IP Camera User's Manual

IP Camera

Version V1.0

State:

This manual may not exactly be described in some technology details or exist error printing, If you have problems in operating according to our manual, please call to our technology department .This manual have regular update, The information is subject to changes without prior notice.

Matters need attention

1、 Installation environment

- Away from heat source of heat and the environment；Avoid direct sunlight
- To ensure camera normal thermal，Should avoid poor ventilation places，Note waterproof, moisture proof, lightning protection. If need to install to outdoor， Requires placed need the water tank, and fix the camera in it.
- The machine should be installed horizontally or hanging installation, avoid installed in the place which will be violent vibration ,not to put other equipment on this machine

2、To avoid electric shocks and fire

- Remember that don't use wet hand touch power and camera

- Do not put the liquid splashed down on the camera , lest cause the machines internal short circuit or fire
- Do not put other equipment on this camera directly
- Non-professional workers can't take apart enclosure to avoid damaging and electric shocks

3、Transportation and handling

- The packing of machine pass seismic design and experiment, by ensuring the cameras will not be accidentally damaged, so during the handling of the machine, we'd better use original packaging materials and cartons.
- Avoid moving the camera in extreme cold, heat places, lest machine generated internal condensation, influence the machine service life;
- Move the machine strictly when charged, otherwise it will damage the mainboard

DIRECTORY

1 PRODUCT BRIEF INTRODUCTION....7
1.1 PRODUCT INTRODUCTION....7
1.2 FUNCTION BRIEF....9
1.3 TECHNICAL SPECIFICTION....10
2 INTERFACE DESCRIPTION....11
3 DEVICE INSTALLATION....15
3.1 WORKING ENVIRONMENT....15
3.2 DEVICE INSTALLATION....15
4 IE OPERATION INTRODUCTION....15
4.1 NETWORK PREPARATION....15
4.2 LOGIN....16
4.3 REAL-TIME MONITORING....19
4.3.1 Menu....19
4.4 PARAMETERS SETTING....23

4.4.1 System setting..... 23
4.4.1.1 Device information..... 23
4.4.1.2 Timing setting.....24
4.4.1.3 Device management..... 24
4.4.2 Audio and video settings.....26
4.4.2.1 Video settings 26
4.4.3 Timing setting..... 29
4.4.3.1 Timing captured..... 29
4.4.3.2 Timing recording.....30
4.4.4 Network setting.....32
4.4.4.1 Network setting 32
4.4.4.2 WIFI Setting 33
4.4.4.3 3G setting 34
4.4.4.4 Platform setting..... 35
4.4.5 Alarm setting 35

4.4.5.1 Motion detection 35
4.4.5.2 Video loss 37
4.4.5.3 Probe alarm.....38
4.4.6 PTZ Setting.....39
4.4.6.1 PTZ Setting 39
4.4.7 Advanced setting 40
4.4.7.1 User management.....40
4.4.7.2 E-mail setting.....40
4.4.7.3 FTP setting 41
4.4.8 Frint-end storage.....42
4.4.8.1 SD card management.....42
5 CLIENT INSTRUCTION.....43
5.1 Client software installation 43
5.2 Parameters configuration through the client software 50
5.2.1 Preview 50

5.2.1.1 Add device.....50
5.2.1.2 Timing recording setting 53
5.2.2 Playback.....55
5.2.2.1 Local playback.....55
6 FREQUENT ASKED QUESTION 57

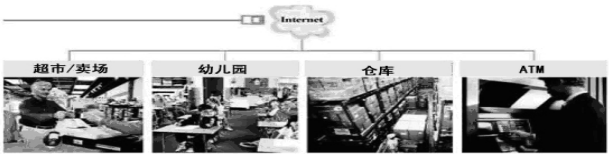
1 Product brief introduction

1.1 Product introduction

IP Camera is based built-in Web server product, IP Camera have multifunction image effects, it is an independent installation monitoring system, bulit-in CPU and network server, through the network to carry high quality images 。IP Camera can watch the video and remote control through personal computer or laptop computer model through LAN or Internet web browsers。Simple installation process and interactive web browser interface let IP can do a very good job Camera whether in general cable network environment or wireless network

environment .IP Camera can carry many alarm tools at the same time an can inform user to take action to abnormal condition. It can applied in market, shop, school, factory, home and a series of places.

