



Network Camera User Manual

Version: V7.1.18.3

◆ Statement

Thank you for purchasing our product. If there are any questions or requests, please do not hesitate to contact the dealer.

This manual applies to network fisheye camera.

This manual may contain several technical incorrect places or printing errors, and the content is subject to change without notice. The updates will be added to the new version of this manual. We will readily improve or update the products or procedures described in the manual.

◆ Please pay your attention to exceptions below:

- 1、Should any reasons below cause the product destroyed or service stop, we will assume no responsibility for your or third party's personal injury and property loss: ① No installation or use according to instruction strictly. ② For sake of state-building maintenance or public interest. ③ Cases of force majeure. ④ Your personal or third party reasons. (Include no limitation use of third party's products, software or components)
- 2、Our company has never guaranteed the products for improper or illegal purposes and uses. This product cannot be used as medical & safety devices or other applications that will cause danger or injury. And loss or responsibility caused by above uses, you must bear it by yourself.
- 3、With correct installation and use, this product can detect the illegal intrusion, but it can not avoid accidents and personal injury or property damage due to these accidents. Please be on the alert in your daily life, reinforce your safety awareness.
- 4、Our company assume no responsibility for any indirect or occasional or special or punitive damages, request, property damage or any loss of data or file. Within the max scope of law allowed, our company's compensation is no more than the products amount you paid.

◆ Safety Instruction

This manual is intended to ensure that user can use the product properly without danger or any property loss. Please read it carefully and take care of it for further reference. Precaution measures are divided into "warnings" and "cautions", as below:

Warnings: Neglecting any of the warnings may cause death or serious injury.

Cautions: Neglecting any of the cautions may cause injury or equipment damage.

 <p>Warning Follow these safeguards to avoid death or serious injury</p>	 <p>Caution Follow these precautions to Prevent potential injury or Property loss</p>
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Warning

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

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



Cautions

1. Make sure the power supply voltage is correct before using the camera.
2. Do not drop the camera or subject it to physical shock.
3. Do not touch sensor modules with fingers. If cleaning is necessary, use a clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period of time, put on the lens cap to protect the sensor from dirt.
4. Do not aim the camera lens at the strong light such as sun or incandescent lamp. The strong light can cause fatal damage to the camera.
5. The sensor may be burned out by a laser beam, so when any laser equipment is being used, make sure that the surface of the sensor not be exposed to the laser beam.
6. Do not place the camera in extremely hot, cold temperatures (the operating temperature should be between -30°C ~ 60°C), dusty or damp environment, and do not expose it to high electromagnetic radiation.
7. To avoid heat accumulation, good ventilation is required for a proper operating environment.
8. Keep the camera away from water and any liquid.
9. While shipping, the camera should be packed in its original packing.
10. Improper use or replacement of the battery may result in hazard of explosion. Please use the manufacturer recommended battery type.

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◆ Introduction

This manual describes in detail fisheye camera network connection, settings and web client and app client download, installation and interface operation.

1. System Requirement

Operating System: Microsoft Windows XP SP1 and above version / Vista / Win7 / Win 8 / Win 10 / Server 2003 / Server 2008 32bits

CPU: Intel Pentium IV 3.0 GHz or higher

RAM: 1G or higher

Display: 1024×768 resolution or higher

Web Browser: Internet Explorer 8 and above version, Safari 5.02 and above version, Mozilla Firefox 3.5 and above version and Google Chrome 4.5 and below version.

2. Network Connection

Before you start:

If you want to set the network camera via a LAN (Local Area Network), please refer to Section 2.1 Setting the Network Camera over the LAN.

If you want to set the network camera via a WAN (Wide Area Network), please refer to Section 2.2 Setting the Network Camera over the WAN.

2.1. Setting the Network Camera over the LAN

Purpose:

To view and configure the camera via a LAN, you need to connect the network camera in the same sub net with your computer, and install the IPC Search or [VMS](#) software to search and change the IP of the network camera.

2.1.1. Wiring over the LAN

The following figures show the two ways of cable connection of a network camera and a computer:

Purpose:

To test the network camera, you can directly connect the network camera to the computer with a network cable as below:



Set network camera over the LAN via a switch or a router as below:



2.1.2. Detecting and Changing the IP Address

You need the IP address to visit the network camera.

Steps:

- To get the IP address, you can choose either of the following methods:
 - ◆ Use IPC Search, a software tool which can automatically detect the online network cameras in the LAN and list the device information including IP address, sub net mask, port number, device serial number, device version, etc.as below.
 - ◆ Use the VMS client software to list the online devices. Please refer to the user manual of VMS client software for detailed information.
- Change the IP address and sub net mask to the same sub net as that of your computer.
- Enter the IP address of network camera in the address field of the web browser to view the live video.

Note:

- The default IP address is 192.168.1.168 and the port number is 80. The default user name is admin, and password is admin. And you are highly recommended change the initial password after your first login.
- For accessing the network camera from different sub nets, please set the gateway for the network camera after you logged in. For detailed information, please refer to Section 4.4.3.1 Configuring TCP/IP Settings.

Index	Model	Device Name	Firmware Version	IP address	Subnet Mask	GateWay	DNS
1	IPCAMERA	IPC	3518EV200_IMX323_...	172.18.196.178	255.255.248.0	172.18.192.2	172.18.192.2
2	IPCAMERA	IPC	DM365+AR0130_5.1.3.5	172.18.190.111	255.255.248.0	172.18.189.189	172.18.189.189
3	HS_DVR	DVR	DVR_3531_16_AHD_M...	172.18.190.44	255.255.248.0	172.18.188.188	172.18.188.188
4	HS_DVR	DVR	DVR_3531_16_AHD_M...	172.18.190.50	255.255.248.0	172.18.189.189	172.18.189.189
5	IPCAMERA	IPC	S2L55M_OV4689_X_6...	172.18.194.194	255.255.248.0	172.18.192.2	172.18.192.2
6	IPCAMERA	IPC	S2L55M_OV4689_X_6...	172.18.193.18	255.255.248.0	172.18.192.2	172.18.192.2
7	IPCAMERA	IPC	S2L55M_OV4689_X_6...	172.18.196.113	255.255.248.0	172.18.192.2	172.18.192.2
8	IPCAMERA	IPC	S2L33M_IMX322_X_6...	192.168.0.2	255.255.248.0	172.18.192.2	172.18.192.2
9	DVR	DVR	DVR_3531_16_AHD_M...	172.18.190.53	255.255.248.0	172.18.188.188	172.18.188.188
10	IPCAMERA	IPC	S2L55M_OV4689_W_6...	172.18.190.241	255.255.248.0	172.18.190.1	172.18.190.1
11	IPCAMERA	IPC	DM368+IMX222_X_5...	172.18.195.14	255.255.248.0	172.18.192.2	172.18.192.2
12	IPCAMERA	IPC	S3L33M_IMX290_W_6...	172.18.196.207	255.255.255.0	172.18.192.2	172.18.192.2
13	IPCAMERA	IPC	S3L33M_IMX290_W_6...	172.18.197.98	255.255.248.0	172.18.192.2	172.18.192.2
14	IPCAMERA	IPC	S2L33M_IMX322_W_6...	172.18.199.158	255.255.248.0	172.18.192.2	172.18.192.2
15	IPCAMERA	IPC	S2L33M_IMX322_W_6...	172.18.199.66	255.255.248.0	172.18.192.2	172.18.192.2
16	IPCAMERA	IPC	S2L33M_IMX322_W_6...	172.18.194.200	255.255.248.0	172.18.192.2	172.18.192.2
17	NVR	NVR	NVR_HI3798_9_v6.1.34...	172.18.198.88	255.255.248.0	172.18.192.2	202.96.1.1
18	IPCAMERA	IPC	S2E66_IMX178_W_6.1...	172.18.194.27	255.255.248.0	192.168.1.1	192.168.1.1

2.2. Setting the Network Camera over the WAN

Purpose:

This section explains how to connect the network camera to the WAN with a static IP or a dynamic IP.

2.2.1. Static IP Connection

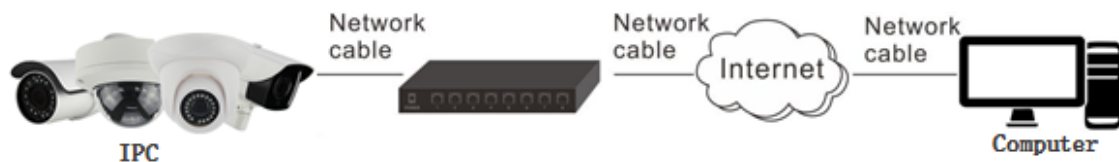
Before you start:

Please apply a static IP from an ISP (Internet Service Provider). With the static IP address, you can connect the network camera via a router or connect it to the WAN directly.

• Connecting the network camera via a router

Steps:

- (1) Connect the network camera to the router.
- (2) Assign a LAN IP address, the sub net mask and the gateway. Refer to *Section 2.1.2 Detecting and Changing the IP Address* for detailed IP address configuration of the camera.
- (3) Save the static IP in the router.
- (4) Set port mapping, e.g., 80, 8000, and 554 ports. The steps for port mapping vary according to the different routers. Please call the router manufacturer for assistance with port mapping.
- (5) Visit the network camera through a web browser or the client software over the internet.



• Connecting the network camera with static IP directly

You can also save the static IP in the camera and directly connect it to the internet without using a router. Refer to *Section 2.1.2 Detecting and Changing the IP Address* for detailed IP address configuration of the camera.



2.2.2. Dynamic IP Connection

Before you start:

Please apply a dynamic IP from an ISP. With the dynamic IP address, you can connect the network camera to a modem or a router.

• Connecting the network camera via a router

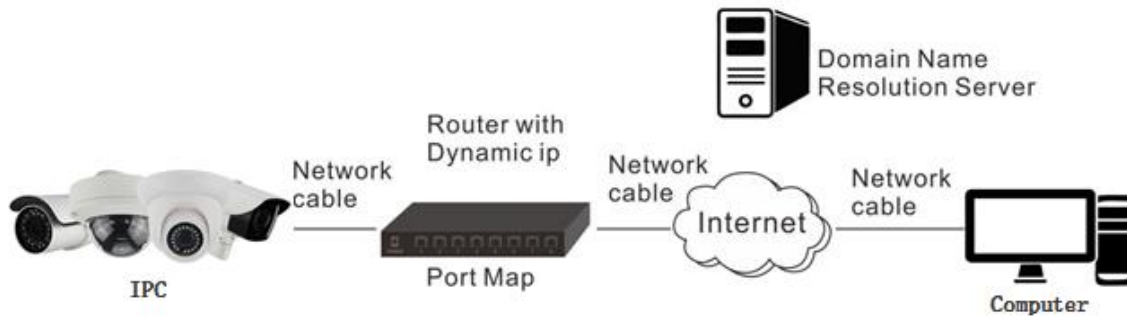
Steps:

- (1) Connect the network camera to the router.
- (2) In the camera, assign a LAN IP address, the sub net mask and the gateway. Refer to *Section 2.1.2 Detecting and Changing the IP Address* for detailed LAN configuration.
- (3) In the router, set the PPPoE user name, password and confirm the password.
- (4) Set port mapping. E.g. 80, 8000, and 554 ports. The steps for port mapping vary depending on different routers. Please call the router manufacturer for assistance with port mapping.
- (5) Apply a domain name from a domain name provider.
- (6) Configure the DDNS settings in the setting interface of the router.
- (7) Visit the camera via the applied domain name.

Note: The obtained IP address is dynamically assigned via PPPoE, so the IP address always changes after rebooting the camera. To solve the inconvenience of the dynamic IP, you need to get a domain name from the DDNS provider (E.g. DynDns.com). Please follow the steps below for normal domain name resolution and

private domain name resolution to solve the problem.

