



2MP IP Network IR Camera User's Manual

ELI-IP5-ED21-4R
ELI-IP5-D21-312R
ELI-IP5-B21-660R



ELI-IP5-D21-312R
ELI-IP5-B21-660R

Network Camera

User Manual

Warranty

If the product does not operate properly in normal conditions, please let us know. We will resolve the problem for free of charge. The warranty period is 1 years. However, the followings are excluded:

If the system behaves abnormally because you run a program irrelevant to the system operation.

Deteriorated performance or natural worn-out in process of time

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. Apolarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/ accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by
13. The manufacturer, or sold with the apparatus. When a cart is used,
14. Use caution when moving the cart/apparatus combination to avoid
15. Injury from tip-over.
16. Unplug this apparatus during lightning storms or when unused for long periods of time.
17. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the



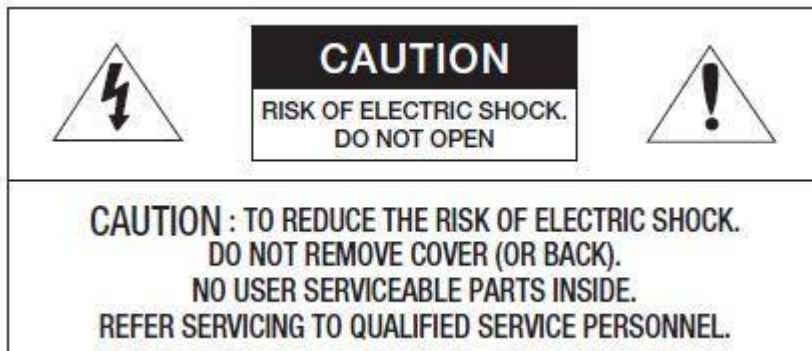
apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Battery

Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

Disconnection Device

Disconnect the main plug from the apparatus, if it's defected. And please call

a repair man in your location.

When used outside of the U.S., it may be used HAR code with fittings of an approved agency is employed.

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

The BNC Out terminal of the product is provided for easier installation, and is not recommended for monitoring purposes.

If you keep the BNC cable connected, a risk of lightening may cause damage or malfunction to the product.

Please use the input power with just one camera and other devices must not be connected.

Please read the following recommend safety precautions carefully.

- I Do not place this apparatus on an uneven surface.
- I Do not install on a surface where it is exposed to direct sunlight, near heating equipment or heavy cold area.
- I Do not place this apparatus near conductive material.
- I Do not attempt to service this apparatus yourself.
- I Do not place a glass of water on the product.
- I Do not install near any magnetic sources.
- I Do not block any ventilation openings.
- I Do not place heavy items on the product.

User's Manual is a guidance book for how to use the products. The meaning of the symbols are shown below.

- I Reference : In case of providing information for helping of product's usages
- I Notice : If there's any possibility to occur any damages for the goods and human caused by not following the instruction
- I Please read this manual for the safety before using of goods and keep it in the safe place.

PRODUCT FEATURES FOR **ELI-IP5-D21-312R & ELI-IP5-B21-660R**

1 Full HD Video Quality

1 Super Low Light

1 Super WDR

1 Multi-Streaming

This network camera can display videos in different resolutions and qualities simultaneously using different CODECs.

1 Web Browser-based Monitoring

Using the Internet web browser to display the image in a local network environment.

1 Alarm

If an event occurs, the event-related video will be transferred to the email specified by the user or saved to the SD memory, or the event signal will be sent to the Alarm Out port.

1 Video Motion Detection

Detects a motion from the video before triggering an event.

1 Intelligent Video Surveillance

Network camera with IVS support intelligent functions, such as auto detection of any abnormal faults, cross-line alarm, area alarm, object left or lost alarm, counting.

1 PoE

Power Over Ethernet.

1 ONVIF Compliance

All these network camera series support ONVIF. For more information, refer to www.onvif.org.



RECOMENDED PC SPECIFICATIONS

1 CPU : Intel Core 2 Duo 2.4GHz or higher

1 Operating System : Windows XP, VISTA, 7, Mac OS

1 Resolution : 1280X1024 pixels or higher

1 RAM : 2GB or higher

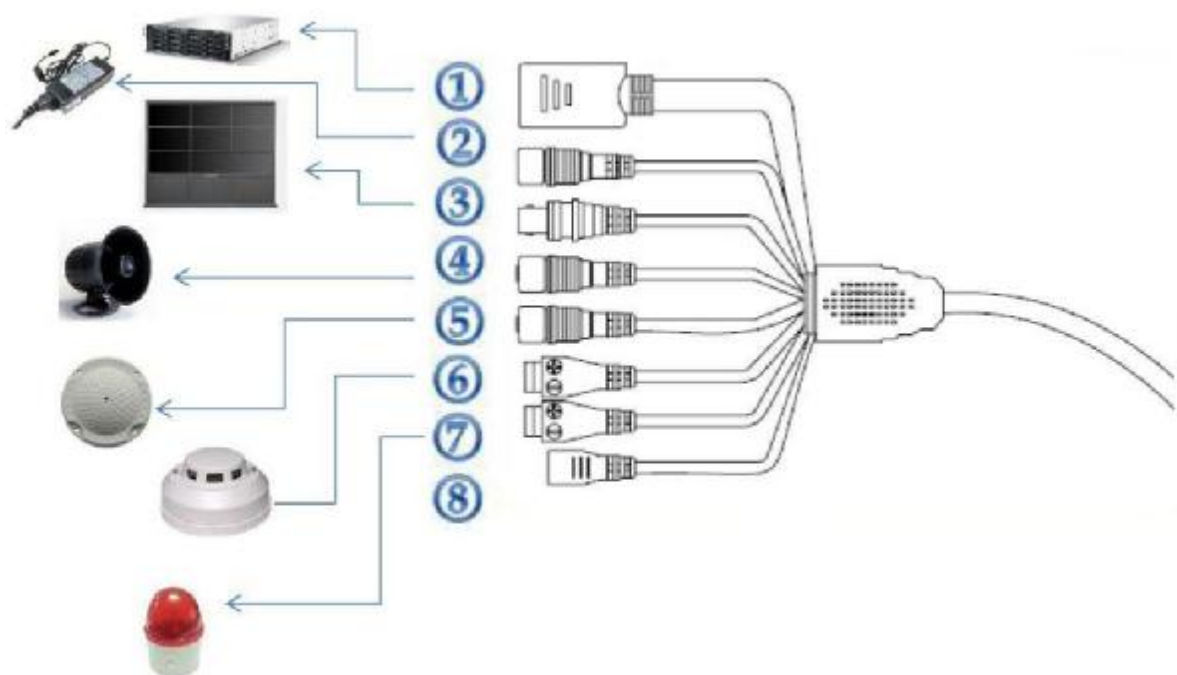
1 Web Browser : Internet Explorer 7.0 or higher.

1 If connecting to IPv6 in Windows XP, it can cause some problem.

1 It is recommended to connect to IPv6 in Windows 7.

1 Video Memory : 256MB or higher

Connecting with other devices



①	Ethernet
②	Power Supply
③	Video Out
④	Audio Out
⑤	Audio In
⑥	Alarm In
⑦	Alarm Out
⑧	Restore Factory Setting

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Overview

Operation

[Tip]: The initial IP address of the device is 192.168.1.2. Please change the IP address of your computer to the same network segment, and then access the camera via LAN. Login account: Admin
Password: Admin

Please notice that the login account and password are case-sensitive.

1. Plug-in installation

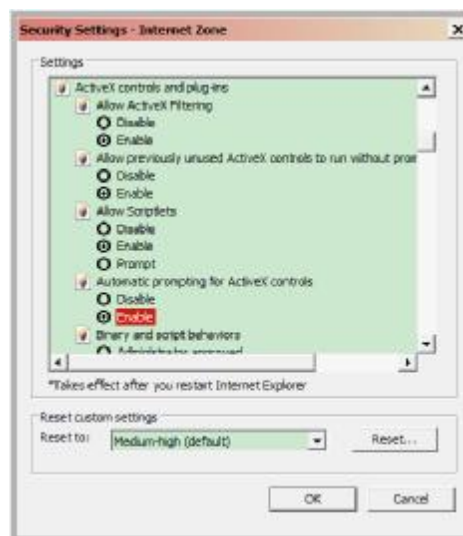
When using the network video products for the first time, an ActiveX control is needed. Before downloading ActiveX, the IE settings should be done appropriately.

[1]: Using IE6

① Open IE, click "Tools - Internet Options - Security - Internet - Custom Level" (Pic.1.1), and all ActiveX controls and plug settings should be enabled (Pic.1.2).



Pic.1.1

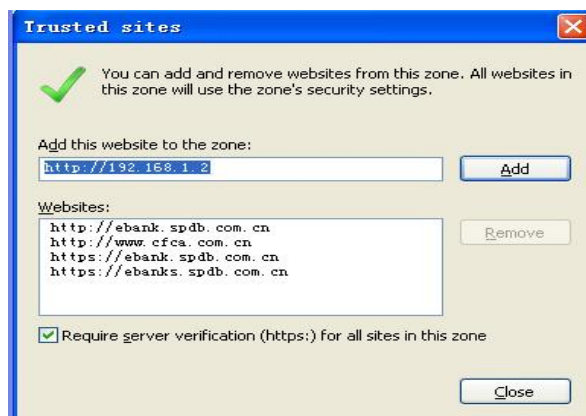


Pic.1.2

② Click "Security - Local Internet - Custom level", all ActiveX controls and plug settings should be enabled.

③ If the operating system is Windows XP, the IP address of the device should be added to "Trusted sites" (Pic.1.3) Click "Safety - Site", enter the IP address, such as: <http://192.168.1.2>, and cancel "Require server verification for all sites in this zone", then click "Add" and "OK" button to complete.

Overview



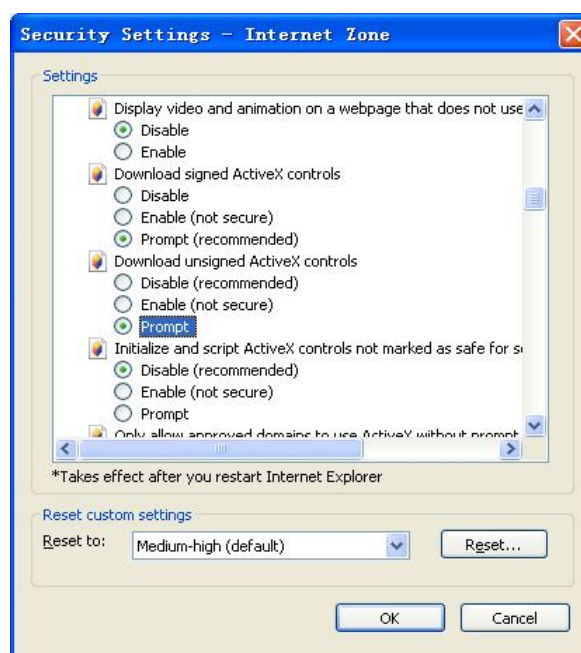
Pic.1.3

[Tip]: After the controls have been downloaded please restore security settings to "Default level".

[2]: Using IE8

① Open IE, click "Options - Security Settings" to modify the ActiveX configuration. For unsigned ActiveX components please choose "Promote".

(Pic.1.4)

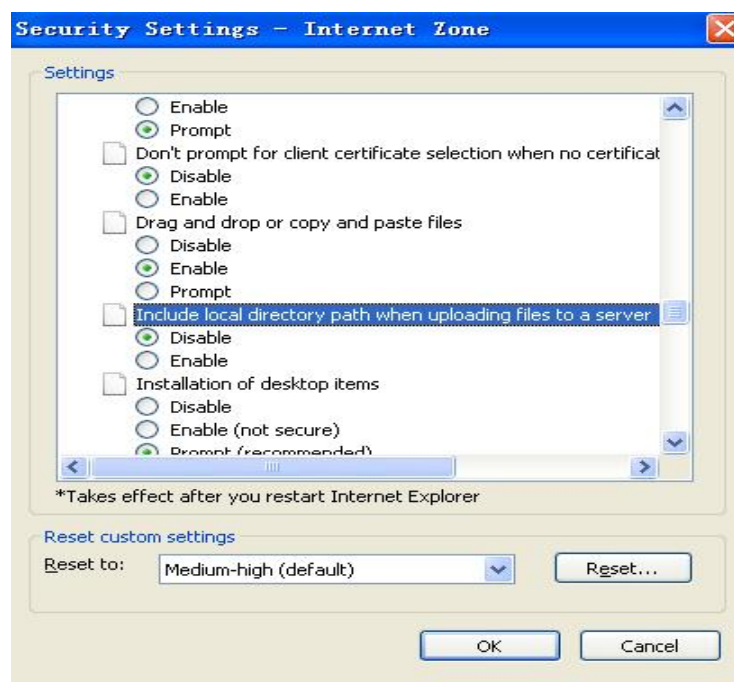


Pic.1.4.

② Open IE8, login the server, there will be a security warning, run this ActiveX control.

③ Modify authority setting, please enable the setting "Include local directory path when uploading files to a server" (Pic.1.5).

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Pic.1.5.

Basic Setting Table

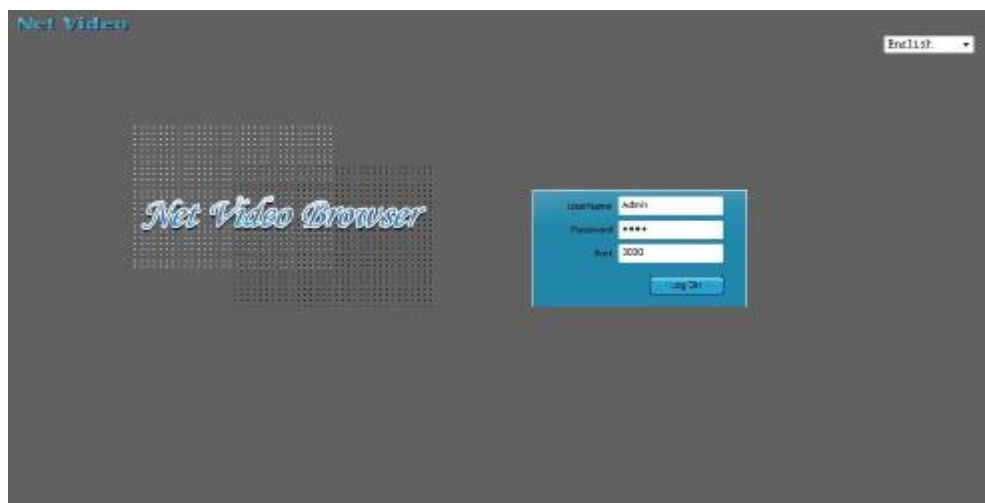
Item	Default Setting
Network	
Static IP/Dynamic IP	Static IP
IP Server Enable	Enable
IP Address	192.168.1.2
Gateway	192.168.1.1
Subnet Mask	255.255.255.0
Web Connection Port	80
RTSP Port	554
RTP Port Range	5000 ~ 5999
ID and Password	
Administrator ID/Password	Admin/Admin
User ID/Password	root/root, guest/guest
Domain of Related Server	
DDNS Server	
Stream setting	
Stream 1	H.264 1080P@30fps
Stream 2	H.264 720x576@30fps/ 640x480@30fps

Overview

<Caution>Make sure that IP address of network cameras and host in the same segment.

2. IE Long in

Enter IP address and password of device, enter login interface,Pic 2.1:

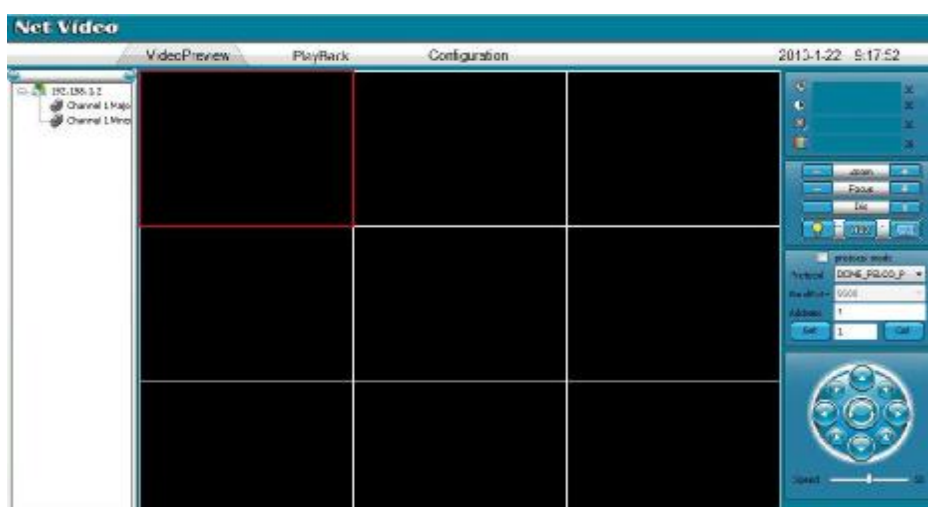


Pic2.1 Login interface

Click 【Log on】 button to enter the system.

3. Browsing interface

After log in enter into the video browsing module, as shown in Pic 3.1.

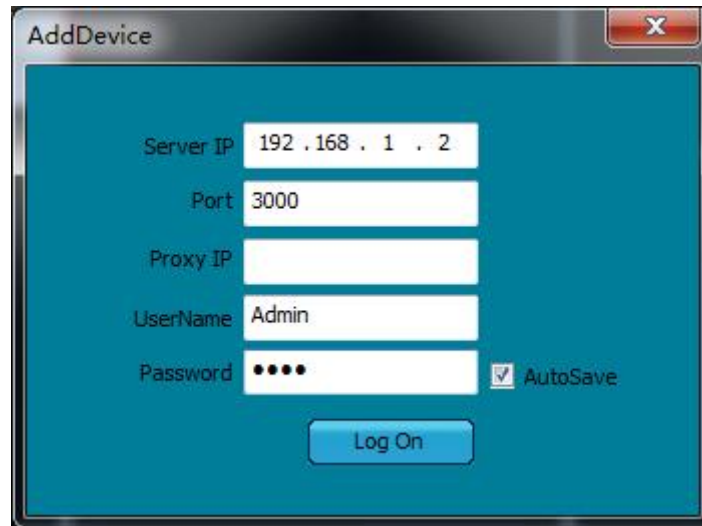


Pic 3.1 Video browse interface

Overview

3.1 Add equipment

In the tree area, click the right mouse button will pop-up menu, click [Add Device], the system pops up the dialog box shown in Pic 3.2.