IP Camera support using mobile phone remote monitoring watch image



Notice1： Before opening the package, please read this manual carefully, and check the content and manual packing list, whether it is consistent with content, check whether the fuselage coding tag stuck fall off on the equipment base .

Notice 2： If need to choose Wifi wireless function device, please select /w model product, this product with built-in wifi wireless module, and equiped with transmitting antenna

1.2 Function brief

- Using h.264 Main Profile@Level3.0 compression format, image is more clear streaming

smaller, facilitate network transmits and save storage space;

- 32-bit processor and a million pixels processing power professional video decoding chips
- D1/CIF/QCIF three kinds of video resolution optional, 720P (1280*720) support max resolution support various video parameters，adjustment, adapted to user various browsing requirements;
- Support mobile watch；
- Support 10 users to monitor at same time
- Support external microphones, simultaneously also support external audio collection devices (such as pick-up)，Realize voice acquisition, remote monitoring site voice; Also can external speakers,
  remote transmission of voice to the scene, realize two-way talkback function
- Built-in WEB SERVER，Support IE browsing and parameter Settings, and one port to transmit all data and is convenient for the user to network Settings;
- Support 802.11 b/g protocol , can built-in wifi module, flexible form wireless monitoring environment;
- Maximum support 32G SD card storage, can realize alarm photograph and alarm video；
- Support motion detective , and external alarm detector, achieve all-round protection
- Support DHCP、TCP/IP、HTTP、UDP、RTSP、SMTP、FTP ；
- SD card, mail, FTP ways to save local alarm records, external alarm warning notice,

  implements multiple alarms linkage；

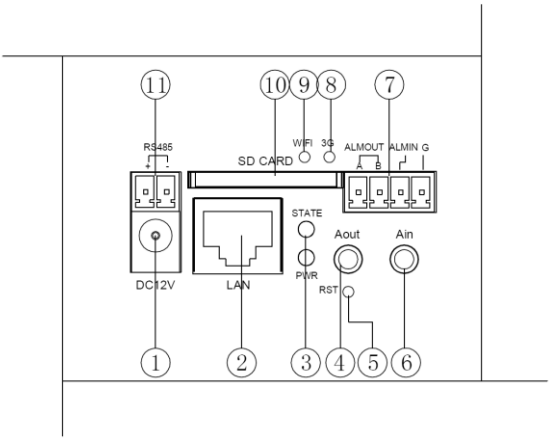
- Support 3 level user permissions Settings
- Supports remote escalation
- Manufacturers provide free client software, provide more pictures looking, timing video, video playback, alarm information query functions

1.3 Technical specification

- Video compression：H.264/MJPEG；
- Encoded output rate bite：32～4000kbps；
- Audio compression：G.711；
- Audio output code rate：64Kbps；
- Max frame rate：PAL：25 F/S NTSC ：30F/S；
- Image settings：saturation, brightness, contrast, hue
- Audio port：In/out*1；
- Working temperature and humidity：-10℃～65℃、85%RH below ；
- Voltage：DC12V；

2 Interface description

2.1 Tail plate



1.Power Connector

connect external power adapter power supply requirements for 12V

2. Network Interface

10/100M Ethernet network interface is the interface through the interface with a variety of network , network device such as : hubs , routers , switches and so on .

3.Status indicator

PWR：Power indicator light； STATE：System status indicator lights to run properly

4.Audio output

LINE OUT output audio signals for a variety of external audio playback device ,such as earphone , sound

5. Reset button

Press the reset button （5 seconds），Equipment to restore factory default and reboot.

6.Audio input port

Audio for an external microphone or line input ,such as the pickup signal.

7.Alarm input and output

External sensors to achieve the collection of the alarm information , it is required the type of the sensor switch (normally open or closed). when smoke , temperature , excessive humidity , people or animal enter signal zone is detected , the switch close or open , the signal as external alarm signal input to the IP camera , the output signal is based on setting signal of the linkage output switch .

8. 3G indicator light

Flicker is indicator that 3G date is transmiting

9 . WIFI indicator light

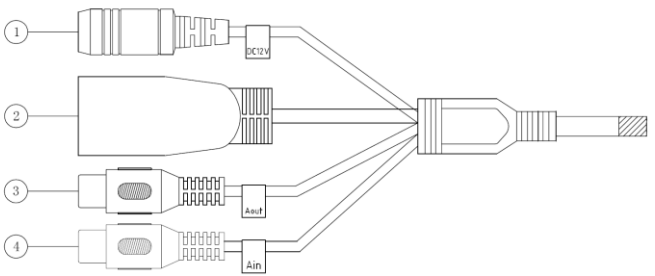
Flicker is indicator that **WIFI** date is transmiting

10. SD Card interface

SD card storage interface

11. 485 communication port

2.2 Lead interface description



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3 . Audio output

LINE OUT output audio signals for a variety of external audio playback device。

4 . Audio input

audio for an external microphone or line input ,such as the pickup signa. If the wiring of the audio input signal , you need to place the audio settings , select the line input .