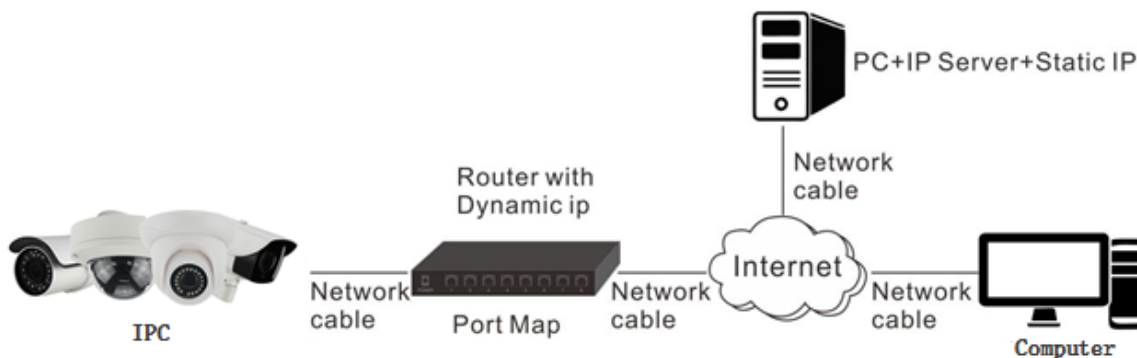
● Normal Domain Name Resolution



Steps:

- (1) Apply a domain name from a domain name provider.
- (2) Configure the DDNS settings in the DDNS Settings interface of the network camera. Refer to Section 4.4.3.2 Configuring DDNS Settings for detailed configuration.
- (3) Visit the camera via the applied domain name.

● Private Domain Name Resolution



Steps:

- (1) Install and run the IP Server software in a computer with a static IP.
- (2) Access the network camera through the LAN with a web browser or the client software.
- (3) Enable DDNS and select IP Server as the protocol type. Refer to Section 5.3.4 Configuring DDNS Settings for detailed configuration.

3. Access to the Network Camera by Client Software

The product CD contains the VMS client software. You can view the live video and manage the camera with the software.

Follow the installation prompts to install the software. The control panel and live view interface of VMS client software are shown as bellow.

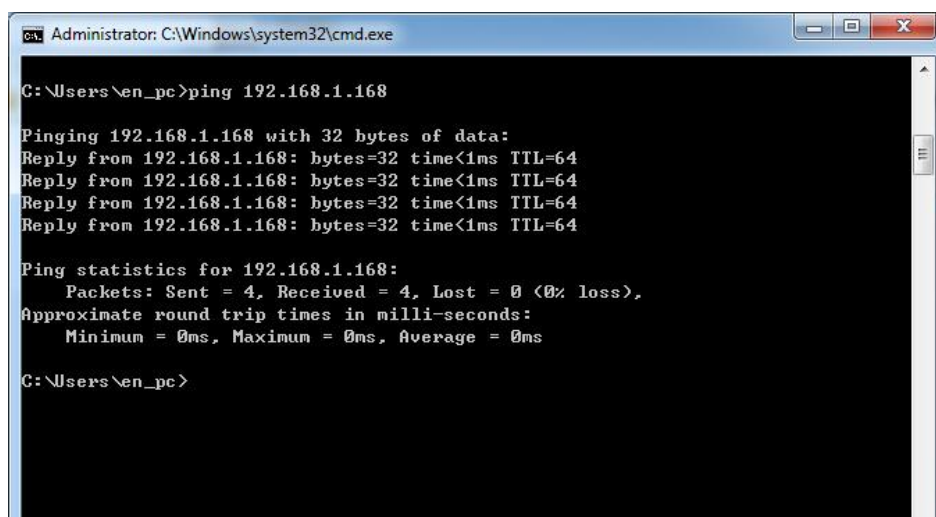


Note: For detailed information about the software, please refer to the user manual of the VMS Client Software.

4. Access to the Network Camera by Web Client

4.1. Preparation Before Install

In ensuring the IPC and the current user's computer after completion of all the hardware connection and power equipment normal, open the computer, run ping the IP address of the IPC (Note: the IP address of the IPC in LAN must be unique). Such as IPC IP for 192.168.1.168, run ping 192.168.1.168. If there is a response to the IPC as shown in the figure below, said the network connection is normal, you can download the plug-in.



```
Administrator: C:\Windows\system32\cmd.exe

C:\Users\en_pc>ping 192.168.1.168

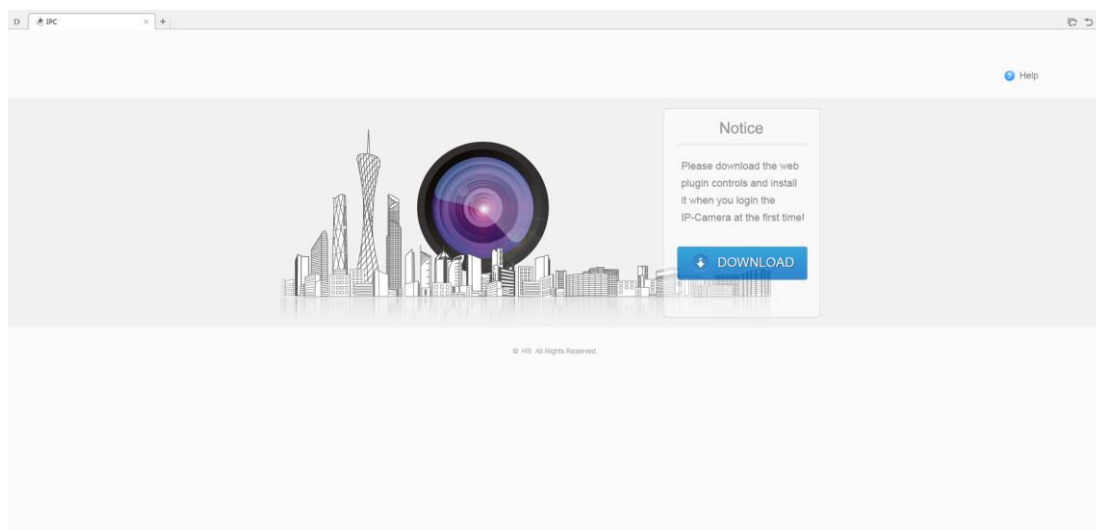
Pinging 192.168.1.168 with 32 bytes of data:
Reply from 192.168.1.168: bytes=32 time<1ms TTL=64
Reply from 192.168.1.168: bytes=32 time<1ms TTL=64
Reply from 192.168.1.168: bytes=32 time<1ms TTL=64
Reply from 192.168.1.168: bytes=32 time<1ms TTL=64


Ping statistics for 192.168.1.168:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\en_pc>
```

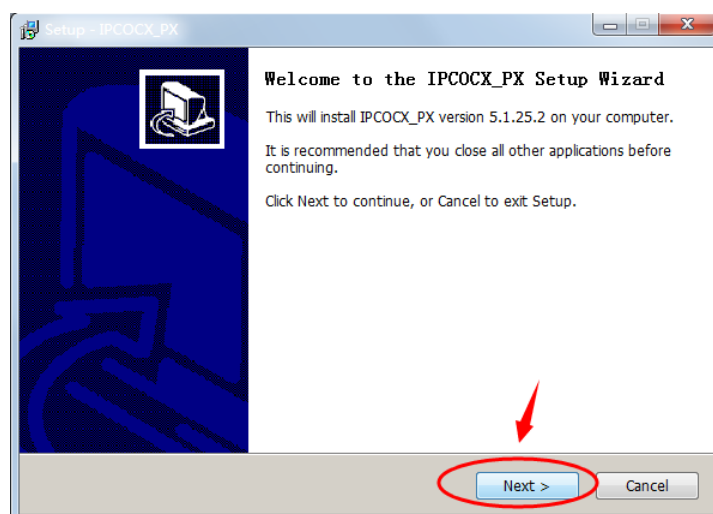
4.2. Install the HsWebplugin.exe Controls

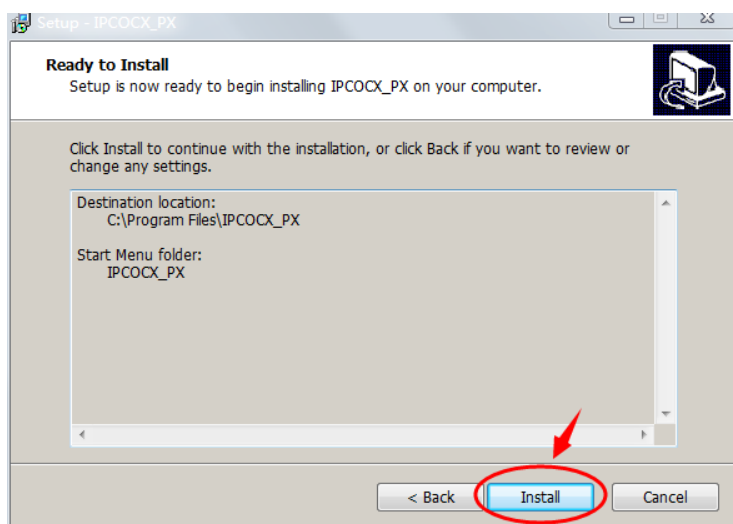
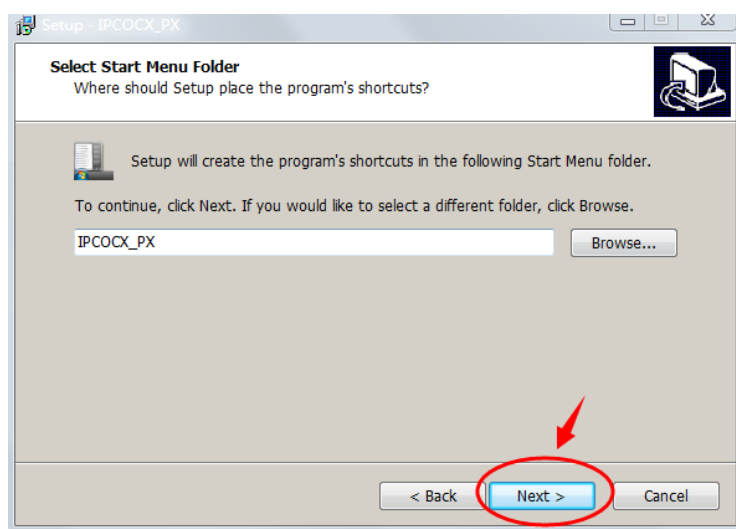
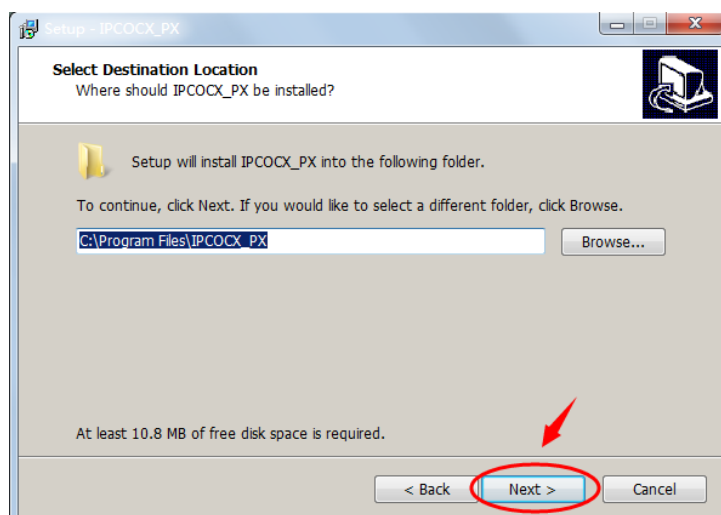
Please open the IE browser and input the IP address of IPC in the address bar.(For the first time to use the default address is: <http://192.168.1.168>), you will be prompted to download information. As shown below:

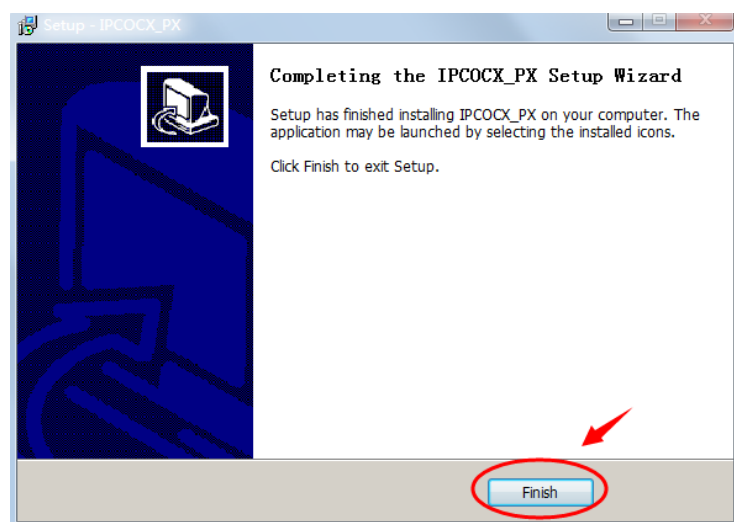
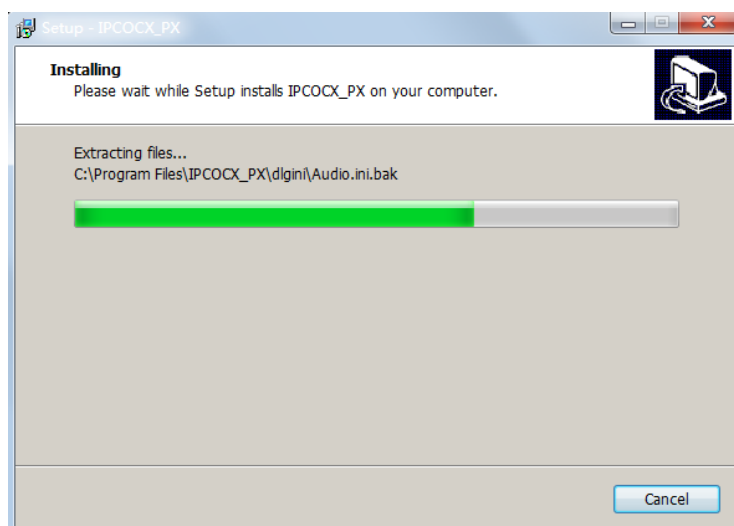


Click  to download, and you can choose "Run" or save directly the installation. As shown below: click "Run".

