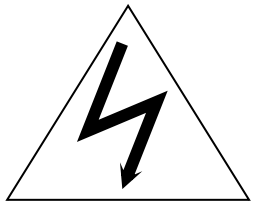
1080P HD IP IR PTZ Camera

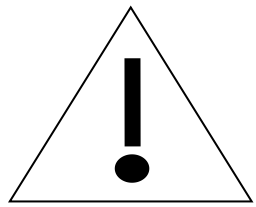
Operation manual

Before installation, please read the operation manual carefully and confirm the device model an d input power correctly.

Contents

CAUTION





- Non-technician should not try to operate this high speed dome before reading this manual carefully. (This manual are subject to change without prior notice.)
- Cut the power supply off before operating the device to avoid damage caused by mal-operation.
- Interior of the camera are precision optical and electrical instruments. Heavy pressure, shock and other incorrect operations should be prevented. Otherwise, may cause damage to product.
- Please do not use the product under circumstances where the limits exceed the maximum specified temperature, humidity or power supply specifications.
- Contents in this manual may be different from the edition that you are using. Should any unsolved problem occur given that the product is used according to this manual, please contact our technical support department or your product suppliers.
- This manual content will be updated unscheduled, our company reserves the right to do manual contents update without further notice.
- The default username for this device is “admin”, and the password is admin. Default IP address is 192.168.1.188, HTTP port is 80.

PACKING LIST

Open the package, and check whether the accessories all contained.

Part	Quantity
IP speed dome（Include bracket）	1
Screws bag	1
CD	1

Note:

- When open the box, please check all of parts carefully, confirm the parts as same as packing list.
- Please read the user manual carefully before the installation.
- Make sure to turn off all the power when install the camera
- Please confirm the power transformer, avoid the device damage with unmatched power source

Contact your local retailer without hesitate if anything is missing in your package.

1. Introduction

Features

- Build in 10X optics zoom lens, up to 1080P 1~60FPS
- True Day/Night switch
- H.264 High Profile encoding, VBR/CBR, dual stream
- Video cover, motion detection
- Alarm linkage output, TF card video recording, snapshot, FTP upload, Email inform, link preset, CMS inform
- ONVIF Profile S protocol,GB/T28181 protocol
- 360° horizonal continuous rotation; vertical 0°-90°,255 presets,No monitoring blind area
- Low power consumption – MTTF up to 30,000 hours
- 1CH alarm input, 1CH alarm output, build in TF card, audio input/ output, 100M Ethernet（Simple camera doesn't contain alarm or analog video output functions)
- IP66 protection level

2. Hardware Installation

System requirement

- LAN or WAN Internet to connect server, via PC Ethernet (network card or network cable) TCP/IP protocol（Windows /NT/2000/XP) connect , suggest Internet Explorer 9.0 version or later.
- Monitor and PC configuration:

  CPU: Dicaryon2.8G or latter, RAM: 512M or latter(Above DirectX8.1)

- Monitor: 17",1920×1080 resolution
- Operation system: Windows NT, Windows2000, Windows XP, Windows 7 Or later

Installation environment

Installation environment requirements

Far away from high-temperature or humid environment, notice ventilation and avoid installing in shaky place.

Recommend operating environment

-20°C～55°C（The camera will enable cold start below -20℃, then it will turn on the IR leds automatically and operate normally after heating in 30 minutes)

Hardware installation steps

Please make sure LAN and WAN are working smoothly before the Network High Speed Dome installation. After checked all the network system in good condition, keep your hands clean and dry, following the steps below.

- Open the box to check the goods

- Take out all goods which needed for installation

Network connection

- LAN connection

  Use one network line to connect Speed Dome with concentrator or switchboard of the LAN.As Figure below.

  Users also can use one network line to connect IP Speed Dome with computer network card or switchboard.

- WAN connection

  Use one network line to connect IP Speed Dome with router or XDSL Modem/Cable Modem. As Figure below.

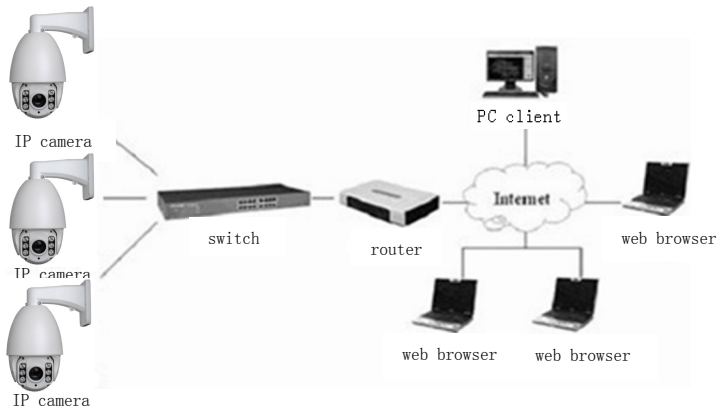


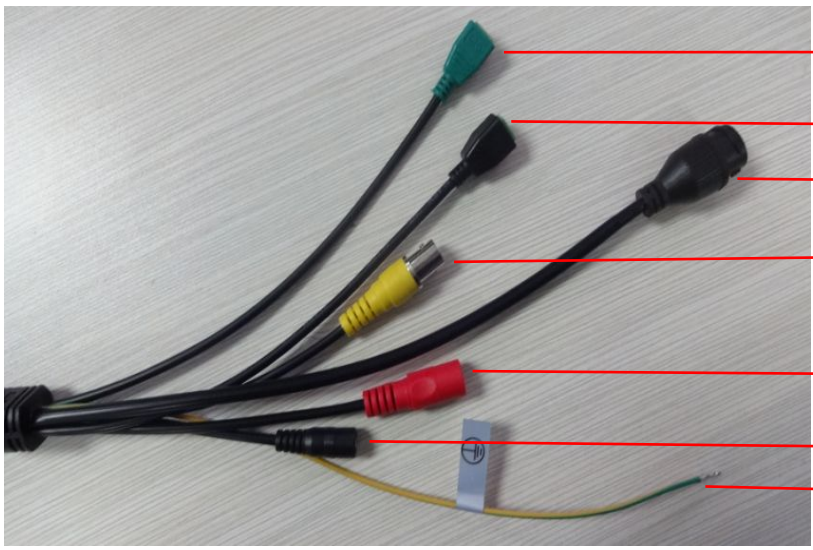
Fig. Devices connection scenarios

- Connect the power supply

  After connect the power source, the IP speed camera will start operation automatically.

Connection instruction

Multi-function RJ45 line:

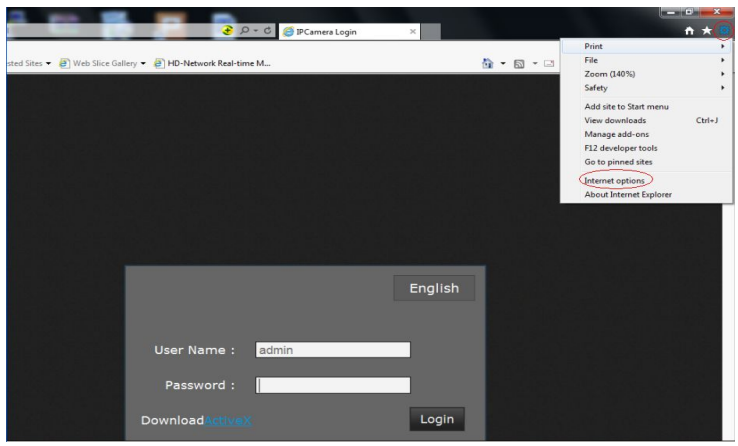


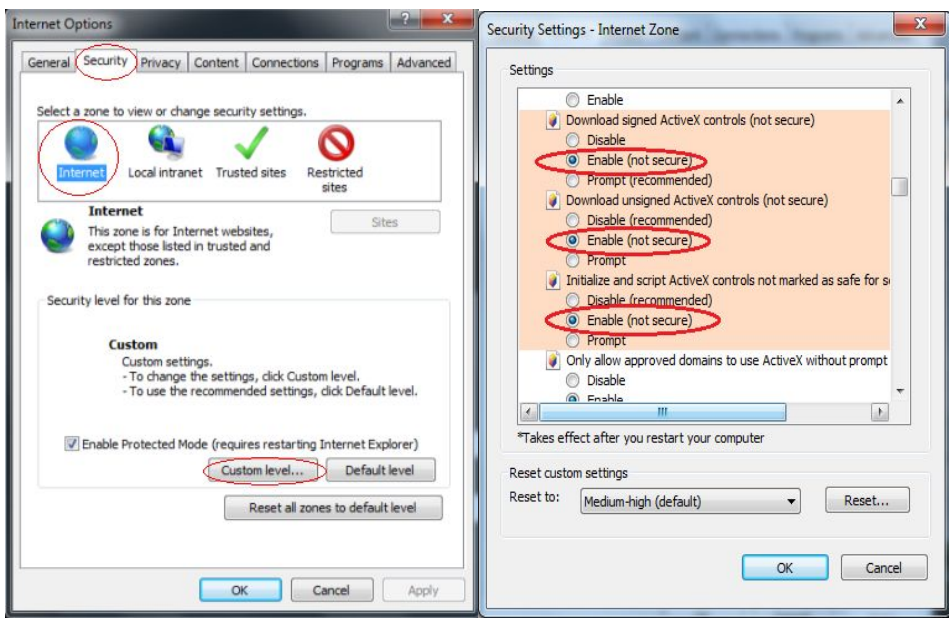
3. Operating Guide for Network High Speed Dome

Set the IE Browser

Because the high safety level of the IE browser, If you visit Network High Speed Dome for first time, Please set the IE browser.

Setting method: Open the IE browser, click Internet Option into the "Security" page, click the "Custom Level", and then follow steps to set the IE browser





Download and Install ActiveX

Users have to install ActiveX Control when visit Network High Speed Dome at the first time via IE browser.

Download and install the ActiveX:

Input the IP address of IP Speed Dome (default address http://192.168.1.188.) in Internet Explorer to enter into login page (users can refer to the " NETWORK SETTINGS" under "SETUP" menu to set the configure the IP address).

At the login interface, click "downloadActiveX". As Figure 3-1 :

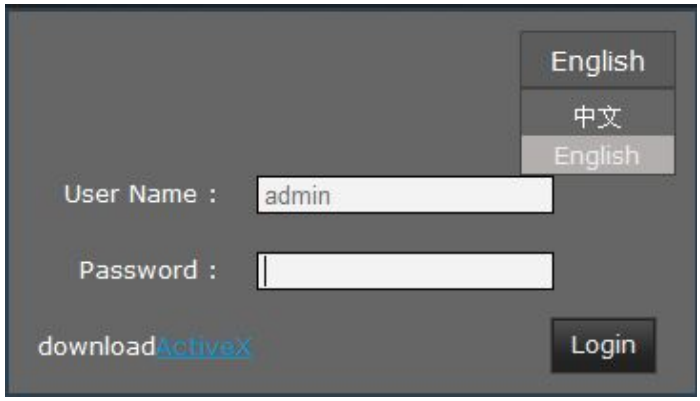


Figure 3-1

Notice the below download interface, click "Run". As Figure 3-2:

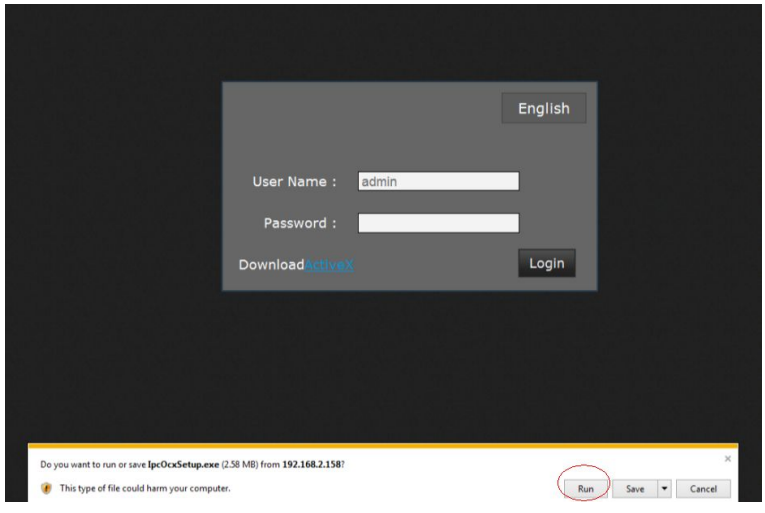


Figure 3-2

A "User Account Control" interface will pop out, click "Yes" to installation. As figure 3-3.

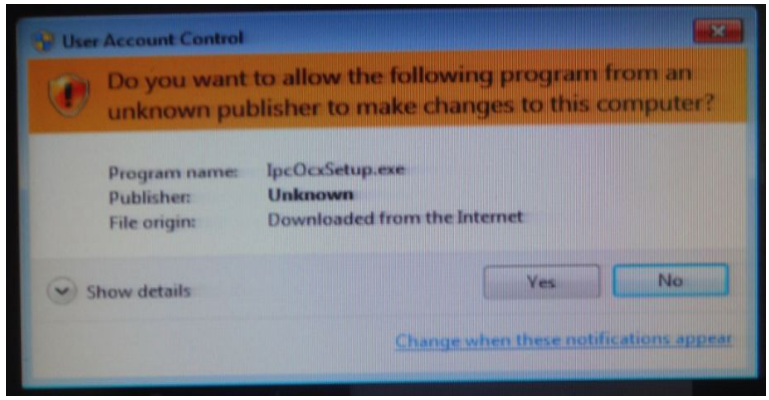


Figure 3-3

In download interface,you can also select “save” to save ActiveX in default storage file,such as D:\TDDOWNLOAD.Then open the file an install the ActiveX. As figure 3-4 and 3-5.

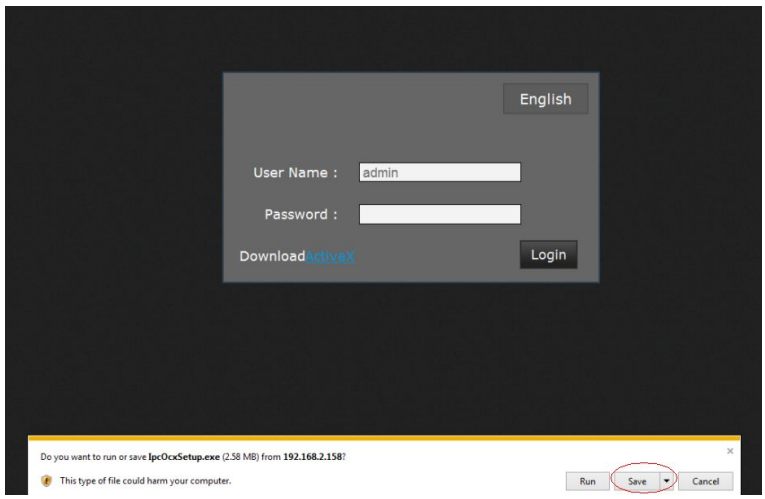


Figure 3-4

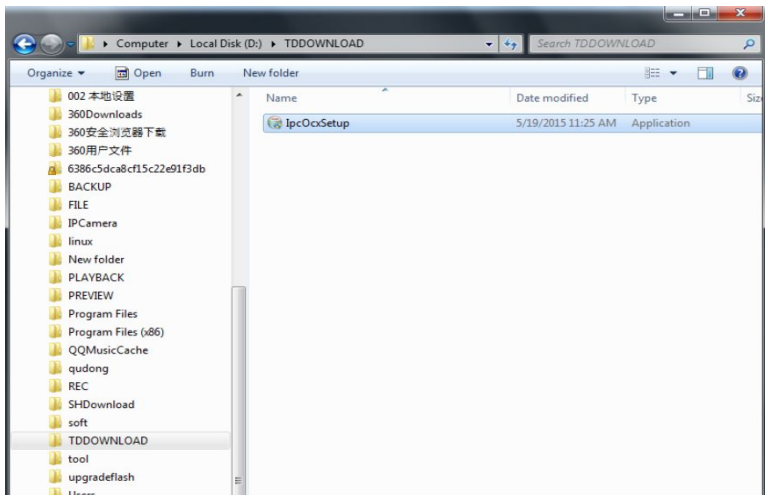


Figure 3-5

Click “Install” in the below interface, as Figure 3-6:

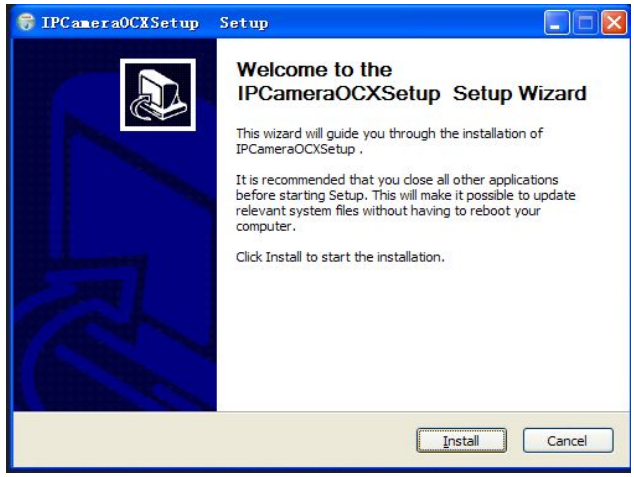


Figure 3-6

Click “Finish” in the below interface to complete the installation, as Figure 3-7:

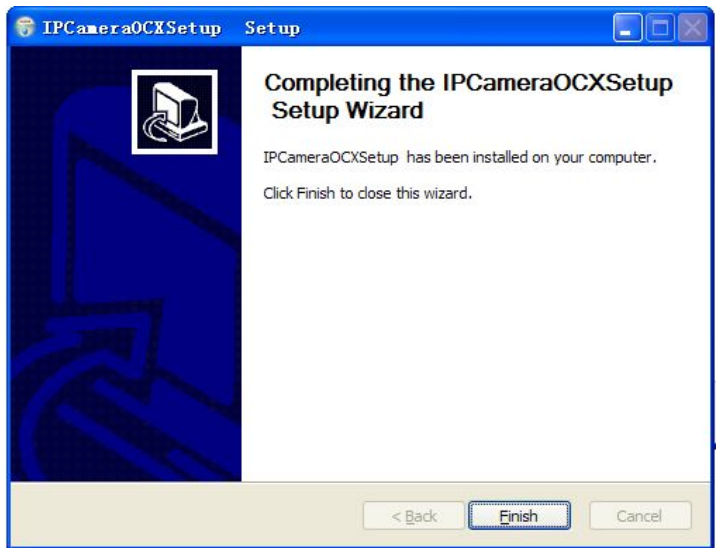


Figure 3-7

Login

Reopen Internet Explorer after ActiveX installation completes, input IP address (http://192.168.1.188,) of the Network High Speed then turn to login page, input username (default is admin) and password (default is admin), click login to enter into main interface(see Figure 3-8):

Figure 3-8

Live view

Live preview interface as figure 3-9:

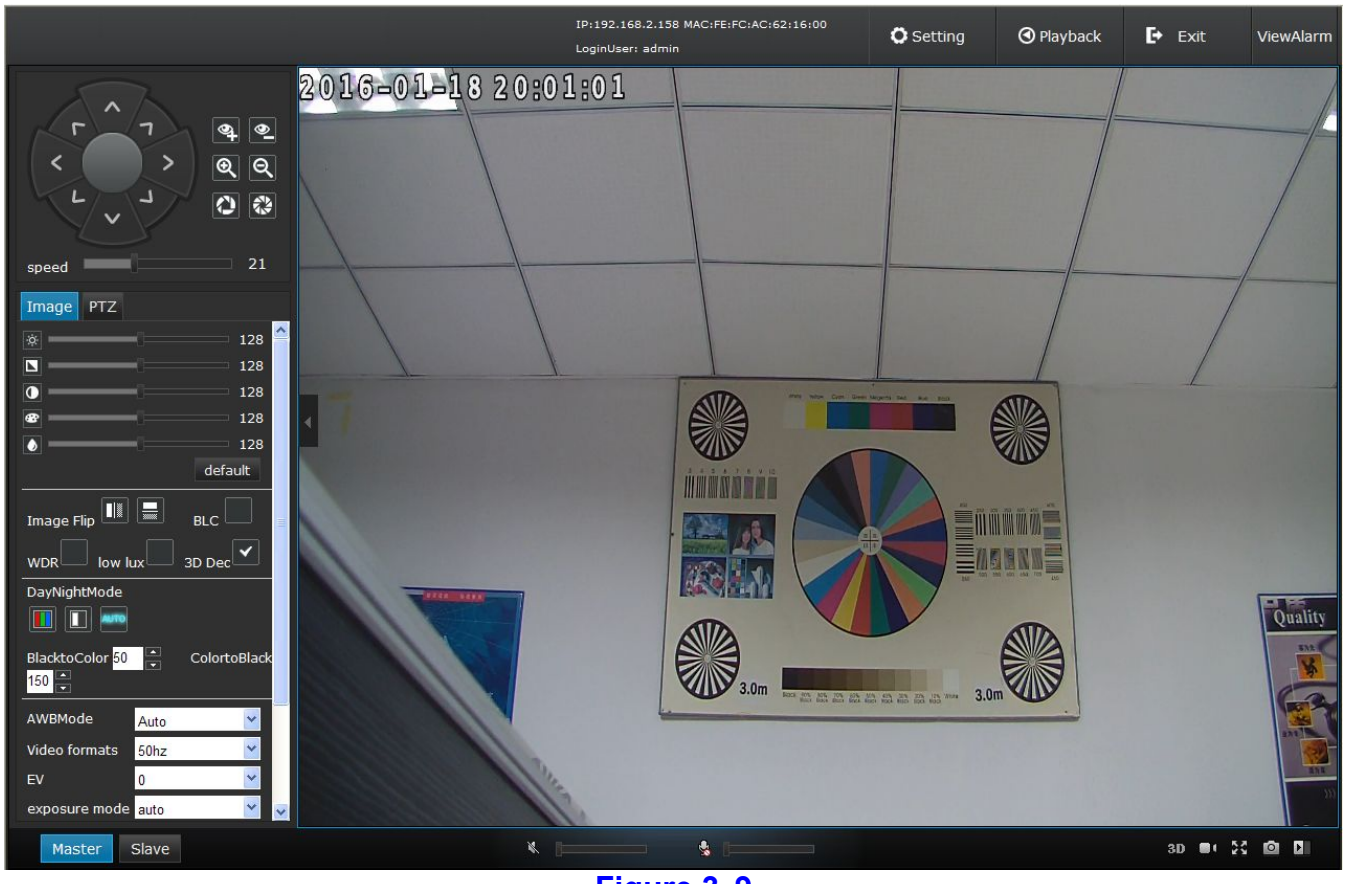
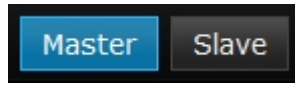


Figure 3-9

In the Live view interface, users can do remote operations such as master/slave stream video preview, voice intercom, listen, video recording, full-screen preview, video capture, PTZ control, preset, area scan, pattern scan, PTZ watch, preview video image volume adjustment, camera module parameters setting, etc.