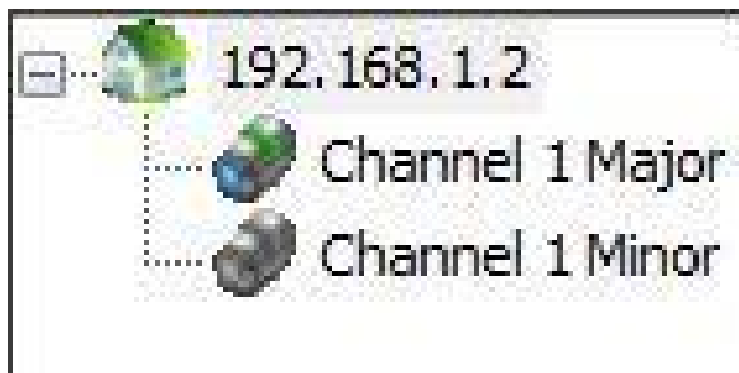


The 'AddDevice' dialog box is a window with a blue background and a title bar. It contains the following fields and controls:

- Server IP: 192 . 168 . 1 . 2
- Port: 3000
- Proxy IP: (empty)
- UserName: Admin
- Password: (masked with four dots)
- AutoSave: AutoSave
- Log On: (button)

Pic 3.2 Add device interface

Input device IP, port, username, and password, click "Log On" to add equipment, new equipment added successfully will be in the tree table. As shown in Pic 3.3.



Pic 3.3 Add devices successfully

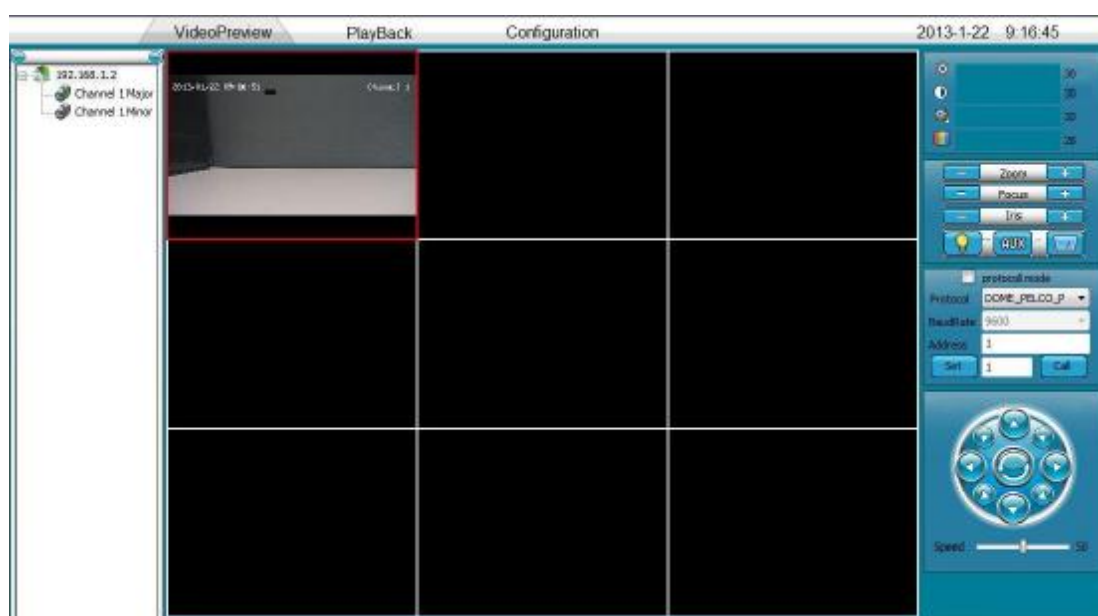
Overview

3.2 Video browsing





3.2.1 Connect the video

Double-click the stream channel connecting video, the middle of the page is the video display area, can display up to 16-screen video, use the control buttons below the video display area can modify the number of frames of the video display area or the selected video channel to capture or operate, as shown






in Pic 3.4.



Pic 3.4

- : Single-screen video display.
- : 4 screen display video.
- : 9 screen video display.
- : 16 screen video display.

Overview

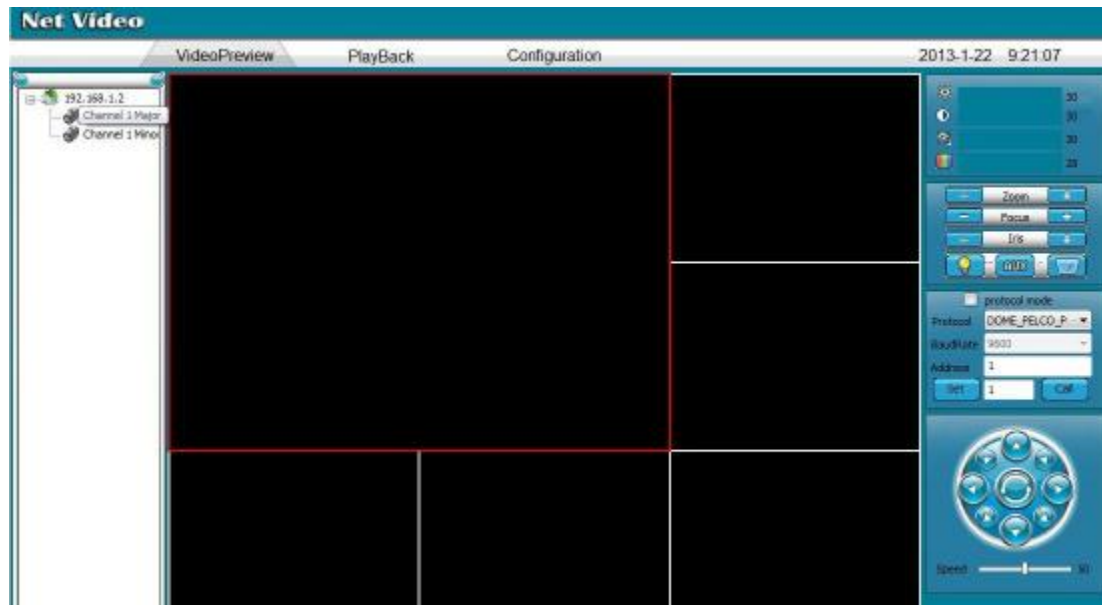
- : Full-screen video of the selected channel.
- : Audio player selected channel.
- : Operate the video of selected channel.
- : Intercom with equipment corresponding selected channel.
- : Snapshot the selected channel.

3.2.2 Change the size of the video window

The system supports double-click to change the video size to support the small screen, single-screen, and full-screen.

3.2.3 Video Drag

The system supports the browser screen drag, right click to drag, left click to change the video display size of the window, click the right mouse button to change back to the original size.



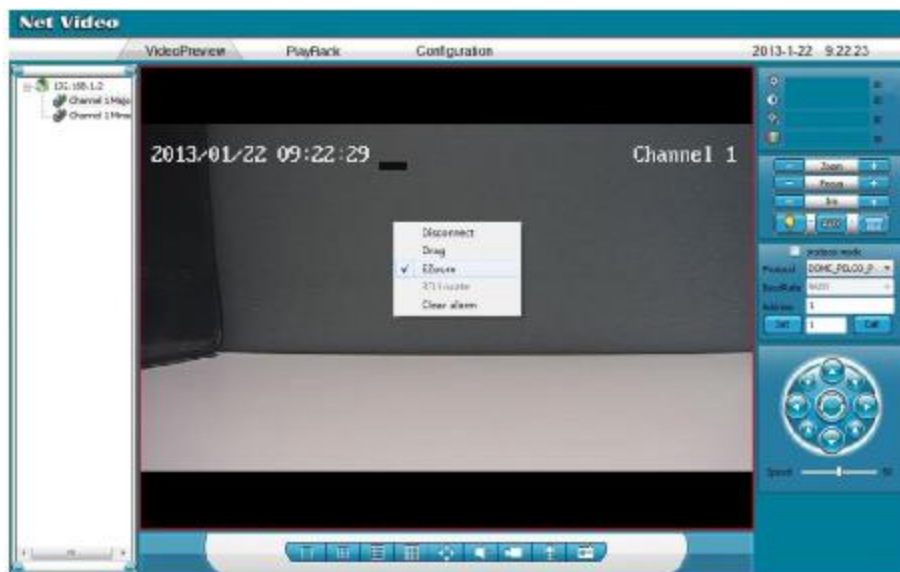
Pic 3.5 Drag to change the size of the video window

Overview

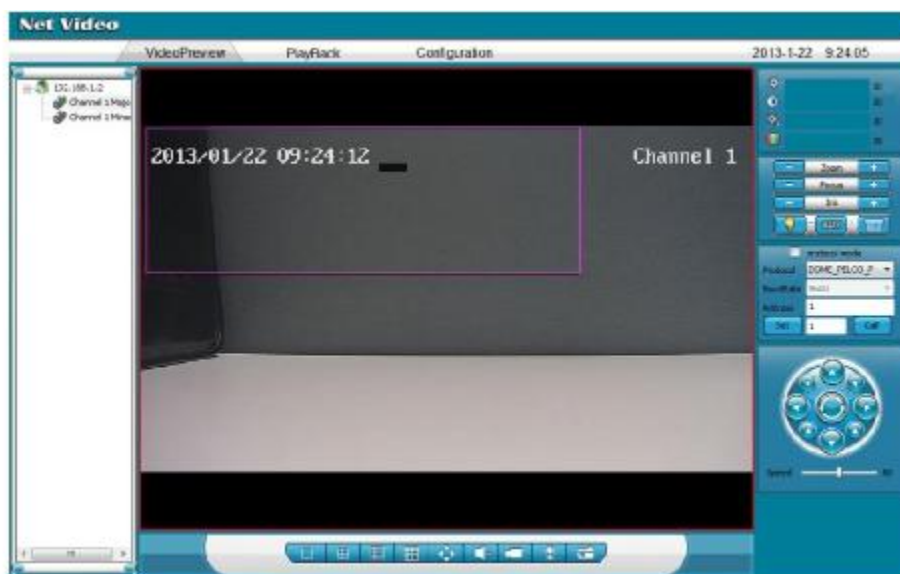
3.2.4 Electronic Amplification

The system supports electronic zoom function, click the right mouse button in the video display area in the pop-up menu, choose the electronic zoom, select a region by draw a rectangle by click left button, and the region will be amplified.

Step 1: select electronic amplification



Step 2: Hold the left mouse button to draw a rectangle



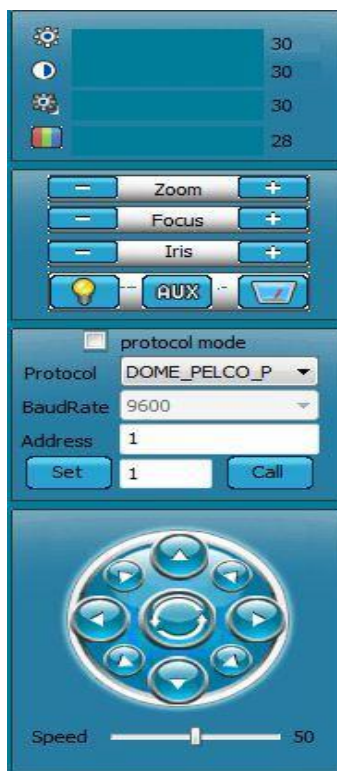
Step 3: release the left mouse button

Overview



3.3 PTZ Control


The right side of the browser interface is the the PTZ control area, as shown in Pic 3.6.





Pic 3.6 PTZ control area


Overview

3.3.1 Key Description


: Video Brightness (range 0 to 100);

: Video contrast ratio (range 0 to 100);

: Video saturation (range 0 to 100);

: Video tone (range 0 to 100);

: Lighting;

: Power;

Overview



: Wiper;

3.3.2 Function Description

PTZ control, including: the direction of rotation, speed, zoom, focus, aperture, power, lights, wipers.

Protocol support:

DOME-PELCO-D

DOME-PELCO-P

DOME-TIANDY

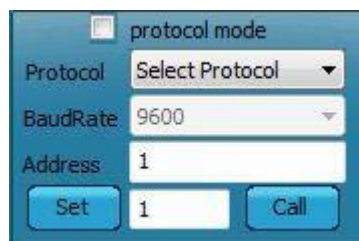
PTZ-PELCO-D PTZ-

PELCO-P PTZ-

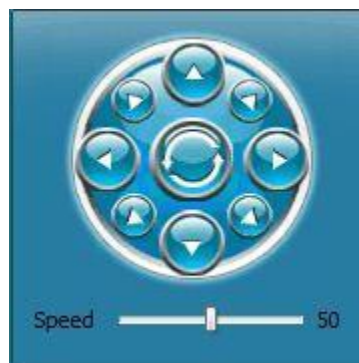
TC615-P

The baud rate can not be changed.

The system supports automatic identification of PTZ device; log on connected devices, the system will distribute the device protocol, baud rate and address. The system supports preset call and up to 255 preset positions.



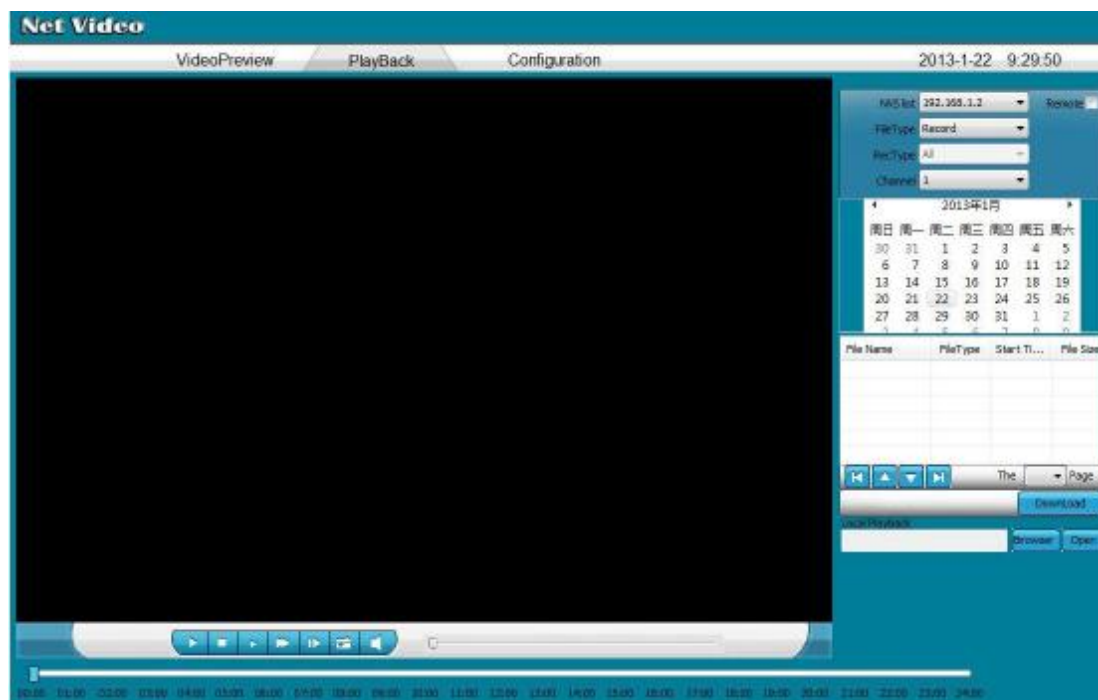
The system can be set to control the speed (range 0 to 100), and control PTZ.



Overview

4. Video playback

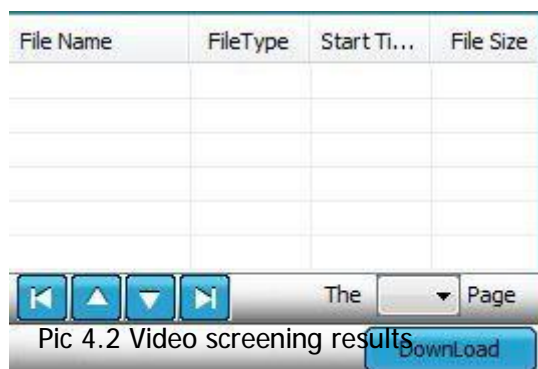
Click the video replay button in the main window into the video playback window, as shown in Pic 4.1:



Pic 4.1 Video playback window

4.1 Video files list






After the above settings, qualified results will be displayed on the video file list, Pic 4.2. The list lists all the results that match the query conditions, displays video files basic information: file name, file type (remote / local), start time, file size.



Pic 4.2 Video screening results

Overview

Key description:

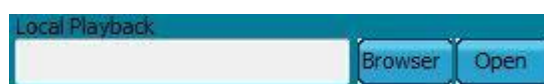
Key	Description:
	Return to home page
	Previous page
	Next page
	Last page
	Download selected remote video files to local computer

User can also select page directly through drop-down menu, to find wanted video files.

For remote video file, user can click on the download button to download the selected video file to the local PC.

4.2 Local Replay

Click browser to select a local video file, and click the Open button to start playing, as shown in Pic 4.3.