3 Device Installation

3.1 working environment

Operation system： Windows2000server/professional/XP/Windows7；

Internet protocol： TCP/IP；

Client PC：P4/128MRAM/40GHD/ support zoom of the video card，DirectX8.0 above

3.2 Device Installation

1. .IP Camera into your network or with a crossover cable directly connected into the PC。
2. Connected to the DC12 Power。

4 IE operation introduction

4.1 Network preparation

- The default of IP address of the IP device is 192.168.1.88, Default Subnet mask is

255.255.255.0，you can modify the network camera IP address , the IP address of your computer to the network camera in the same network segment and the same subnet mask

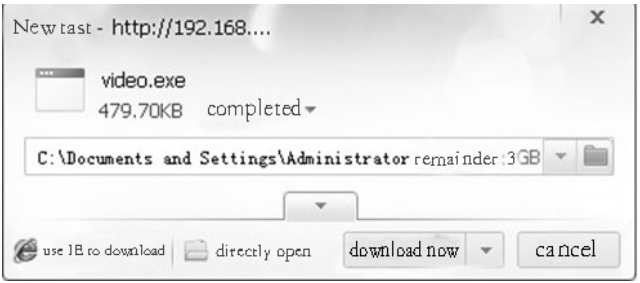
- IP Camera start normal test . In accordance with <Start→run→command>operating under Windows, open a command window type Ping 192.168.1.88-t，if not show “Request time out” it indicates that the normal start

- When the browser (Internet Explore) for the first time to access the network camera , you must temporarily reduce the safety .All set for a one-time install the ActiveX component to the network，selecting the tools from the browser menu . Internet Options—Security –Custom Level-ActiveX controls and plug-in>， set the security level to low and click Reset.

4.2 Login

（1） Enter http://192.168.1.88 on the IE and then Pop-up login screen 。 The default user name and password are: admin , admin

（2） Click “ download and install control” ， Pop-up download dialog box , select the way you need to download , as the blow shown



Choice direct open . Control will automatically unzip to C:\WINDOWS\system32 directory . the controls of the installation is named video.exe, the last pop up a dialog box prompts to complete installation . (Suggestion: If your controls is not installed on your computer, please click to download and install the controls or there is no picture in the main screen , when you login in . if you previously installed the control , you need to update this space , you must close the page, and then install space) as follows Figure:

（3） Completed installation of the controls . enter into you user name and password , then

you can view the real-time picture .

4.3 Real-time Monitoring

4.3.1 Menu

Menu Bar：the main function are Capturing , video recording , playback and SD card and

so【snapshot】: Click“Snapshot” button, the captured image are saved in the format of *.jpg on the local D:\ Snap\IP address\ channel\time。

example：D:\Snap\192.168.1.88\01\20110505。

The snapshot is named as：[date][time][channel][capture mode] such as ”[20110505][153208001][01][IE_MAN].bmp”， the image file size should be conformity with the image resolution，If the pre-view images with superimposed characters and time display , the captured picture also have the characters and time display overlay .（Note ：Image is stored in the D drive firstly , if the D drive memory is full , it will stored at the next drive）。

【Video】: Click“ recording”Button ， Button icon into red, the system began to video, the system will automatically generate such a directory：D:\Record\IP address\channel\time ，such as :\Record\192.168.1.88\01\20110505，and the video files stored as *.evd formats in the directory ， If the disk D space is full are already , will automatically skip to the next disk storage video files. If there is not disk space , it will delete the oldest video files , reset the new video file. Click the button again to stop recording video , the buttons will change the white