- **Master/slave stream：** Notice the 

buttons at the left right corner, click it to switch the preview mode.
- **Video capture:** Click  icon to do screen video capture, it will create JPG picture and store in the specified folder automatically. The default file storage path is C:\IPCamera\ , users can set it at the **Setting→→Local→→Local setting** .
- **Full screen:** Click  icon to get full screen preview, press ESC or right mouse click to exit full screen preview.
- **Manual video:** Click  icon to do manual video operation and store in the specified file automatically (Video format is mp4, the default file storage path is C:\IPCamera\, users can set it at the **Setting→→Local→→Local setting** .
- **Image parameters adjustment:** Users can adjust the image parameters at the video preview interface, such as image brightness, hue, contrast, saturability and sharpness, etc. As Figure 3-10:

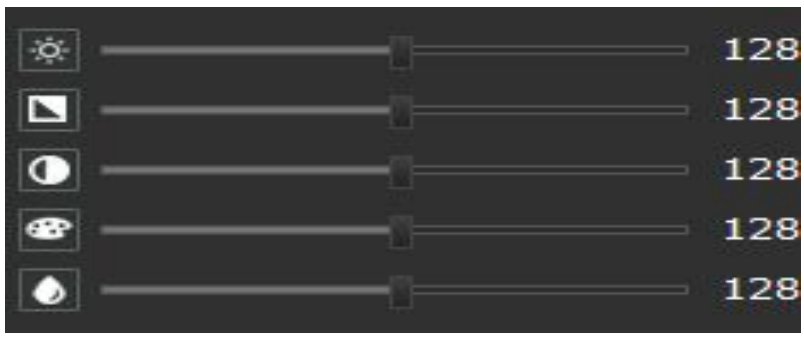


Figure 3-10

- **Day/Night switch:** According to the surveillance need, users can set color model, black model, auto model. According to the environment need, users can set Day/night switch sensitivity 0-255, and Night/day switch sensitivity 0-255. As Figure 3-11:

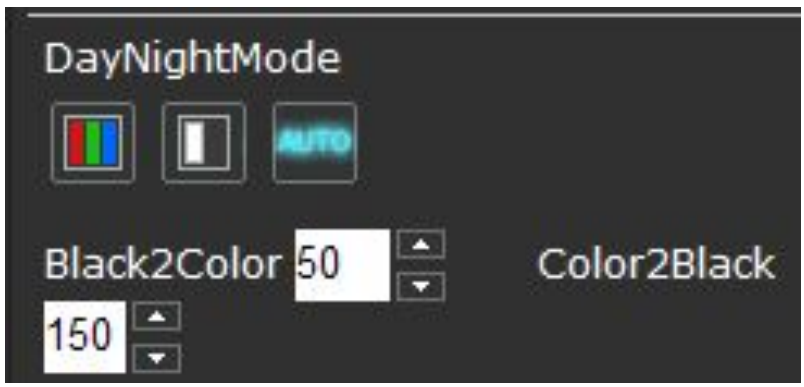
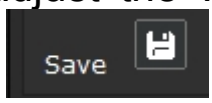
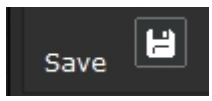
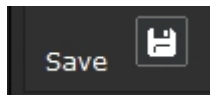
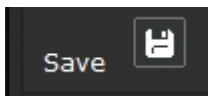


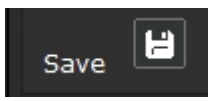
Figure 3-11

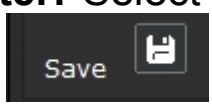
- **White balance:** According to the environment color temperature, users can set the white balance, **Auto** option for normal light environment, adjust the white balance value by drop down list selection, click 

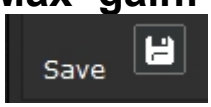
to save it. As Figure 3-9.
- **Image rotation:** Via the buttons to adjust image rotation, support horizontal rotation  , horizontal+vertical rotation  . As Figure 3-9.
- **WDR:** Click  to open it , click again  to close it. As Figure 3-9.
- **Low illumination:** Click  to open it , click again  to close it. As Figure 3-9.
- **BLC:** Click  to open it , click again  to close it. As Figure 3-9.
- **3DNR:** Click  to open it , click again  to close it. As Figure 3-9.
- **Video formats：** Select the video format, 50HZ for PAL, 60HZ for NASC. click 

to save it. As Figure 3-9.
- **Exposure compensation:** Select the exposure compensation at the drop down list, click 

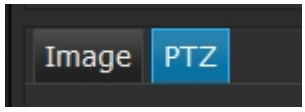
to save it. As Figure 3-9.
- **Exposure mode:** Select auto and handle at the drop down list, click 

to save it. As Figure 3-9.
- **Max shutter:** Select the max shutter value at the drop down list, click 

to save it. As Figure 3-9.
- **Min shutter:** Select the minimum shutter value at the drop down list, click 

to save it. As Figure 3-9.
- **Max gain:** Select the gain value at the drop down list, click 

to save it. As Figure 3-9.

Click 

PTZ at the video preview interface to turn to PTZ configuration interface. As Figure 3-12:

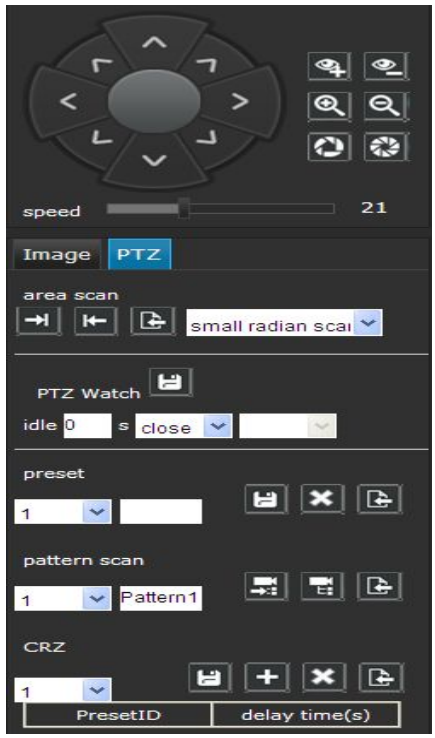


Figure 3-12

- **PTZ control:** User can do horizontal 360°/vertical 180°overall monitoring via PTZ configuration buttons  , PTZ operation speed 

1-63 levels adjustable. As Figure 3-12.
- **Preset:** Adjust the camera to the appointed angle and location through directional buttons, and then select a preset number in the preset drop down list, click  to set it. There are 1-255 presets can be set, and users can click  to delete the preset, click  to call the preset. As Figure 3-12.
- **Area scan:** Via the PTZ buttons to set area scan, click  to set left limit, click  to set right limit, and area scan remembered automatically. When set the area scan, users have to select Small radian scan(Scan radian less then 180°) / Big radian scan (Scan radian more then 180°)first, and then set left limit/right limit. Click  to call area scan. As Figure 3-12.
- **Pattern scan:** At the pattern scan drop down list, users can select the pattern scan number, and edit the pattern scan name.

Then click to start recording, click to stop recording,pattern scan remembered automatically. Click to call pattern scan. As Figure 3-12.

- PTZ Watch: At the PTZ Watch drop down list, users can select the PTZ watch type(Include preset, CRZ, Pattern, Area, etc), and set the idle time, then click to save it. As Figure 3-13.

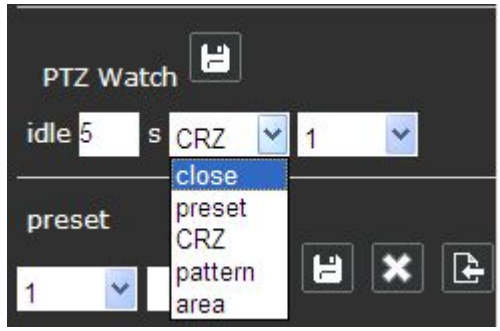


Figure 3-13

- CRZ: At the CRZ drop down list, users can select cruise preset, click to add preset, set the delay time. Select preset ID and click to delete it. Finally click to save it, and Click to call pattern scan. As Figure 3-14.

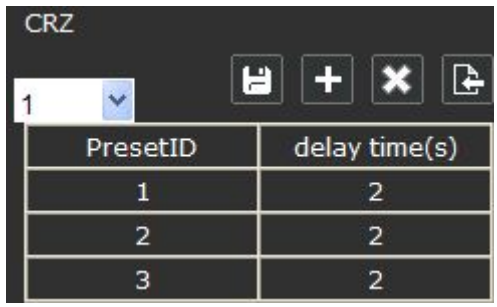


Figure 3-14

System specification setting

System

❖ Basic info

● System information

Click **Setting→ System→ Basic info→ Sysinfo**, IP Speed Dome “Device Info” interface. As figure 3-15:

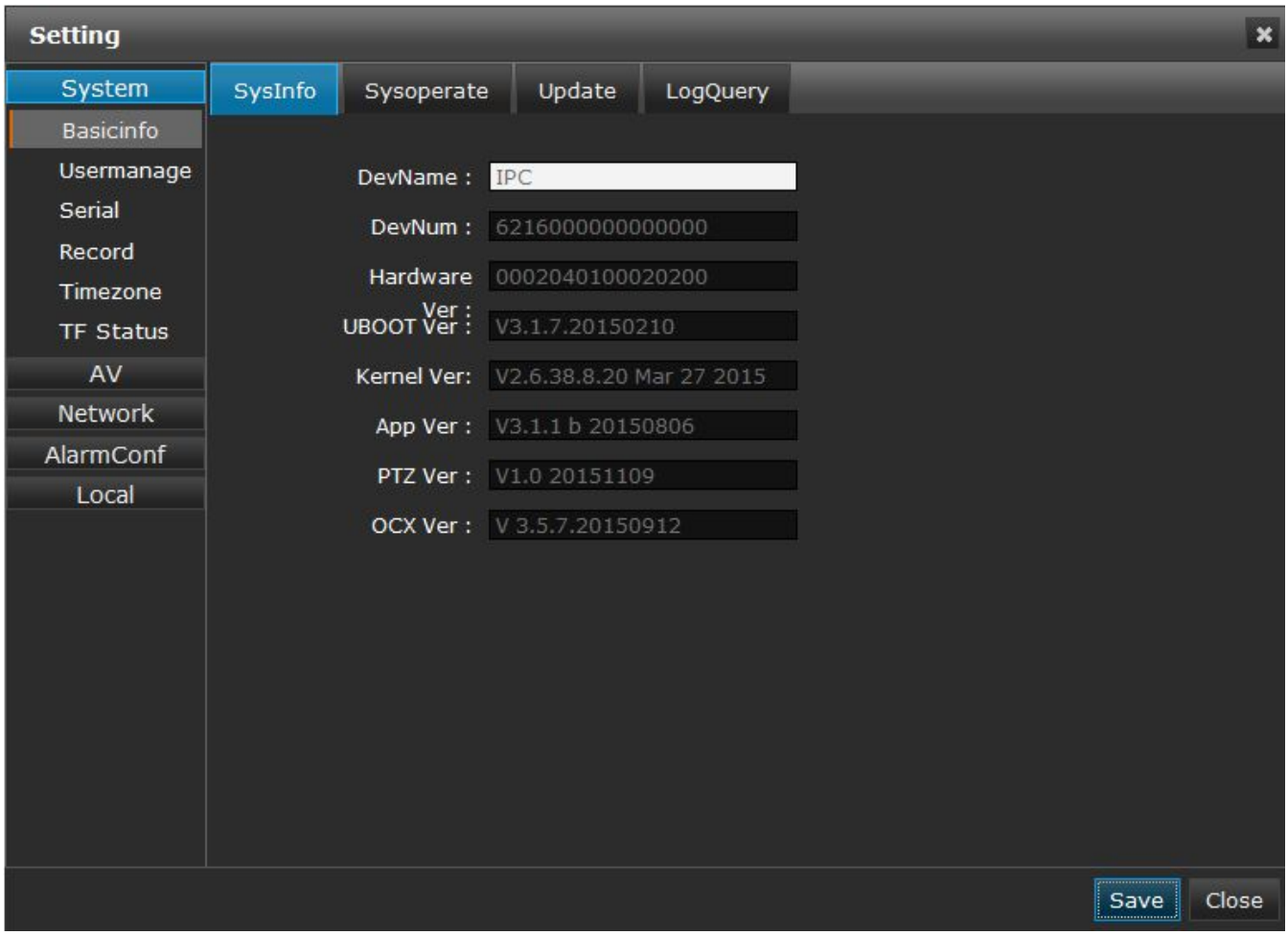


Figure 3-15

- ◆ Device name: Edit the camera name
- ◆ Device number: Display the device serial number
- ◆ Hardware version: Display the device hardware version number
- ◆ UBOOT version: Display the product system UBOOT version number
- ◆ Kernel version: Display the product system kernel version

number

- APP version: Display the product software version and the system version date
- PTZ version: Display the IP speed dome version model
- OCX version: Display the OCX version number

After setting complete, click Save to save it.

● System operate

Click **Setting→ System→ Basic info→ Sysoperate**, IP Speed Dome "System operate" interface. As figure 3-16:

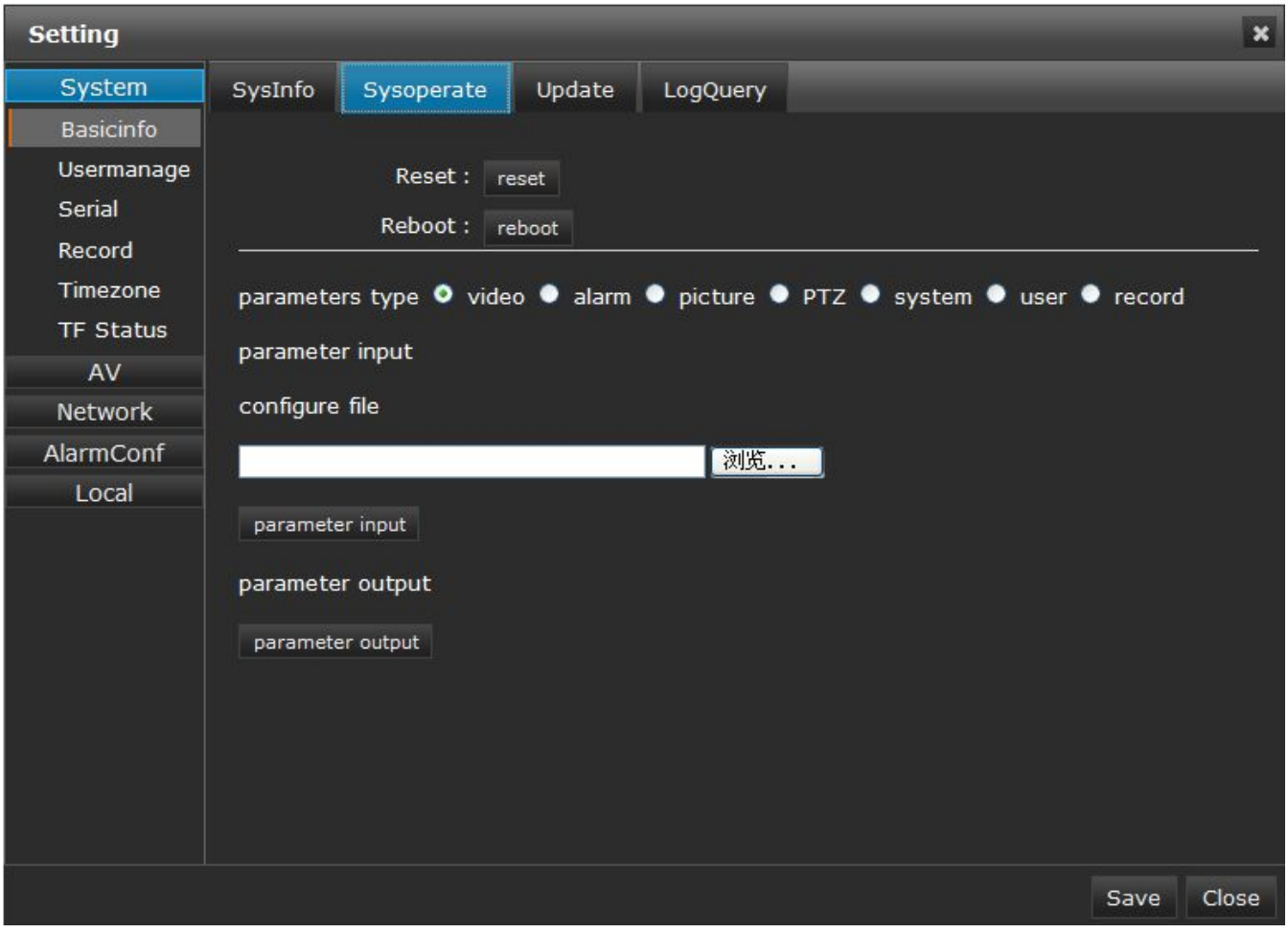


Figure 3-16

- Rest: Restore factory settings
- Reboot: Click reboot to do IP speed dome reboot operation
- Parameters type: Select the parameters type which you have to derive

- Parameter input: Select the configure file which you need,and click parameter input
- Parameter output: Select the configure file which you need,and click parameter output

After setting complete, click Save to save it.

