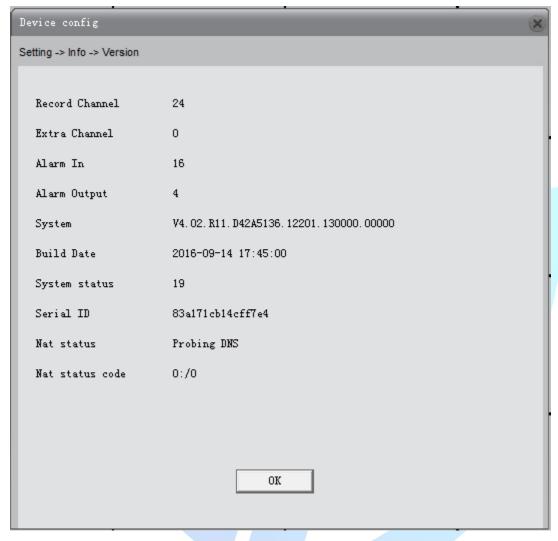
[Type]: Check the log info, including all, system operation, configuration operations, data management, alarm events, recording operation, user management, file operations [Start, end time]: Check the start time and end time of the log. Results show only the log information within time period.

[Query]: Query all logs.

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

7.5.3 Version Info





Pic.7.34

[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.

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

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

Note: 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.