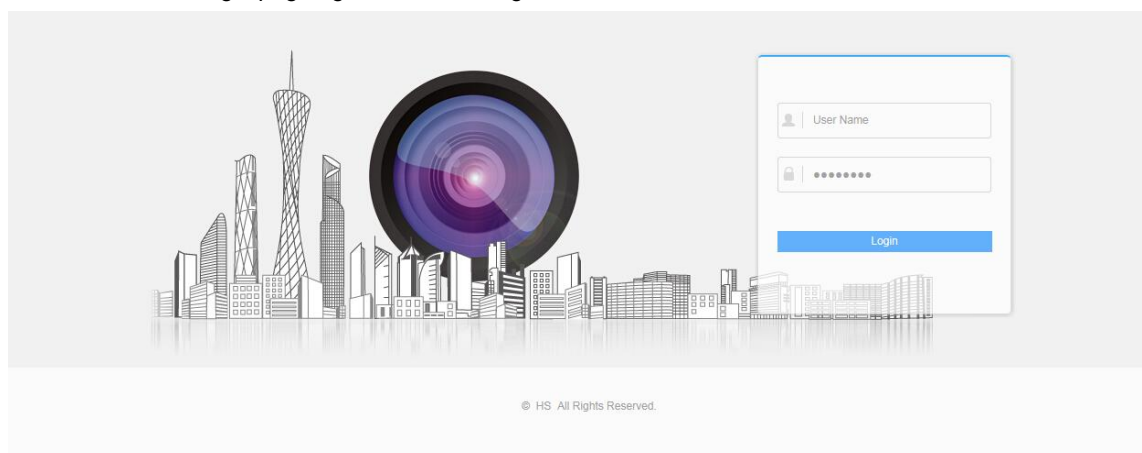
Will pop up the Setup Wizard after click "Run" , as shown below:



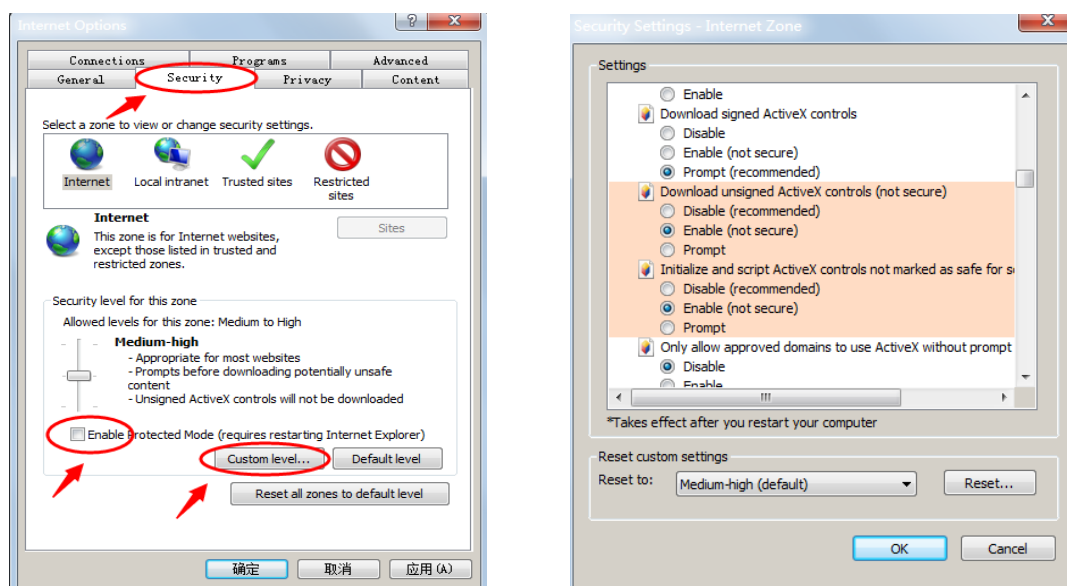




Click "Finish" and login page again, enter the login interface as shown below:



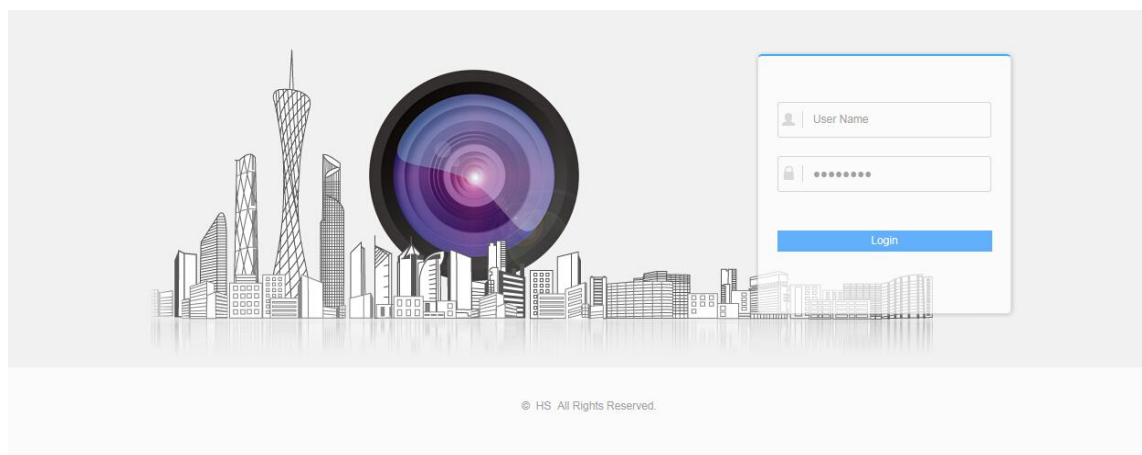
Note: If the system prompt "installation failure", please uncheck the "cancel protection mode" in the setting safety of "Internet options" and enter the "custom level" ActiveX control Settings as shown below, and reinstall HsWebplugin.exe after save settings.



4.3. Interface operations and Usage:

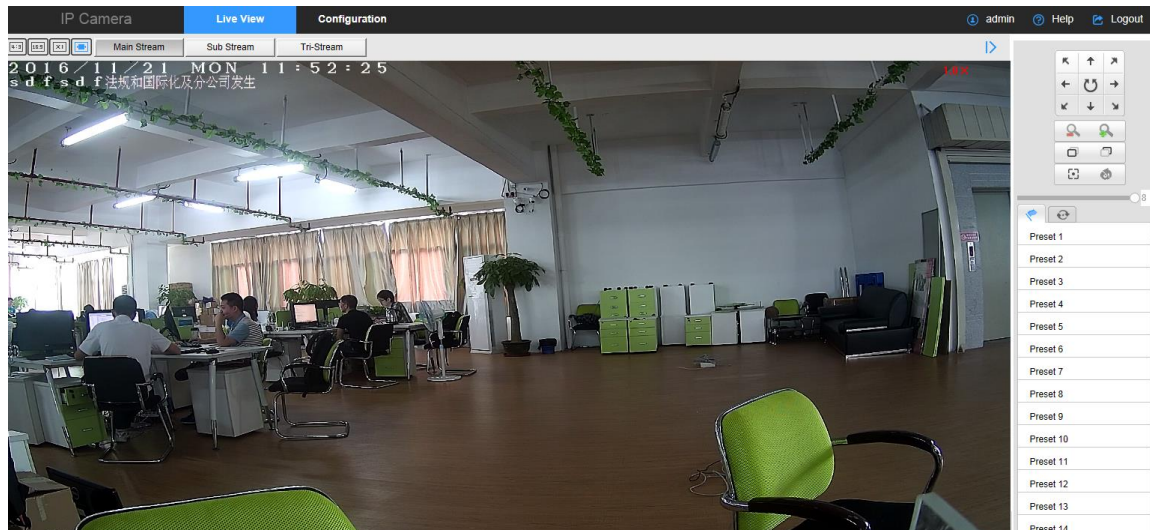
4.3.1. Login

Login for the first time must input account: " admin " and password: " admin " on the login interface as below.




4.3.2. Live preview


4.3.2.1. Video Preview



【switching window size】In the real-time preview interface on the top left of the preview ratio option, click "4: 3", "16: 9", "X1", "full screen" to switch the video preview scale.

【switching option】In the upper left of the real-time preview interface, there is a stream switching option. Click "Main Stream", "Sub Stream" and "Triple Stream" to switch preview video stream.


【Capturing Pictures Manually】In the live view interface, click  on the toolbar to capture the live pictures. The captured image will be saved as JPEG file in your computer. The saving paths of the captured pictures and clips can be set on the Configuration > Local Configuration page.







【Recording Pictures Manually】In the live view interface, click  to record the live view. The recorded file will be saved as avi file in your computer. The saving paths of the recorded can be set on the Configuration > Local Configuration page.

In the live view window as follow Figure, click ►/■ on the toolbar to start/stop the live view of the camera.



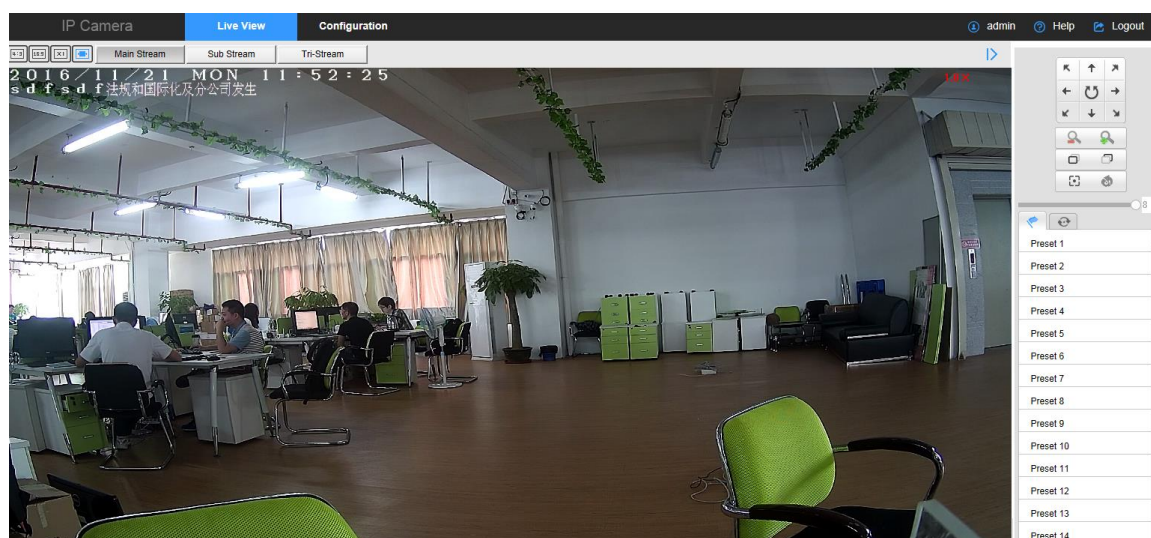
The preview interface operation buttons are shown in the following table.


Icon	Description
►/■	Start/Stop live view.
	The window size is 4:3.

	The window size is 16:9.
	Self-adaptive window size.
	Manually capture the picture.
	Manually start/stop recording.
	Open/close talk back
	Turn on/off Sound.

4.3.2.2. Camera settings PTZ, zoom, cruise

In the live view interface, you can use the PTZ control buttons to realize pan/tilt/zoom control of the camera.