● Update

Click **Setting→ System→ Basic info→ Update**, IP Speed Dome "Update" interface. As figure 3-17:

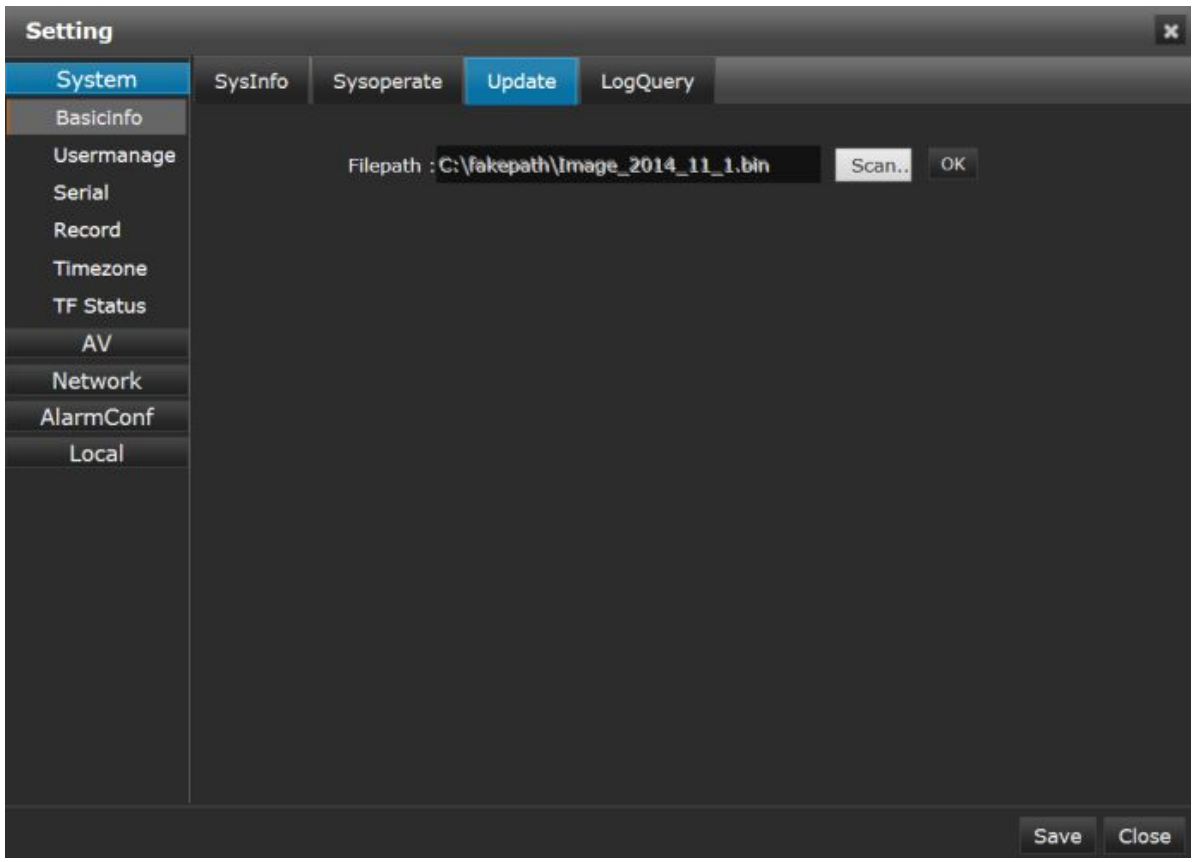
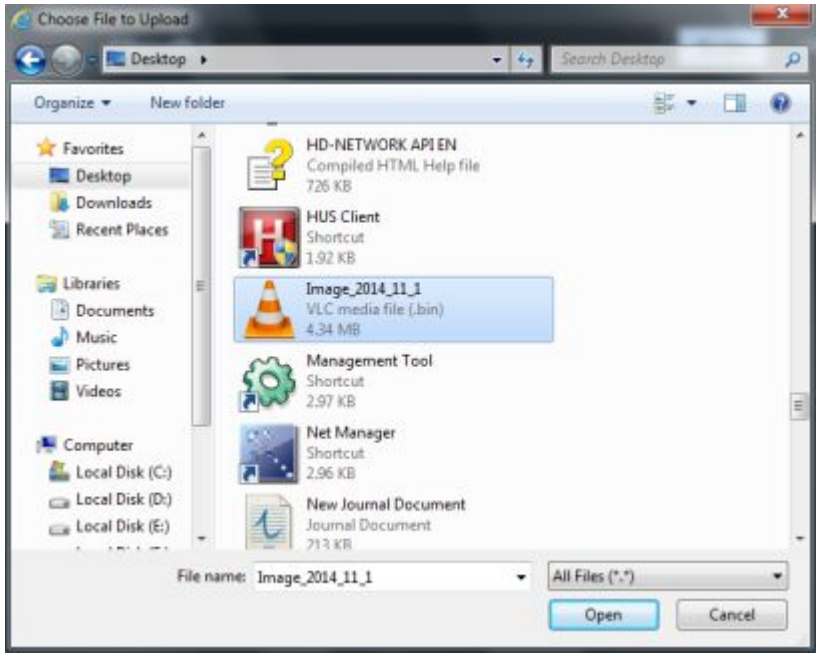


Figure 3-17

- System update: System update online.

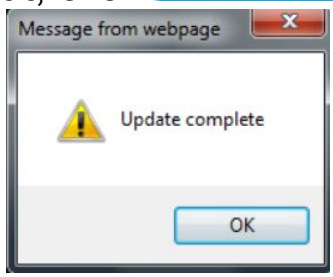
  Operation method:

  ① Click Scan.. ,find the specified file and select the upgrade package, click Open or double click to operate the program file . As Figure below:



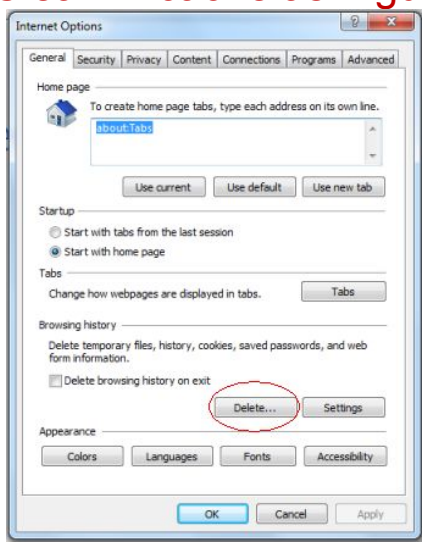
② Click OK, system upgrade automatically;

③ After system upgrade successfully, the following window will pop out, click OK. As Figure below:



④ Reopen the IE browser and input the IP address, after log in, check the whether the software version is updated.

Note:After system upgrade successfully, you need to reset camera data in "Sysoperate",clear IE cache and install ActiveX again before logging in web system.(Clear IE cache as Figure below)



Non-professional technicians do not operate the system upgrade.

Please do not power off during installing update.

● Log query

Log query setting, as Figure 3-18:

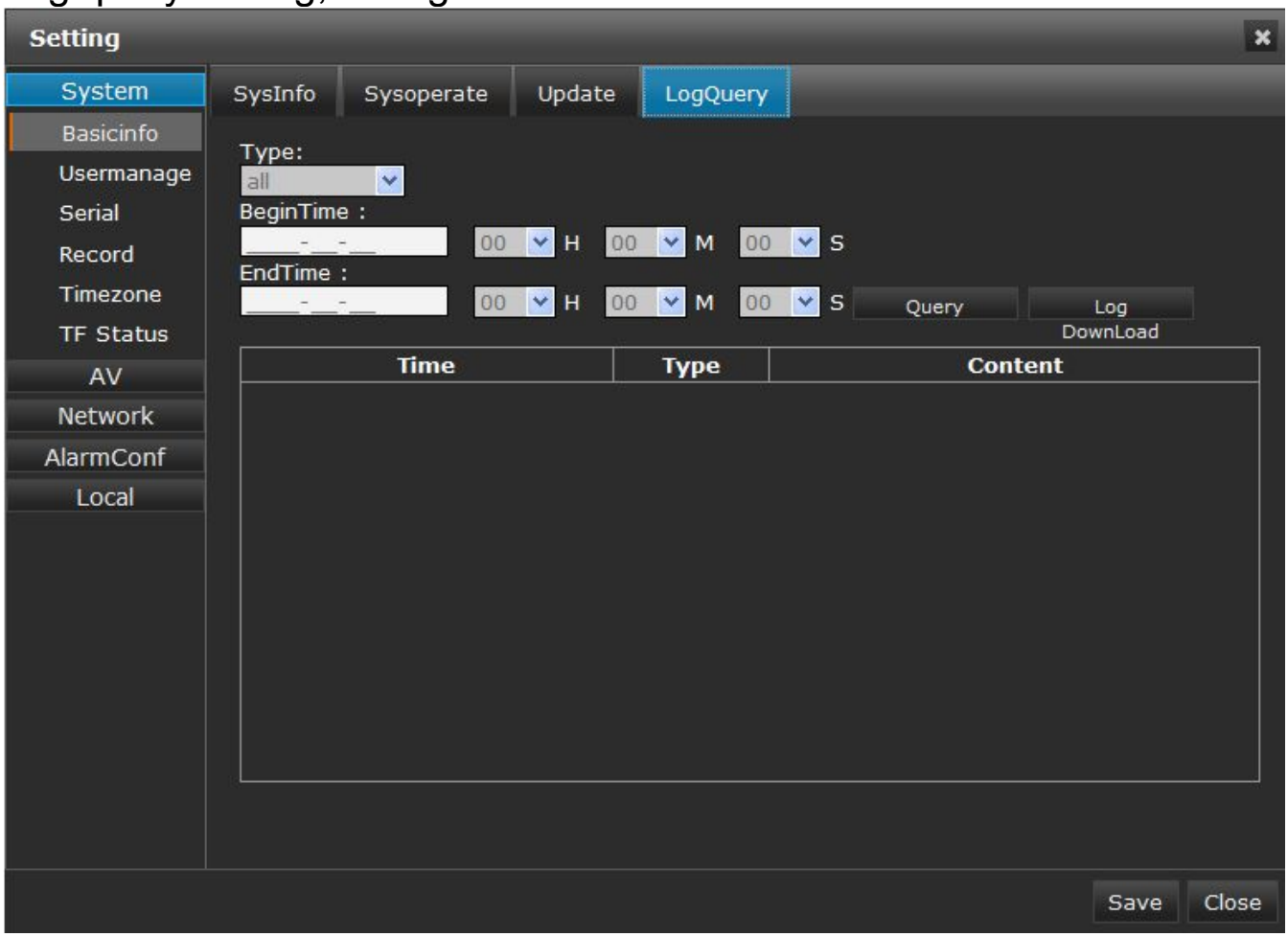


Figure 3-18

- Type: Select the alarm log type, there are alarm/ exception/ operation/ information selectable
- Begin time/ End time: Set the log search time period, click icon Query, and the log information will display, click Log DownLoad to open or download the corresponding log information

After setting complete, click Save to save it.

❖ User manage

User manage, as Figure 3-19:

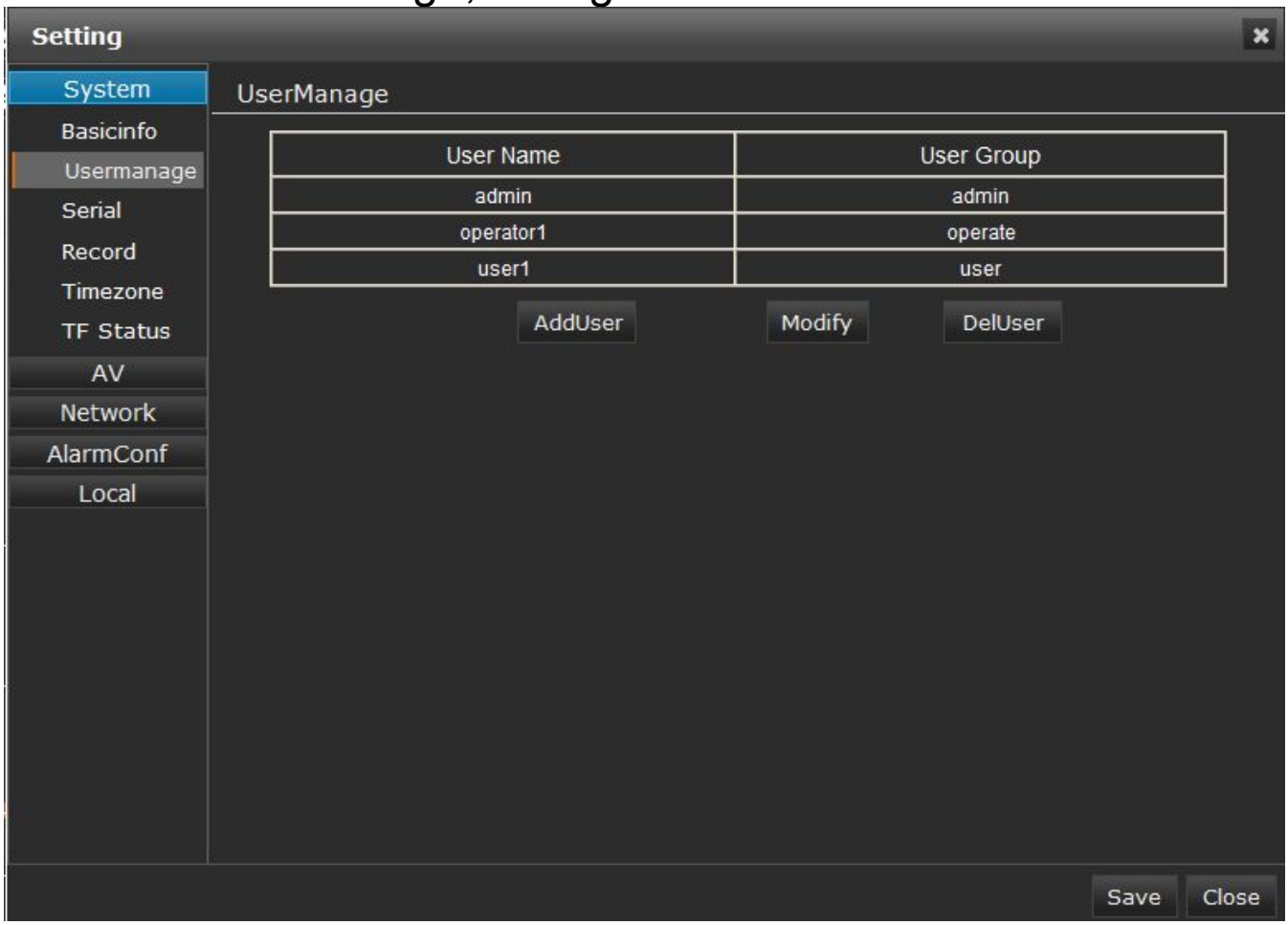


Figure 3-19

- ◆ Add User: Add a new users, and select the new user limits of authority
- ◆ Modify: Select the added user and modify the users password
- ◆ Del User: Delete the added users

After setting, click Save to save it.

❖ Serial

Serial settings, as Figure 3-20:

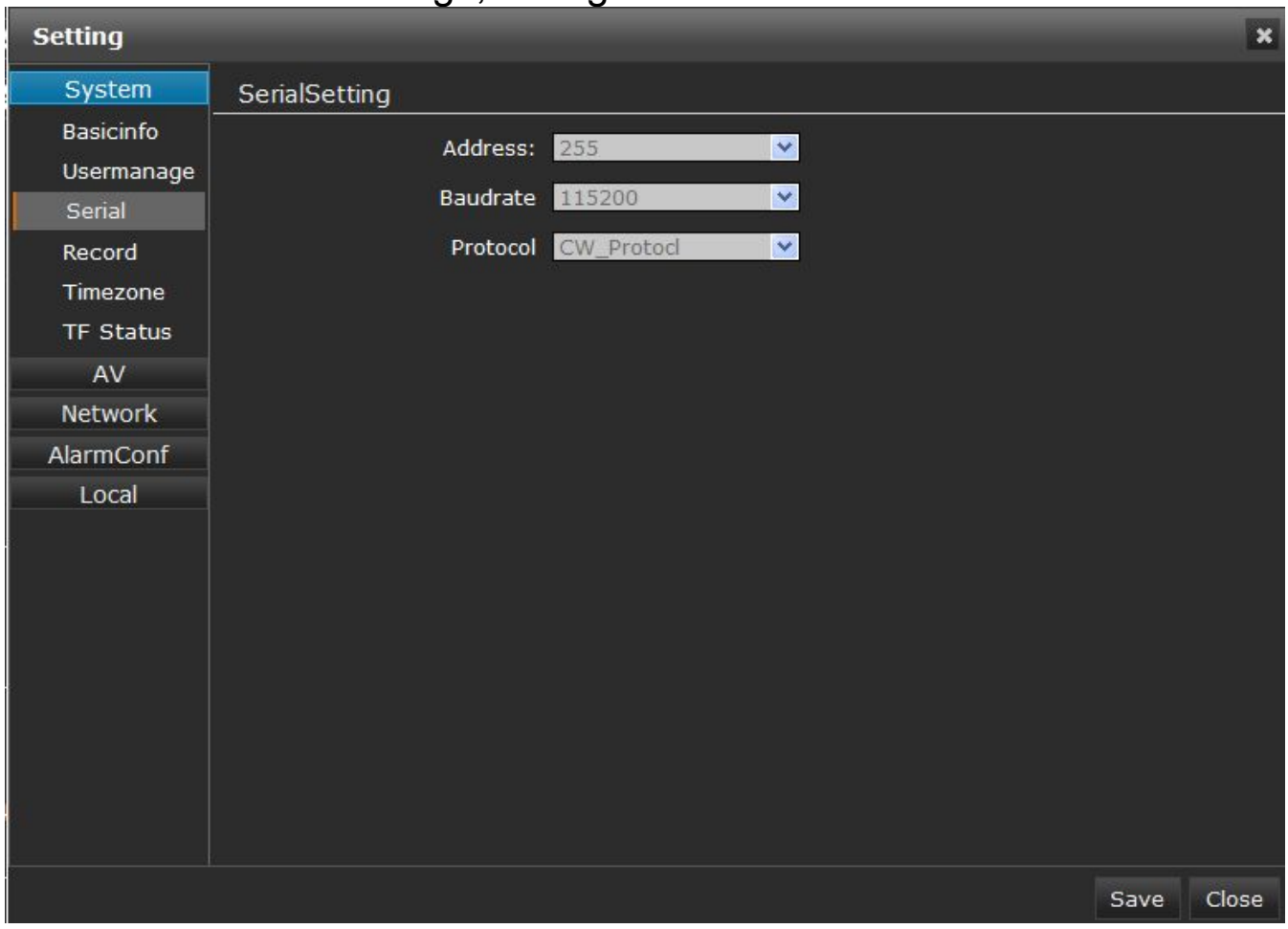


Figure 3-20

- **Serial setting**
  - Address: Click to select or modify the IP speed dome address
  - Baud rate: Click to select or modify the baud rate
  - Protocol: Click to select or modify the protocol

After setting, click Save to save it.

❖ Record

● Timer record

Timer record, as Figure 3-21:

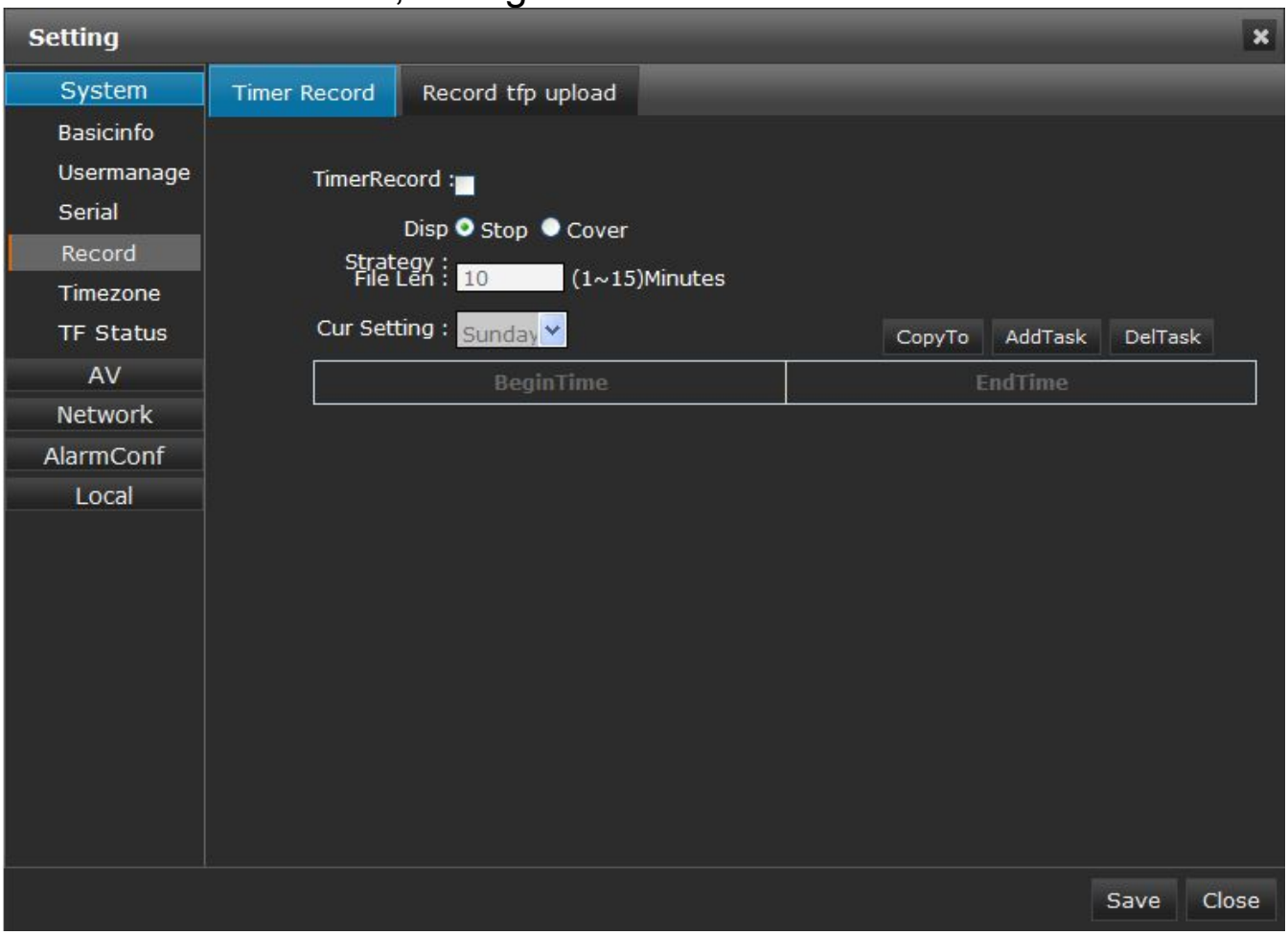


Figure 3-21

- ◆ Timer record: Click the icon ☑ to open timer record, and the record video will stored in the TF card automatically.(Note: Users have to turn off the power when take off or insert the TF card)
- ◆ Disp strategy: As insufficient storage space, select stop (Stop recording) or cover (Cover recording)
- ◆ File len: Set the file length, 1-15 mins selectable
- ◆ Cur setting: Set the current video record time, max 10 periods/ day.