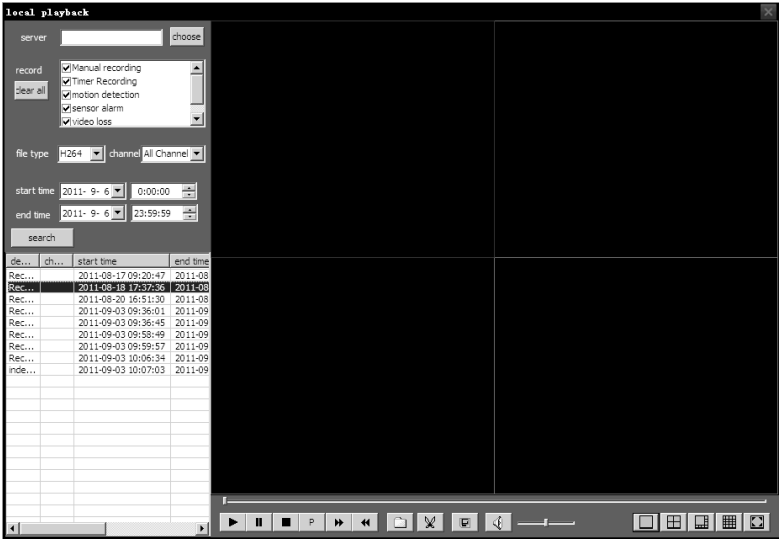
【talkback】: Click “talkback” button can transmitted the sound captured by the computer to the equipment , and play out by the audio Sound device which connected the device . click again , then turn off this function

(Note : open the monitoring before the talkback)

【Monitoring】: Click“ monitoring ”button , you can play out the sound collected by the device on

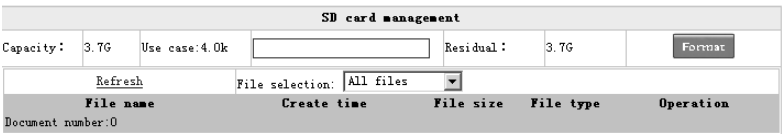
the computer . click it again , then close the function . (Note: you must close the talkback before closing the monitoring)。

【Playback】: Click "playback " button ， pops up the page as below ：



Playback: According to the record type, file type, video channel, start date and other conditions of the search, the user selection criteria and click Search, the search results displayed in the blank form , the user can double-click the video during playback, you can also drag the video, if the user want to watch multiple video, you can select options for the lower right corner of the screen (the screen can be divided into single, four, eight, 16-channel), then select the picture, and then double-click or drag the video file to watch.

【SD CARD】: If you insert the SD card , click on "SDCARD" button , the content of the SD card in the pop-up page as below .



Time capture , timing video , motion detection , video loss, probe alarm and other operation file

captured by triggered and recording file are stored in the SD card , you can double-click to open

【Log】: Click “log” button ， pop-up the page as below .

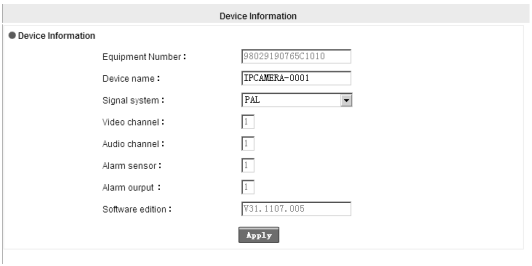
Log record all of the operation , the user can check all the log in some time , according to different conditions , you can check the corresponding log (video loss , set operation , motion detection , set operation ,initialization operation , server startup error)

4.4 Parameters setting

Click parameters setting enter into system setting---time setting .plz refer to the following settings

4.4.1 System setting

4.4.1.1 Device Information

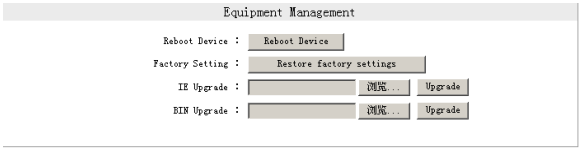


Device information shows the basic information of the connected device ,such as device number , name ,format , channels , sensors and version number .