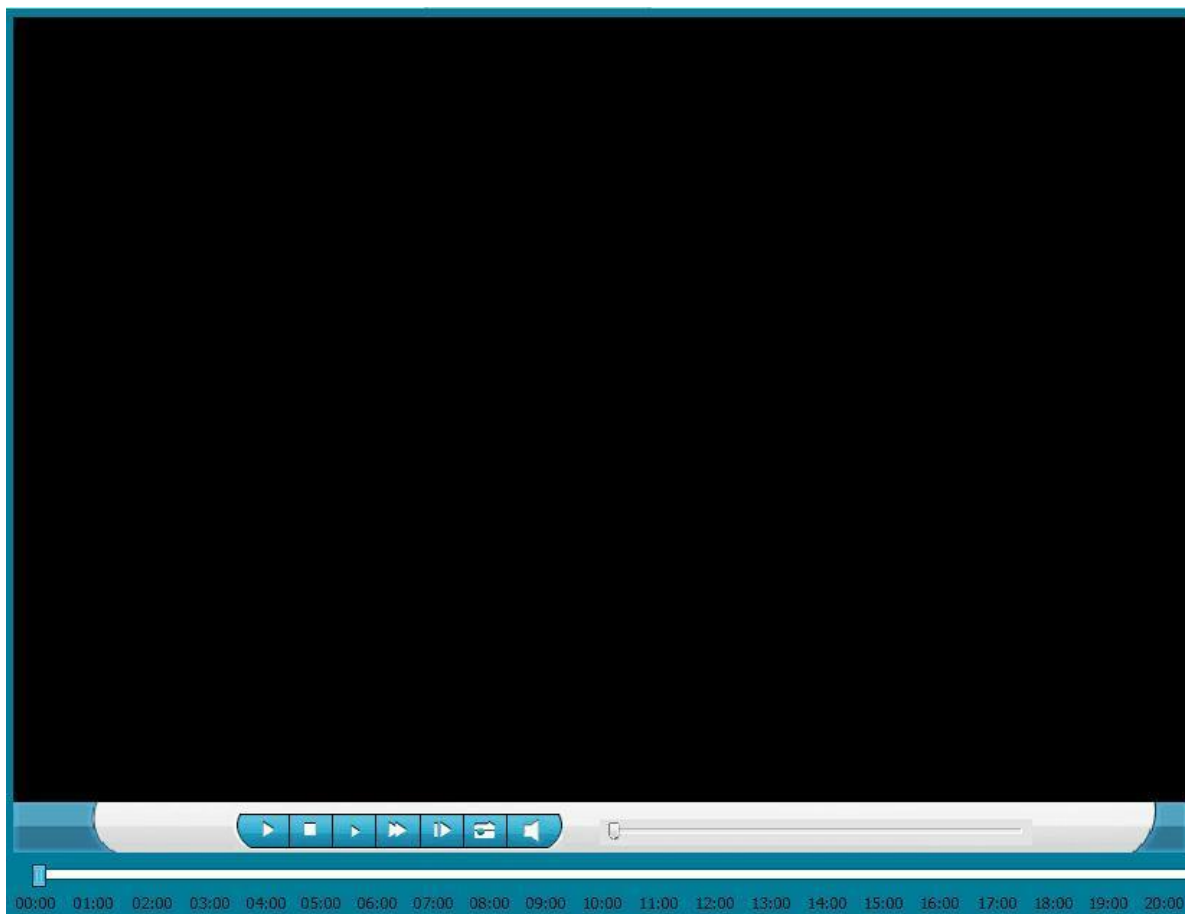


Pic 4.3 video replay

4.3 Playback Controls









Pic 4.4 shows the main window of the display and control. The videos through search or selected local file can be played in the window.

Overview

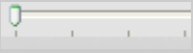


Pic 4.4 Display and control window

Key description:

Key	Description
	Play video file
	Halt
	Stop
	Single frame
	Fast forward playback speed by 2
	Slow forward playback speed divided by 2
	Snapshot, click the button to save still
	mute

Overview

	<p>Video file playback progress bar, drag the progress bar to positioning.</p> <p>Note: Only playback local video can drag to positioning.</p>
---	--

4.4 Operation of video playback

1. According to the conditions specified to search video file.

① Select Server list

② If user wants to search remote video file, then click remote check box,

if user want to search local file then do not need to check.



③ Select the file type; select a file type in the "file type" drop-down list.

④ If user wants to search remote video files, then need to select video type, select a video type in the drop-down menu.

⑤ Select a channel, select a video input channel.

⑥ Double click on a certain day in the calendar can find all videos in that day.

2. Play

Select a file in the list of video files, click  to start playback selected file, click  to halt, click  to stop, click  to play by frame, click  double speed to play selected file, click  /2 speed to play selected file, click  snapshot the picture of select video, click  stop preview audio.

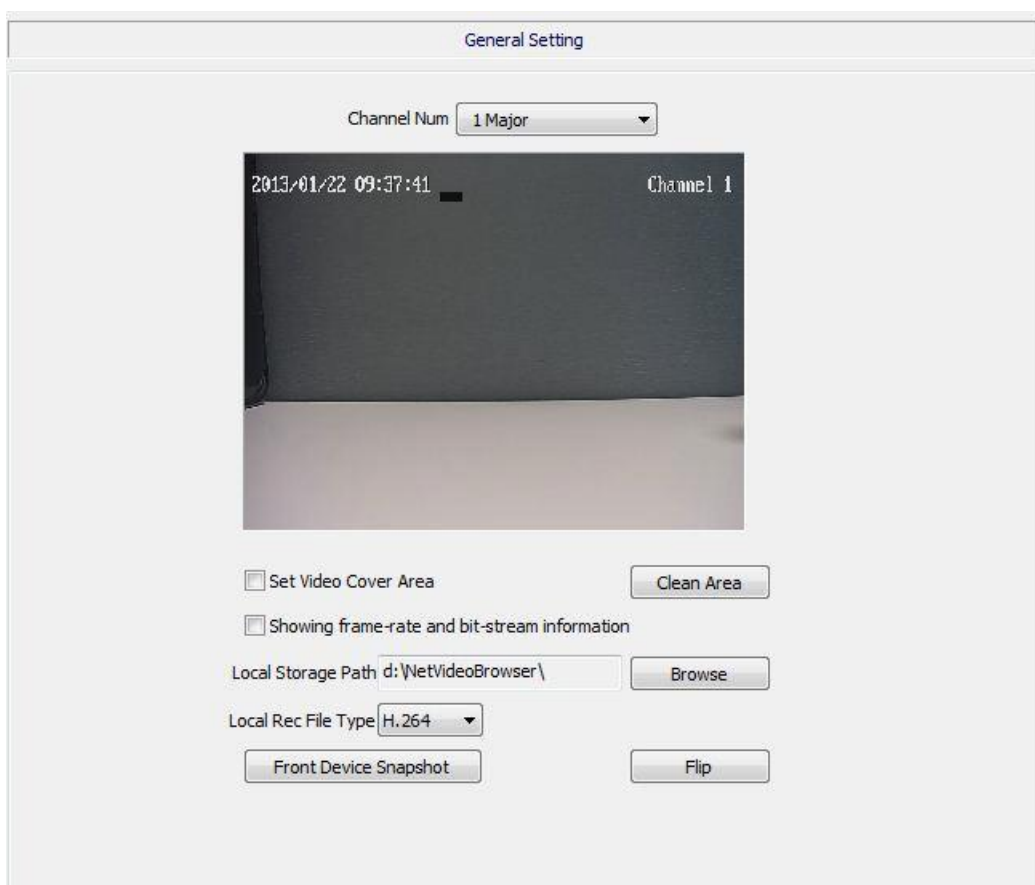
s

Overview

5 Parameters Setting

On video preview mode, click Parameters Setting, and this mode includes General Setting, Video Param, HD Setting, OSD, Alarm Setting, Network Param., Advance, PTZ and Cruising.

5.1 General Setting



Pic.5.1 General Setting

- I Channel Num.: Ch 1 Major and Vice
- I Set Video Cover Area: Select to confirm using and setting video cover area, and select Clean Area to cancel.
- I Showing Frame-rate and Bit-stream Information : Select to confirm displaying frame-rate and bit stream.
- I Local Storage Path: Set storage path of recording and snapshot.

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- I Local Rec. File Type: Set local recording file type, there are two types: H.264 and AVI.
- I Front Device Snapshot: Snapshot from front SD card or NFS

5.2 Video Param.

Video Param

Channel Num 1 Major

Video Quality Good

Frame Rate 25

Stream Type Audio Video

Prefer Mode Frame Rate

Rate 4096 Set

Resolution 720P(1280x720) Set

N/P Mode PAL Set

IFrame Rate 100 Set

Encode Mode VBR

Video Encoder H.264

Play Impression Low Delay

Extended code baseline

Pic. 5.2 Video Param.

- I Channel Num.: Channel 1 Major and Channel 1 Vice
- I Video Quality: If on Variable Bit Rate (VBR), it needs to select video quality. There are 5 levels, Best, Better, Good, Average and Worse, and image quality and bit rate is proportional.
- I Frame Rate: Options are 30, 25, 20, 15, 10, 5 and 1fps/s. The 30fps/s is only available when NTSC.
- I Stream Type: Video or Audio&Video
- I Prefer Mode: Quality or Frame Rate

Overview

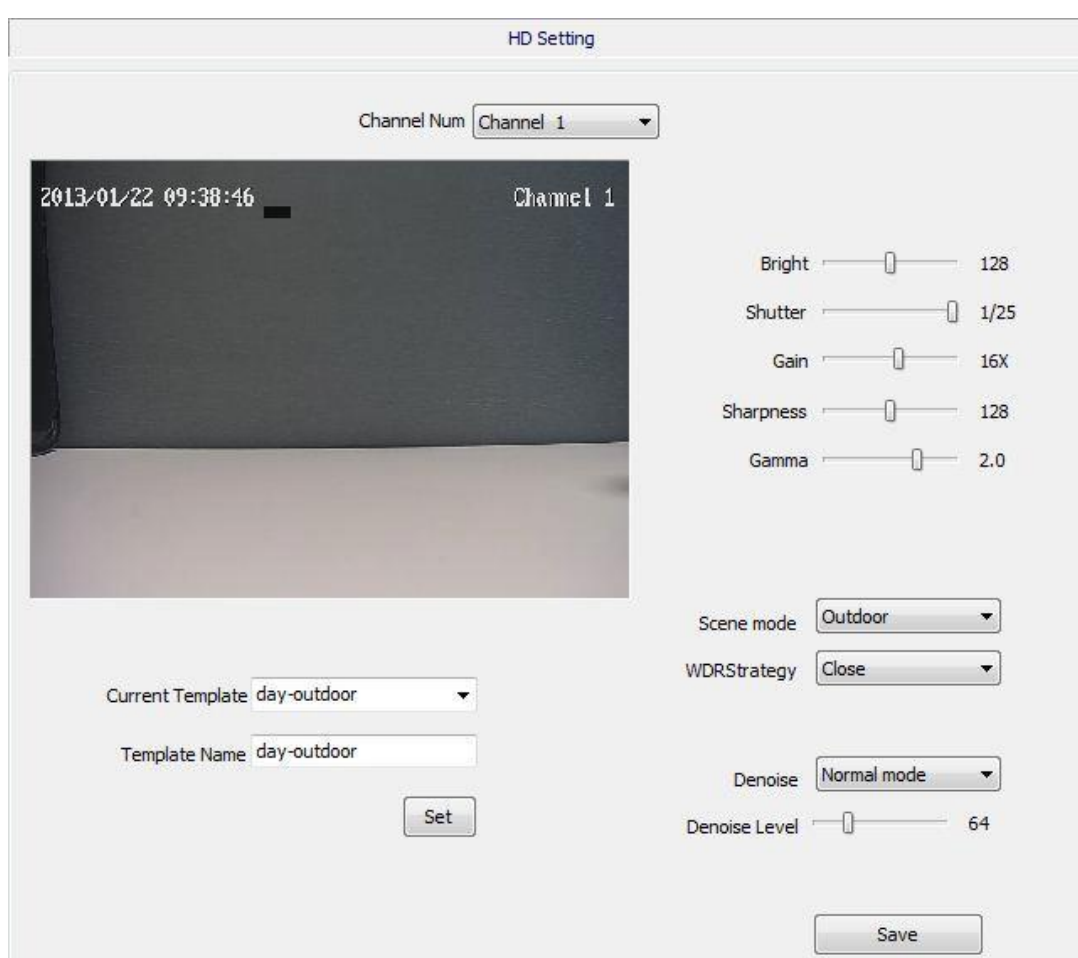
- I Rate: Can be set. When select VBR, if compress dramatic movement videos, it needs to set an upper limit. Stream rate is the limit value, and the scope is 32Kbps-8192Kbps. The bit rate setting is proportional to the resolution, if higher resolution, the set value of bit rate should be higher. For CIF, typically set as 384K-768Kbps; 2CIF, 512K-1Mbps; 4CIF, 768K-2Mbps. Concrete bit rate should be adjusted according to cameras position.
- I Resolution: VGA, 4CIF, 720P, 960P are optional. Higher resolution and clearer image.
- I N/P Mode: NTSC or PAL
- I I Frame Rate: It is the key frame. The video frame is composed by key frames and non-key frames. I frame rate refers to the number of video frames in the data stream includes an I-frame. If I frame rate is 100, means there is a I frame every 100 frames. I frame the frame rate and bit rate is inversely proportional, larger I frame and smaller bit rate. It is advised that I-frame rate setting value is four times of frame rate.
- I Encode Mode: VBR(Variable Bit Rate) or CBR(Constant Bit Rate)
The BVR means when compression video signal, it can change bit rate according to the video source. For example: decrease compression rate for stable image, otherwise, raise it. Thus, it can save the hard disk space and enhance bandwidth utilization. The main features of VBR are video quality unchanged and compressed stream adjusted according to video source. Given bit rate means that no matter what happens to the video source, video share hard disk space and The CBR means the compression bit rate is unchanged, and it can accurate estimate the hard disks space and bandwidth occupied by recordings.
- I Video Encoder: Support H.264 and Motion JPEG
- I Play Impression: Low Delay and Fluent
- I Extended Code: Support H.264 baseline, main profile and high profile

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5.3 HD Setting

5.3.1 HD Setting

Parameters setting as Pic.5.3, support Auto Iris, WDR (open default), BLC, Exposure Time, Shutter Speed, Gain, Gamma, Sharpness, Denoise, Bright, BLC(auto&manual), and 8 setting template can be saved.



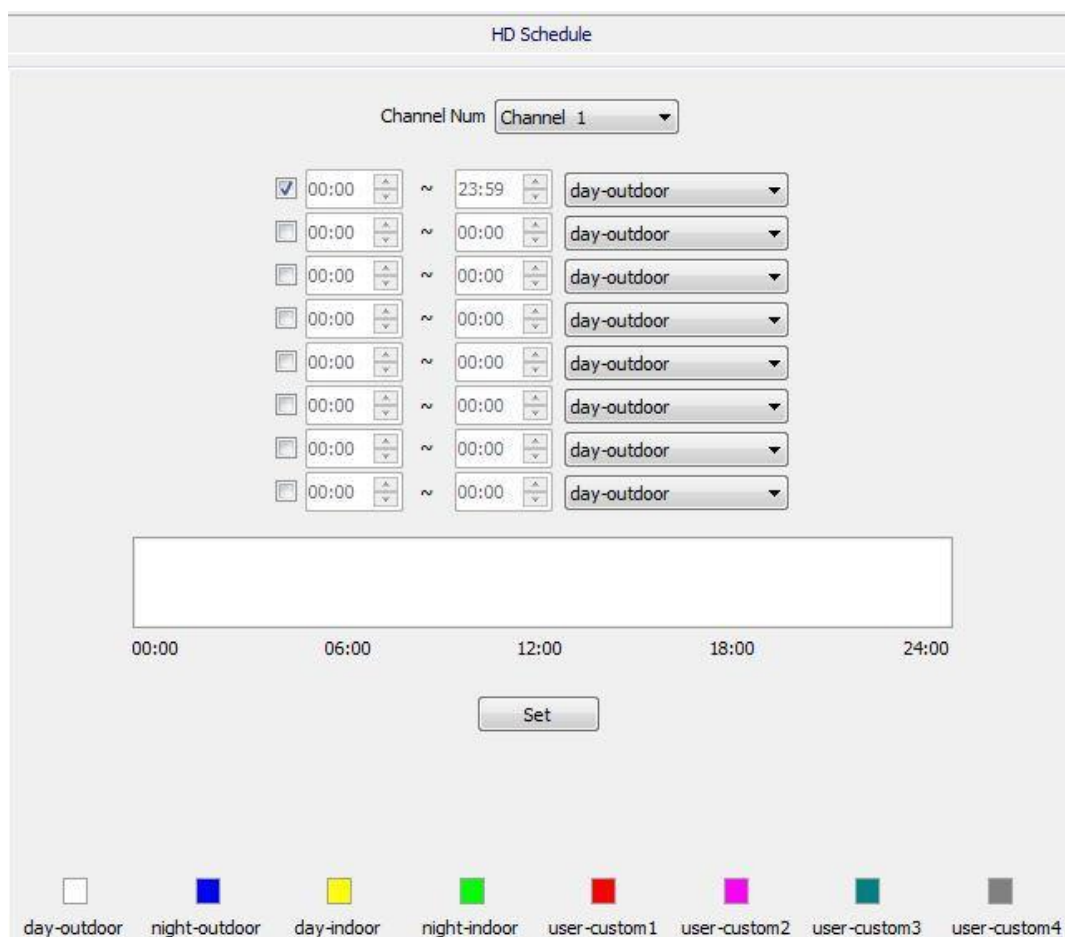
Pic. 5.3 HD Setting

5.3.2 HD Schedule

8 templates will be shown here, as Pic. 5.4, each template has a particular color. Set different time periods using different templates by controlling the

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"Settings" button at the top bar. For example: Time period: 00:00–05:40, using day-indoor(white), 05:40~14:10 using night-indoor(blue),14:10~23:59 using night-outdoor(green).