After setting, click Save to save it.

Please do not power off during backup the video .

● Record tfp upload

Record tfp upload, as Figure 3-22:

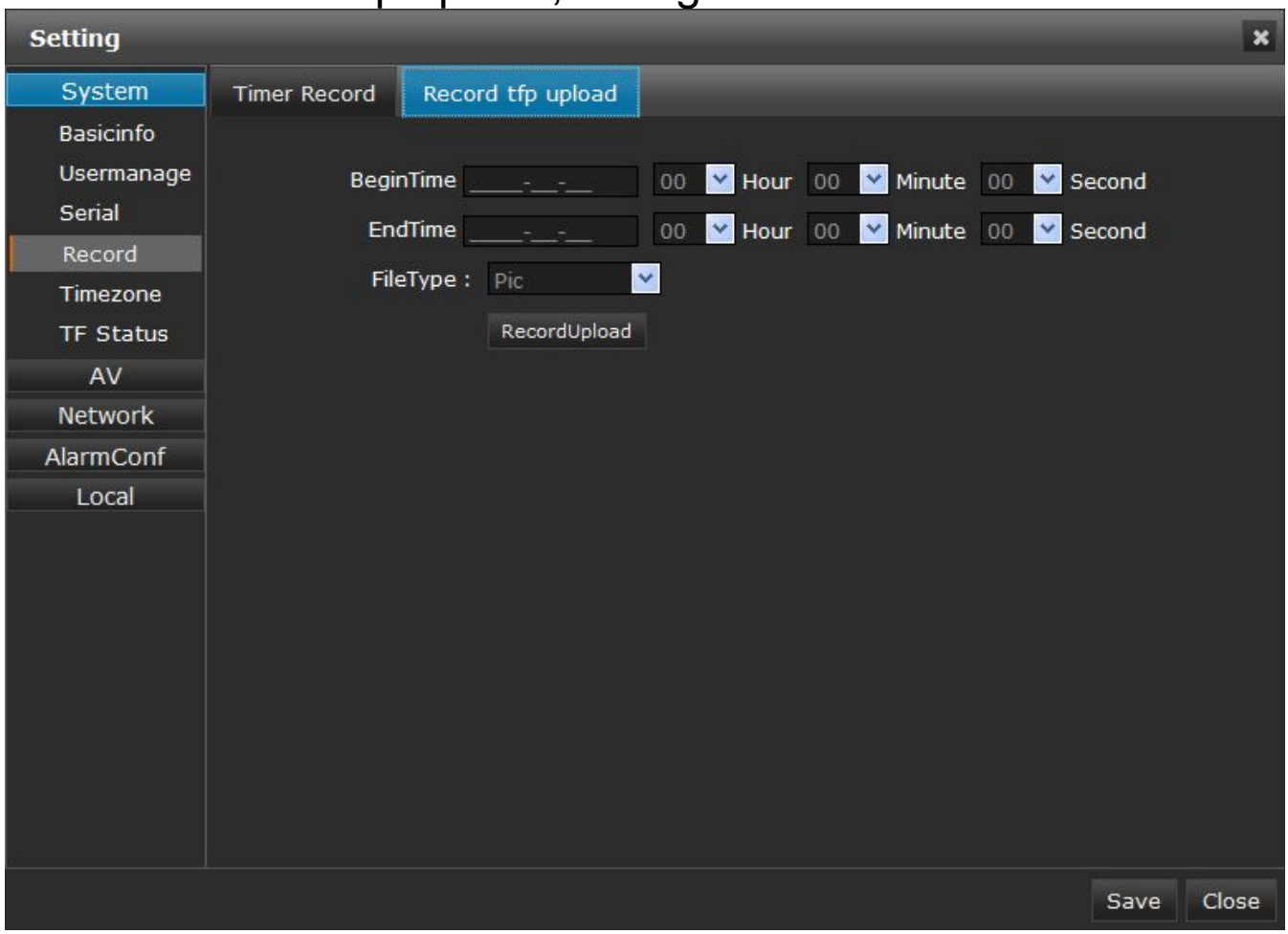


Figure 3-22

- ◆ Begin time: Set the video record begin time
- ◆ End time: Set the video record end time
- ◆ File type: Set the upload file type, such picture or video(Users have to set the FTP parameters first at **Alarm conf→Alarm Linkage→Ftp Settings** and enable FTP upload at **Alarm conf→Alarm conf→function** item, more details please refer to **Alarm conf**)

After setting, click Save to save it.

❖ Time zone

Time setting, as Figure 3-23:

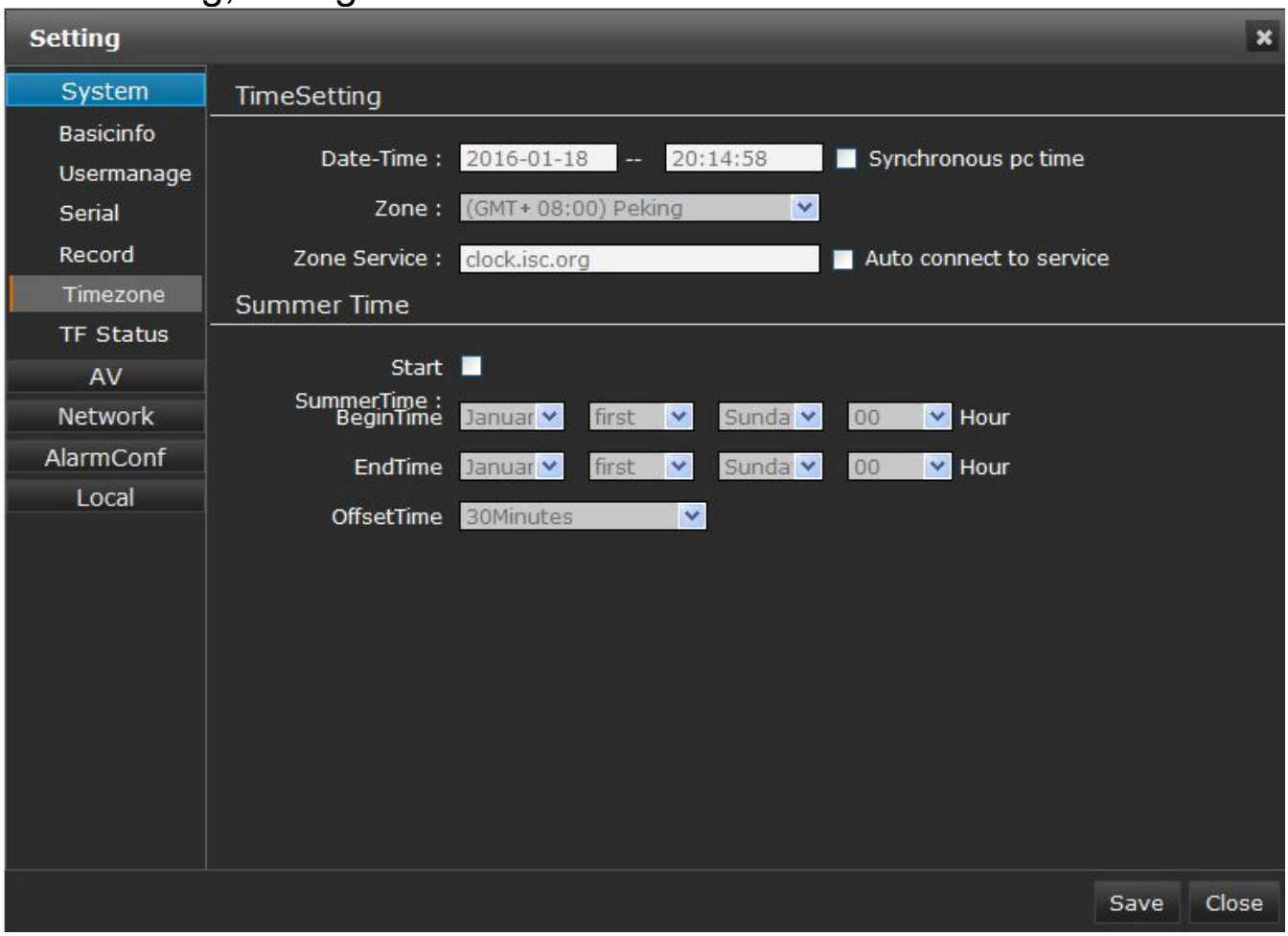


Figure 3-23

- Date-time: Click ☑ in front of “Synchronous pc time” to make the IP speed dome time same with PC
- Zone: Select corresponding time zone
- Zone service: Select zone service, and click ☑ in front of “Auto connect to service” to make the IP speed dome time zone same with PC

Summer time setting, as Figure 3-24:

- Start: Click ☑ to start summer time
- Begin time: Set begin summer time
- End time: Set end summer time
- Offset time: Set summer offset time, there 30/60/90/120 minutes selectable

Attention:The sunmmer start time should be later than camera’s.

After setting, click Save to save it.

❖ TF status

TF card status,as Figure 3-24:

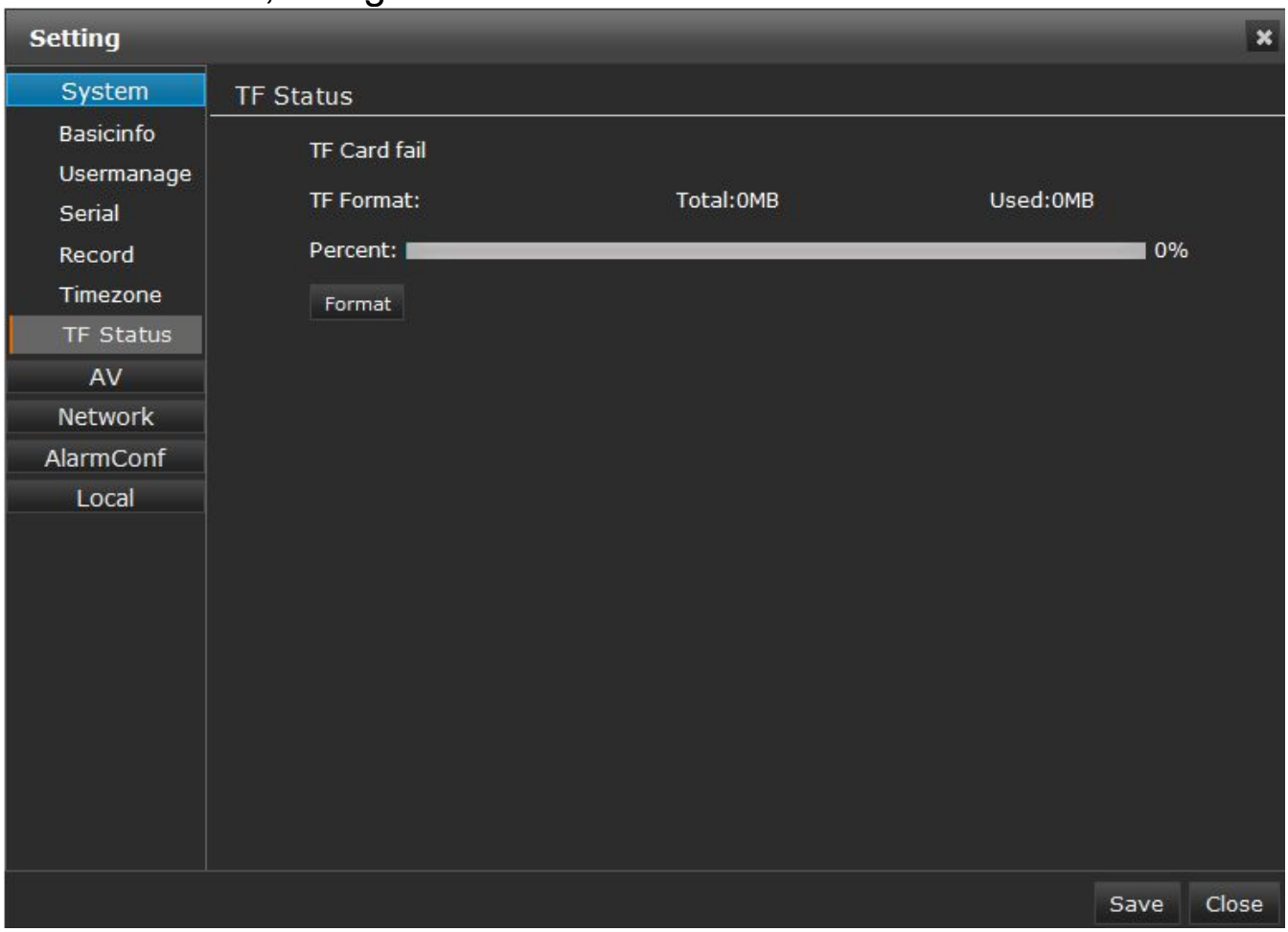


Figure 3-24

- TF card: Display the TF card status: successful/fail
- TF format: Display the TF card format(Not support to display TF format)
- Total/used: Display the TF card total capacity and has been used capacity
- Percent: Display the percentage of has been used and without used
- Format: Click to format the TF card

AV

❖ Video channels

Dual stream parameters setting, as Figure 3-25:

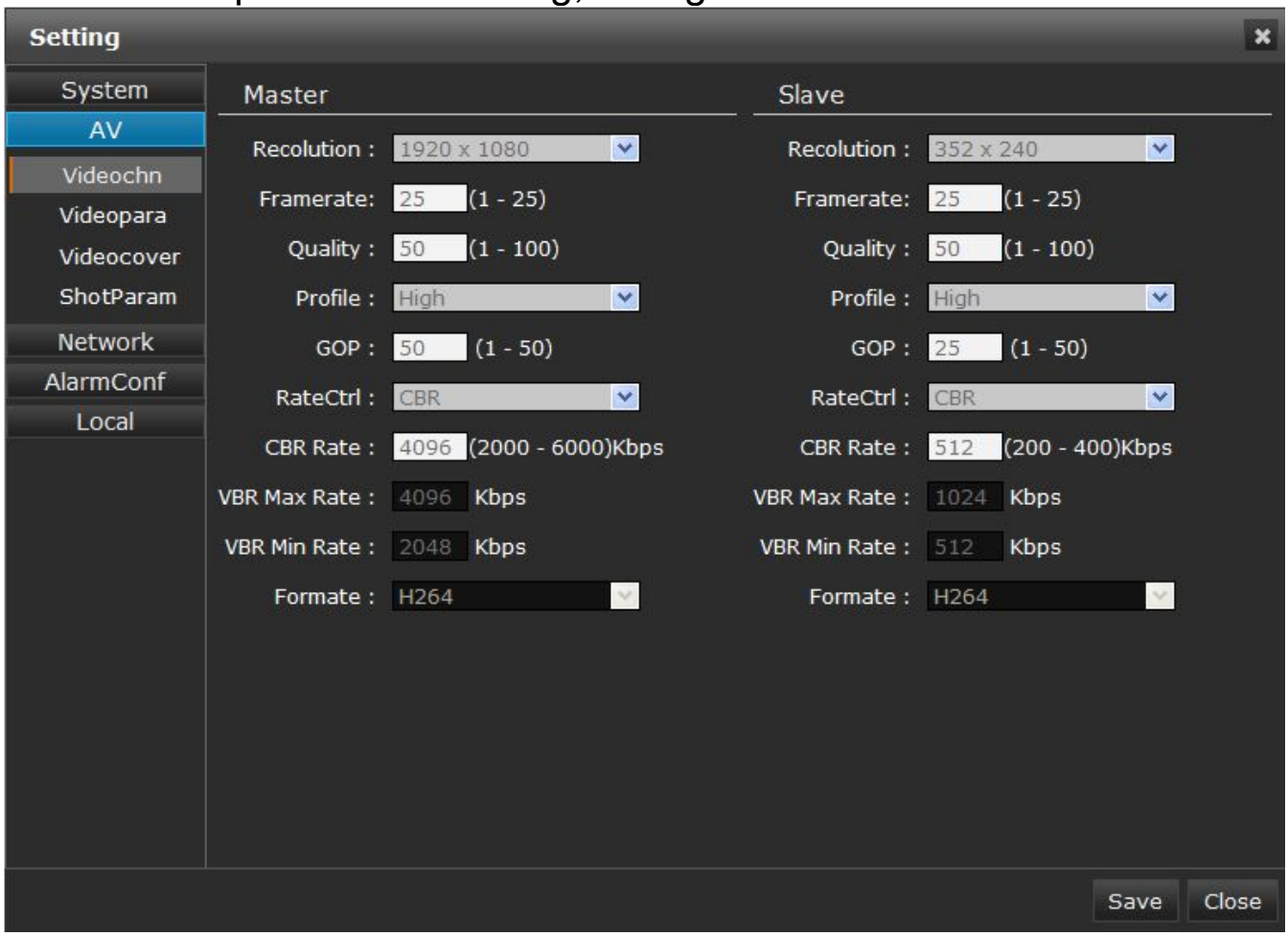


Figure 3-25

- Resolution: Master/slave stream, support kinds of resolution format.
- Frame rate: Video frame for one second, 1-25 frames/s for PAL format, 1-30 frames/s for NTSC format
- Quality: Set the front end devices video coding quality, 1-100 levels selectable
- Profile: Set the video coding level, High/Base/Main selectable
- GOP: Set the GOP value，1-50 selectable
- Rate control: CBR(Constant Bit Rate)/VBR(Variable Bit Rate) selectable
- CBR rate: Set the constant bit rate value, 2000-6000 Kbps selectable

- VBR max rate/VBR min rate: Set the variable bit rate value
- Format: Video compression format , support H.264 at present

After setting, click Save to save it.