【PTZ control】 On the live view page, click  to show the PTZ control panel or click  to hide it.




① PTZ direction control

Click the direction buttons to control the pan/tilt movements.



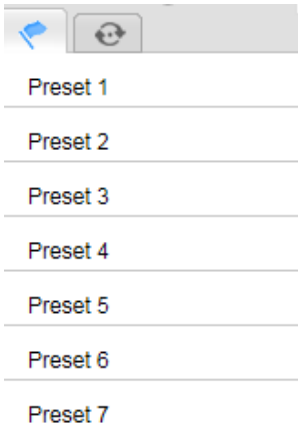
There are 8 direction arrows () in the live view window when you click in the relative positions.

The PTZ interface operation buttons are shown in the following table.


Icon	Description
	Auto Scan
	Zoom in/out
	Adjust speed of pan/tilt movements

② Setting a Preset

(1) In the PTZ control panel, select a preset number from the preset list.



(2) Use the PTZ control buttons to move the lens to the desired position.
Pan the camera to the right or left.
Tilt the camera up or down.
Zoom in or out.


(3) Click  to finish the setting of the current preset.

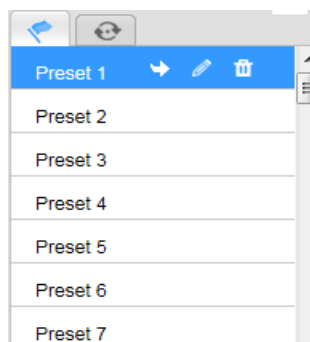
(4) You can click  to delete the preset.

Note: You can configure up to 128 presets.

③ Calling a Preset

This feature enables the camera to point to a specified preset scene manually when an event takes place. For the defined preset, you can call it at any time to the desired preset scene. In the PTZ control panel,

select a defined preset from the list and click  to call the preset.





④ Setting / Calling a Cruise



Note:

No less than 2 presets have to be configured before you set a cruise.

Steps:

- (1) Click  to enter the cruise configuration interface.
- (2) Select a path No., and click  to add the configured presets.
- (3) Select the preset, and input the cruise duration and cruise speed.
- (4) Click OK to save the first preset.
- (5) Follow the steps above to add the other presets.

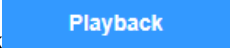
(6) Click  to save a cruise.

(7) Click  to start the cruise, and click  to stop it.

(8) (Optional) Click  to delete a cruise.

Note: Normal camera no PTZ, zoom, cruise settings interface, please take the camera physical specific functions shall prevail.

4.4. Playback

In the main interface, click  into the video playback interface.






Here you can query the video files in the SD card according to the recording type (Normal Record, Alarm Record) and recording time, playback, screenshot, clip and download to the video file.

Note: No SD card storage video camera and no video playback settings interface, please take the camera physical specific functions shall prevail.

4.5. Network Camera Configuration

4.5.1. Local Configuration

Click    into the parameter configuration screen, where you can manually choose image format, and set the storage path for you record video files, log export files as well as capture files. As shown below:

IP Camera		Live View	Playback	Configuration
Local Configuration		Local Configuration		
Local Configuration				
System	Record File Settings			
Network	Save record files to	C:\Users\summer	Browse	
Video	Save downloaded files to	C:\IPC\DownloadFiles	Browse	
Image	Picture and Clip Settings			
Events	Save capture files in live view to	C:\Users\summer	Browse	
	Save capture files when playback to	C:\IPC\PlaybackPics	Browse	
	Save clips to	C:\IPC\PlaybackFiles	Browse	
	Anmelden Export			
	Log export save path	C:\Users\summer	Browse	

【Record File Settings】 Set the saving path of the recorded video files. Valid for the record files you recorded with the web browser.

【Save record files to】 Set the saving path for the manually recorded video files.

【Save downloaded files to】 Set the saving path for the downloaded video files in playback mode.

【Picture and Clip Settings】 Set the saving paths of the captured pictures and clipped video files. Valid for the pictures you captured with the web browser.

【Save capture files in live view to】 Set the saving path of the manually captured pictures in live view mode.

【Save capture files when playback to】 Set the saving path of the captured pictures in playback mode.

【Save clips to】 Set the saving path of the clipped video files in playback mode.

【Picture and Clip Settings】 Set the saving paths of the captured pictures and clipped video files. Valid for the pictures you captured with the web browser.

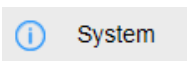
【Save capture files in live view to】 Set the saving path of the manually captured pictures in live view mode

【Anmelden Export】 Set the saving paths of the exported log

【Log export save path】 Set the saving path of the exported log

Note: You can click **Browse** to change the directory for saving the clips and pictures.

4.5.2. System

Click  into the system configuration interface.

4.5.2.1. System Configuration

① Device Information

IP Camera		Live View	Playback	Configuration	
Local Configuration	Device Information	Time Settings	DST	Maintenance	Fisheye Parameters
System	Basic Information				
System Configuration	Device Name	IPC			
Scheduled Reboot	Firmware Version	S2E66_IMX178_W_6.1.45.4			
Log Search	Software Version	6.1.46.3			
Security	WEB Version	6.1.45.161031			
SDCard	Number of Channels	1			
Network					
Video					
Image					
Events					

Here you can see the basic information of the current device.

【Device Name】The name of the current IPC.

【Firmware Version】The current version of the IPC.

【Software Version】The current HsWebplugin.exe control version of the IPC.

【WEB Version】The current page version of the IPC.

【Number of Channels】The current channels of the IPC, the default is 1.

② Time Setting

Click “Time Setting” into the set the time interface.

IP Camera		Live View	Playback	Configuration	
Local Configuration	Device Information	Time Settings	DST	Maintenance	Fisheye Parameters
System	Time Settings				
System Configuration	Time Zone	GMT+08 Taipei, Beijing, Chongqing, Urumqi, Hong Kong, Perth			
Scheduled Reboot	Time Sync.				
Log Search	Time in Camera	2016-11-24 16:17:30			
Security	<input type="radio"/> NTP				
SDCard	SNTP Server	time.windows.com			
Network		time.nist.gov			
Video	<input type="radio"/> Set Manually				
Image	Time Settings	2016-11-24 16:17:18			
Events	<input checked="" type="radio"/> Synchronize with computer time				
	Computer time	2016-11-24 16:16:20			
	<input checked="" type="checkbox"/> NVR prohibit modification IPC Time				

【NTP】The IPC time will synchronization with network, and you can change the different time zones. (This feature requires that IPC network environment can connect to the Internet.) Click on the "Save" after completing the settings.

【Set Manually】Setting the IPC 's date and time manually. Click on the "Save" after completing the settings.

【Synchronize with computer time】The IPC will synchronize with the computer time and date that your connect currently. Click on the "Save" after completing the settings.

【NVR prohibit modification IPC time】The IPC time will be not affected by the backend storage devices (such as NVR and XVR, etc.) after check this option. The IPC 's time will be running according to the user settings.

③ DST

Click "DST" into the daylight saving time setting interface.

The screenshot shows the 'IP Camera' web interface with the 'Configuration' tab selected. Under 'Configuration', the 'DST' sub-tab is active. The left sidebar shows 'Local Configuration' and 'System' (with 'System Configuration' highlighted). The main content area has a sub-header: 'Device Information | Time Settings | DST | Maintenance | Fisheye Parameters'. Below this, there is a checkbox 'Enable DST' which is checked. To the right of the checkbox are three rows of settings: 'Start Time' (Apr, First, Sun, 02), 'End Time' (Oct, The End, Sun, 02), and 'DST Bias' (30 minutes).

To enable daylight saving time here, set the start time, end time, and offset time for Daylight Saving Time.

④ Maintenance

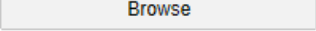
Click "Maintenance" into the setup interface.

The screenshot shows the 'IP Camera' web interface with the 'Configuration' tab selected. Under 'Configuration', the 'Maintenance' sub-tab is active. The left sidebar shows 'Local Configuration', 'System', and 'Network' (with 'Network' highlighted). The main content area has a sub-header: 'Device Information | Time Settings | DST | Maintenance | Fisheye Parameters'. Below this, there are three main sections: 'Reboot System' with a 'Reboot System' button and a 'Reboot' button; 'Default' with a 'Restore Factory Settings' button and a note 'Fully restore the device parameters to the factory settings'; and 'Upgrade' with a 'Firmware' section containing a file input field, a 'Browse' button, and an 'Upgrade' button. Below the 'Firmware' section is a 'Connection status' section with a progress bar and a 'Note' stating: 'The upgrade process will take about 1-5 minutes, please do not turn off the power, The device reboots automatically after upgrading.'

【Reboot System】The IPC will restart again automatically after clicking "Reboot System".

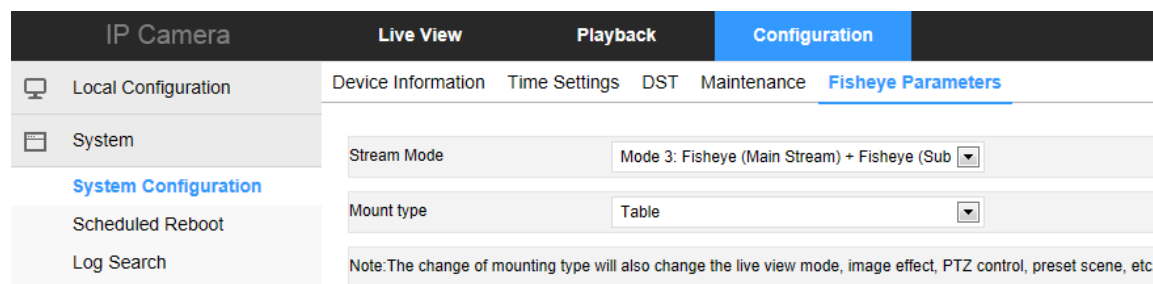
【Restore Factory Settings】The IPC will restore to factory default parameters automatically after clicking this option. (Camera IP and other network parameters will not be restored to the factory, other settings will

be restored to factory defaults. Please operate this function carefully).

【Firmware】Clicking  to add upgrade file package, and upgrading the IPC program. (Please careful operation, the error of upgrade file will cause equipment system operate abnormally).


⑤ Fisheye Parameters

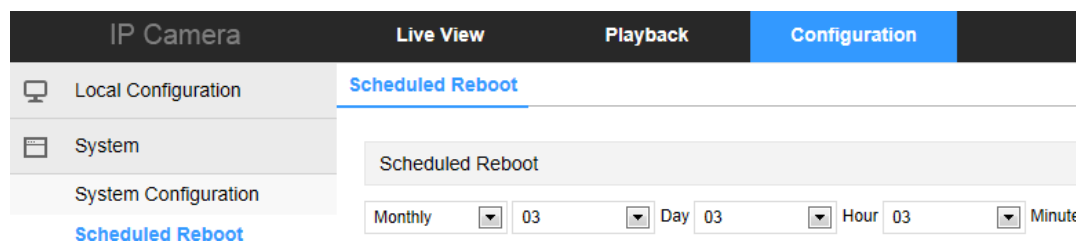
Click “Fisheye Parameters” into the fisheye parameter setting interface.



Here you can set stream mode and mount type, select stream mode different camera output corresponding to the different stream.


4.5.2.2. Scheduled Reboot

Click  into the scheduled reboot interface.



It can be set "cycle" and "time" from the pull down menu, such as setting "every day to restart in 1:00 am", click to save. The IPC will be restarting every day at 1:00 am.

4.5.2.3. Log Search

Click  into the log search interface.

ID	Time	Detail
1	2016-11-24 16:27:34	Motion Alarm
2	2016-11-24 16:21:33	Motion Alarm
3	2016-11-24 16:17:36	Motion Alarm
4	2016-11-24 16:16:15	Motion Alarm
5	2016-11-24 16:15:25	Motion Alarm
6	2016-11-24 16:15:15	Motion Alarm
7	2016-11-24 16:14:41	Motion Alarm
8	2016-11-24 16:14:29	Motion Alarm

【Search】 It can find running record of IPC from the start time to end time.

【Clear】 Clicking clear button to empty all logging.

【Anmelden Export】 Save the contents of the current log to the location you specified in txt format.