Pic. 5.4 HD Schedule

5.3.3 Color to Gray

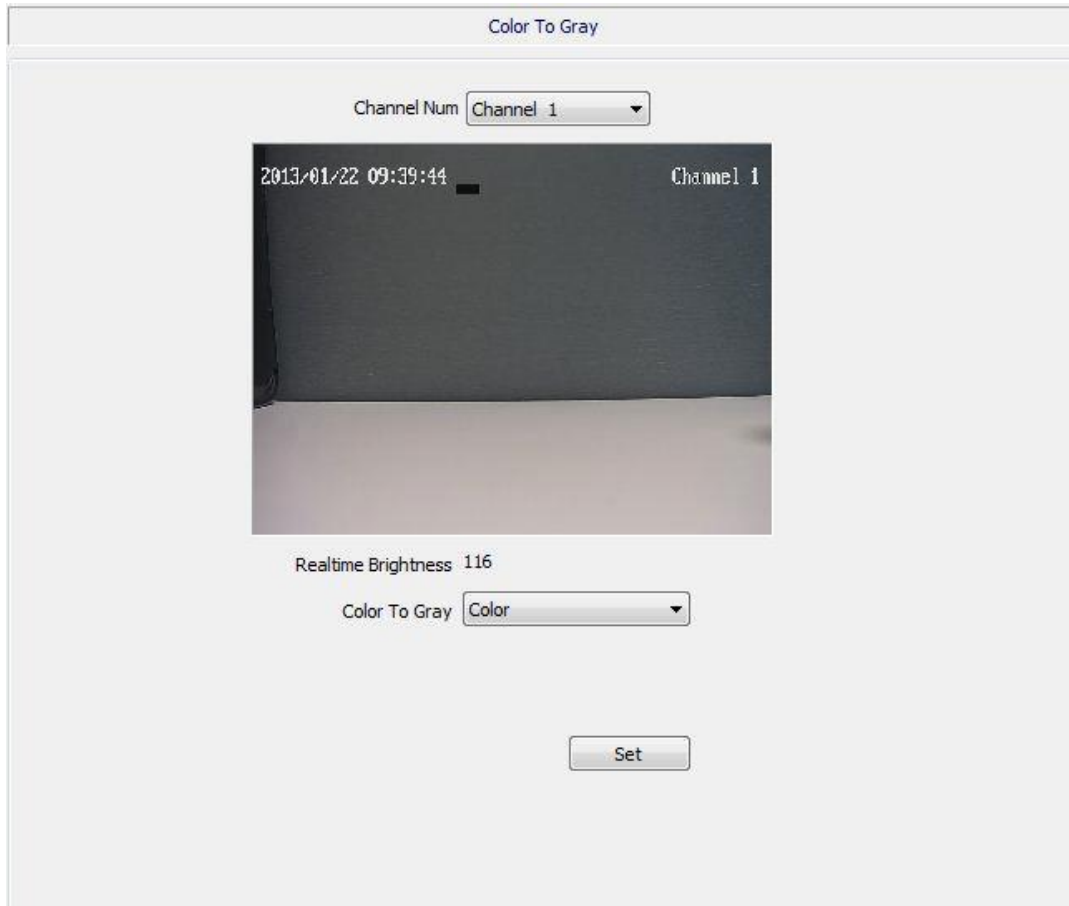
It has four modes: color, gray, internal synchronization and external synchronization, and Pic. 5.5 only showed the internal synchronization, the brightness in day and night only works in this mode.

Daytime Brightness: If real-time brightness is larger than day brightness, it will turn to color mode, and recommended value is 100.

Night Brightness: If real-time brightness is smaller than night brightness, it will turn to gray mode, and recommended value is 45.

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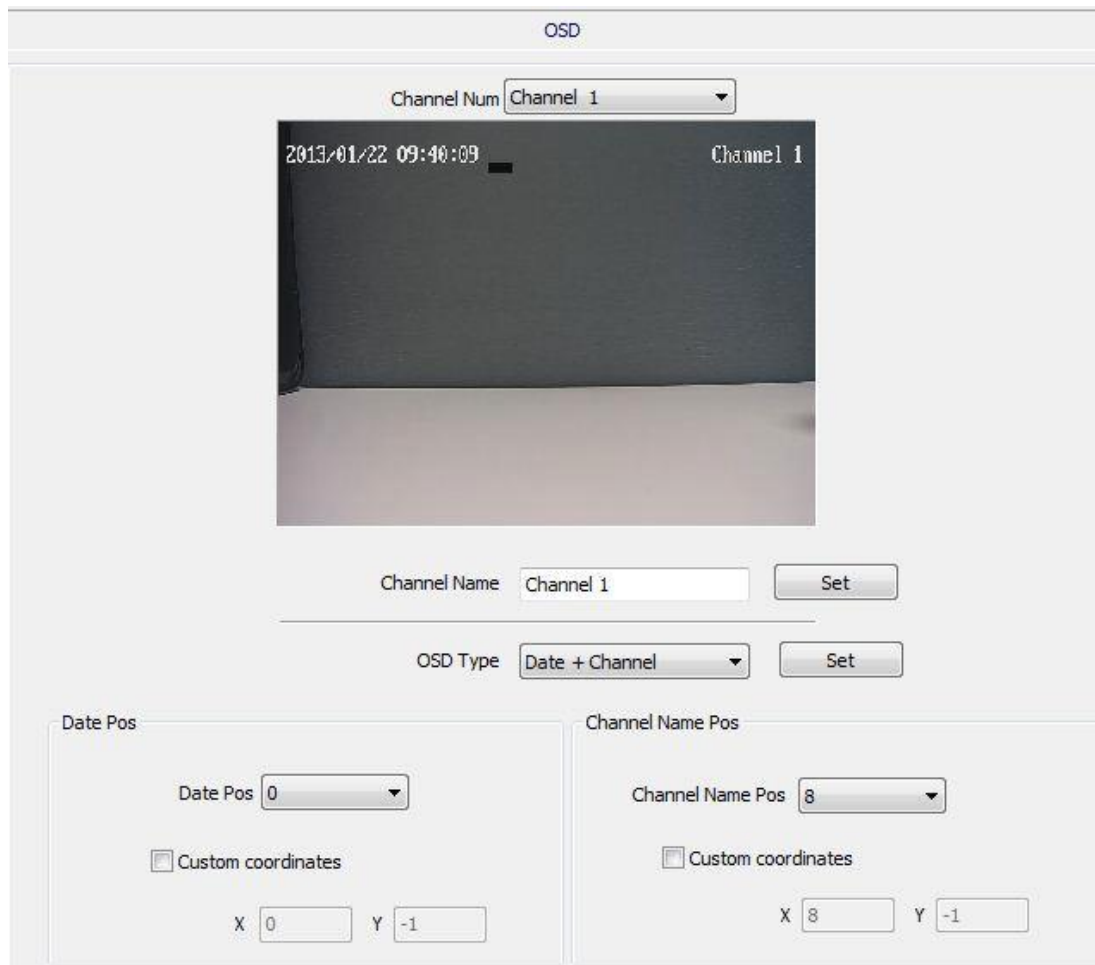
Alarm Recommended: If alarm synchronization interface (SYNC) is short-circuit, it will turn to gray mode, and short-circuit disconnected will change to color mode



Pic. 5.5 Color To Gray

Overview

5.4 OSD



Pic. 5.6 OSD

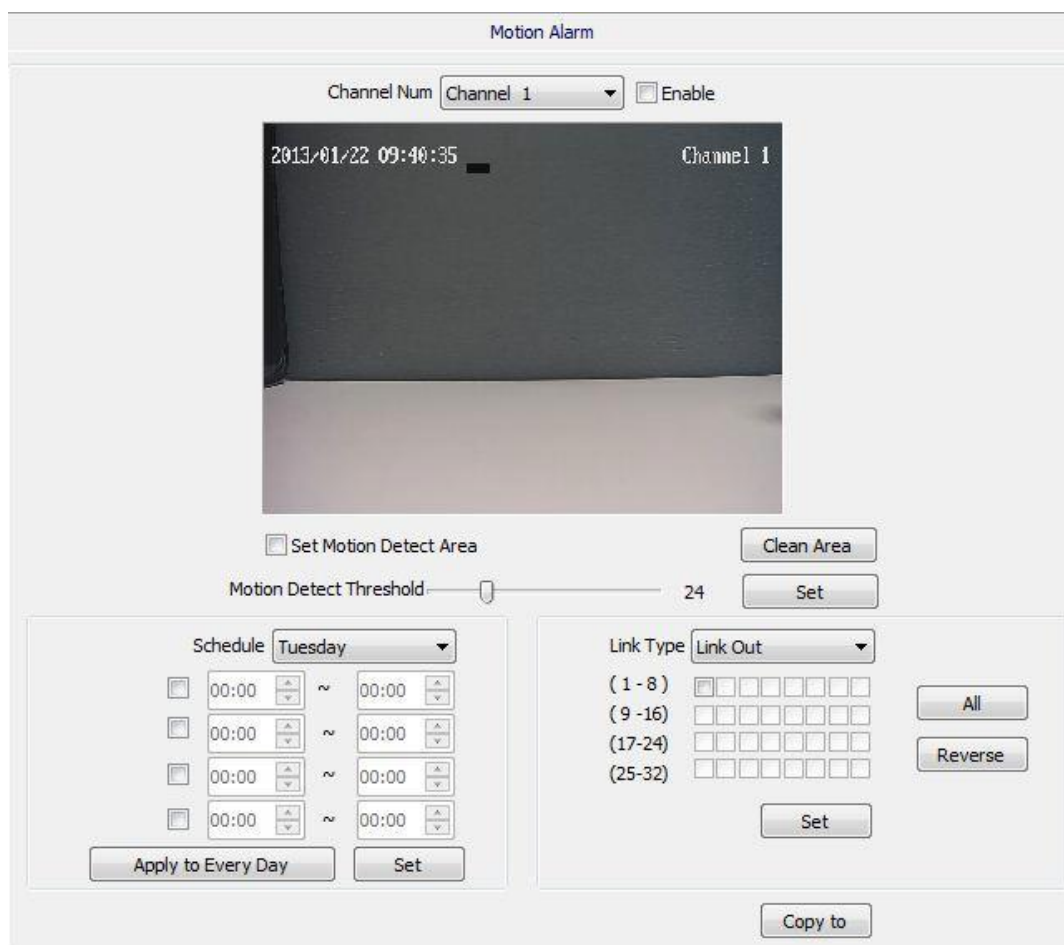
- I Support OSD setting to different channels
- I Support channel name setting. The system can set channel name for each video and display on it. When local video preview, playback and network video preview, the channel name will always display on the video. The maximum length of channel name is 32 bytes.
- I Support OSD type settings, there is No OSD, Time, Channel and Time+Channel four options.
- I Set horizontal and vertical coordinates of date position.
- I Set horizontal and vertical coordinates of channel name.
- I Set OSD content.
- I Set horizontal and vertical coordinates of OSD position

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5.5 Alarm Setting

5.5.1 Motion Alarm

Select 'Set Motion Detect Area' and move the mouse to video and drag it to set motion alarm area, as Pic. 5.7



Pic. 5.7 Motion Alarm

- I Set motion alarm for different channels.
- I Enable motion alarm.
- I Set motion alarm area and threshold.
- I Set motion alarm template.
- I Set motion alarm link out.

Overview

5.5.2 Lost Alarm

Select Channel Num. and Enable, and select date in Schedule to set, as 5.8.

Lost Alarm

Channel Num Enable

Schedule

00:00 ~ 00:00
 00:00 ~ 00:00
 00:00 ~ 00:00
 00:00 ~ 00:00

Link Type
Link Channel
Link PTZ Type
Number

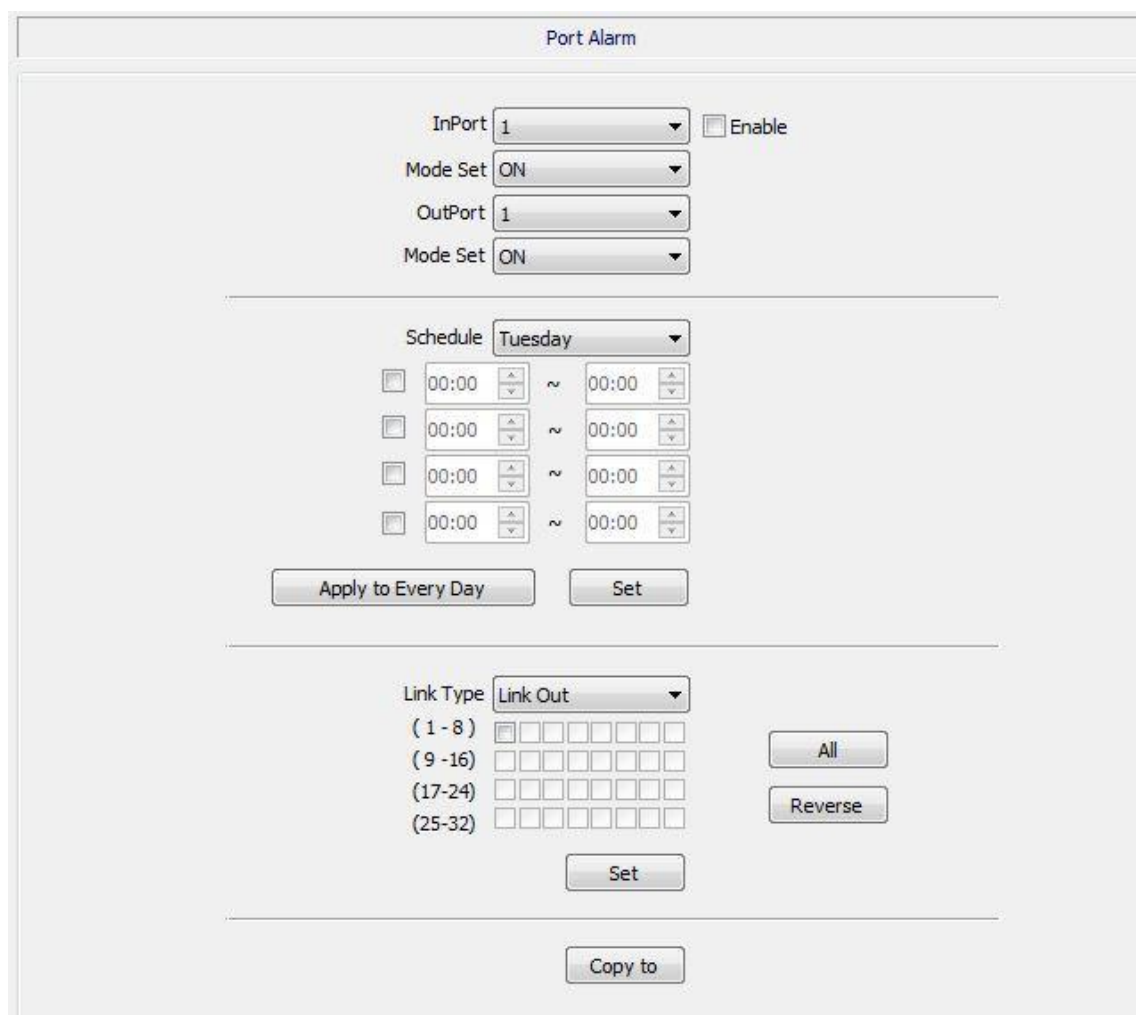
Pic. 5.8 Lost Alarm

- I Set motion alarm for different channels.
- I Enable lost alarm.
- I Set lost alarm template.
- I Set lost alarm link out, Support alarm and PTZ preset and cruising.

5.5.3 Port Alarm

Select Input and output port and Enable to set mode, as Pic. 5.9

Overview



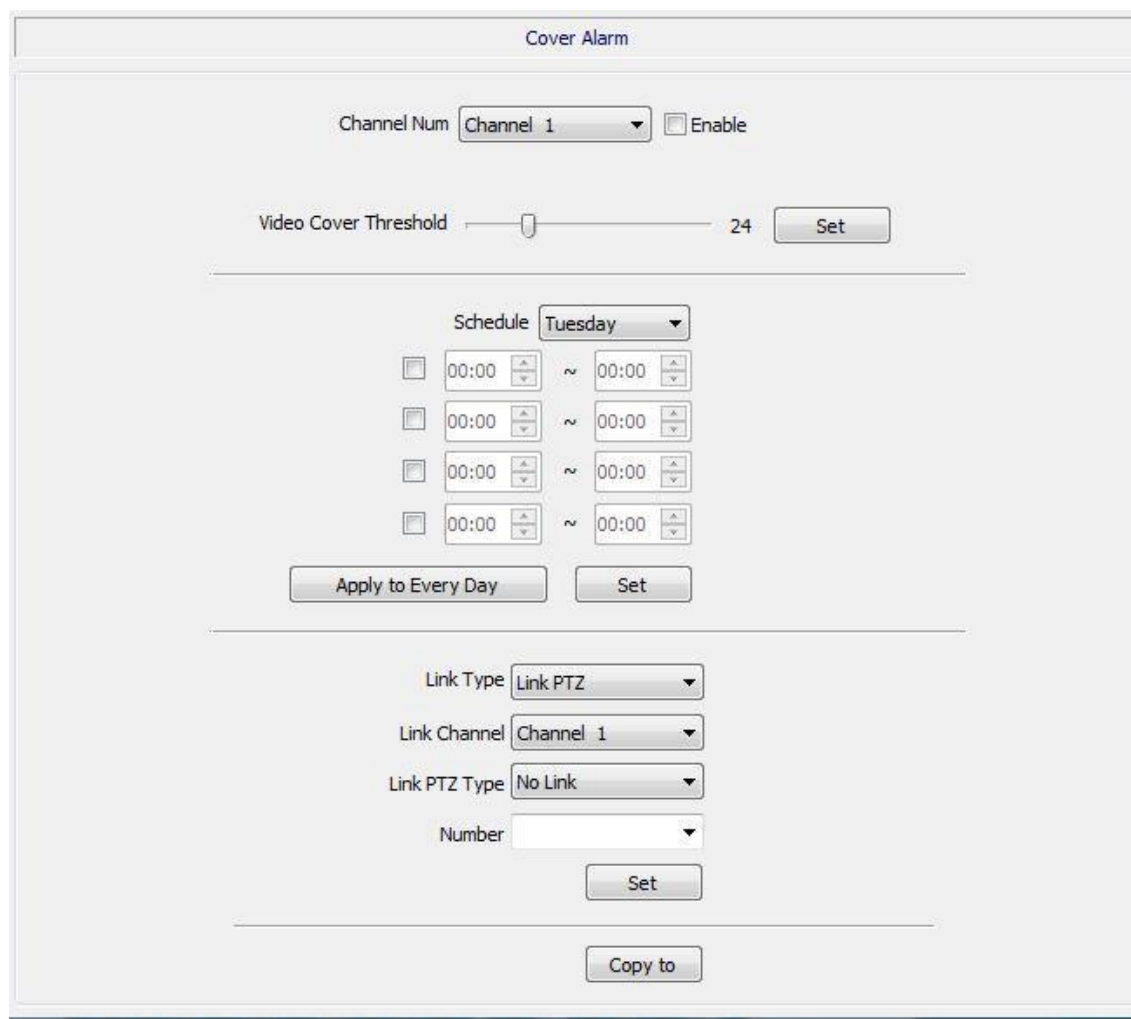
Pic. 5.9 Port Alarm

- I Enable motion alarm.
- I Set input and output port alarm trigger type.
- I Set port alarm template.
- I Set port alarm link out, Support alarm and PTZ preset and cruising.

5.5.4 Cover Alarm

Select Channel Num. and enable, and set video cover threshold, as Pic. 5.10.