❖ Video parameters

OSD chars setting, as Figure 3-26:

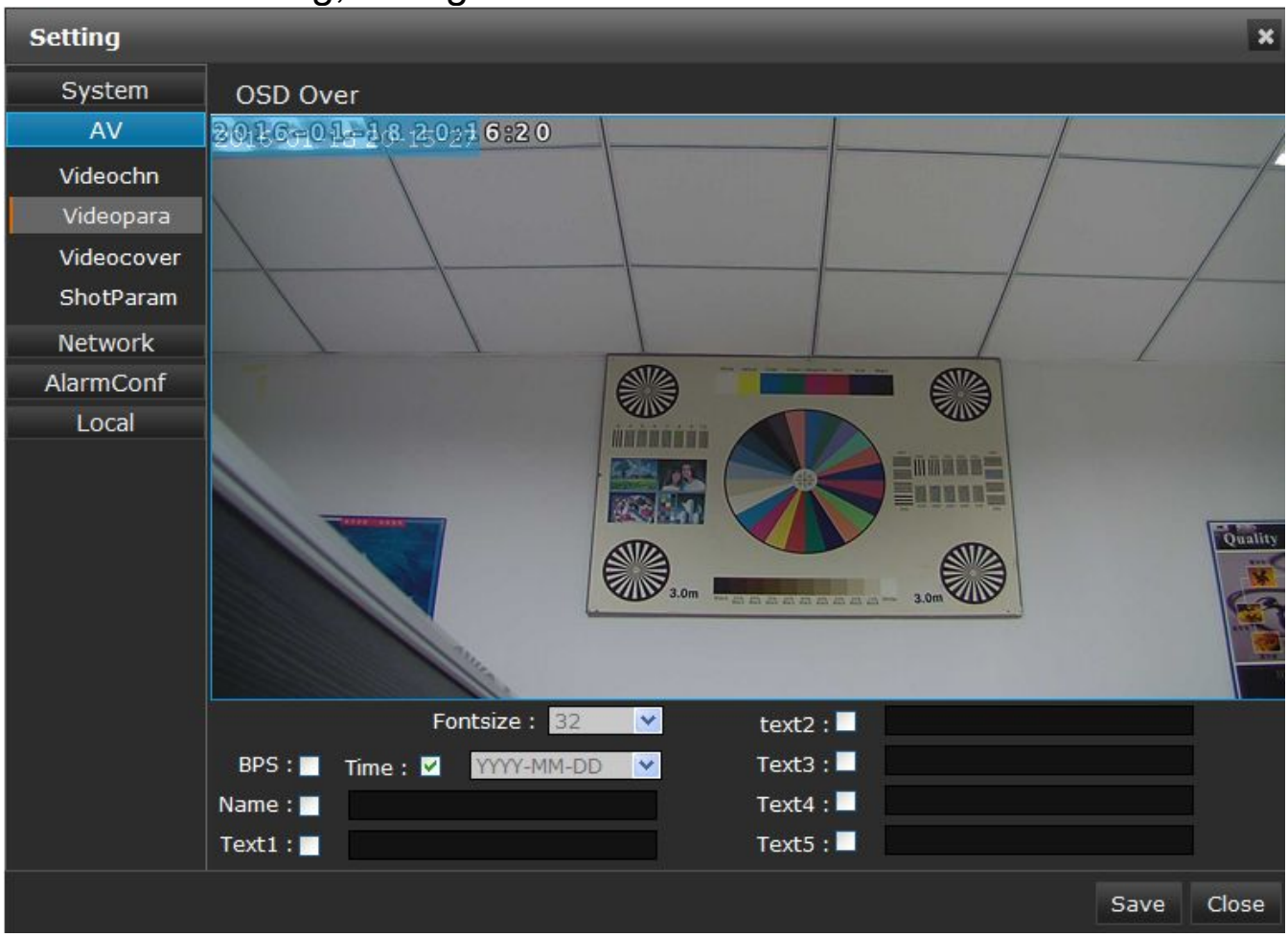


Figure 3-26

- Font size: Support 24/ 32/ 42/ 48 font size
- BPS: Click it to display the BPS information on the screen
- Time: Select the time display format and display it on the screen
- Name: User can edit the video image name, click it to display the video image name
- Text: Support at most 5 items chars display, user-defined

Note: Users can drag the information to optional position with mouse

After setting, click Save to save it.

❖ Video cover

Video cover setting, as Figure 3-27:

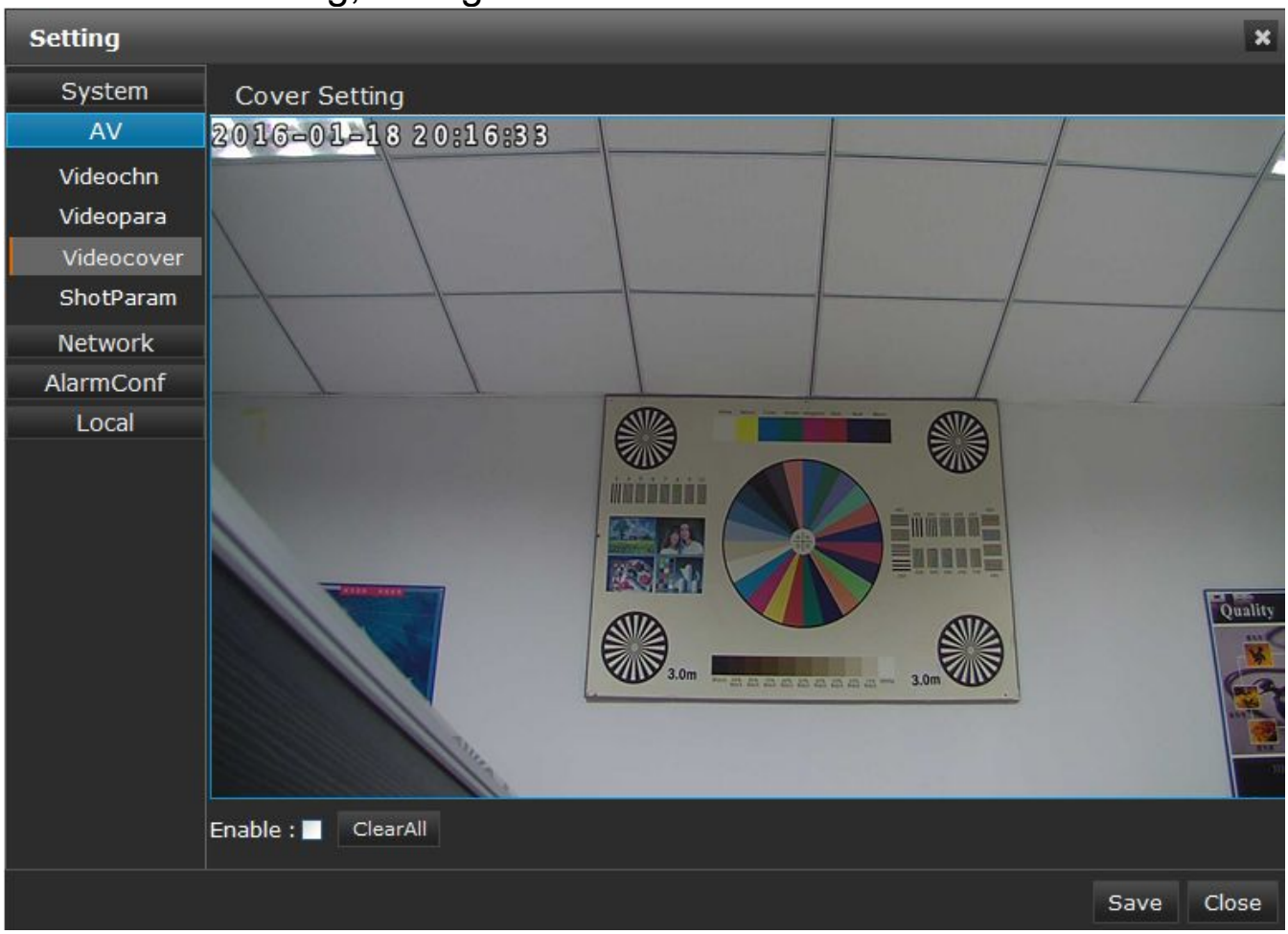


Figure 3-27

- Create cover zone: With the mouse moving, users can set the cover zone at the video window any where
- Enable: Click ☑ to enable video mask, click ClearAll to clear all cover zones

After setting, click Save to save it.

❖ Shot parameters

Shot parameters setting, as Figure 3-28:

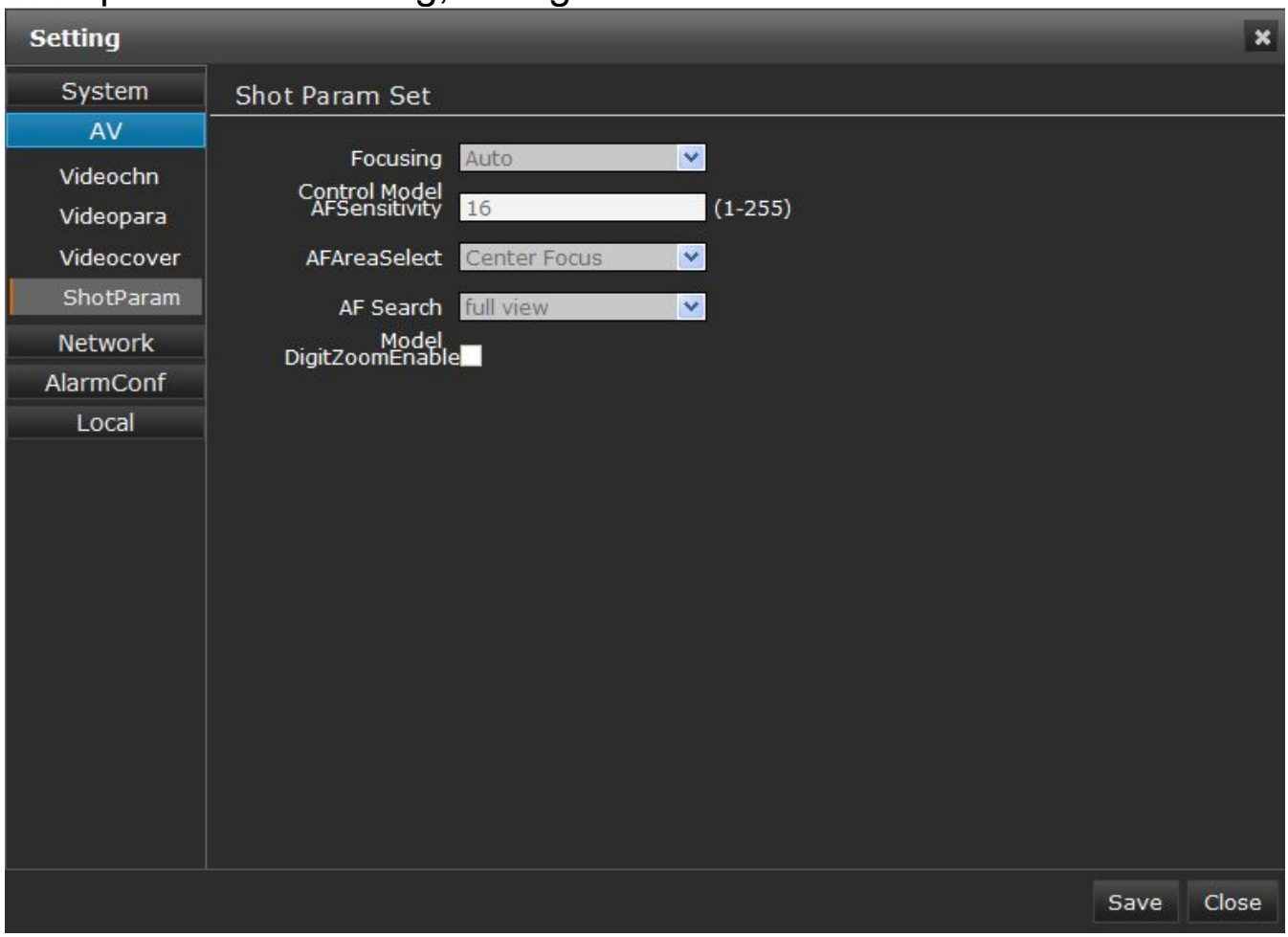


Figure 3-28

- Focusing control method: Select lens focus method, support auto/ semi-automatic/ manual. As users select “semi-automatic/ manual” click to adjust focus and to zoom
- AF sensitivity: Set the AF sensitivity, 1-255 selectable
- AF Area Select: select AF area, support all region focus/ center focus
- AF search model: Support full view/ 1.5m/ 3m/ 6m infinity model
- Digital zoom: Click to enable digital zoom

After setting, click Save to save it.

Network

❖ Ethernet

Ethernet setting, as Figure 3-29:

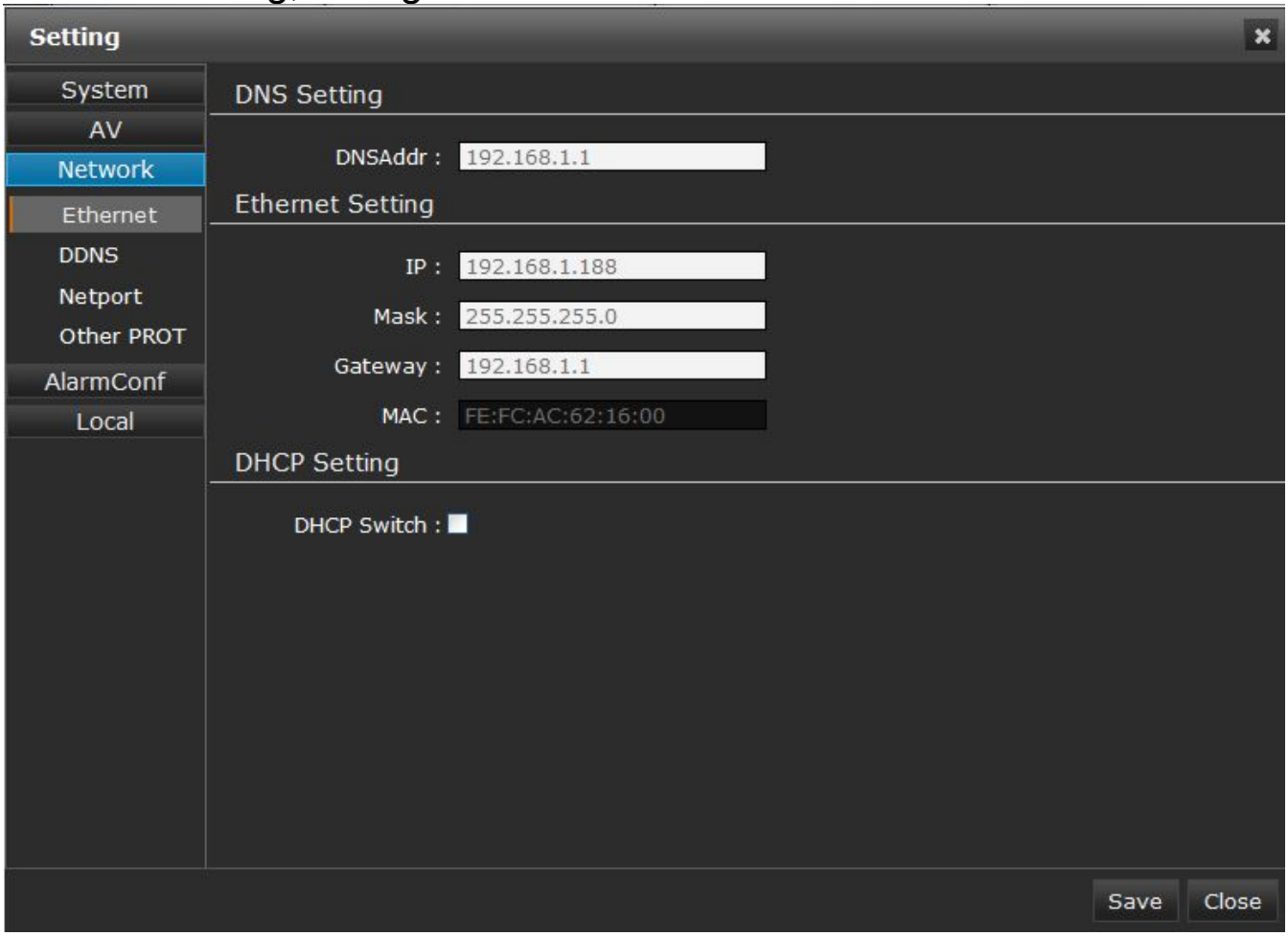


Figure 3-29

- ◆ DNS setting: Set the DNS IP address
- ◆ Ethernet setting: Set the IP:192.168.2.188 /Mask:255.255.255.0 / Gateway:192.168.1.1
- ◆ DHCP setting: If the router comes with DHCP function, click ☑ to enable DHCP switch, IP speed dome will get the IP address from the router automatically

After setting, click Save to save it.

❖ DDNS

DDNS setting, as Figure 3-30:

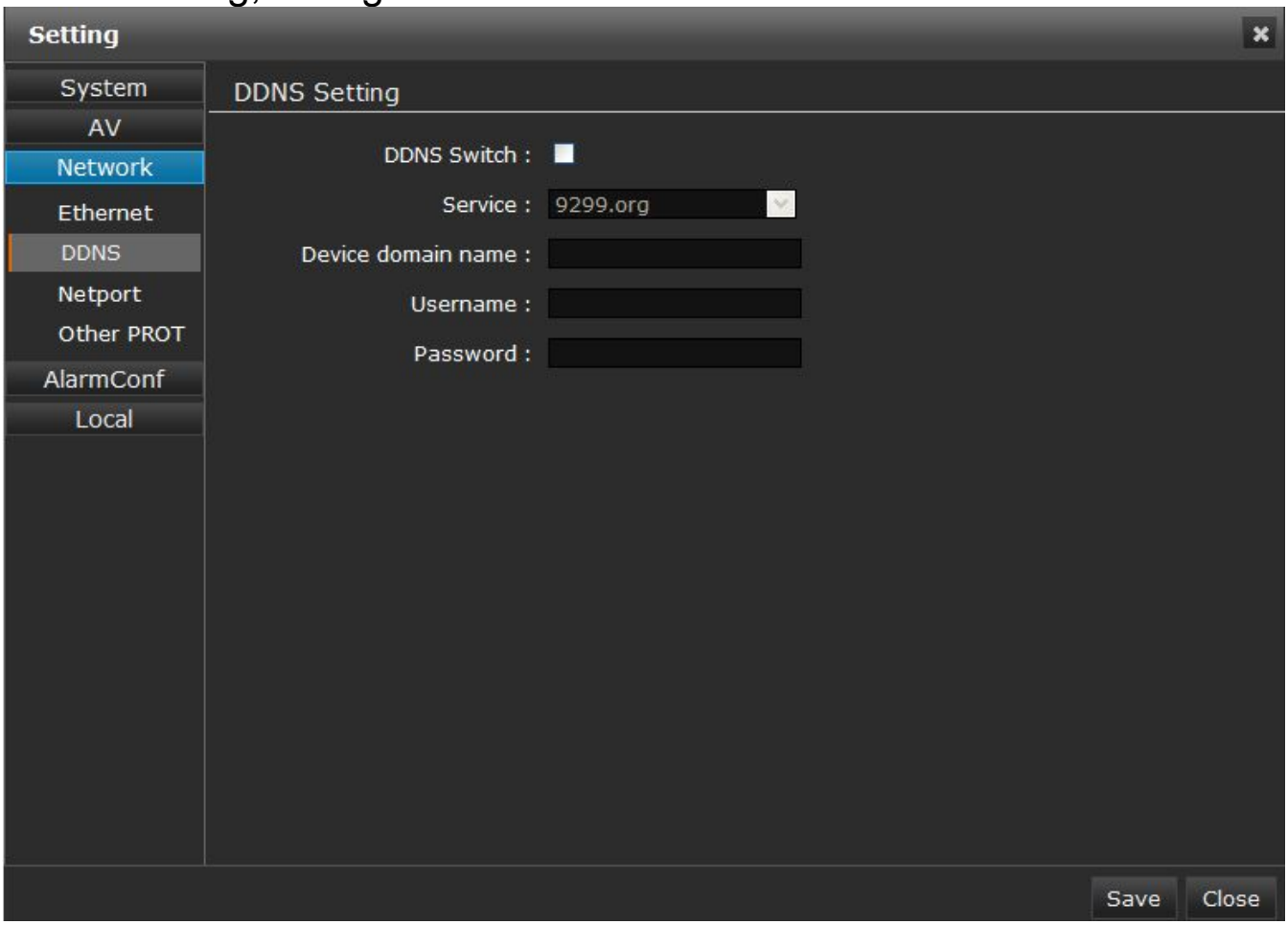


Figure 3-30

- ◆ DDNS switch: Click to determine whether to use Dynamic Domain Name Server (Enable DDNS, users have to enter the router to manually map the WEB and RTSP port)
- ◆ Server: Select DDNS server type (There are 9299.org/ 3322.net two types selectable)
- ◆ Device domain name: Input the registered domain
- ◆ User name: Input the registered user name
- ◆ Password: Input registered password

After setting, click Save to save it.