4.5.2.4. Security

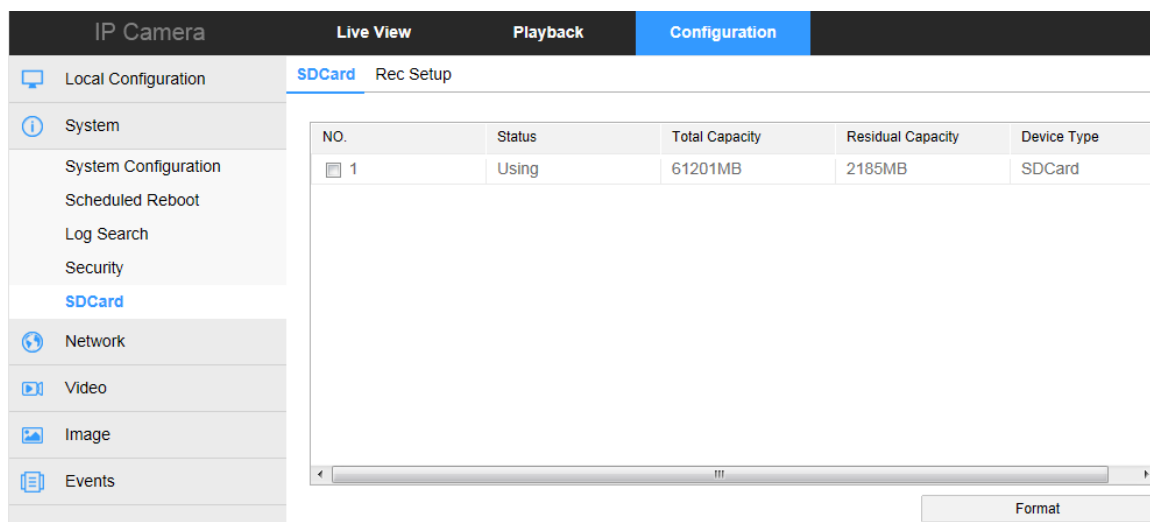
Click **Security** into the user management interface.

Viewer	Authority	Edit	Delete
admin	Admin	Edit	

Here you can click “Edit” to modify the original account password, and click“ Add User ”to create / delete an administrator account, create / delete operator account, or create / delete user account, a total of 10 accounts can be created. The system administrator account is prohibited to delete.

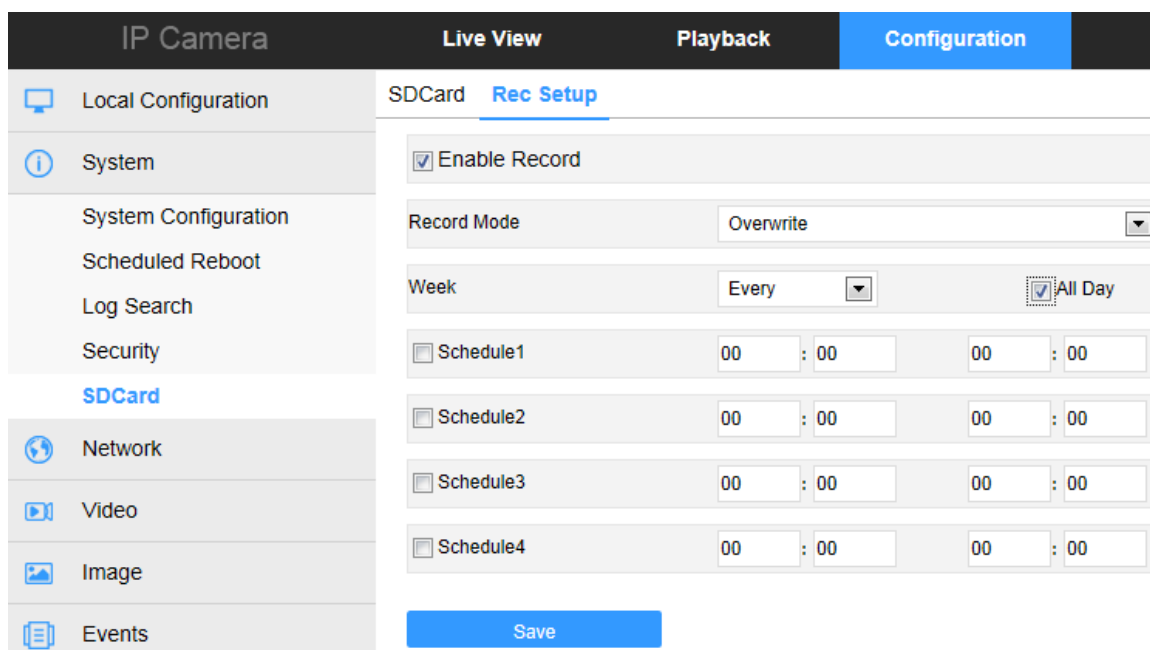
4.5.2.5. SD Card

Click **SDCard** into the SD card management interface.



Here you can view the SD card detected in the camera, and SD card format.


Click "Rec Setup" into the recording setting interface.



Here you can open the SD card video, set the SD card recording schedule and recording mode.

Note: No SD card video recording function of the camera No SD card management interface, please take the camera physical specific functions shall prevail.

4.5.3. Network

Click  Network into the network setting interface.

4.5.3.1. Basic Setup

The screenshot shows the 'IP Camera' configuration interface. The 'Configuration' tab is selected, and the 'Basic Setup' sub-tab is active. The left sidebar contains a menu with 'Local Configuration', 'System', 'Network', 'Basic Setup', 'Advance Setup', 'Video', 'Image', and 'Events'. The main area is titled 'NIC Settings' and includes a 'DHCP' checkbox (checked), 'IPv4 Address' (172.18.194.27), 'IPv4 Subnet Mask' (255.255.248.0), 'IPv4 Default Gateway' (192.168.1.1), and a 'Test' button. Below this is the 'DNS Server' section with 'Preferred DNS Server' (192.168.1.1).

① TCP/IP

The IPC is connected to the router that have opened the DHCP function, check the DHCP option, and the IPC can be get automatically IP address、Net mask、Default Gateway and DNS。Don't check the DHCP, you can manually modify the IP address、Net mask、Default Gateway and DNS for IPC.

② Port

Click "port" into the port settings interface, can manually modify the IPC's HTTP, RTSP and other port numbers.

The screenshot shows the 'IP Camera' configuration interface with the 'Port' sub-tab selected. The left sidebar is the same as the previous screenshot. The main area is titled 'Port' and includes 'HTTP Port' (80), 'RTSP Port' (554), and 'HTTPS Port' (443). Below this is the 'Protocol Port' section with 'ONVIF Port' (8999) and 'HIK Port' (8000), each with a checkbox for 'ONVIF Protocol Enable' and 'HIK Protocol Enable' respectively, both of which are checked.

4.5.3.2. Advance Setup

Click [Advance Setup](#) into the advance network setting interface.

① DDNS

IP Camera		Live View	Playback	Configuration			
Local Configuration	DDNS	FTP	SMTP	P2P	Cloud	Other	
System							
Network							
Basic Setup							
Advance Setup							
Video							
Image							
Events							

DDNS

☐ DDNS

DDNS Type

Site Name

DDNS Account

DDNS Password

Confirm Password

Status Login failed

Service Type Ordinary User

Links to service providers [Oray DDNS to apply](#) [Oray DDNS to help](#)

Open the DDNS (Dynamic Domain Name Server), click the link to register DDNS service account. Fill in the account name and password that you registered. Then you can access your IPC through DDNS. (Note: IPC must be connected to the Internet).

② FTP

Click“FTP”into the FTP setting interface.

IP Camera		Live View	Playback	Configuration			
Local Configuration	DDNS	FTP	SMTP	P2P	Cloud	Other	
System							
Network							
Basic Setup							
Advance Setup							
Video							
Image							
Events							

FTP

FTP Server

Port

User Name ☐ Anonymous

Password

Confirm Password

FileUpload

☐ AutoCover

Upload Via FTP

【FTP Server】 Fill in the FTP server address.

【Port】 Fill in the FTP server port number.

【User Name】 Fill in the FTP server username.

【Password】 Fill in the FTP server password.

【Confirm Password】 Fill in the FTP server password.

【File Upload】 Automatically creates a folder that you named in the FTP storage path.

【Auto Cover】 When enabled, the oldest FTP server will be overwritten automatically when the FTP server is full.

【Upload Via FTP】 In the drop-down menu, select FTP file format, JPEG image format and AVI video for selection. Click on the "Save" after completing the settings.

③ SMTP

Click“SMTP”into the SMTP setting interface.

IP Camera		Live View	Playback	Configuration		
Local Configuration	DDNS	FTP	SMTP	P2P	Cloud	Other
System						
Network						
Basic Setup						
Advance Setup						
Video						
Image						
Events						
Sender						
Sender	user@domain.com					
SMTP Server	smtp.domain.com					
Port	25					
Upload Via SMTP	MESSAGE					
Alarm Duration	10 s					
<input type="checkbox"/> My Server Requires Authentication						
User Name	smtpuser					
Password	••••					
Confirm Password	••••					
Receiver						
Email1	user@domain.com				Test	
Email2					Test	
Email3					Test	

Sender

【Sender】 Fill out the full address of the sender mailbox.

【SMTP Server】 Fill in your email server address.

【Port】 Fill in your email server port.

【Upload Via SMTP】 In the drop-down menu, select SMTP file format, JPEG image format, AVI video and message for selection. Click on the "Save" after completing the settings.

【Alarm Duration】 Set the sending interval.

【My Server Requires Authentication】 When enabled, the server and user are authenticated to ensure that the data is sent to the correct client and server.

【User Name】 Fill out the send mailbox user name.

【Password】 Fill out the send mailbox password.

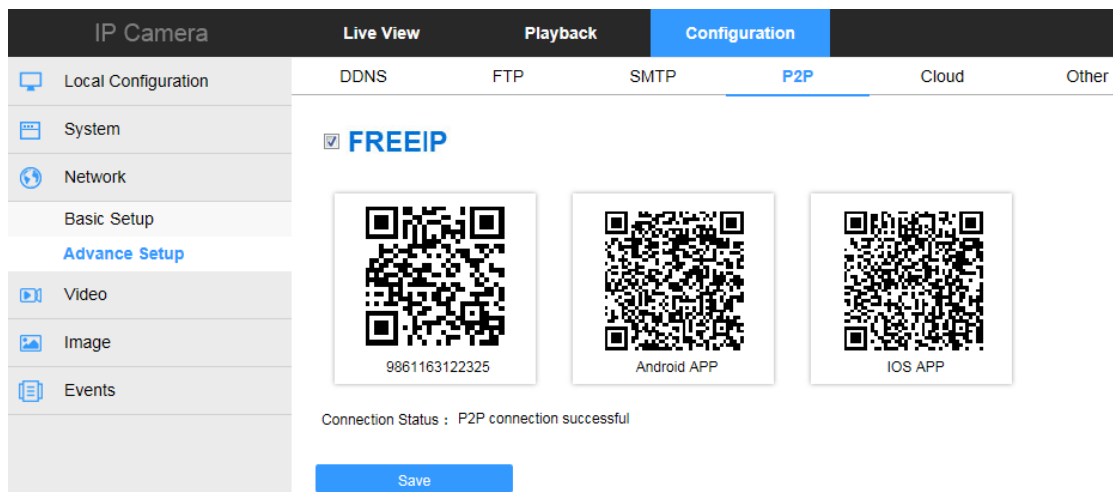
【Confirm Password】 Fill out the send mailbox password.

Receiver

【Email】 Fill in the full address of your inbox, here up to 3 inboxes, click on the completion of the completion of the "test" to ensure that all the correctness of the input information and network connectivity of the camera.

④ P2P

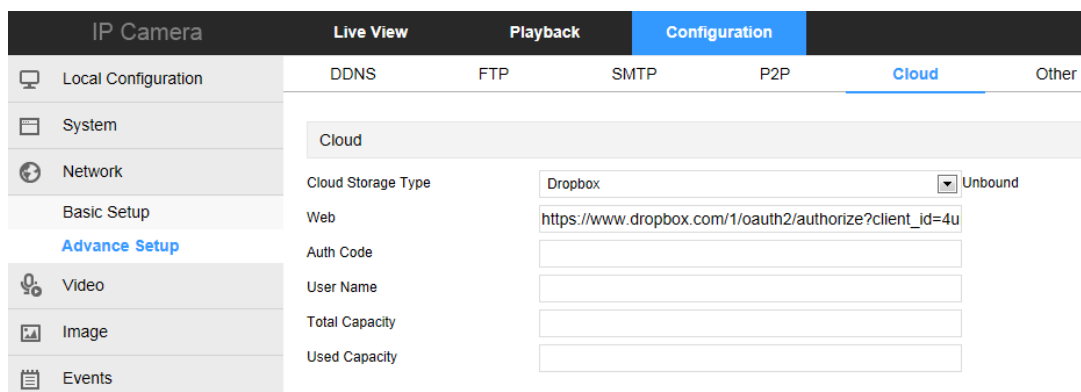
Click "P2P" into P2P configuration interface.