Overview



Pic. 5.10 Cover Alarm

- I Set cover alarm for different channels.
- I Enable cover alarm.
- I Set cover alarm threshold.
- I Set cover alarm template.
- I Set motion alarm link out. Support alarm and PTZ preset and cruising

5.5.5 Alarm Server

Input alarm server address and set alarm port, as Pic. 5.11

Overview

Alarm Server

Alarm Server 255 . 255 . 255 . 255

Port 0

Set

COM Server 255 . 255 . 255 . 255

Port 0

Set

Pic. 5.11 Alarm Server

- I Set alarm sever IP and port
- I Set COM server IP and port.

Overview

5.5.6 Email Alarm

Email Alarm

Email Alarm Enable

Smtp Server 0

Smtp Port 0

Email Account 0

Email Password •

Email Mode off

Main Email Address 0

Email Address 1 0

Email Address 2 0

Email Address 3 0

Email Subject 0

Set

Pic. 5.12 Email Alarm

- I Set email SMTP server and port.
- I Set email account and password.
- I Set email address, max 4.
- I Set email subject

5.6 Network Parameter

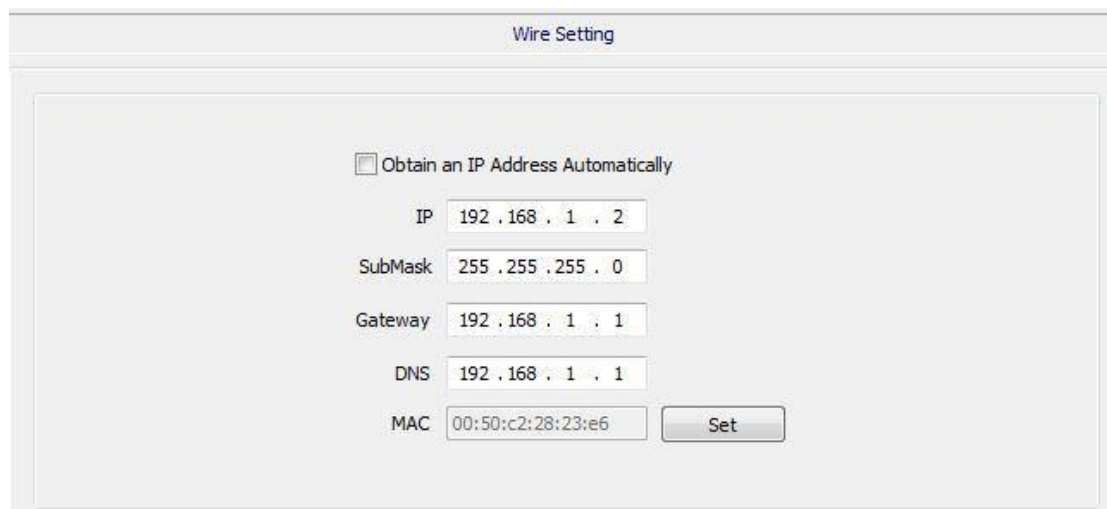
Support Wire Setting, WEB Port, Registration Center, DDNS Setting, PPPOE Setting, FTP and NTP Setting.

5.6.1 Wire Setting

Support IP address, Sub Mask, Gateway, DNS and MAC. IP address can be

Overview

obtained automatically or manually.



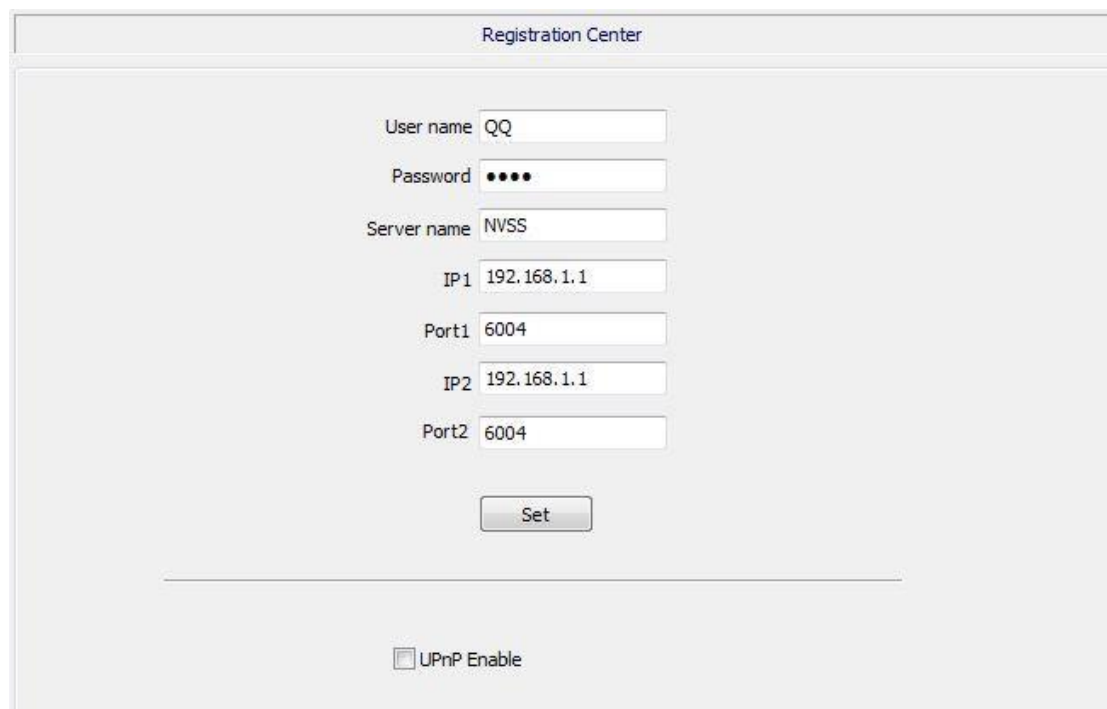
The 'Wire Setting' dialog box contains the following fields and controls:

- Obtain an IP Address Automatically
- IP: 192 . 168 . 1 . 2
- SubMask: 255 . 255 . 255 . 0
- Gateway: 192 . 168 . 1 . 1
- DNS: 192 . 168 . 1 . 1
- MAC: 00:50:c2:28:23:e6
- Set button

Pic. 5.13 IP Setting

5.6.2 Registration Center

Support User Name, Password, Server Name, IP and Port setting.



The 'Registration Center' dialog box contains the following fields and controls:

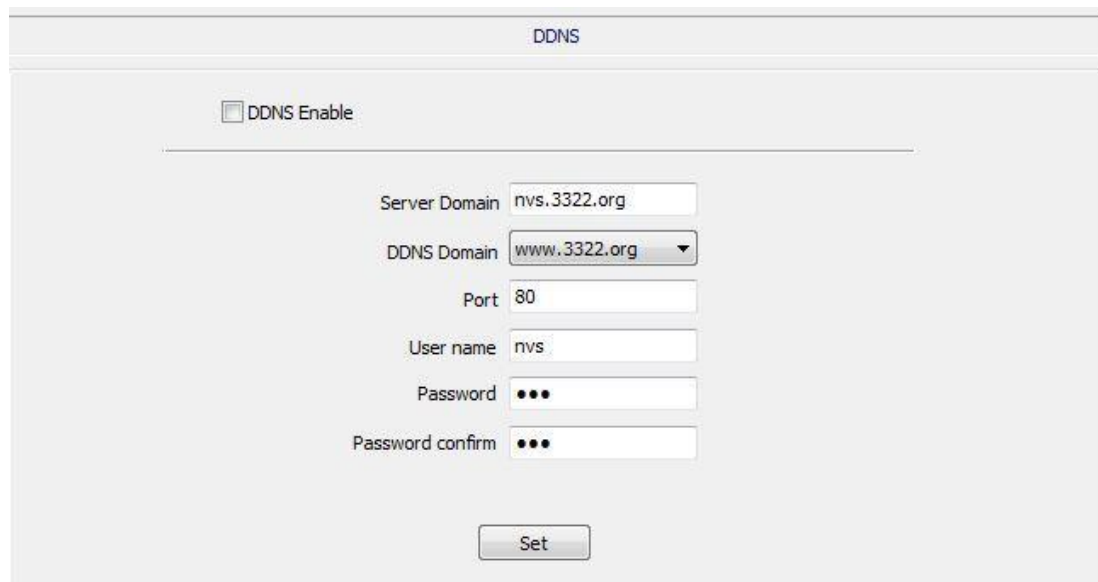
- User name: QQ
- Password: ••••
- Server name: NVSS
- IP1: 192.168.1.1
- Port1: 6004
- IP2: 192.168.1.1
- Port2: 6004
- Set button
- UPnP Enable

Pic. 5.14 Registration Center

Overview

5.6.3 DDNS

Support Server Domain, DDNS Domain, Port, User Name and Password setting.

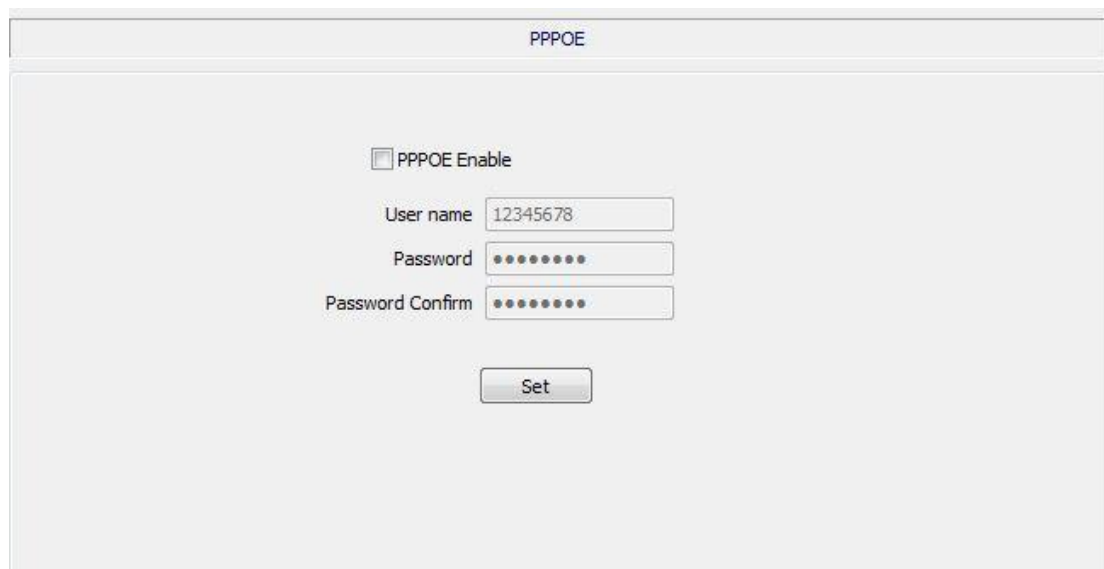


The screenshot shows a web interface for DDNS configuration. At the top, there is a tab labeled "DDNS". Below the tab, there is a checkbox labeled "DDNS Enable" which is currently unchecked. A horizontal line separates the header from the configuration fields. The fields are: "Server Domain" with the value "nvs.3322.org", "DDNS Domain" with a dropdown menu showing "www.3322.org", "Port" with the value "80", "User name" with the value "nvs", "Password" with three dots, and "Password confirm" with three dots. At the bottom of the form is a "Set" button.

Pic. 5.15 DDNS

5.6.4 PPPOE

Set user name and password.



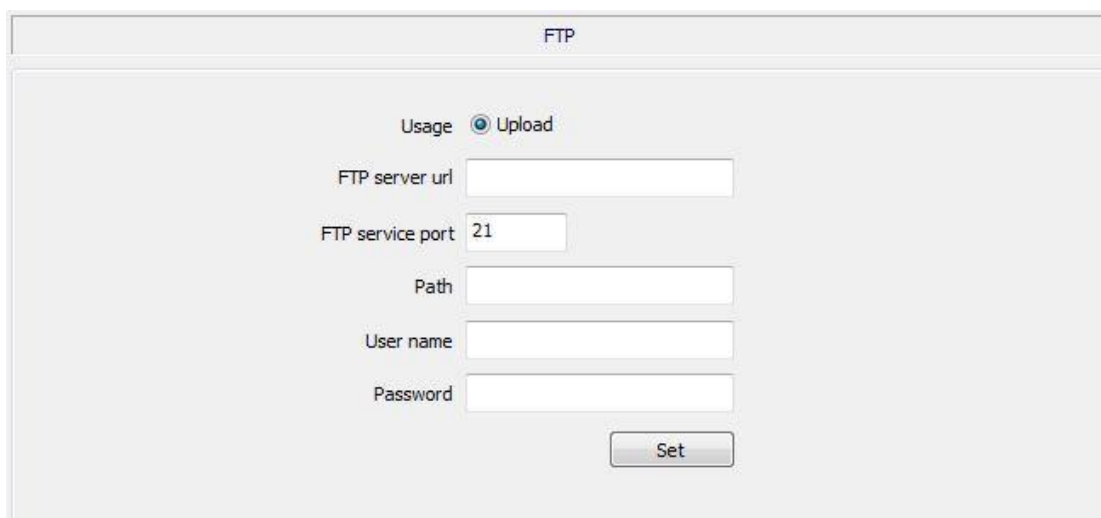
The screenshot shows a web interface for PPPOE configuration. At the top, there is a tab labeled "PPPOE". Below the tab, there is a checkbox labeled "PPPOE Enable" which is currently unchecked. The fields are: "User name" with the value "12345678", "Password" with eight dots, and "Password Confirm" with eight dots. At the bottom of the form is a "Set" button.

Pic. 5.16 PPPOE

Overview

5.6.5 FTP

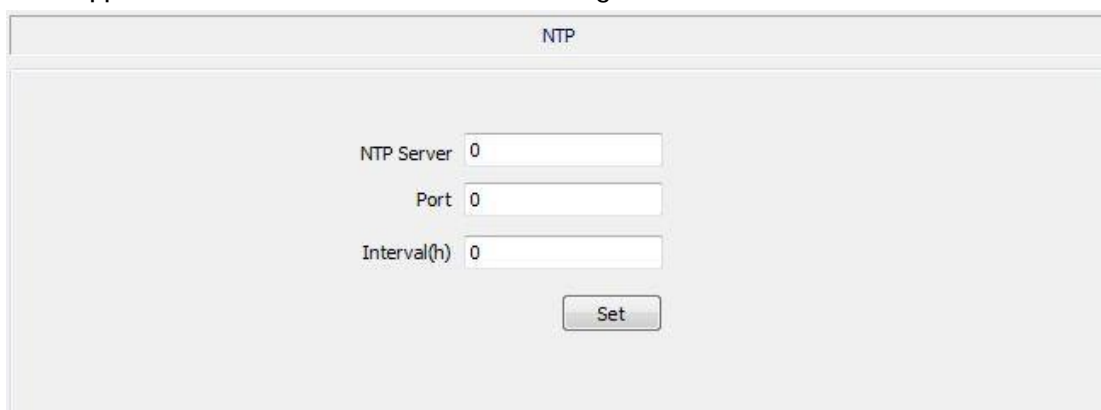
Support FTP Server Url, FTP Port, Path, User Name and Password setting. Upload support automatically and manually, also recorder and picture timing.



Pic 5.17 FTP

5.6.6 NTP

Support NTP Server, Port and Interval setting.



Pic. 5.18 NTP

5.7 Front Storage

Front storage contains SATA, USB/SD, NFS, Record Policy, Pre-record, Storage Policy and Snapshot.

Overview

5.7.1 SATA

It contains Device No., Status, Usage, Part Num., Total Size and Free Space.

SATA

Device NO 1

Status UnMounted

Usage Record

Part Num 0

Total Size 0

Free Space 0

5.19 SATA

5.7.2 USB/SD

Support Device No., Status, Usage, Total Size, Free Space and Initialize Disk setting.

USB/SD

Device NO 1

Status UnMounted

Usage Record

Total Size 0

Free Space 0

Initialize Disk

Pic. 5.20 USB/SD

5.7.3 NFS

Support Device No., Status, Usage, Total Size, Free Space, IP address and Mapping Path setting.

Overview

The screenshot shows a configuration window titled "NFS". It contains the following fields and controls:

- Device NO: 1 (dropdown menu)
- Status: UnMounted (dropdown menu)
- Usage: Record (dropdown menu)
- Total Size: 0 (text input)
- Free Space: 0 (text input)
- IP Address: 0 . 0 . 0 . 0 (text input)
- Mapping Path: /nfs (text input)
- Set (button)

Pic. 5.21 NFS

5.7.4 Record Policy

Support Alarm Record, Manual Record, Task Record, Channel Num and Record Status.

Overview

Record Policy

Channel Num Channel 1

Record Status Stoped

Manual Rec Alarm Rec Task Rec

Date Selection Tuesday

00:00 ~ 00:00

00:00 ~ 00:00

00:00 ~ 00:00

00:00 ~ 00:00

Apply to Every Day Set

Disconnect Record Close

Tip broken network video according to time period for video footage

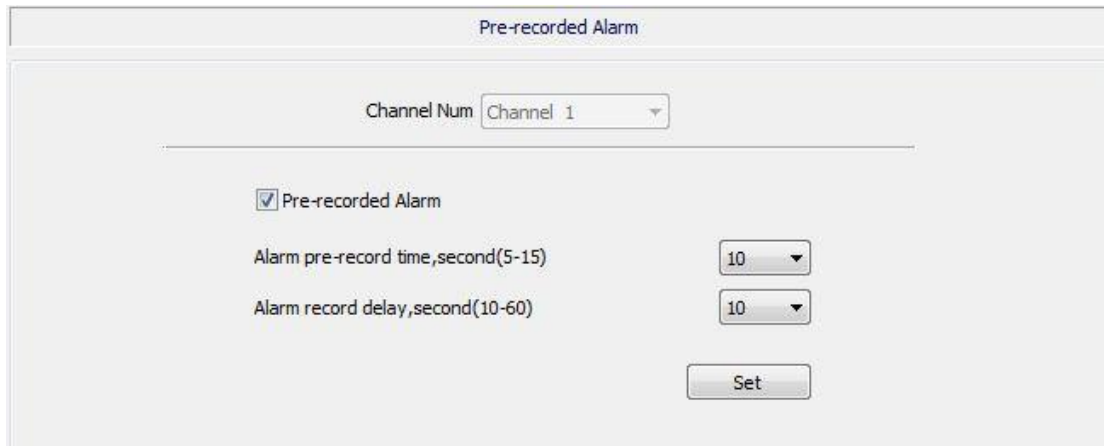
Copy to

Pic. 5.22 Record Policy

5.7.5 Pre-recorded

Support Channel Num., Alarm Pre-record Time and Alarm Record Delay setting. There are 5, 10 and 15 seconds optional, for Alarm Record Delay, there are 10, 15, 30 and 60 optional.