❖ Netport

Net port setting, as Figure 3-31：

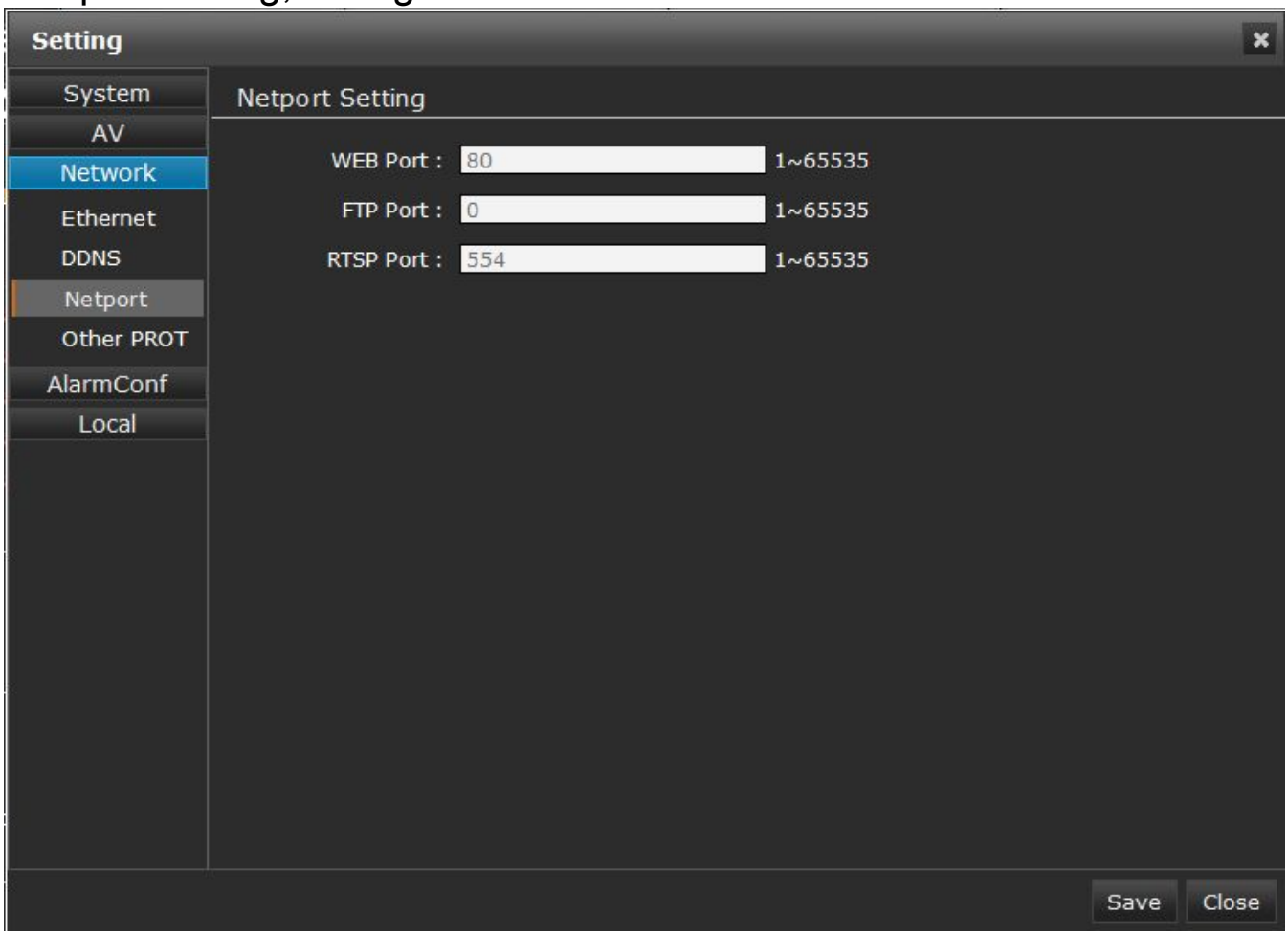


Figure 3-31

- ◆ WEB port: HTTP access port, default is 80, user-defined
- ◆ FTP port: FTP server appointed port number
- ◆ RTSP port: video data decoding port, default is 554

❖ Other protocol

Other protocol, as Figure 3-32:

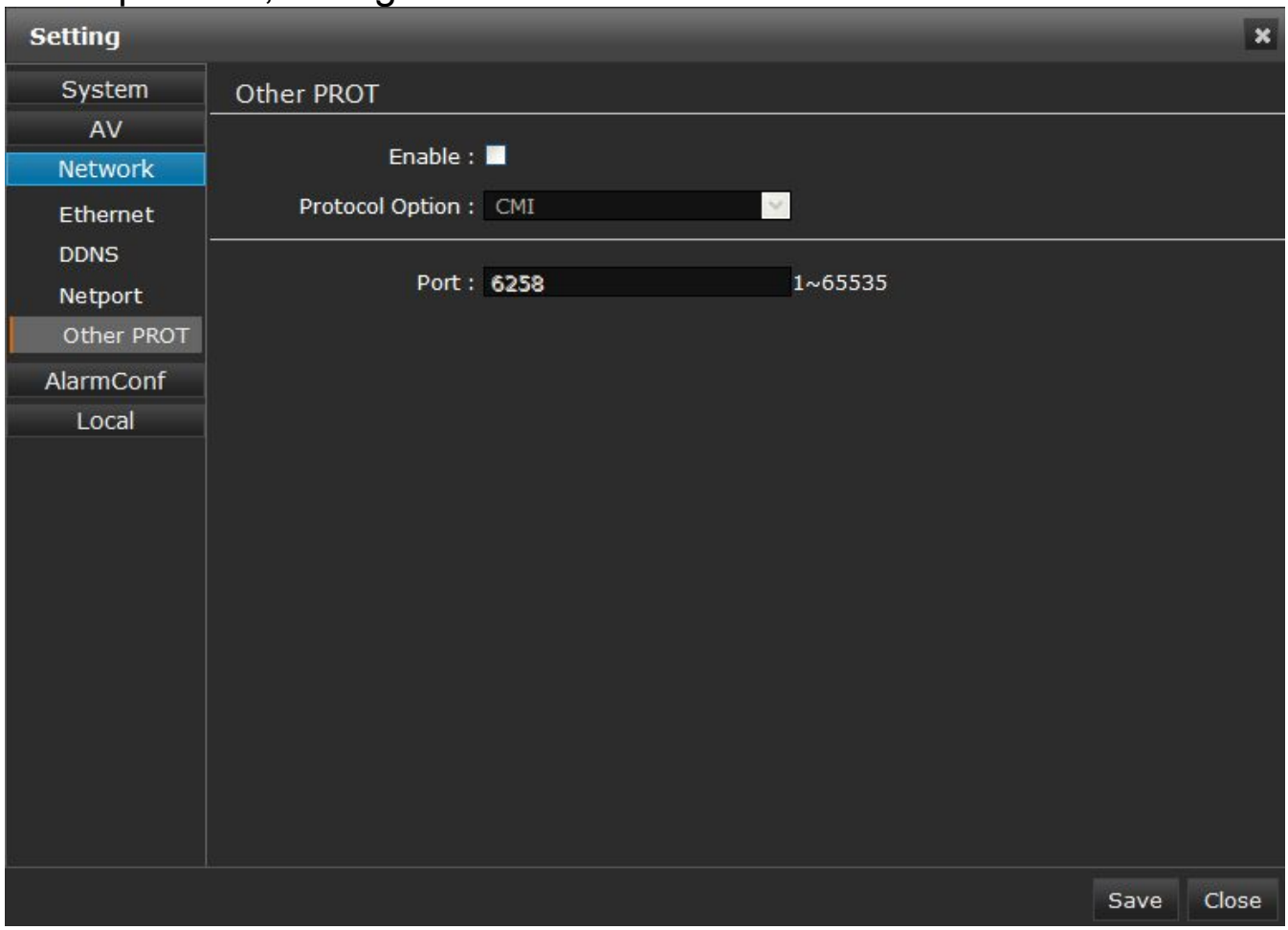


Figure 3-32

Click ☑ to enable the other protocol, and select the appointed protocol, After setting, click Save to save it.

Alarm configuration(Simple camera doesn't contain alarm function)

❖ Alarm conf

● Alarm conf

Click **Setting→Alarm conf→ Alarm conf→ Alarm period**, IP Speed Dome "**Alarm period**" interface. As Figure 3-33:

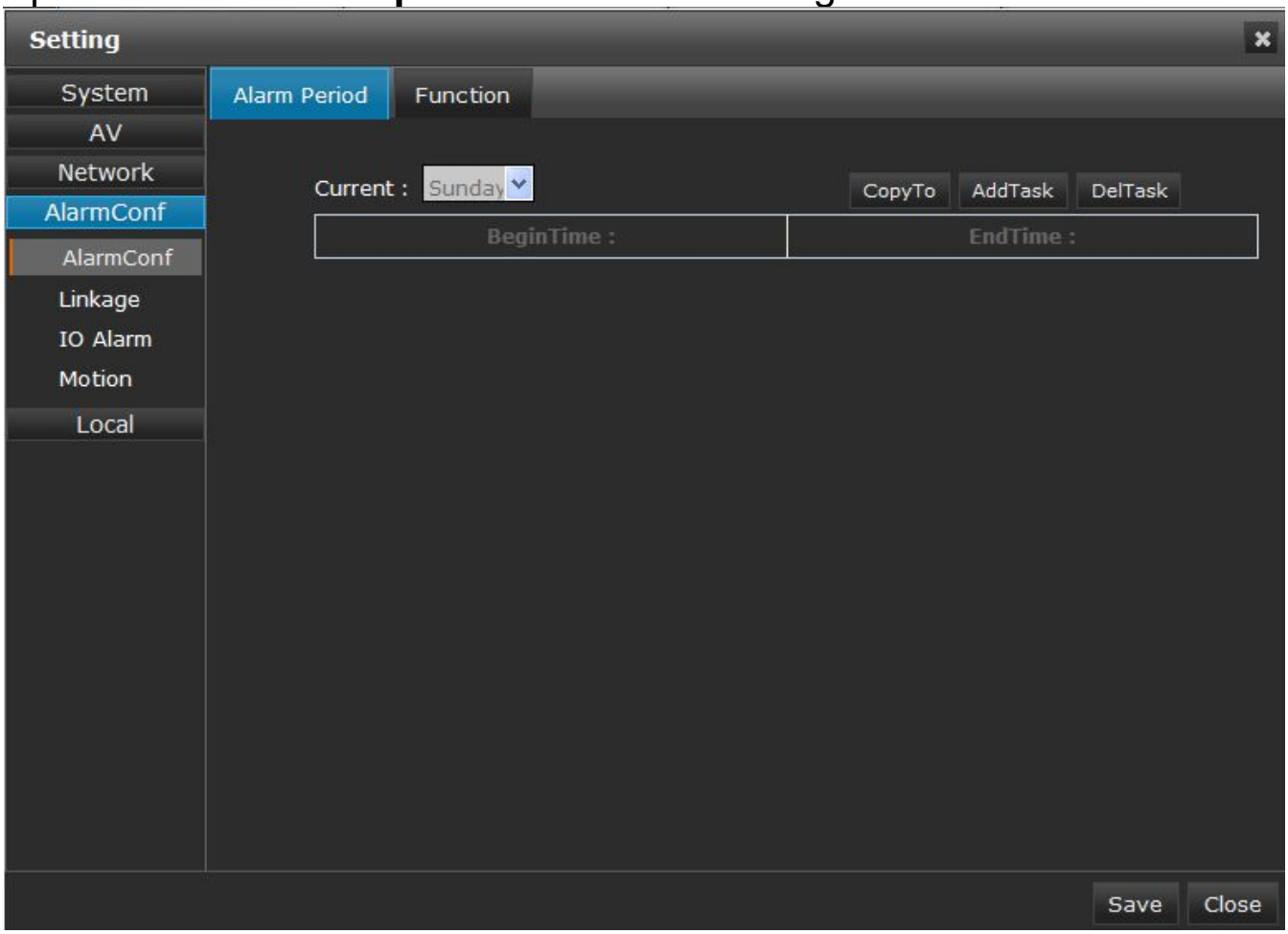


Figure 3-33

- ◆ Add task: Add new alarm period
- ◆ Del task: Delete the specified time period
- ◆ Copy to: Copy the current alarm period to the other day

After setting, click Save to save it.

● Function

Click **Setting→Alarm conf→ Alarm conf→ Function**, IP Speed Dome "**Alarm Function**" interface. As Figure 3-34:

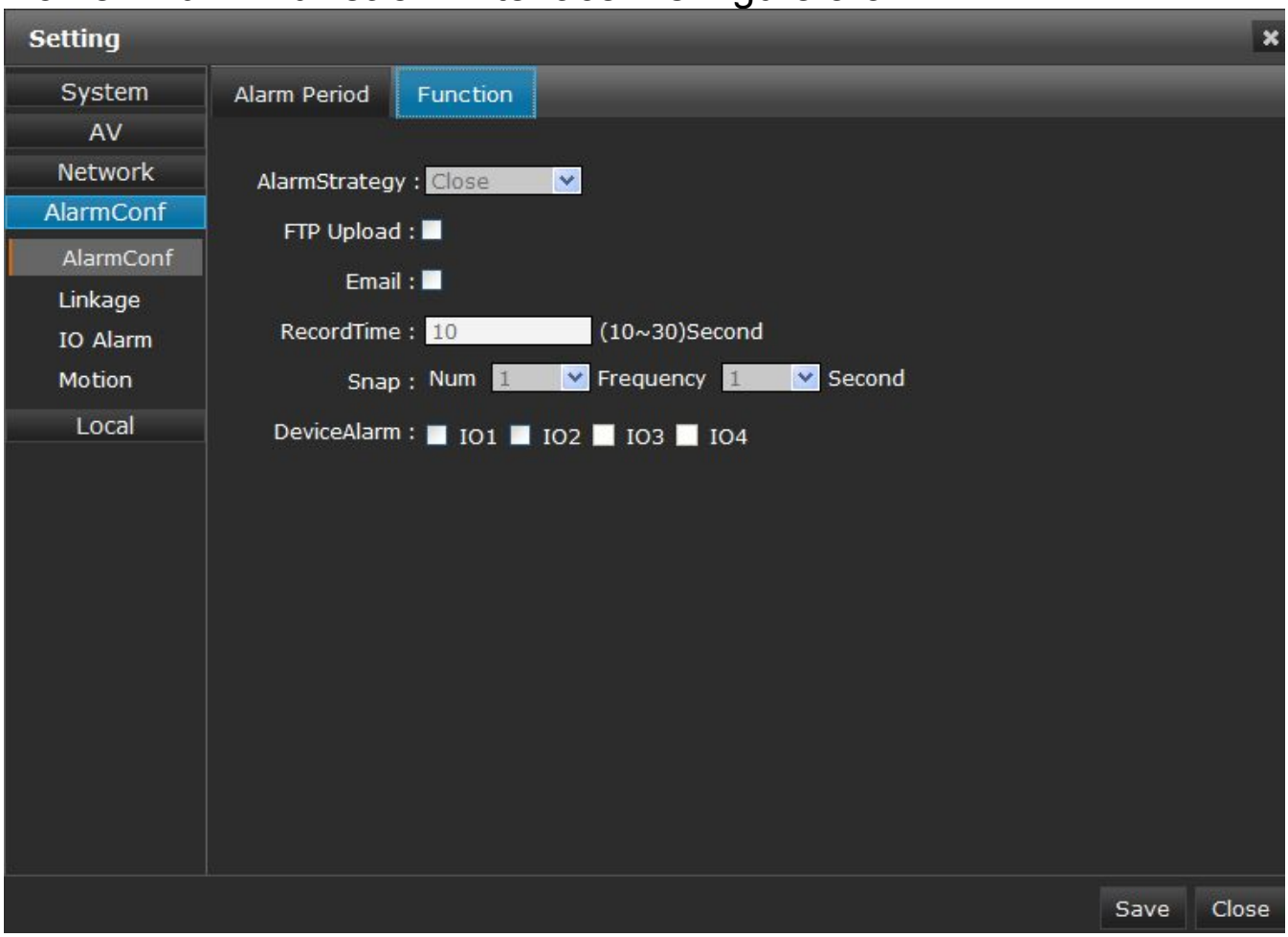


Figure 3-34

- ◆ Alarm Strategy: Select alarm output type, linkage picture(Picture) or video(Record)
- ◆ FTP upload: Click ☑ to enable FTP alarm upload
- ◆ Email: Click ☑ to enable E mail alarm upload
- ◆ Record time: Set video record time
- ◆ Snap: Set picture snapshot number and frequency time
- ◆ Device alarm: Set alarm linkage devices

After setting, click Save to save it.

❖ Linkage

Linkage setting, as Figure 3-35:

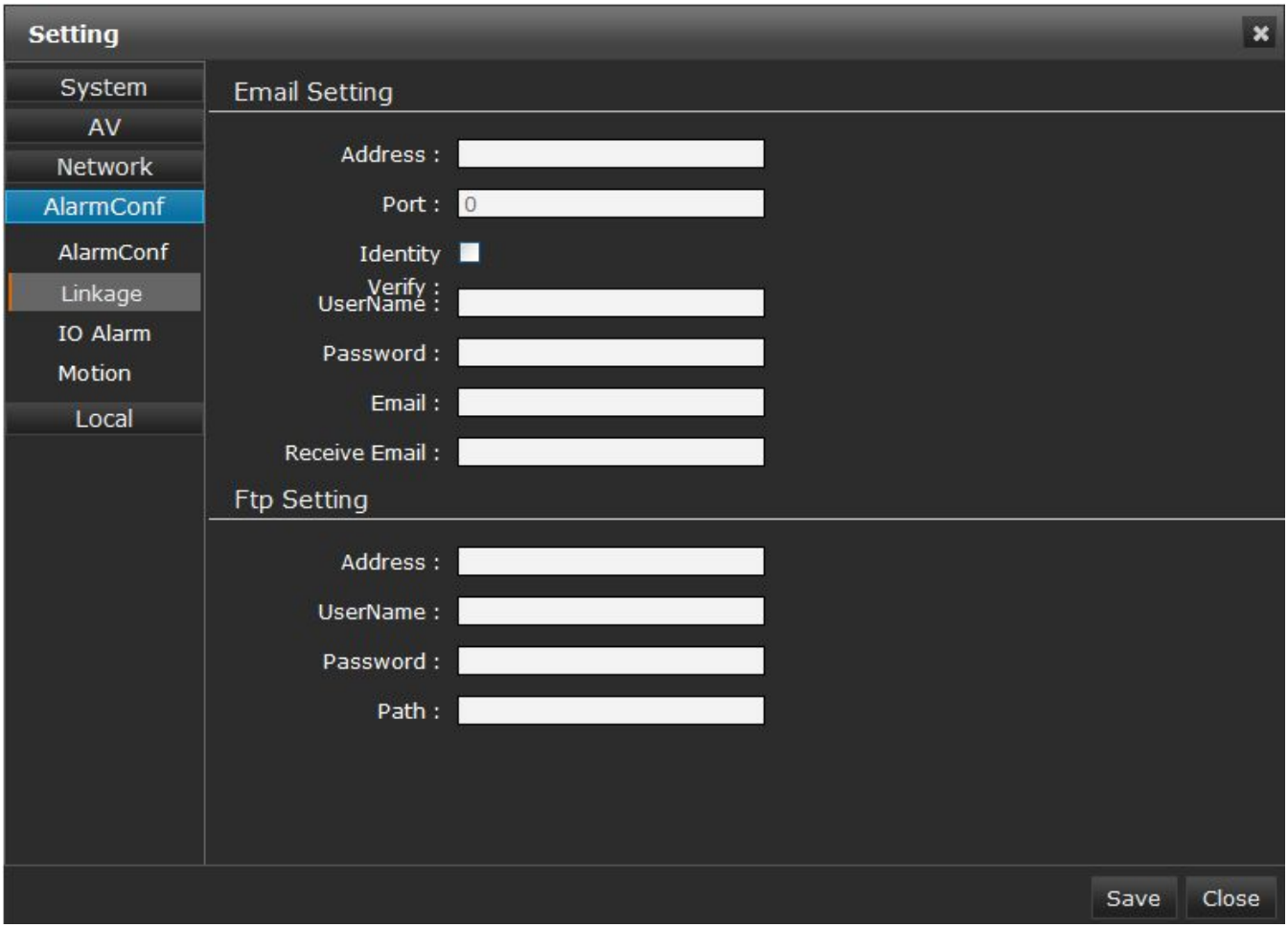


Figure 3-35

- Email setting: Configure the file upload email, include: Email address, port, user name, password, send email and receive email. And the port is 465, send email is same with receive email, click Identity
- Ftp setting: Set the FTP server, include the server address(User's PC IP address), username, password, and the upload file path(Users must set the same file path in the computer, PC can not create a file automatically).

After setting, click Save to save it.