This function is mainly used mobile client for remote monitoring. Currently, the FreeIP PRO client we offer has Android version and iOS version. Users can be added to the appropriate mobile client by scanning the QR code. (Remote monitoring requirements IPC connected to the Internet).

⑤ Cloud

Click "Cloud" into the cloud setting interface.



【Cloud Storage Type】 Select the cloud storage type, Dropbox or Google in the drop-down menu.

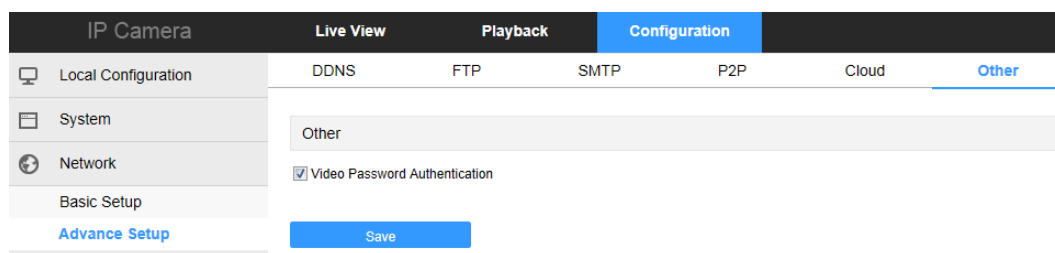
【Web】 Depending on the type of cloud storage selection play a cloud url, login web site registered account according to clew clouds.

【Auth Code】 Login cloud web, the verification code will display on the cloud storage interface, than copy it in the space.

Fill in the verification code, click on the "Bind" after the success. "User name", "Total Capacity" and "Used Capacity" that information will be automatically displayed.

⑥ Other

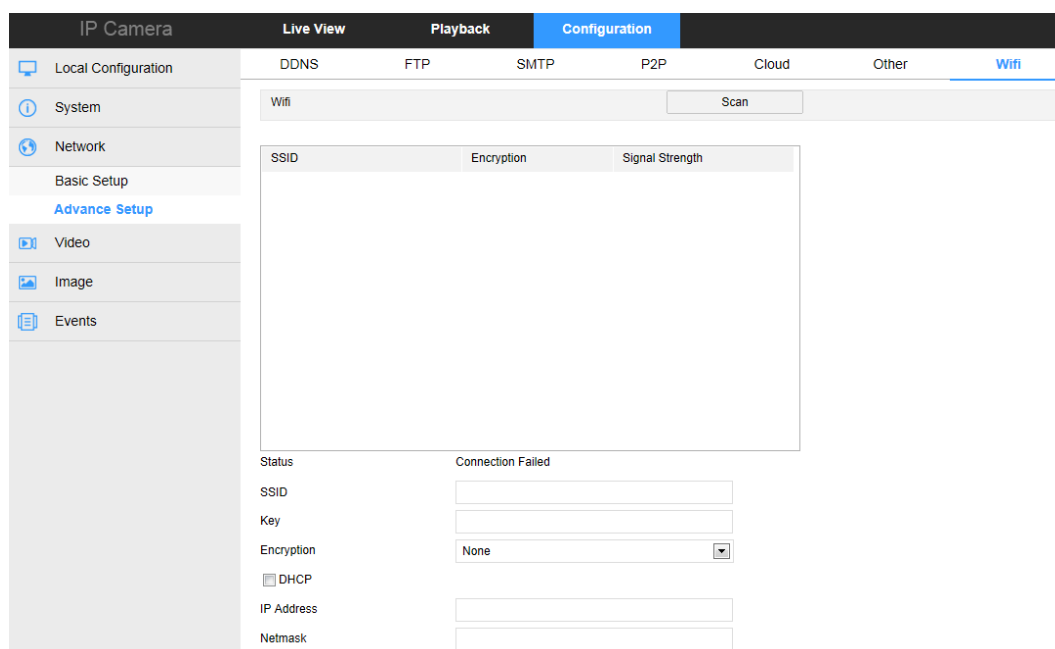
Click "Other" into the video and audio setting interface.



Here, the video password authentication is enabled. All the devices connected to the camera through the ONVIF protocol must be connected to the camera.

⑦ Wifi


Click "Wifi" into the video and audio setting interface.



Here you can configure the camera to connect the WiFi to the camera, click Scan to search for a nearby WiFi connection, select the camera you want to connect to WiFi, enter the WiFi password, turn DHCP on or not, and click Save.

Note: Normal camera no "Wifi" setting interface, please take the camera physical specific functions shall prevail.

4.5.4. Video

Click  **Video** into the video and audio setting interface.

4.5.4.1. Video

The screenshot displays the 'IP Camera' configuration interface with the 'Configuration' tab active. On the left, a sidebar lists various settings: Local Configuration, System, Network, Video, Audio, Image, and Events. The 'Video' section is expanded, showing a 'Video' sub-tab. The main area contains the following settings:

- Device Name:** IPC
- Stream Type:** Tri-Stream (dropdown menu)
- Codec:** H264:2048x1536,H264:720x480,H264:352x288 (dropdown menu)

Below these, a detailed configuration for 'Stream1' is shown, with tabs for Stream1, Stream2, and Stream3. The 'Stream1' tab is active, displaying:

- Framerate:** 30 (dropdown menu) fps
- Bit Rate:** 6144 (dropdown menu) Kbps
- Rate Control:** CBR (dropdown menu)
- I-Frame Interval:** 1 (dropdown menu) s
- Profile:** Main Profile (dropdown menu)

A 'Save' button is located at the bottom of the configuration area.

【Device Name】 Setting your camera name.

【Stream Type】 Here Single/Third available.

【Codec】 Choose coding and resolution. (Note: The coding scheme is based on the actual scheme type.)

【Framerate】 Set the frame rate of the current output video of the device. (Note: Frame rate is too low will cause the video caton)

【Bit Rate】 Support 64-12000kbps. The higher the bit rates the better video quality, but it occupy the greater network bandwidth and the greater the pressure transmission.

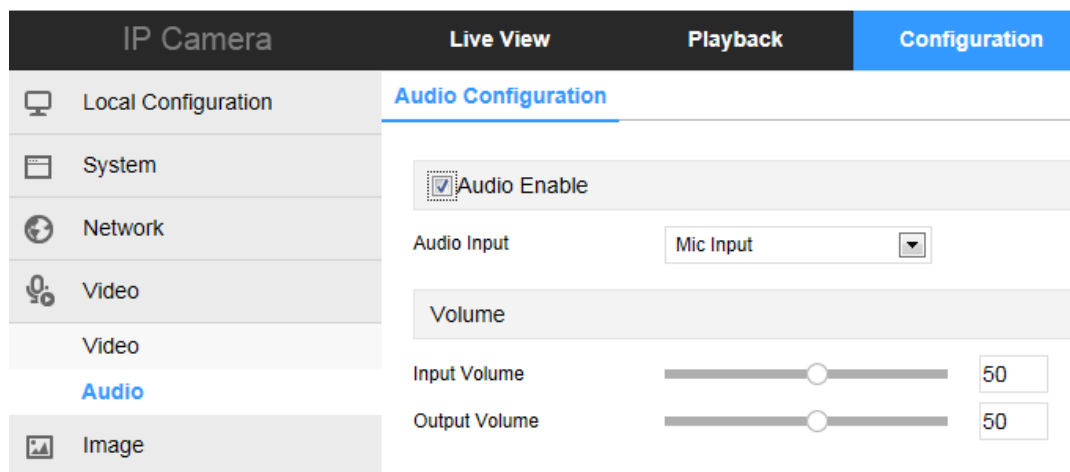
【Variable (fixed) code rate】 Switch the code rate output mode in the drop-down menu, fixed rate and variable rate.

【I Frame Interval】 IPC acquisition keyframe interval, can be set 1-5s.

Note: The supported video encoding may be different according to the different platform.


4.5.4.2. Audio

Click **Audio** into the audio configuration interface.

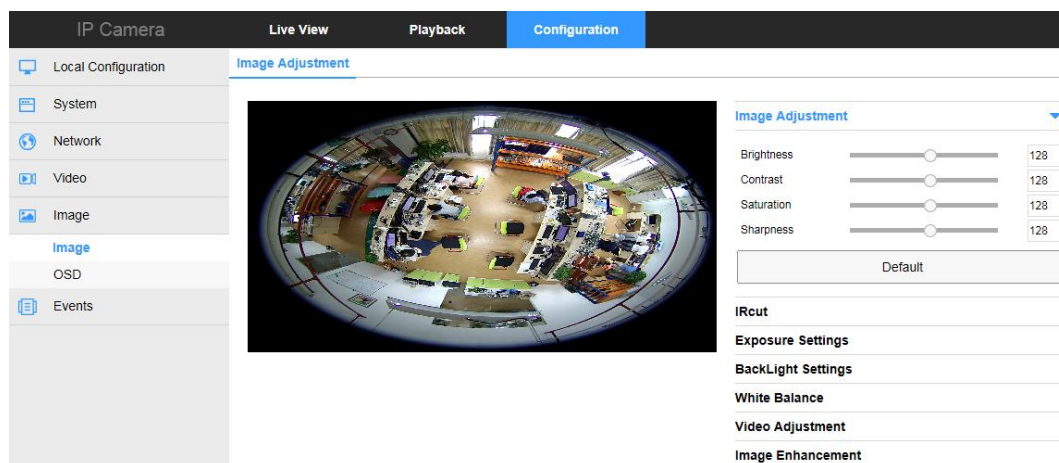


Open the audio, pull bar to set the input volume (range 0-100 range optional). Click “Save” to complete the setting.

4.5.5. Image

Click  Image into the image configuration interface.

4.5.5.1. Image



【Brightness/Contrast/Saturation/Sharpness】 You can input the value manually to set brightness, contrast, saturation, sharpness. These parameters shall be set according to the actual environment. The scope of valid values is from 0 to 255, you can drag the slider to set, and the default value is 128.

Image Adjustment ▼

Brightness	<input type="range"/>	128
Contrast	<input type="range"/>	128
Saturation	<input type="range"/>	128
Sharpness	<input type="range"/>	128

Default

【IRcut】 Select the day/night switch mode, and configure the IR switching time from this option.

IRcut ▼

Ircut Filter Time	3	▼
Ircut Mode	LDR Auto	▼

【Exposure Settings】 It have automatic mode and manual mode, the manual mode when the click, "Gain Control" is active, valid values are (0-255) and the default value is 128. At the same time can set the speed of the electronic shutter. Click "Save" to complete the setting.

Exposure Settings ▼

Exposure Settings ☒ Auto ☐ Manual

Exposure Time

Gain Control 0

【White Balance】 It have automatic mode and manual mode, the manual mode when the click, "Red gain" and "green gain", "Blue Gain" is active, valid values are (0-255) and the default value is 128. Click "Save" to complete the setting.

White Balance ▼

White Balance

Red Gain	<input type="range"/>	0
Green Gain	<input type="range"/>	0
Blue Gain	<input type="range"/>	0

【Image Enhancement】 It have flicker control and sensor linear WDR setting.

- **Flicker Control:** Indoor PAL, Indoor NTSC and outdoor are selectable. The flash mode is selected according to the camera installation environment and the flicker standard; normally 50 Hz for PAL standard and 60 Hz for NTSC Standard.
- **WDR:** Wide Dynamic Range can be used when there is a high contrast of the bright area and the

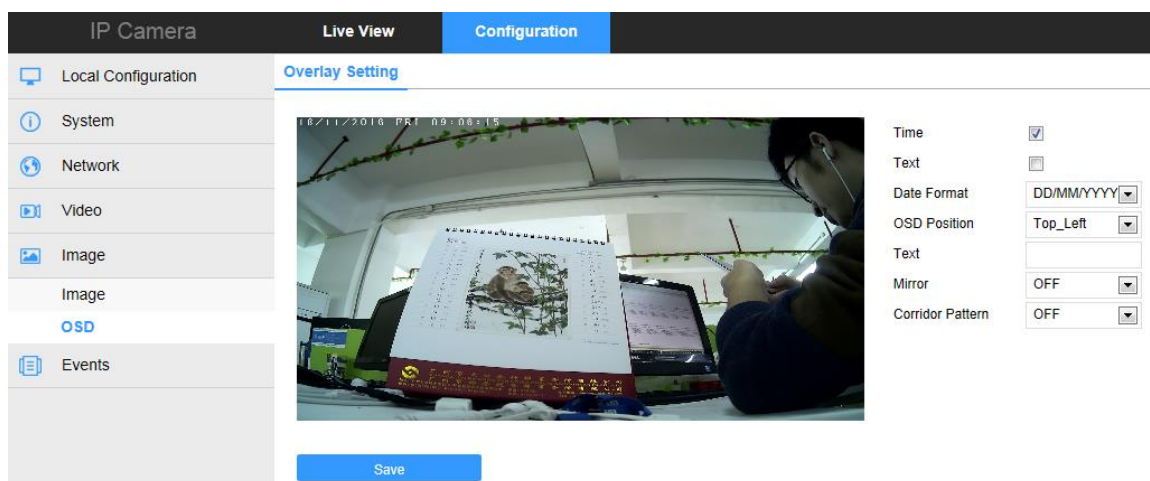
dark area of the scene.