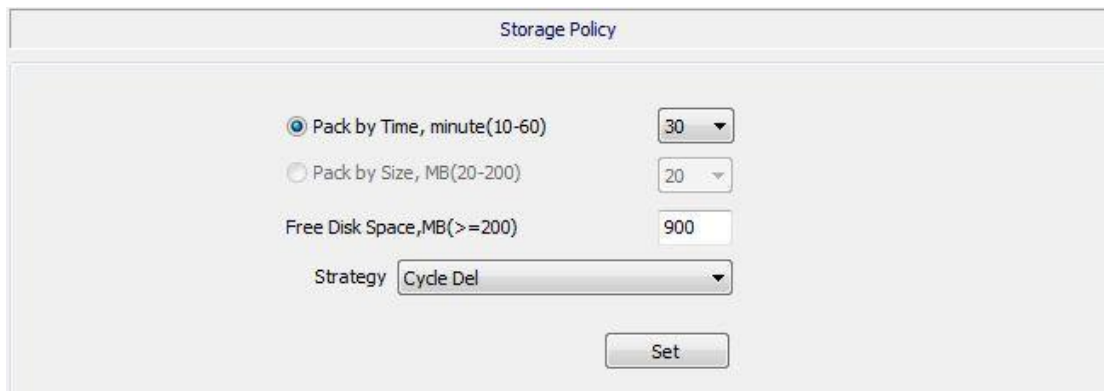
Overview



Pic. 5.23 Pre-recorded Alarm

5.7.6 Storage Policy

Support Pack Type (by time or by size), Free Disk Space(more than 200M) and Saving Strategy setting. The Pack By Time has 10, 20, 30 and 60 optional. Saving Strategy has Stop Record and Cycle Del(Except Alarm File)

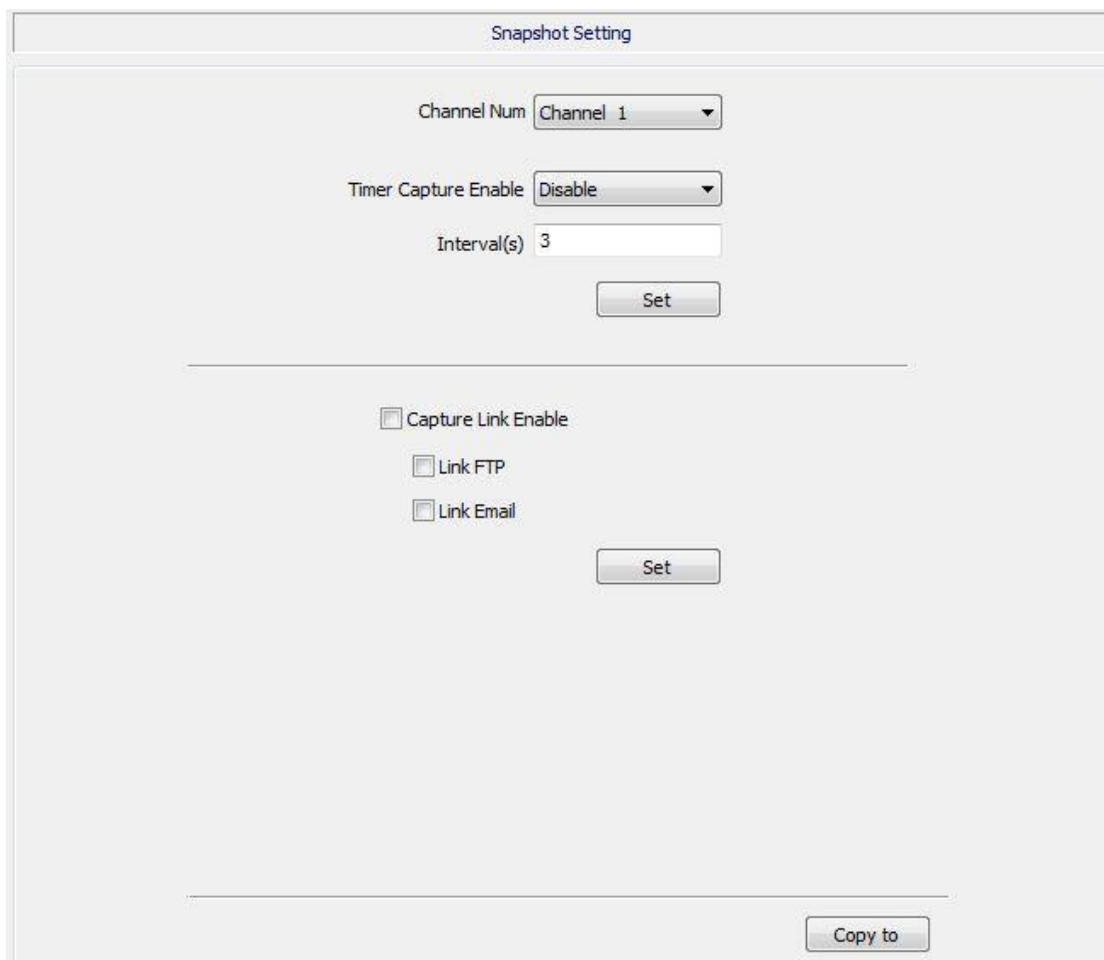


Pic. 5.24 Storage Policy

5.7.7 Snapshot Setting

Select Channel Num and enable Timer Capture, then set Interval, and click Set to complete.

Overview



Pic. 5.25 Snapshot Setting

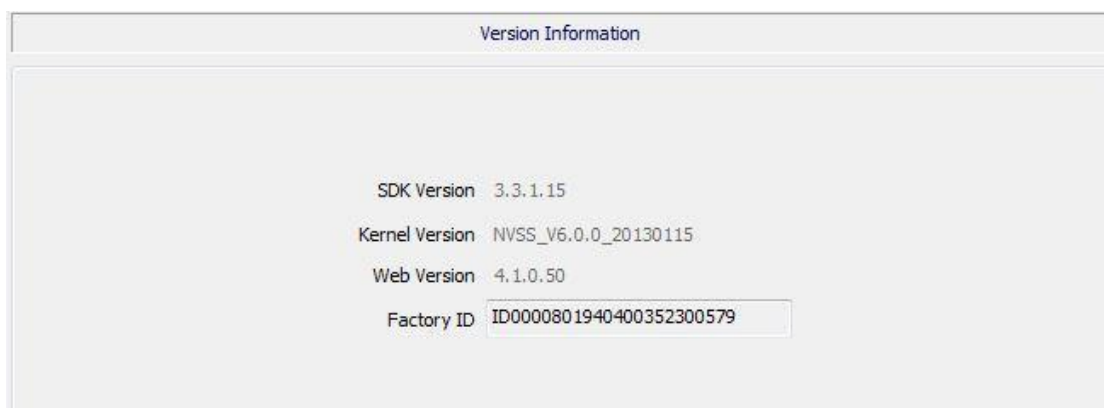
5.8 Advance

Support Version Information, System Information, PU, SIP, Access Platform, User Management, Upgrade and Log Management setting.

5.8.1 Version Information

It will show SDK Version, Kernel Version, Web Version and Factory ID information, as Pic. 5.26

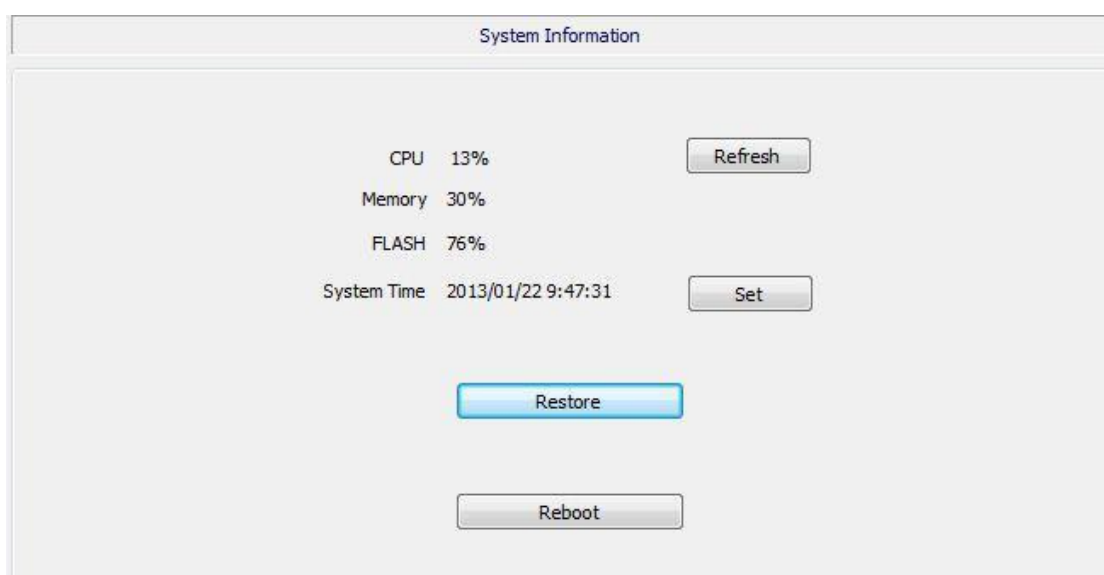
Overview



Pic. 5.26 Version Information

5.8.2 System Information

It will show CPU, Memory, Flash and System Time information.



Pic. 5.27 System Information

5.8.3 PU Set

- I Set Channel Num.
- I Set Register Server, Heartbeat Server, Alarm Server and corresponding port.
- I Set Device ID, Device Name, VSP Port, VAP Port and Access Pass.

Overview

PU Set

Register Server: 192.168.1.100
Port: 10102

Heartbeat Server: 192.168.1.100
Port: 10102

Alarm Server: 192.168.1.100
Port: 2122

Device ID:

Device Name:

VSP Port: 8000

VAP Port: 9000

Access Pass:

Channel Num: Channel 1

Channel Num:

Auto increase Set

Pic. 5.28 PU Set

5.8.4 SIP Configuration

SIP Configuration

SIP Server IP:

SIP Server Port: 0

SIP Server ID:

SIP Device ID:

SIP UserName:

SIP Password:

RegValidity: 0

Keep-alive: 0

Heartbeat interval: 0

Heart rate: 0

Need to Register

Channel Num: Channel 1

Channel Num:

Channel Level: 0

PTZ time: 0

Alarm Input: 1

Alarm Input Num: 987654321021111112

Alarm Level: 1

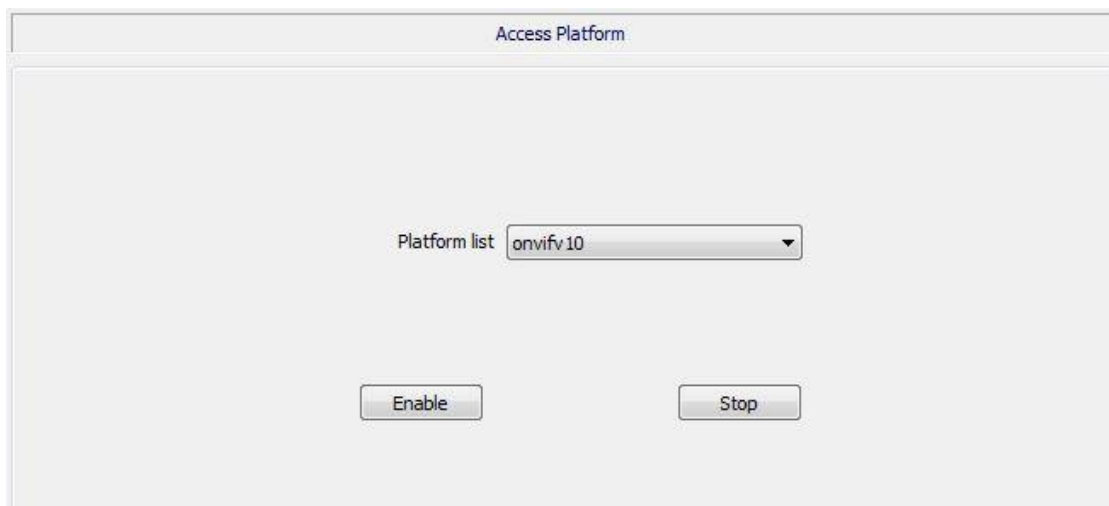
Auto increase Set

Overview

Pic. 5.29 SIP Configuration

5.8.5 Access Platform

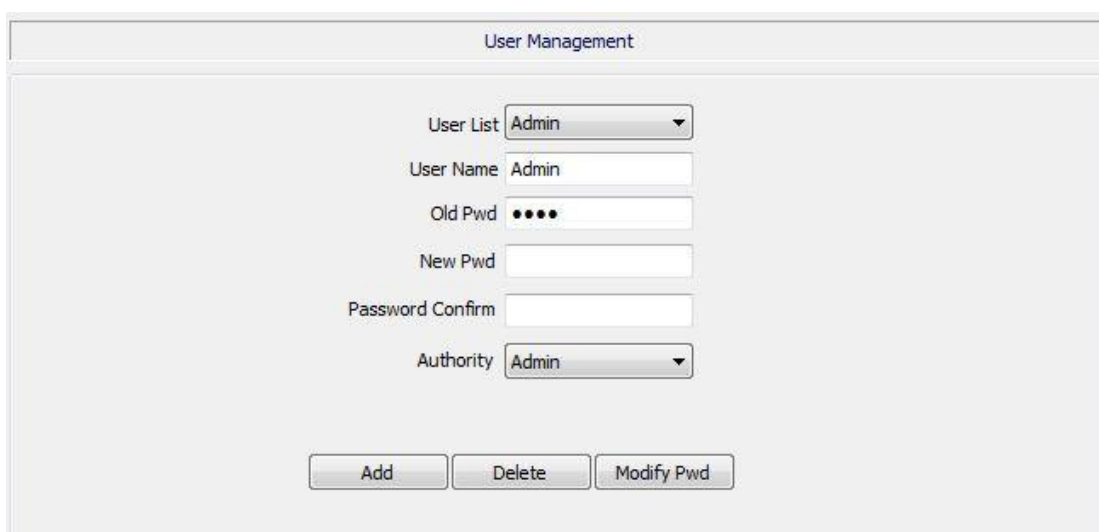
Select platform list and click 'Enable'. If select 'Stop', the device will restart.



Pic. 5.30 Access Platform

5.8.6 User Management

Support add and delete user. And the user authority contains Admin, View, View+Control and View+Control+Set, it can set password for new user.

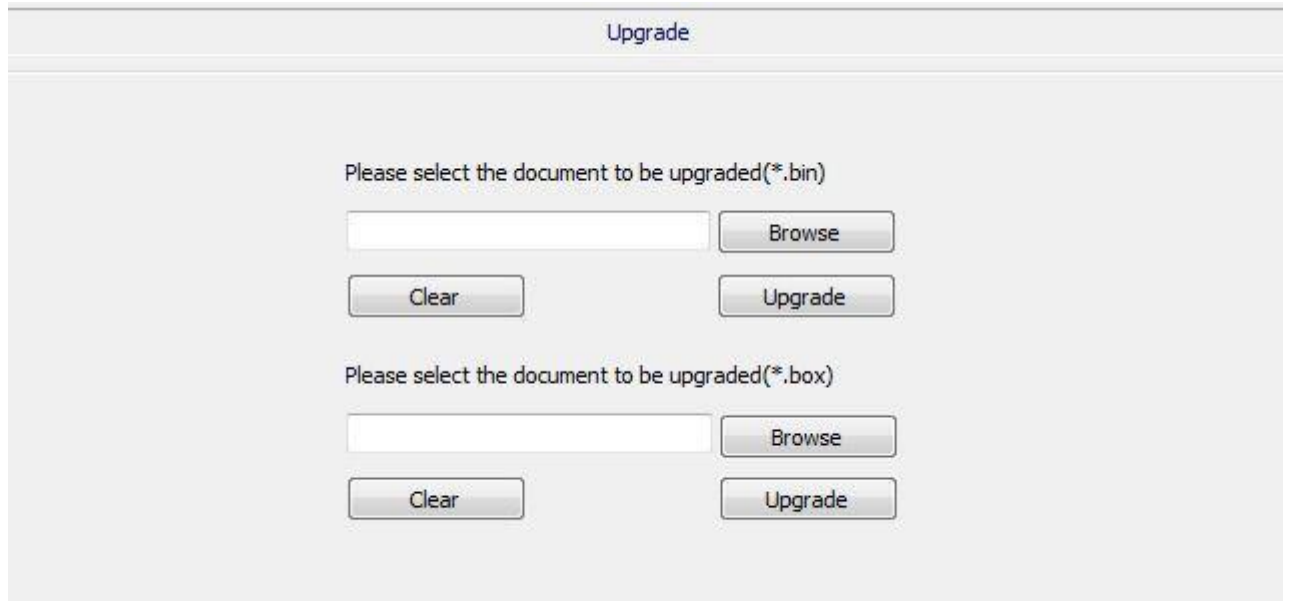


Pic. 5.31 User Management

Overview

5.8.7 Upgrade

The system support .bin to upgrade kernel and .Box to upgrade web. Click [Browse] and select .bin or .box file, then select [Upgrade Kernel] or [Upgrade Web], and the system will restart after completion.



Pic. 5.32 Upgrade

5.8.8 Log Management

Query log information according to channel, type and time.

Overview

The screenshot displays a 'Log Management' interface. At the top, there are search filters: 'Channel Num' set to 'ALL Channel' and 'Log Type' set to 'ALL Type'. To the right, 'Start Time' is '2012-01-22 00:00:00' and 'End Time' is '2013-01-22 23:59:59'. Below these are navigation buttons: 'Query', 'FirstPage', 'PrePage', 'NextPage', and 'LastPage'. The main area is a table with columns: 'IP', 'Count', 'CountPage', and 'CurrentPage'. The table header also includes 'No', 'Channel', 'Log Type', 'Start Time', and 'Content'. The table body is currently empty. At the bottom right, there are buttons for 'Export Current Page' and 'Export All Page'.

Pic. 5.33 Log Management

6.0 Supplement

6.1 Clod Start on Low Temperature

If the temperature is lower than -30 degree, please reheat for 3-5 minis.