❖ IO alarm

IO alarm setting, as Figure 3-36:

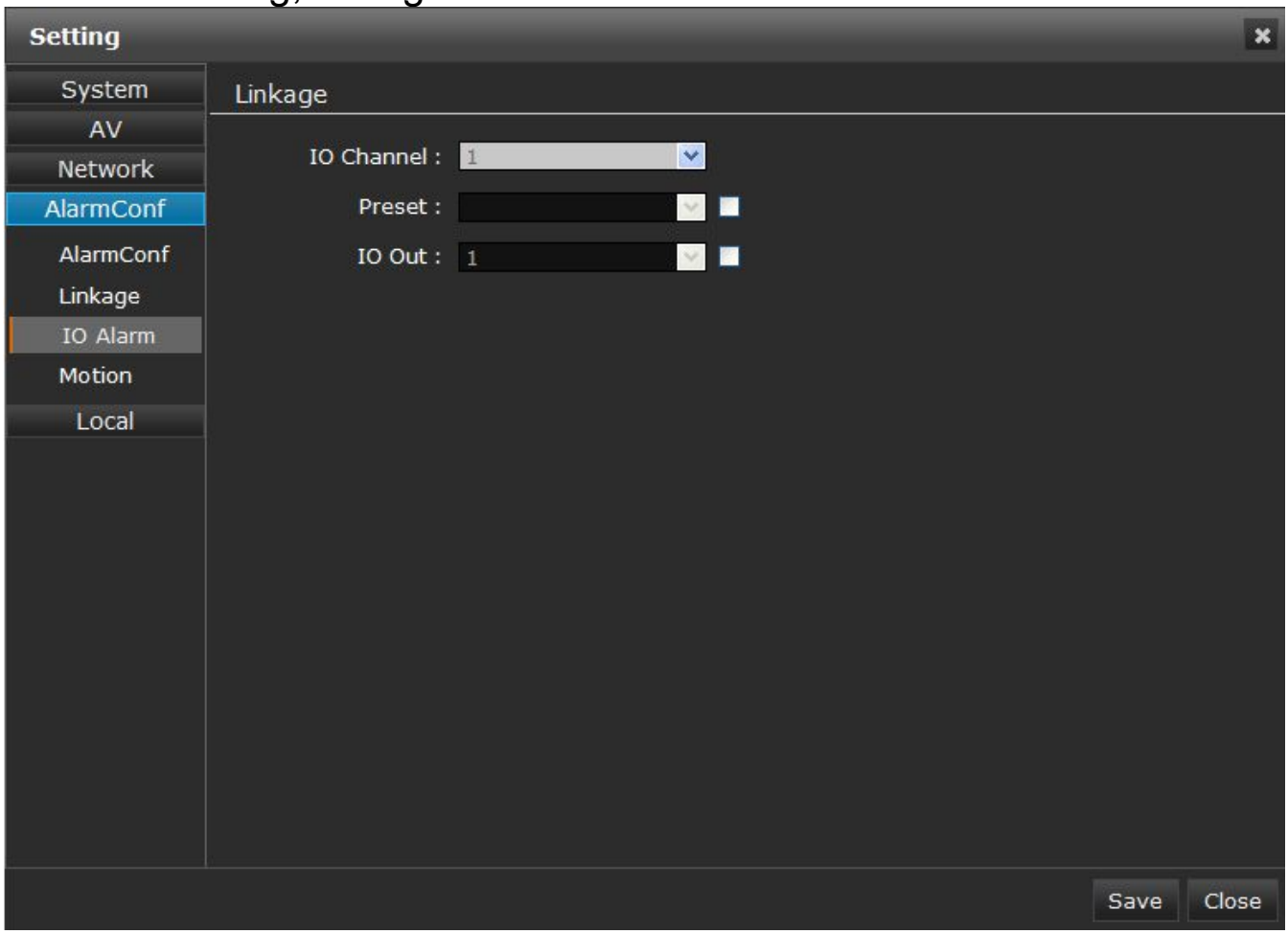


Figure 3-36

- IO channel: Set the alarm linkage device input port
- Preset: Click to enable linkage preset, and set the preset number
- IO out: Click to enable device alarm output port, and set the IO output number

After setting, click Save to save it.

❖ Motion

Motion setting, as Figure 3-37:

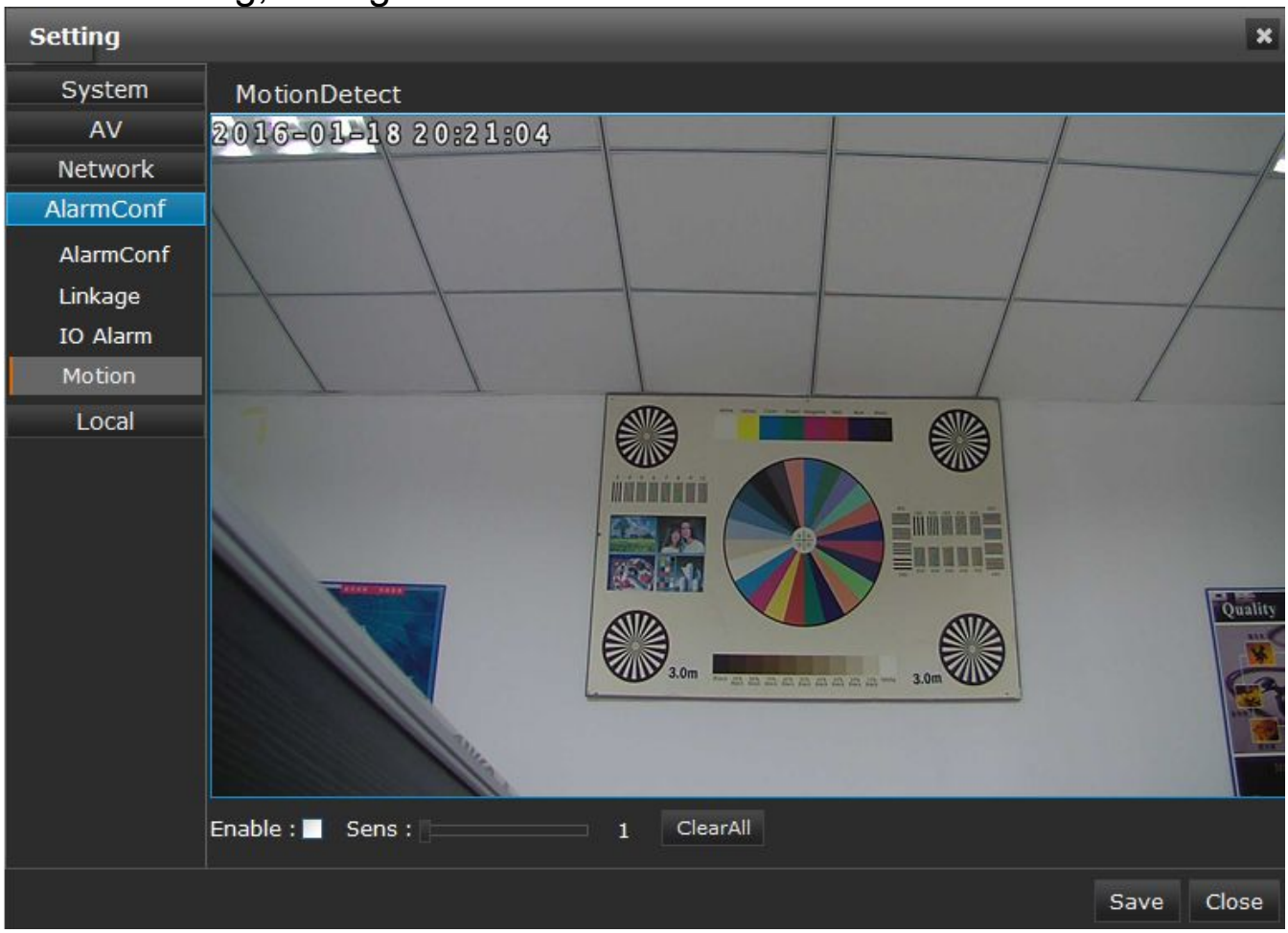


Figure 3-37

- ◆ Enable: Click ☑ to enable motion detection, there are max 4 motion detection
- ◆ Sensitivity: Set the sensitivity, 1-10 levels adjustable
- ◆ Clear all: Clear all motion detection setting

After setting, click Save to save it.

Local

❖ Local

Local setting, as Figure 3-38:

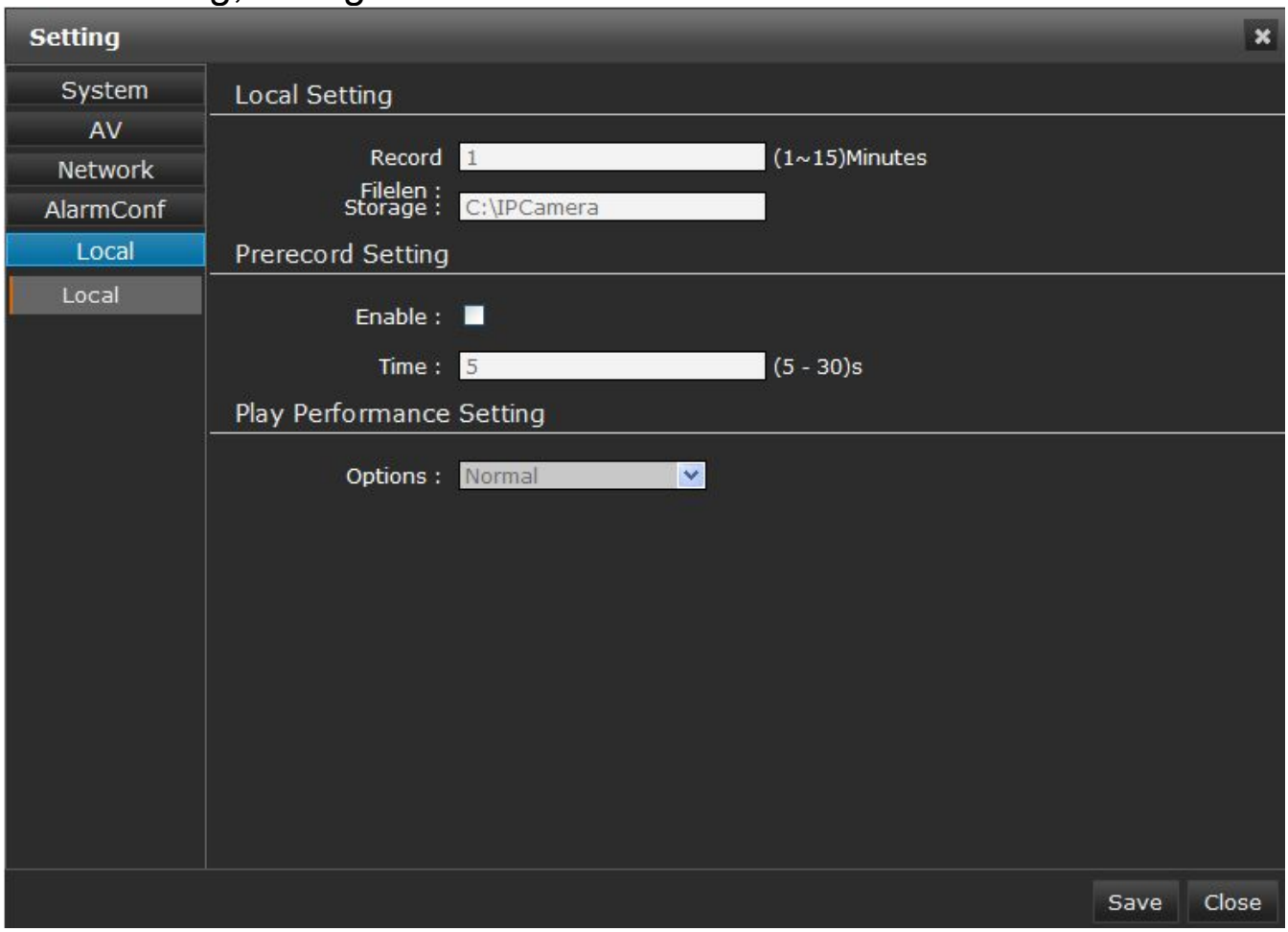


Figure 3-38

- ◆ Local setting: Set the video record length(time) and file store path
- ◆ Prerecord setting: Click ☑ to enable prerecord, and select prerecord time.5-30s selectable.
- ◆ Play performance setting: Set the alarm video performance, select normal/ real time/ fluency.

After setting, click Save to save it.

Playback

Search video and playback

Video playback setting, as Figure 3-39:

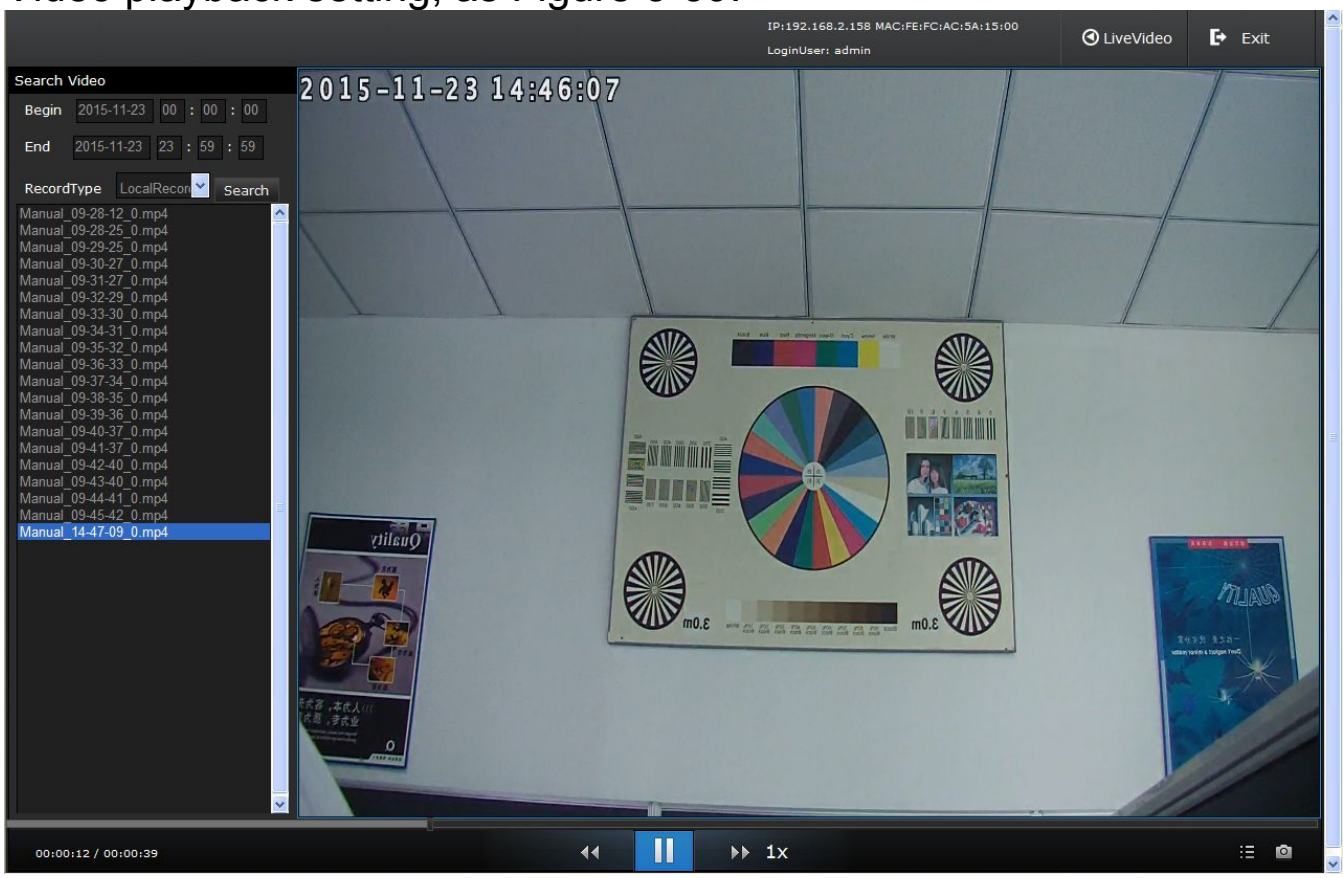


Figure 3-39

At the video playback interface, users can do video search, front end devices video playback, local video playback, stored video playback, video playback snapshot.

- Video search: Support local video record and front end device video record (Support TF card) file search, input the start and end time, select the video type(front end or local), click search. And the video record file will display automatically.
- Video playback operation: Select the record video, double click to playback, click icon to pause, click / icon to speed up/quick back.As figure 3-39
- File video playback: Click icon to find the stored video(Format: Mp4), double click to play it.
- Video playback snapshot: Click icon to do

playback window snapshot, and the picture will stored in the specified file(C:\IPCamera\) automatically.

4 Appendix

Specification

Model	Multi-function
Pick-up device	1/2.8" CMOS
Optical zoom	10X
Effective Pixels	200W
Resolution	>1000TVL
S/N Ratio	≥50dB
Min. Illumination	IR OFF: Color:0.05Lux@F1.6 IR ON:0Lux B/W :0.005Lux@F1.6
Focal Length	5.1~51mm
FOV	54°~4.9° (Near-Far)
Iris	F1.6~F1.8
Zoom speed	About 4s
Focus	AUTO/ Semi-Auto/ Manual
White Balance	AUTO/ Whitelow lamp/ 4000K/ 5000K/ Sunshine/ Dark clouds/ Flash light/ Fluorescent lamp/ High fluorescent lamp/ Water bottom/ Customized
Iris control	AUTO/ Manual
Electronic shutter	AUTO (1/25~1/5, 000 s) Manual（1/5～1/5，000 s）
AGC	100, 150, 200, 300, 400, 600, 800, 1600, 3200, 6400, 12800, 25600, 51200, 102400
BLC	OFF/ ON
WDR	OFF/ ON
Day&Night	Auto, COLOR, B/W(ICR)
Rotation	Normal/ H-Mirror/ V-Mirro
NR	OFF/ON
IR Beam Distance	50~80m IR distance
Angle Field of IR	Change with focus
IR Control	Brightness and angle changed with scene
Operation	
Horizontal rotate	360 ° continuous rotation

Vertically rotation	0-90°		
Manual control speed	0.1°-200°/s		
Preset	255		
Preset Accuracy	0.1°		
Preset speed	240°/s		
zone scan	1		
Pattern	4		
Proportion zoom	Auto		
Home Function	Preset/ cruise/ Pattern / zone		
Auto reverse	Machinery reverse		
Power Memory	Support		
3D positioning	Support		
Speed Dome Cameras upgrade	Support online remote upgrade		
Network			
Video encoding	video compression		H.264
	Max frame rate		1080p@25/30fps
	Main-stream	resolution	1920x1080(1080p)，1280x960(960p)，1280x720(720p)，720x576(D1)，720x480(D2)，640x480(VGA)，352x288(CIF)，352x240，320x240(QVGA)
		frame rate	1～30fps
		Bit rate	100Kbps～6000Kbps, support CBR/VBR
	Sub-stream	resolution	720x480(D2)，640x480(VGA)，352x288(CIF)，352x240，320x240(QVGA)
		frame rate	1～30fps
		Bit rate	100Kbps～1000Kbps, support CBR/VBR
Video cover	4 zones		
OSD	Support date/time, code rate/ camera title display,		

	chars can be moving
Image	Brightness, Contrast, Saturability, Sharpness adjustable through client and IE explorer
Port protocol	GB/T28181，ONVIF Profile S
Network protocol	IPv4, TCP, UDP, HTTP, HTTPS, SMTP, FTP, NTP, DNS, DDNS, DHCP, RTSP, RTP, RTCP, SNMP
TF card	Max 64G
Poe	Support
Alarm input	1ch input
Alarm output	1ch output, support alarm linkage
Alarm action	TF card video recording/ FTP transmission/ Email inform/ snapshot / Preset / alarm output
General	
IP Grade	IP66
Operating temperature	-20℃～55℃（The camera will enable cold start below -20℃, then it will turn on the IR leds automatically and operate normally after heating in 30 minutes)
Humidity	0%~90% comparatively Humidity(Non-condensation)
Size	291(H) x 149 (D) mm
Weight	2.7Kg
Power supply	DC24V1.5A (±10%) *not included
Power Consumption	25W

Note: All Info. only for reference, please see the subject produce. Any change will not be notified .

Network Interface of Network High Speed Dome

The default network ports of Network High Speed Dome are:

TCP	80	Web port
	5050	Communication port, audio/video data transmission port, talkback data transmission port
UDP	5050	Audio/video data transmission port
Onvif port	80	
RTSP port	554	
RTSP stream port	554	
Search port	10000	
Telnet port	23	
Onvif search port	3702	
Video stream port	554	
Playback, upgrade, search port	80	
Https protocol port	80	

Default Network Parameters

Default network parameters

Cabled Network:
IP Address: 192.168. 2.158
Data Port: 5050
Subnet mask: 255.255.255.0
Web port： 80
Gateway: 192.168.2.1
DHCP: OFF

Network High Speed D me DDNS

DDNS description

DDNS(Dynamic Domain Name System) means that DDNS is implemented through a dynamic domain resolution server. It requires a PC with fixed IP address on the Internet, on which the dynamic domain resolution server runs. All internet users can view the Network High Speed Dome via a fixed IP address.