Image Enhancement

Flicker Control	Indoor PAL	▼
Sensor Linear WDR	Shut Down	▼

4.5.5.2、OSD

Click **OSD** into the overlay setting interface.

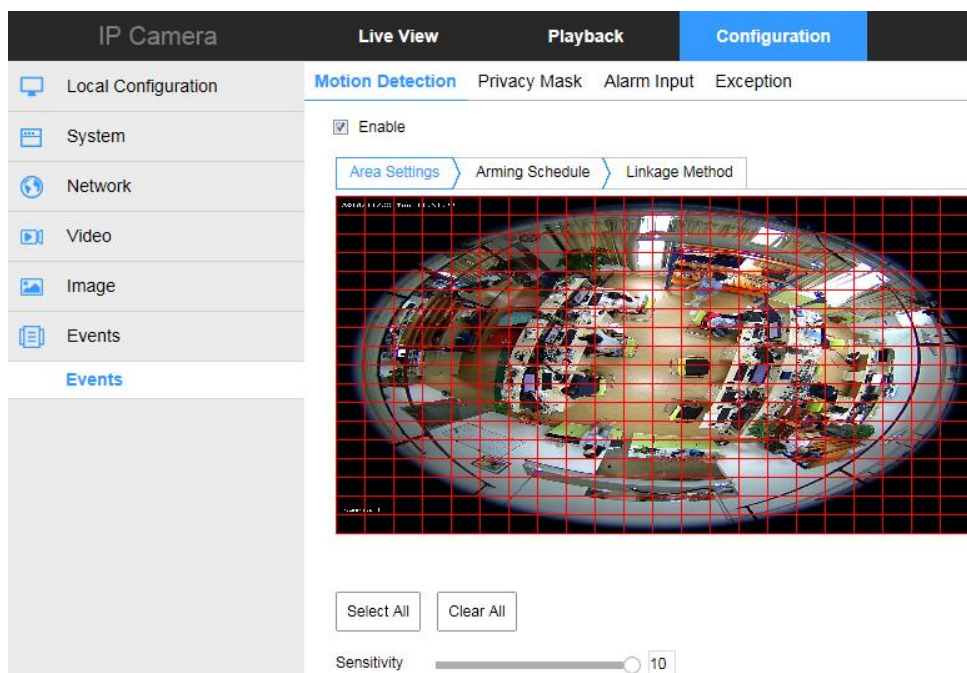


【Overlay Setting】 It allows you to set the Date Format, OSD Position, OSD Text and mirror, and will be displayed in the preview screen.

4.5.6. Events

4.5.6.1. Motion Detection

Click **Events** into the motion detection setting interface.

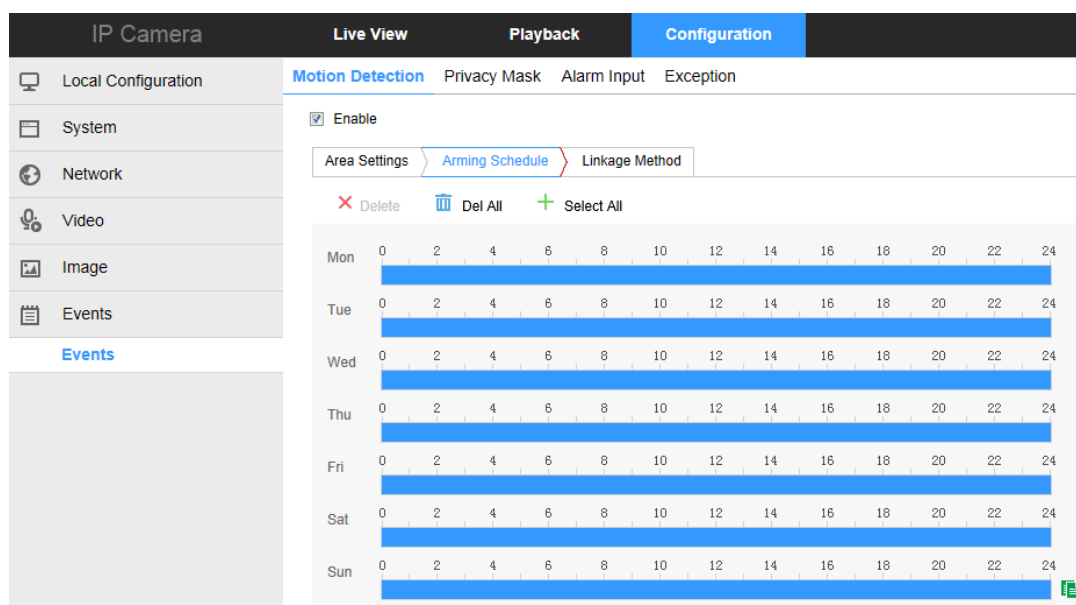


【Select All】Motion detection range to monitor all of the area, which Consists of 396(22*18) small squares. Of course you can choose a combination of several small squares among them as motion detecting area.

【Clear All】Clearing all the motion detecting area that selected currently.

【Sensitivity】Can be selected 0 to 10, and the higher the value, the greater the sensitivity.

Click “Arming Schedule” into the arming time setting interface.

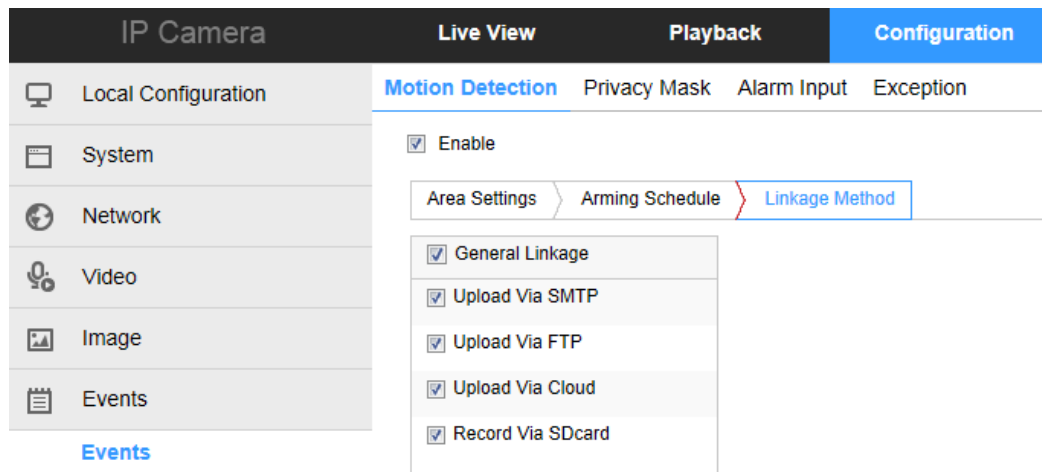


Here, set the motion detection alarm period, add, delete, edit.

(1) Click and drag the mouse on the time axis to edit the arming schedule.

- (2) Choose the day you want to set the arming schedule.
- (3) Click to set the time period for the arming schedule.
- (4) After you set the arming schedule, you can copy the schedule to other days (Optional).
- (5) Click Save to save the settings.

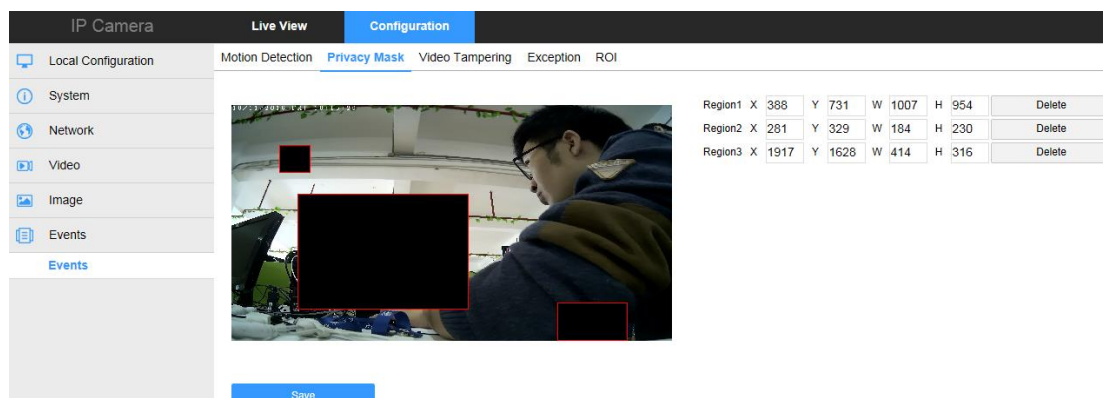
Click "Linkage Method" into the linkage mode setting interface.



Open the "General linkage", "upload Via SMTP", "upload Via FTP", "upload Via Cloud" function, when the device motion detection alarm, the linkage corresponding way to inform the user.

4.5.6.2. Privacy

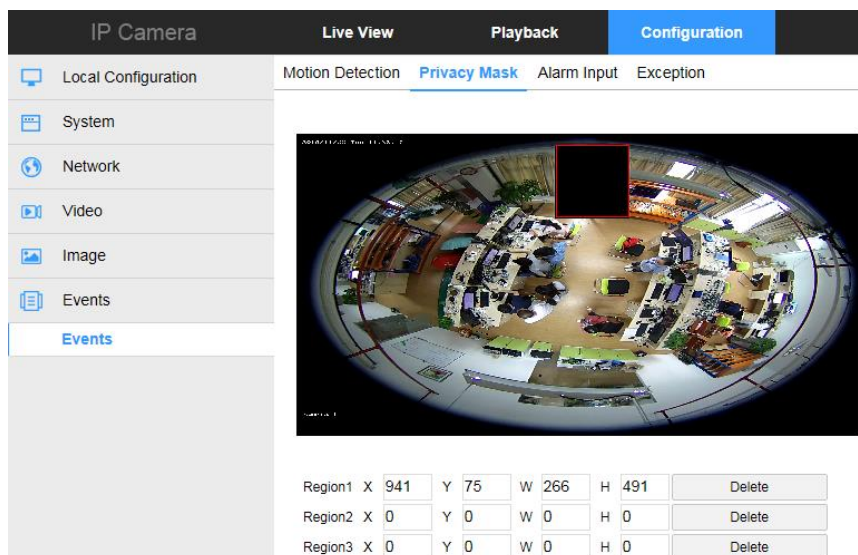
Click "Privacy" into the privacy setting interface.



Pressing the left mouse button and drag to select area in the region. Region 1, Region 2, Region 3 bellow will show the corresponding coordinates, width, and height of the region. If you want to delete a region, click on the corresponding "Delete" button. Click on the "Save" after completing the setting.