6.2 Lightning Level

4KV electrostatic protection

Power port: mold 4KV, differential mode 2KV.

Network port: common mode 4KV.

Overview

The electrostatic: contact 6KV, air 8KV.

6.3 The Braids Lines Traces

In order to prevent water from braids line, please note braid line traces.

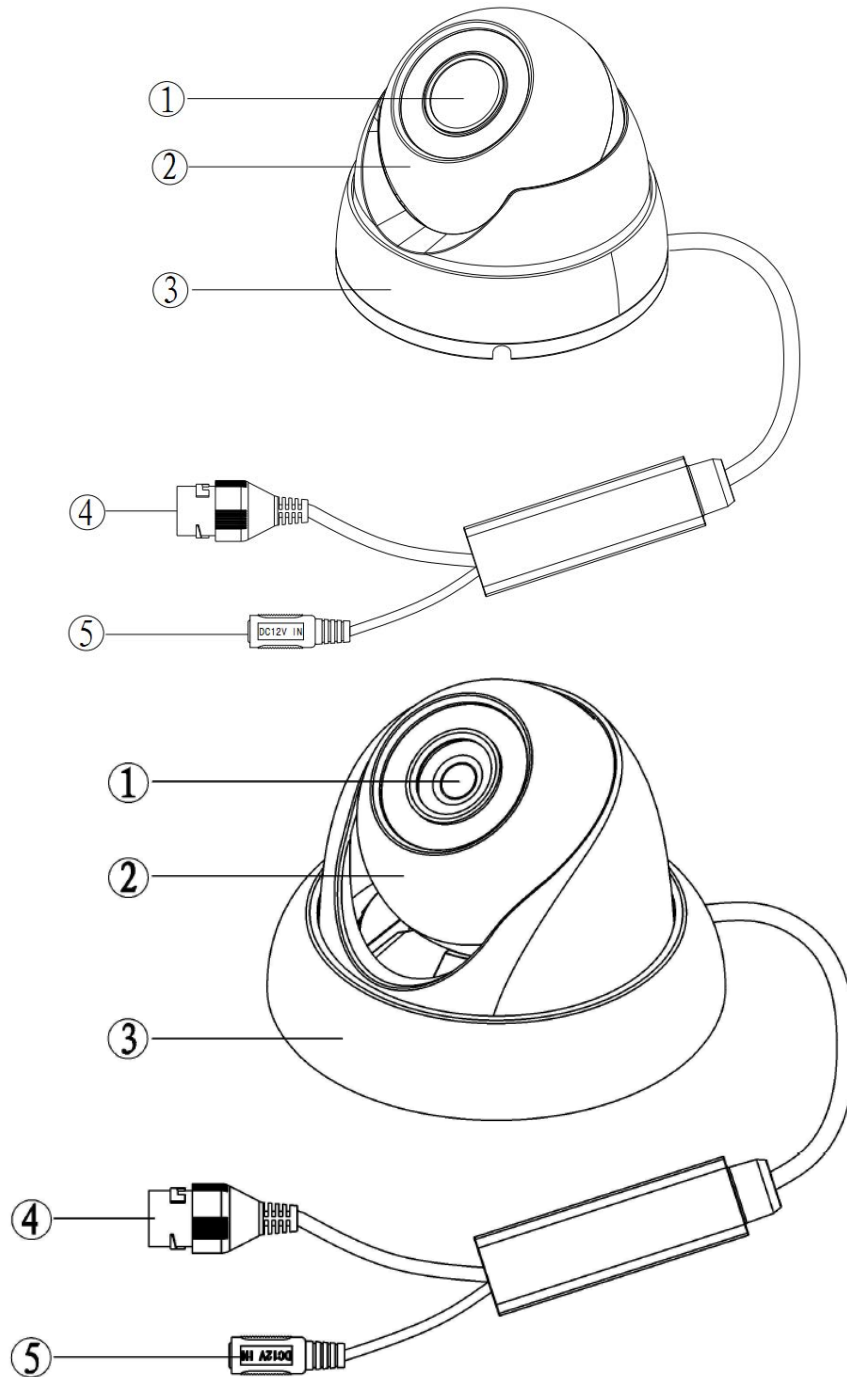
Parameter		Model			
		ELI-IP5-ED21-4R			
System	Main Processor	High performance DSP			
	OS	Embedded LINUX			
	System Resources	Support real-time network, local record, and remote operation at the same time.			
	User Interface	Remote operation interface such as WEB, DSS, PSS			
	System Status	Bit stream statistics, log, and software version.			
Video Parameter	Image Sensor	1/3-inch CMOS			
	Pixel	2048(H)*1536(V)			
	Day/night	Support day/night mode switch			
	Gain Control	Fixed/Auto			
	White Balance	Manual/Auto			
	BLC	On/Off			
	Electronic Shutter	Manual/Auto/Low noise/Low-motion blur It ranges from 1/3 to 1/100000.			
	Video Compression Standard	H.264/H.264B/H.264H/MJPEG			
	Video Frame Rate	PAL: Main stream (1920*1080@25fps), extra stream (704*576@25fps)			
NTSC: Main stream (1920*1080@30fps), extra stream (704*480@30fps)					
	Privacy Mask	Supports max 4 privacy mask zones			
	Video Setup	Support parameter setup such as bright, contrast.			
	Video Information	Channel title, time title, motion detect, tampering.			
	Lens	2.8mm, 3.6mm, 6mm, 8mm. Fixed focus.			
	Lens Interface	M12. Lens is the default accessories			
Video	Motion Detect	396 (18*22) detection zones; sensitivity level ranges from 0 to 100; area threshold ranges from 0 to 100. Activation event: video storage, image snapshot, log, email function and etc.			
Record and Backup	Record Priority	Manual >Video detect>Schedule			
	Storage Management	Support NAS storage			
Network	Wire Network	1-ch 10/100M Ethernet, RJ45 port			
	Network Protocol	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPOE, IPv4/v6, QoS, UPnP, NTP, HTTPS, Bonjour			
	Remote Operation	Monitor, system setup, file download, log information, maintenance, upgrade and etc			
	Platform Interface Standard	Support ONVIF			
General Parameter	IR light	IR light 20M.			
	Power	DC12V power and PoE.		DC 12V	
	Power Consumption	4.8W MAX			
	Working Temperature	-30℃~+60℃			
	Working Humidify	≤95%			
	Dimensions(mm)	Φ113.6×85.8	Φ93.4×80.5	Φ113.6×85.8	Φ93.4×80.5
	Weight	0.27kg	0.35kg	0.27kg	0.35kg
	Installation	Ceiling and wall mount			

ELI-IP5-ED21-4R

Structure

Components

You can refer to the following figures for product appearance information.

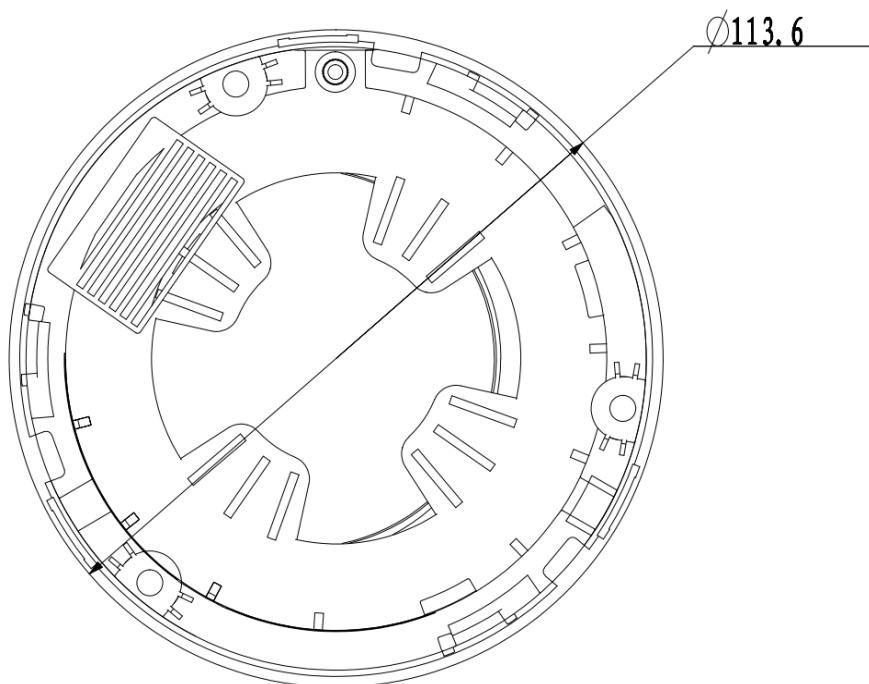
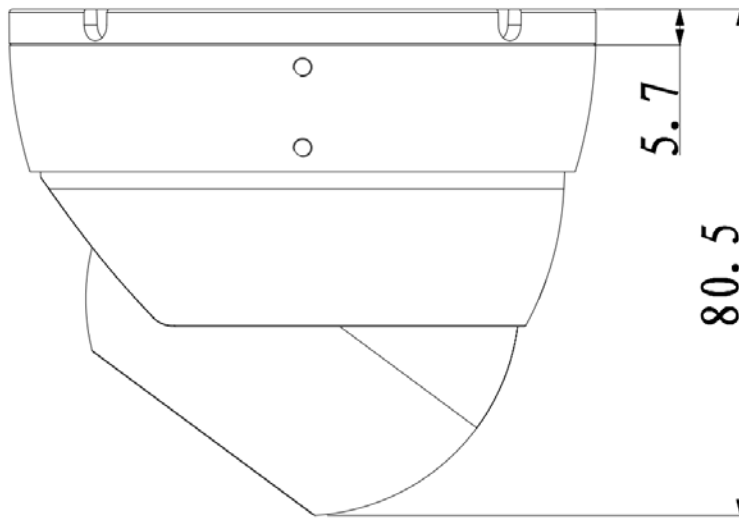


Component	Component Name
Component 1	Device lens
Component 2	Dome body
Component 3	Dome enclosure

No.	Port	Name	Connector	Note
4	LAN	Network port	Ethernet	To connect to standard Ethernet. Note: ● Some devices do not support PoE.
5	DC12V	DC power 12V		To connect to DC12V power supply.

2.2 Framework and Dimension

Please refer to the following two figures for dimension information. The unit is mm. See Figure 2-3 to Figure 2-6.



3 Device Installation

Important

Before the installation, please make sure the installation environments can at least support 3x weight of the camera.

3.1 Installation Steps for Metal Dome

Please follow the steps listed below to install the device. Please refer to Figure 3-1 to Figure 3-3 for reference.

Step 1

Turn clockwise to remove the decoration ring from the snap joints.

Step 2

Please take the installation position map in the accessories bag, and then paste it on the ceiling or the wall according to your monitor area requirements. Draw and then dig four expansion bolts holes in the installation surface and then insert four expansion bolts in the holes. Secure these four bolts firmly. Please draw the cable out from the cable exit when you install the device.

Step 3

Adjust the device installation pedestal to the proper position and then line up the four holes in the device pedestal to the four plastic expansion bolt holes in the installation position. Put the four self-tapping screws in the four plastic expansion bolts firmly. Loosen the decoration ring to adjust lens in order to make lens toward designed monitoring area. User can use the M3X3 inner hex screw to secure dome body.

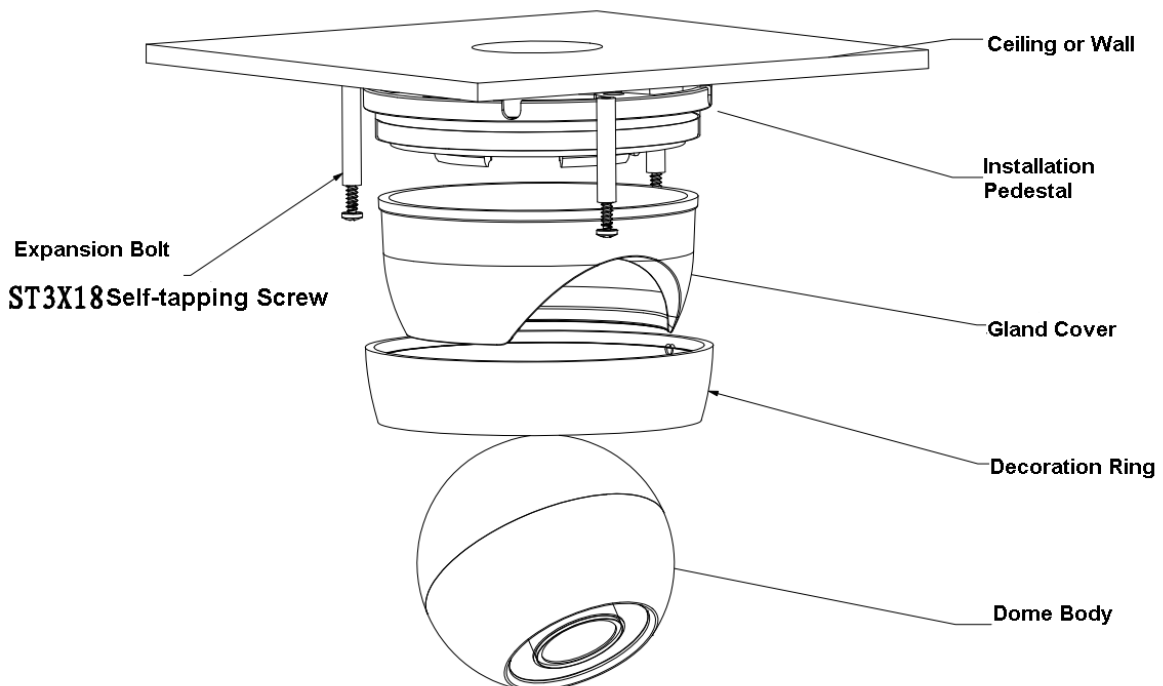


Figure 3-1 Device installation illustration 1

Please pay attention to the dome camera direction when you are installing. Please refer to the following figure for detailed information. See Figure 3-2.

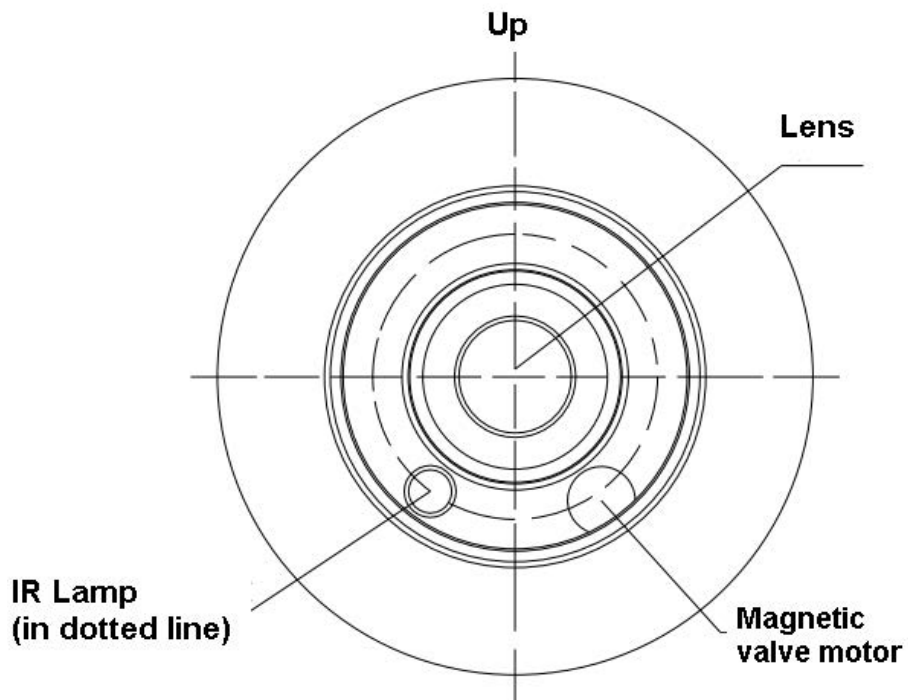


Figure 3-2 Device installation illustration 2

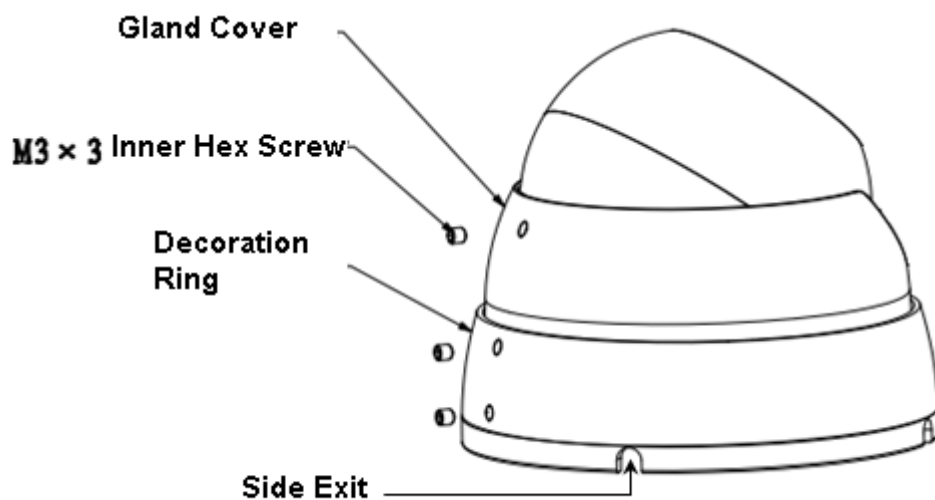


Figure 3-3 Device installation illustration 3

3.2 Installation Steps for Plastic Dome

Please follow the steps listed below to install the device. Please refer to Figure 3-4 for reference.