Network High Speed Dome DDNS analytical process:

Visit Network High Speed Dome under different network environments

Users visit the Network High Speed Dome through LAN/ WAN. The following directions will tell you how to operate the Network High Speed Dome through LAN/ WAN.

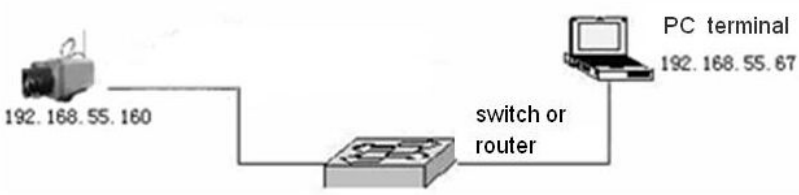
LAN

There two ways to connect Network High Speed Dome: Static IP/ Dynamic IP

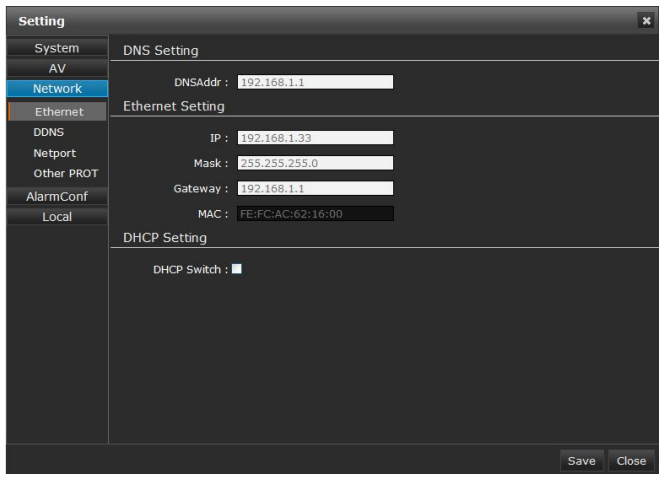
Static IP

Static IP means the webmaster distribute a LAN inner IP address to the Network High Speed Dome. Keep your PC IP address same as the camera IP address and to implement access.

Network topological graph as follows:：



Network setting reference:



Setting procedure:

1. Log in Network High Speed Dome via the IE browser (the

default IP is 192.168.1.188)

2. Switch to the page “ Network Setting” interface, input the IP address,such as 192.168.1.33

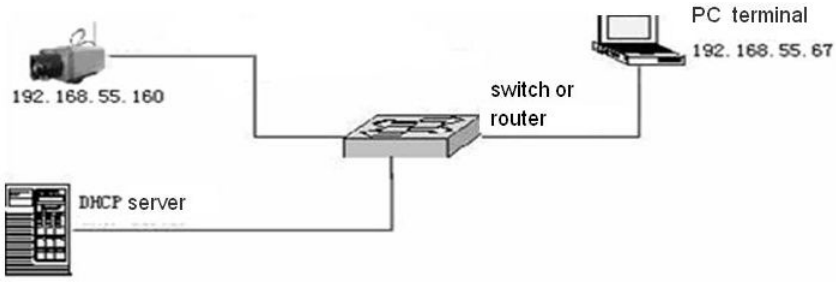
3. Fill in subnet mask, the default is 255.255.255.0

4. Fill in gateway address, the default is 192.168.1.1

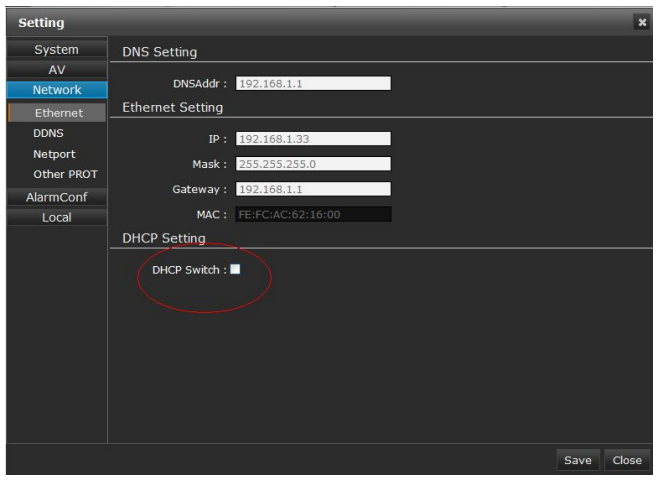
After input all parameters, click “Save”, then the device restart, Input the device IP address at the IE browser to visit the camera.

Dynamic IP

Dynamic IP means that Network High Speed Dome obtains IP address from DHCP server. See below picture for the network topology:



Please refer to below picture for the network settings:



Log in Network High Speed Dome via IE browser. Then turn to “ Network Setting” interface, click DHCP”

After setting all the parameters, click save and restart to make the parameters valid.

Internet

There are three ways to connect Network High Speed Dome to the Internet.

1. Fixed IP mode

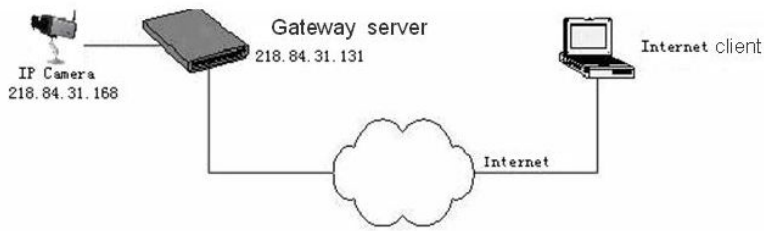
2. ADSL broadband and router share online mode(Dynamic get the IP address mode)

3. PPPOE dial-up access

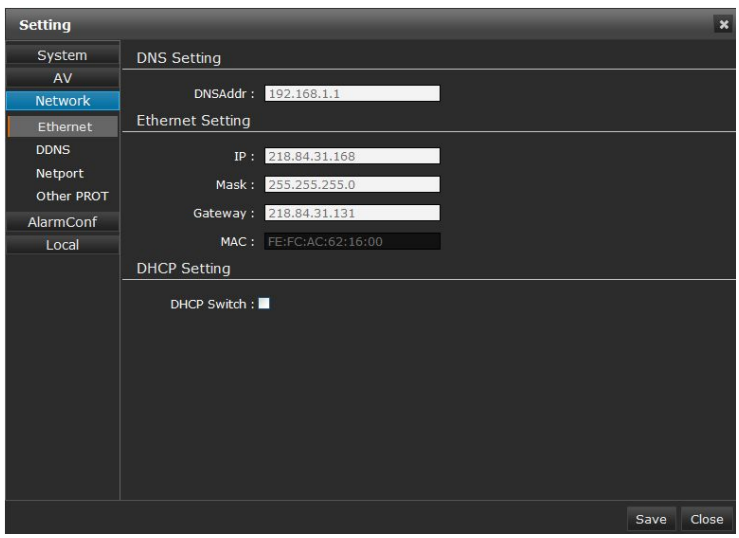
After Network High Speed Dome is connected to Internet, remote Internet users can visit it directly via domain name or IP address.

Fixed IP mode

See below picture for the network topology:



Please refer to below picture for the network settings:



Setting steps:

1. Log in IP Camera via crossover cable direct connection.(For details, please refer to “Hardware Installation”)

2. Switch to the page network settings, fill in the device IP address requested from network service provider in to Basic Parameters, such as 218.84.31.168

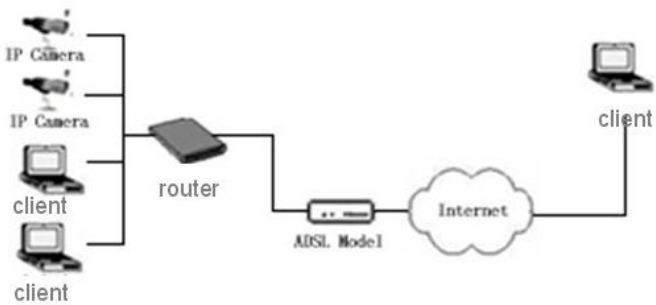
3. enter correct subnet mask. Such as 255.255.255.0

4. enter correct gateway address. Such as 218.84.31.131

After setup completes, click Save and restart the device, then connect it to public network so that all Internet users can visit the Network High Speed Dome remotely via entering http://218.84.31.168 to IE browser

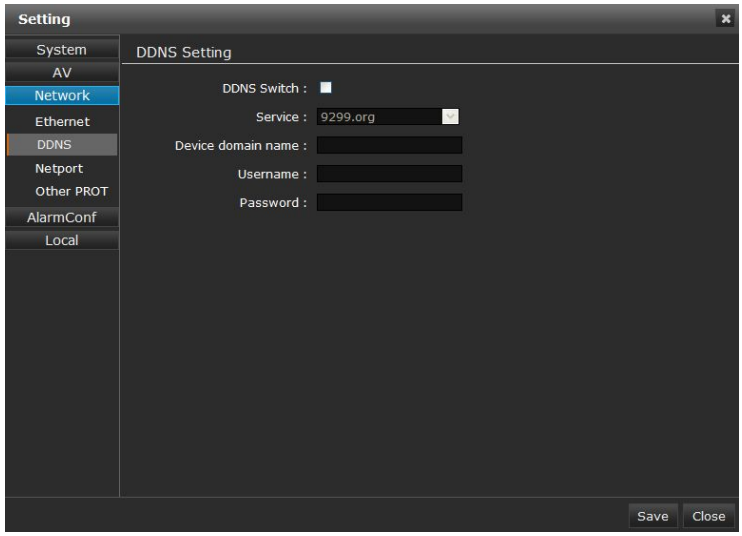
Broadband and router sharing Internet access mode (dynamic obtainment of extranet IP address mode) like ADSL and so on.

If you select router dial-up to connect internet, see below picture for the network topology:



Users can set up DDNS domain name service at the same time. Fill the username and password which were applied in the DDNS server into the DDNS setting item, implement port mapping from the router. The router determines and points to the Network High Speed Dome that need to be visited according to different ports, long-distance Internet user can visit the Network High Speed Dome on the network via domain name directly.

Please refer to below picture for the network settings:



DDNS setting procedure：

1. Login DDNS server， register accounts and password.
2. Click DDNS (It is selectable when server provider is blank)
3. Select DDNS server provider, such as “9299.org”
4. Input the device domain name
5. Input the DDNS login username
6. Input the DDNS registered password

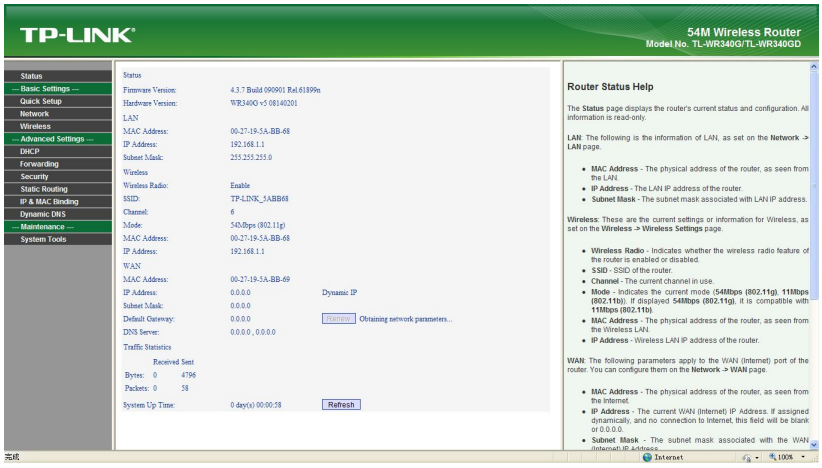
Note: Enable DDNS, users have to enter the router and manually map WEB port and RTSP port first, set the IP Camera WEB port and RTSP port same as the router

After all parameters setting completed, click Save , the IP Camera will restart and comes into effect.

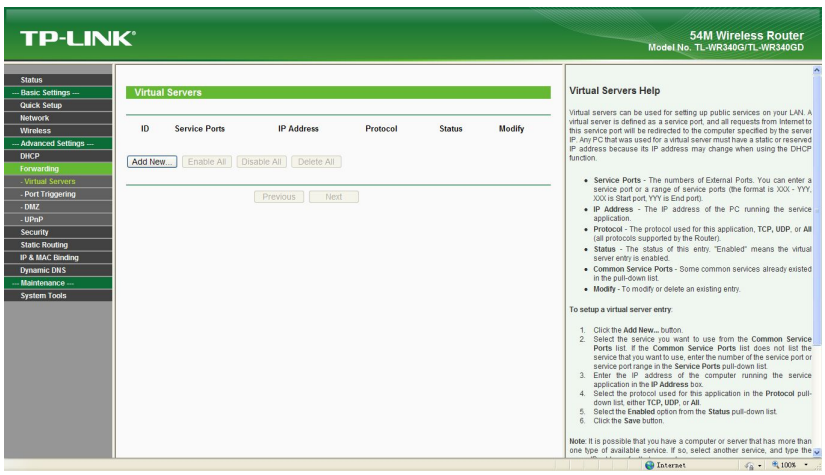
Port mapping setting procedure

TP-LINK TL-WR340G illustration:

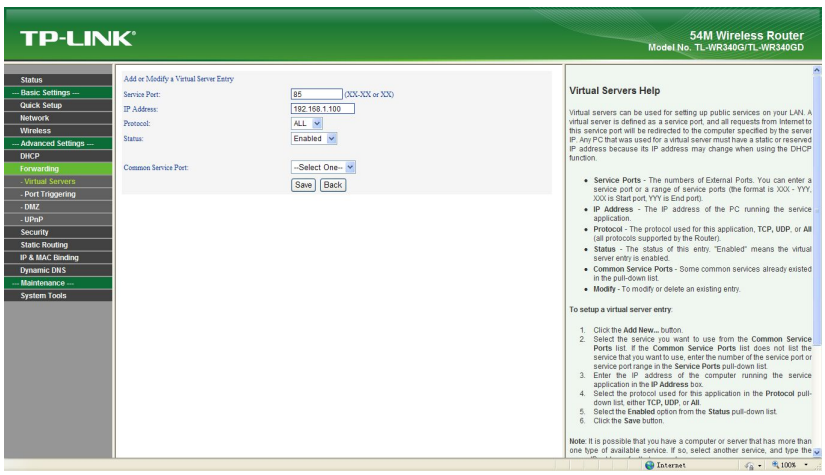
1. Ask network administrator for the IP address of the router (i.e. LAN gateway address), login user name and password, then log in the router. The main interface is as follow:



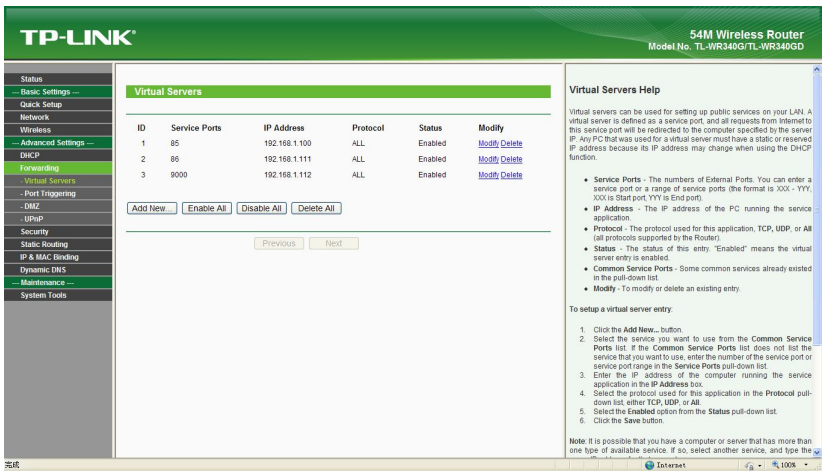
2. Open “Forwarding”, select “Virtual Servers” as below picture shows:



3. Select “Add New Items”, enter the IP address of the Network High Speed Dome (e.g.192.168.1.100), port (e.g. 85), status (valid) and other information, click save, see below picture:



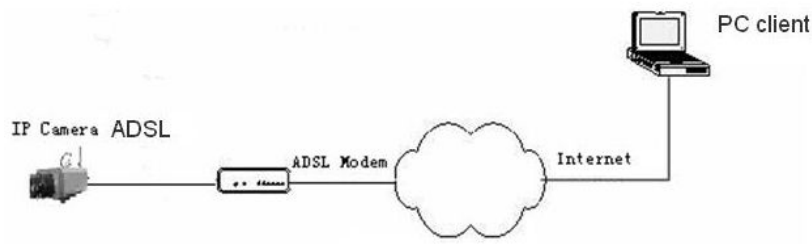
4. After save successfully, below screen appears:



5. If DDNS is successfully set in “Network Settings” of Network High Speed Dome, direct visit to the Network High Speed Dome can be realized via entering http://test.mvddns.net:85 into IE browser.

PPPOE dial-up access

For Network High Speed Dome dial-up access, see below picture for the network topology:



Setup steps:

1. Log in Network High Speed Dome via crossover cable direct connection.(For details, please refer to **Hardware Installation**)

2. Set PPPOE parameters.(for details, please refer to **PPPOE settings**)
3. Connect Network High Speed Dome to Internet.
4. If DDNS service is successfully set for the device, the device can be visited via entering domain name into IE browser.

Frequently asked questions

1.No video image displayed in IE browser.

Possible reason: ActiveX not installed

Solution: ActiveX must be installed when visiting Network High Speed Dome for the first time via Internet Explore.

How to install: Visit Network High Speed Dome, click **Download Address**, file download dialog will pop up, select **Run** or **Save** to download. After download finishes, installation interface will pop up, click **install**, the installation of ActiveX will start automatically, "Register OCX success" dialog box will pop up to remind the completion of installation process.

2.Fail to visit Network High Speed Dome via IE after upgrade.

Solution: Delete the caching of Browser:

Open IE→click **Tool**→select "Internet Options"→click **delete files** button in "Internet temporary files"→ select "delete all offline contents"→click **OK** and re-log in Network High Speed Dome.

3.The images do not flow.

Possible reason 1: The frame rate of Network High Speed Dome is too low.

Solution: Increase the video frame rate

Possible reason 2: Too many users are viewing the images.

Solution: Block some clients or reduce the video frame rate.

Possible reason 3: The bandwidth is low.

Solution: Reduce video frame rate or video compression bit rate.

4.Fail to visit Network High Speed Dome via IE browser.

Possible Reason 1: Network is disconnected.

Solution: Connect your PC to network, checking whether it works properly or not. Check whether there is cable failure or network failure caused by PC virus, until PCs can be connected with the command of Ping.

Possible reason 2: IP Address has been occupied by other devices

Solution: Stop the connection between Network High Speed Dome and Network, hook up Network High Speed Dome to PC separately, reset IP address according to the proper operations recommended.

Possible reason 3: IP addresses are in different subnets.

Solution: Check IP address, subnet masking address of the DVS and the settings of Gateway.

Possible reason 4: Physical address of network conflict with Network High Speed Dome

Solution: Modify the physical address of Network High Speed Dome.

Possible Reason 5: Web port has been modified

Solution: Contact Network Administrator to obtain related information.

5.The color of images is abnormal (green or other colors).

Sometimes Network High Speed Dome images cannot display properly for the difference between Graphics Cards, the images appears to be green or other colors, then you should run the programme Config.exe (or run C:\windows/ system32\Config.exe)to set the following parameters of display buffer: auto-detection, used display card memory or system memory, then reopen IE and connect Network High Speed Dome.

6.There is no sound while monitoring.

Possible Reason 1: No audio input connection

Solution: Check audio connection of the host

Possible Reason 2: The audio option of Network High Speed Dome is off

Solution: Check audio parameter settings to see if you have opened the audio.

7.Search NVS software cannot find device.

Possible reason: Search NVS software adopts multicast protocol to perform searching. But the firewall forbids multicast data packet.

Solution: Disable the firewall.

8.Image processing doesn't work properly.

Possible Reason 1: System issue, DirectX function is disabled, which will cause slow display of images and abnormal color.

Possible Reason 2: Hardware issue, graphics card doesn't support image acceleration and hardware zooming functions.(For hardware issue, the only solution is to replace graphics card)

Solution: Install DirectX image drive, then Start → Run → input "**Dxdiag**"order.

Enable DirectDraw speedup, Direct3D speedup, AGP veins speedup in DirectX function. If they cannot be enabled, that means DirectX installation fails or hardware not supportive.