4.5.6.3. Video Tampering

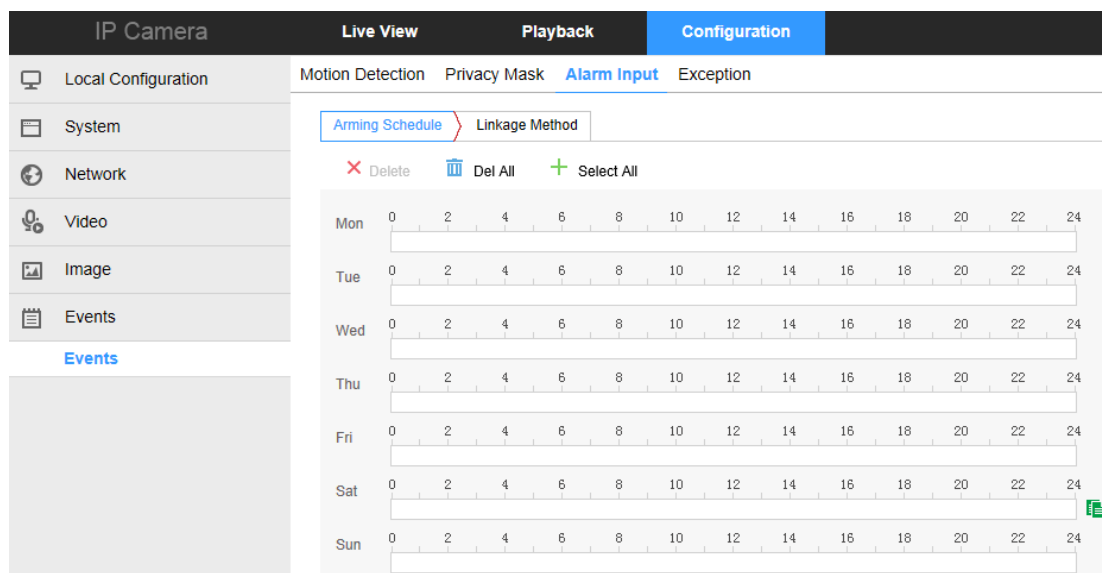
Click “Video Tampering” into the video occlusion interface.



Open the "block alarm", draws the occlusion area, set the sensitivity. Click “Save” when the settings are complete.

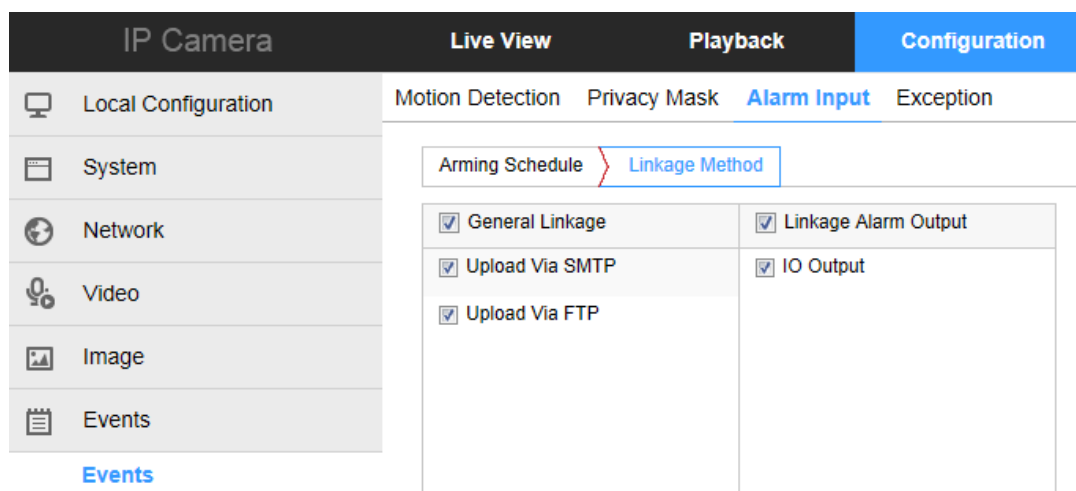
【Clear All】 Clearing all the occlusion area that selected currently.

Click “Arming Schedule” into the arming time setting interface.



Set the time period for occlusion alarm, add, delete, edit. Click on the “Save” after completing.

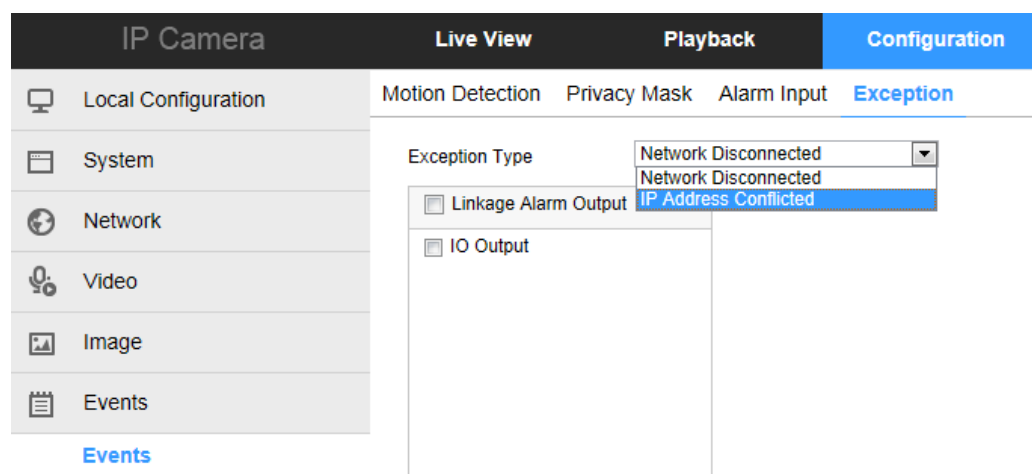
Click “Linkage Method” into the linkage mode setting interface



Open the "General linkage", "upload Via SMTP", "upload Via FTP" function, when the device occlusion alarm, the linkage corresponding way to inform the user.

4.5.6.4 Exception

Click "Exception" into the abnormal alarm setting interface.



Set the "Cable Disconnection" and "IP Address Conflict" alarms here, and set the alarm output mode. Click on the "Save" after completing the settings.

5. App client

5.1. Download and install App

Download and install FreeIP on your smart phone. Please scan the following QR codes to download the

App, or you can download from the following websites:

Android App: <https://play.google.com/store/apps/details?id=com.xc.hdscreen>

iOS App : <https://itunes.apple.com/cn/app/freeip/id898690336?mt=8>



Android APP



iOS APP

5.2. Add device

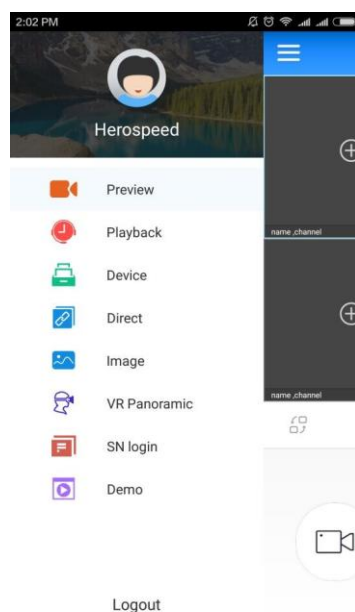
Add a device to the device list to manage.

Steps:

(1) Open the FreeIP you install on the smart phone (New users please register an account), and log in the account.



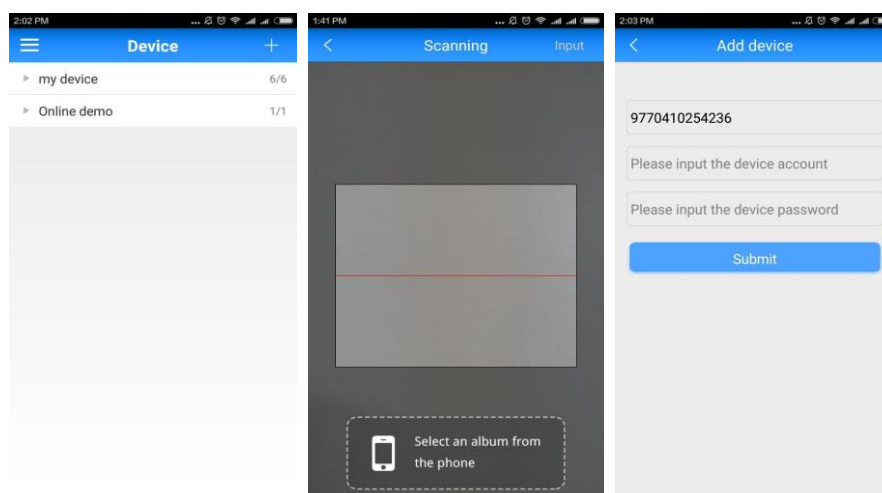
(2) Enter the sliding menu, Click **【Device】** to add the device.



(3) In the device management interface, Click **【Add Device】** or **【+】** on the right of Device Management to enter the adding devices interface.

(4) Scan the QR code on the gift box or on the website to add the device.

(5) Enter the device's user name and password, and then click **【Submit】**

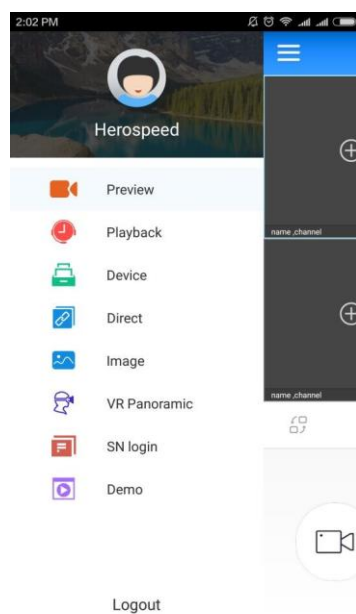


5.3. Preview

Preview the real time stream of the device.

Steps:

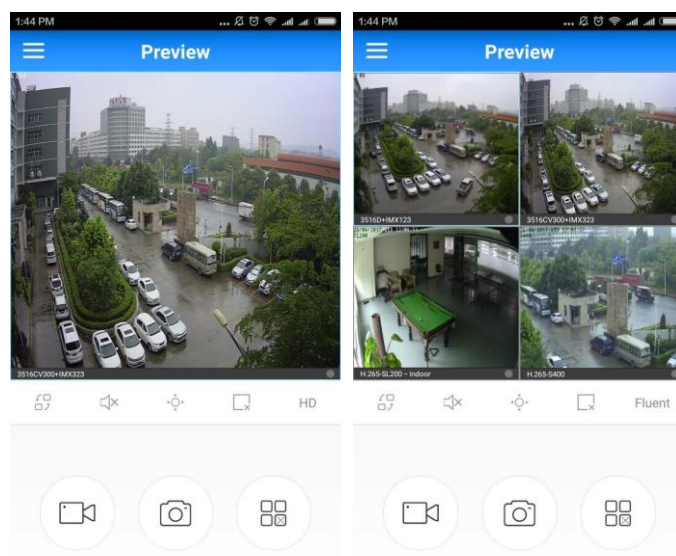
(1) Enter the sliding menu, Click **【Preview】** to preview .



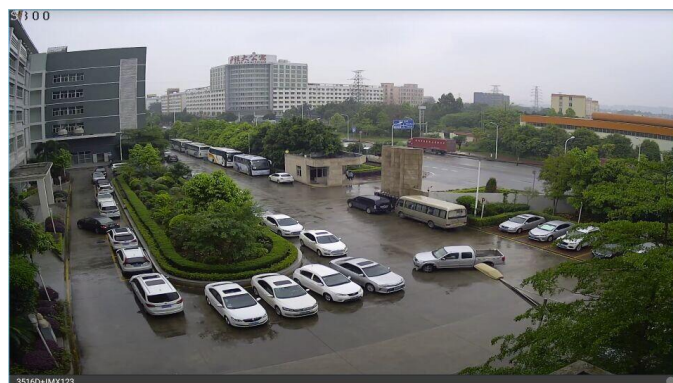
(2) Click **【+】**

(3) In **【My device】**, please choose the device you want to preview, then click **【Preview】**

(4) You can select different preview windows in the preview interface, different modes as below.



Phone full-screen preview as follows:



In the preview interface in addition to switch preview mode, you do video, capture, set the sound and other operations.

6. Frequently Asked Questions

6.1. Why can not access the camera by IE?

Answer: There maybe 4 reasons, Details are as follows:

a.The network unreasonable?

Solution: First you can connect network by PC, check the network cable if it is good. And check the network between the camera and the PC is good.

b.The IP address of the camera is occupied by other device or PC?

Solution: You can connect the camera with your PC directly, and modify the IP address or use the IP search tool.

c.The camera maybe in other network segment?

Solution: Check the IP address and net mask.

6.2. Why can not access the camera after update?

Answer: Clean browser cache.

Steps: open IE, click "Tools" and select "Internet Options", then you can see "Temporary Internet files" and click "Delete Files", it will prompt a dialog you need to check "Delete all offline content" and click "OK".

Also you can click "Start" and select "Run" then enter "cmd", enter "arp -d" in "Command Prompt" interface. Re-access the camera.

6.3. Why cannot show the whole interface?

Answer: Close some options of IE.

Steps: Open IE, click "View" and select "Toolbar", close the "Favorites bar", "Status bar" and "Command bar".