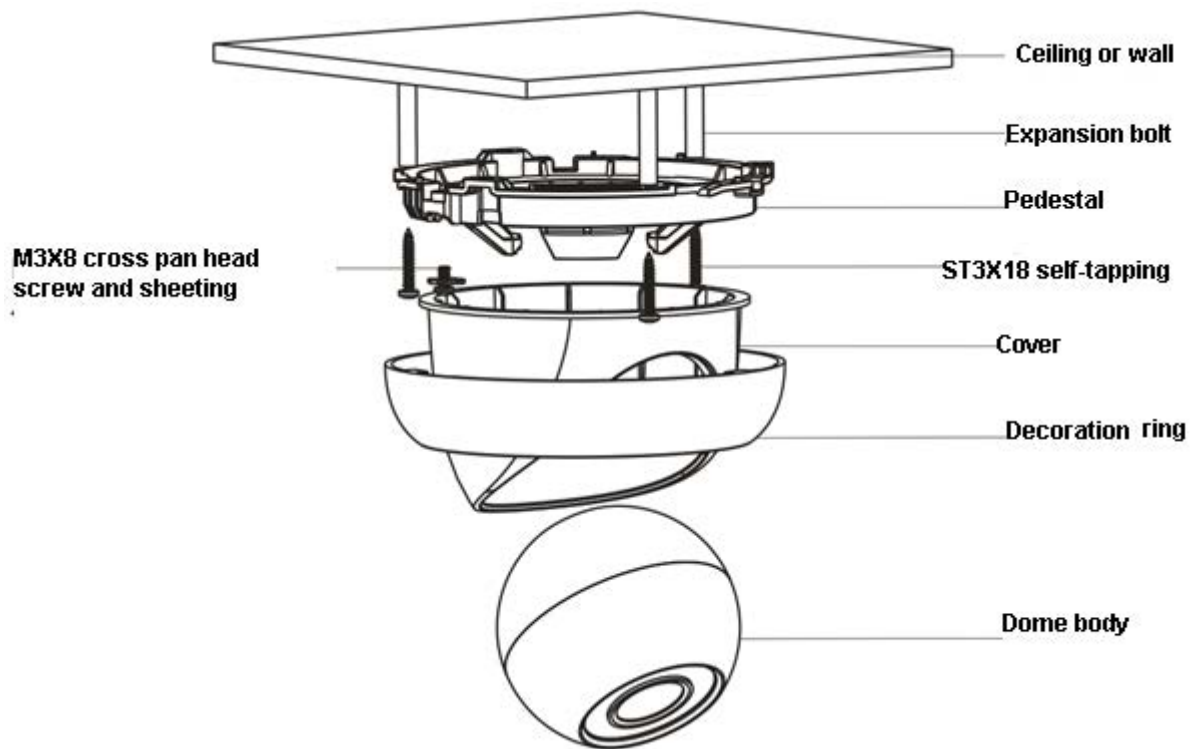


Figure 3-4 Device installation illustration 1

Step 1

Rotate decoration ring clockwise and take it out.

Step 2

Take out installation map in accessories bag, and according to monitoring area, paste it on ceiling or wall there device will be installed. Dig three hole at the position marked on installation map, and take out three expansion bolts in accessories bag to insert them into the holes.

Step 3

Adjust position of pedestal, and aim the three holes on device pedestal at the three expansion bolts on installation surface. Fasten the three self-tapping screws into the three expansion bolts to secure the pedestal. Loosen the M3X8 cross pan head screw on pedestal, and be careful do not loosen completely. Now you can adjust position according to monitoring area. After adjustment, fasten the M3X8 cross pan head screw with sheeting.

Step 4

Rotate decoration ring bottom up and face the three spigots toward the three slots. When you hear a “Ca” sound, it is rotated in place.

4 Quick Configuration Tool

4.1 Overview

Quick configuration tool can search current IP address, modify IP address. At the same time, you can use it to upgrade the device.

Please note the tool only applies to the IP addresses in the same segment.

4.2 Operation

Double click the “ConfigTools.exe” icon, you can see an interface is shown as in Figure 4-1.

In the device list interface, you can view device IP address, port number, subnet mask, default gateway, MAC address and etc.

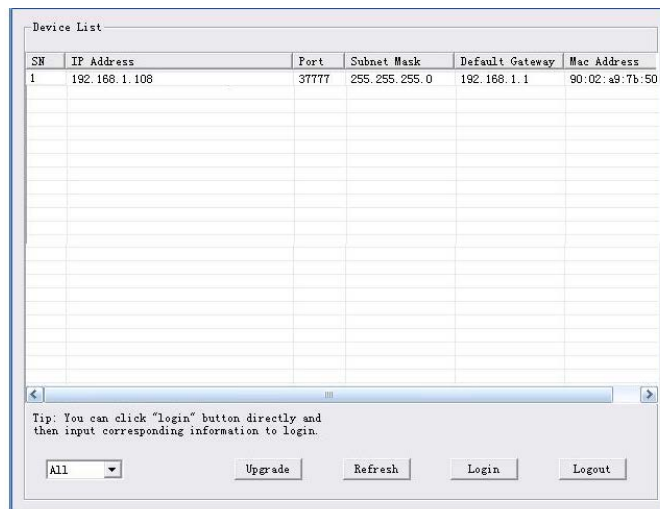


Figure 4-1 Search interface

Select one IP address and then right click mouse, you can see an interface is shown as in Figure 4-2. Select the “Open Device Web” item; you can go to the corresponding web login interface.

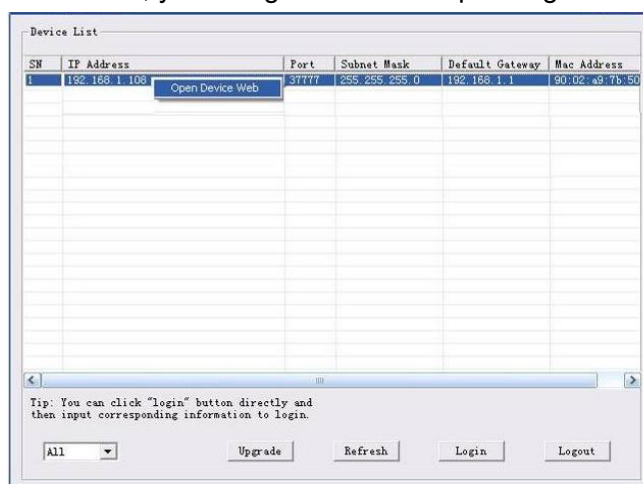


Figure 4-2 Search interface 2

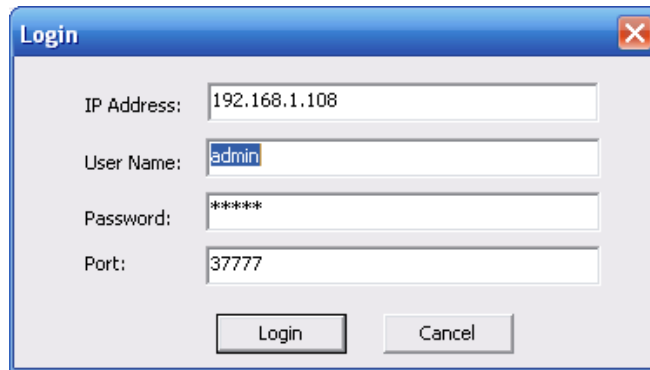
If you want to modify the device IP address without logging in the device web interface, you can go to the configuration tool main interface to set.

In the configuration tool search interface (Figure 4-1), please select a device IP address and then double click it to open the login interface. Or you can select an IP address and then click the Login button to go to the login interface. See Figure 4-3.

In Figure 4-3, you can view device IP address, user name, password and port. Please modify the corresponding information to login.

Please note the port information here shall be identical with the port value you set in TCP port in Web Network interface. Otherwise, you cannot login the device.

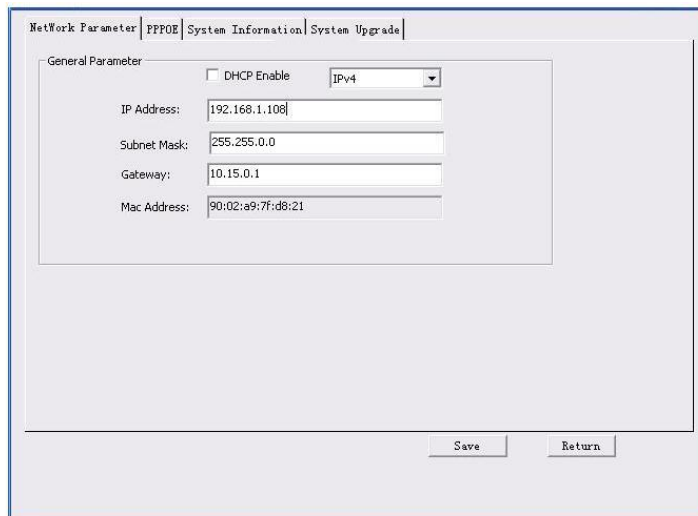
If you are using device background upgrade port 3800 to login, other setups are all invalid.



The image shows a 'Login' dialog box with a blue title bar and a close button (X) in the top right corner. It contains four input fields: 'IP Address' with the value '192.168.1.108', 'User Name' with the value 'admin', 'Password' with the value '*****', and 'Port' with the value '37777'. At the bottom, there are two buttons: 'Login' and 'Cancel'.

Figure 4-3 Login prompt

After you logged in, the configuration tool main interface is shown as below. See Figure 4-4.



The image shows the main interface of the configuration tool. It has a tabbed interface with tabs for 'Network Parameter', 'PPPOE', 'System Information', and 'System Upgrade'. The 'Network Parameter' tab is active. Under the 'General Parameter' section, there is a checkbox for 'DHCP Enable' which is unchecked, and a dropdown menu for 'IPv4' which is set to 'IPv4'. Below these are five input fields: 'IP Address' (192.168.1.108), 'Subnet Mask' (255.255.0.0), 'Gateway' (10.15.0.1), and 'Mac Address' (90:02:a9:7f:d8:21). At the bottom right, there are two buttons: 'Save' and 'Return'.

Figure 4-4 Main interface

For detailed information and operation instruction of the quick configuration tool, please refer to the *Quick Configuration Tool User's Manual* included in the resources CD.

5 Web Operation

This series network camera products support the Web access and management via PC. Web includes several modules: Monitor channel preview, system configuration, alarm and etc.

5.1 Network Connection

Please follow the steps listed below for network connection.

- Make sure the network camera has connected to the network properly.
- Please set the IP address, subnet mask and gateway of the PC and the network camera respectively. Network camera default IP address is 192.168.1.108. Subnet mask is 255.255.255.0. Gateway is 192.168.1.1
- Use order ping `***.***.***.***`(* network camera address) to check connection is OK or not.

5.2 Login and Main Interface

Open IE and input network camera address in the address bar. See Figure 5- 1.

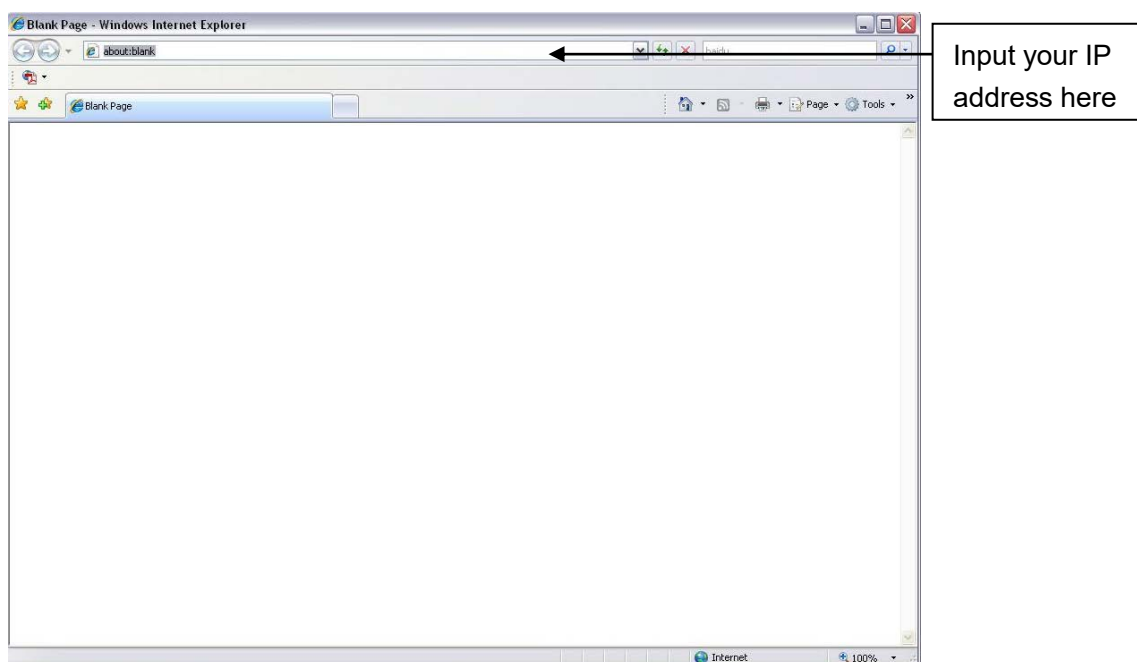


Figure 5- 1 IP address

The login interface is shown as below. See Figure 5- 2.

Please input your user name and password.

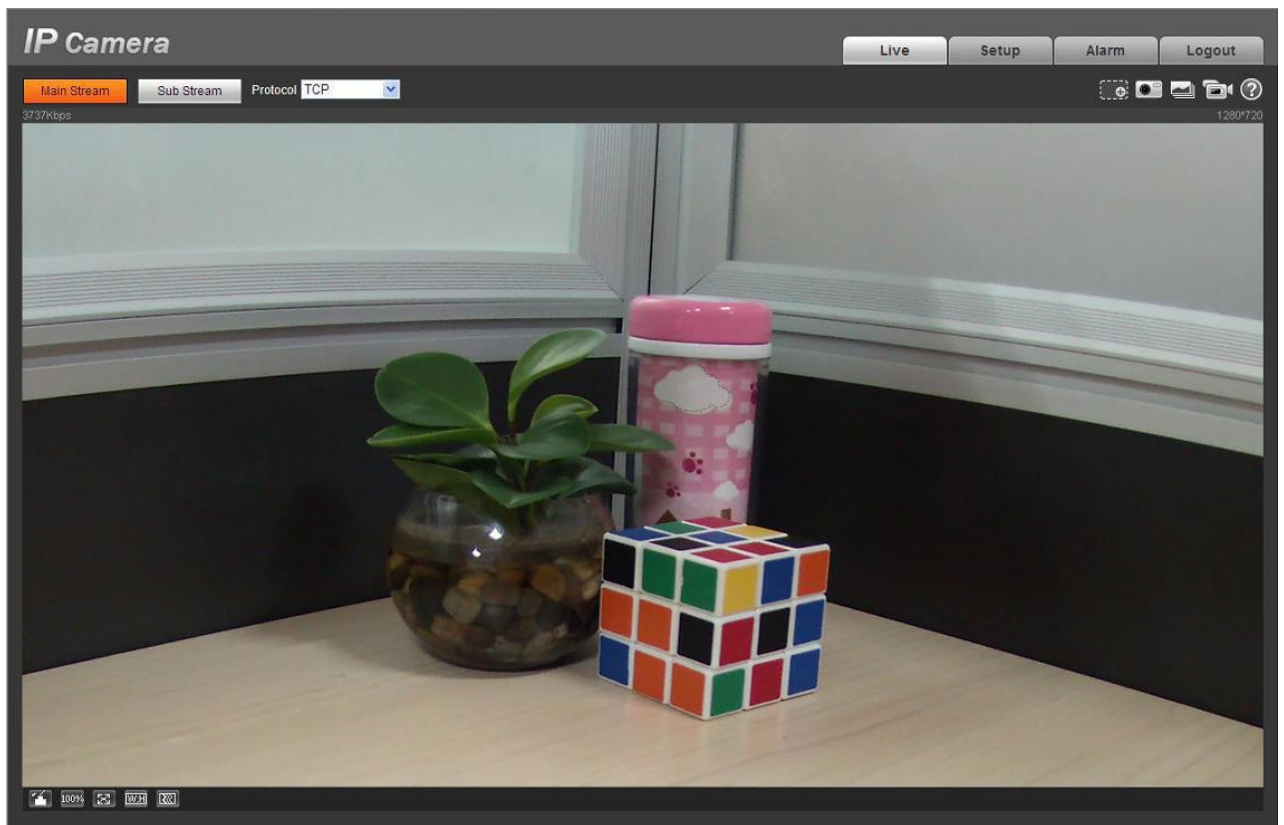
Default factory name is admin and password is admin.

Note: For security reasons, please modify your password after you first login.



Figure 5- 2 Web login

After you successfully logged in, please install WEB plug-in unit. Please refer to the Web Operation Manual included in the resource CD for detailed operation instruction. See Figure 5- 3.



6 FAQ

Bug	
The water leakage occurred.	<p>The unauthorized front or rear cap remove many result in water leakage.</p> <p>The glass front cap has sustained heavy push or strike.</p> <p>The waterproof plug of the rear cap becomes loosen.</p>
IR video is poor.	<p>Do not use the proper supplying power. The IR light can not turn on completely.</p> <p>The object is out of the IR distance range of current device.</p> <p>IR-CUT does not turn to the night mode. The photosensitive chip of the front-end can not sense the IR light.</p>
I can not upgrade the device via network.	<p>When network upgrade operation failed, you can use port 3800 to continue upgrade.</p>
I can not login the client-end or the WEB.	<p>For Windows OS 98 or Windows ME user, if you can not install the client-end or can not view after the installation. We recommend the win2000sp4 OS or install the client-end of the low version.</p> <p>The Active X control is blocked.</p> <p>The display card version shall be dx8.1 or higher.</p> <p>Network connection error occurred.</p> <p>Invalid network setup.</p> <p>Invalid user name or password.</p>
I can not play the download file.	<p>There is no player.</p> <p>There is no DX8.1 or higher.</p> <p>For the MEDIA PLAYER, there shall be Div X503Bundle.exe plugin if you play the .AVI file.</p> <p>For Windows XP user, you need to install the plugin DivX503Bundle.exe and ffdsho-2004 1012.exe.</p>
To guarantee setup update	<p>After you modified the important setup, please reboot the device via the software to make sure the setup has been updated to the storage medium.</p>
Power adapter	<p>The general power adapter can work ranging from 0°C to 40 °C. The device may result in unstable power supply when the temperature exceeds the working temperature.</p> <p>Please replace an industry-level power adapter if you are using in the harsh environments.</p>

Appendix Toxic or Hazardous Materials or Elements

Component Name	Toxic or Hazardous Materials or Elements					
	Pb	Hg	Cd	Cr VI	PBB	PBDE
Circuit Board Component	○	○	○	○	○	○
Device Case	○	○	○	○	○	○
Wire and Cable	○	○	○	○	○	○
Packing Components	○	○	○	○	○	○
Accessories	○	○	○	○	○	○

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

Note

- **This user's manual is for reference only. Slight difference may be found in user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks mentioned are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website for more information.**