4.4.1.2 Timing setting

As shown above , set the date and time : manual setting , and synchronization with the PC time

4.4.1.3 Device management



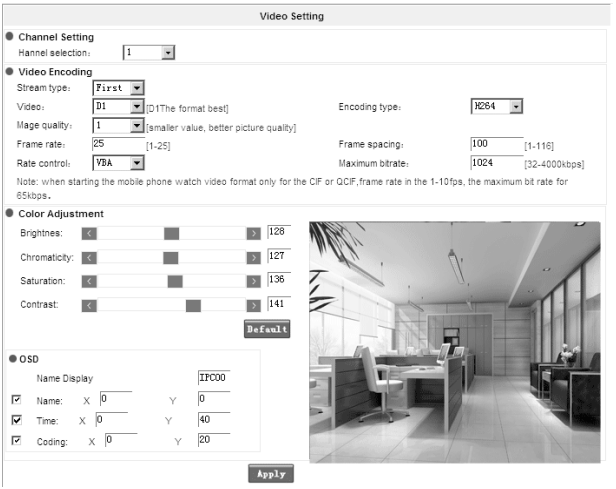
- Click the reset button will reset the device;
- Click on the factory default , all settings will revert to the factory default settings . and restart;
- IE upgrade , browse IE upgrade file ,then click the upgrade , you can upgrade the device through the network . upgraded , restore you system to factory defaults . Upgrade takes a long time , please be patient until pop-up dialog box that prompts a successful

upgrade

- BIN upgrade， browse BIN upgrade file ,then click the upgrade.please be patient until pop-up dialog box that prompts a successful upgrade（Bin upgrade is mainly to upgrade the back-end decoder.）

4.4.2 Audio and video settings

4.4.2.1 Video settings



- **Video coding**

- **Stream sharpness adjustment**

  Dive support three kinds of resolution \：D1(704*576)、CIF(352*288)、QCIF(176*144)；second stream：CIF(352*288)、QCIF(176*144) two kinds of resolution . The greater the resolution, the picture becomes clearer，but the stream the greater the need for greater network bandwidth

- **Stream regulation**

  Users can specify the stream, generally speaking, the larger stream, the picture becomes clearer. However, the configuration of bit stream to be combined with the network bandwidth when the network bandwidth is very narrow, and configuring a large stream, it will cause the video stream can not be delivered normally, visual effects even worse.

  Note: the range of the stream setting：32～4000Kpbs。

- **Maximum frame rate adjustment**

  Set the maximum transmission frame per second . it is recommended to reduce frame rate when the network bandwidth is limited . Typically , above 15 fps , the basic image is smooth.

- **Stream control**

  Stream control has two modes ,namely , fixed-stream (CBR) , variable bit rate (VBR)。When you choose a fixed stream , the video encoder will be coded according to the stream speeds

set in the encoded stream；in changes stream mode, the video encoder will take into account the image quality , based on the set stream speed but not in full accordance with this rate code.

- **Color adjustment**

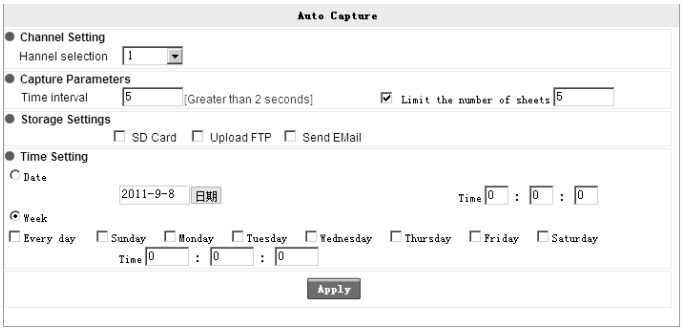
  Drag the slider above the image , you can adjust the brightness , saturation , contrast , color to meet the users visual preferences .

- **OSD setting**

  With this option set, you can be loaded into the device name and time on the video screen.

4.4.3 Timing setting

4.4.3.1 Timing captured



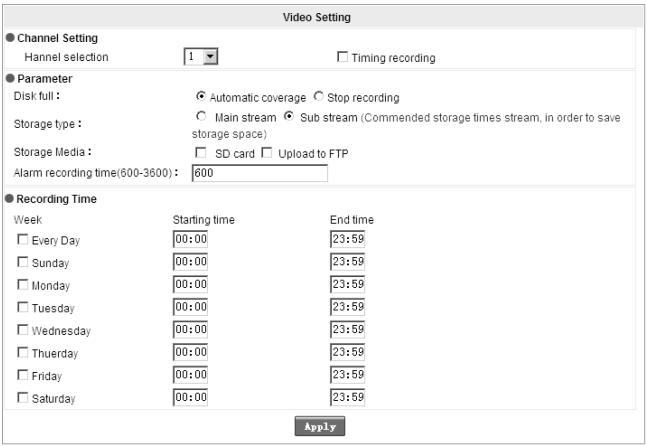
"Time interval"： interval between captured images ;

Limit the number of sheets ": If selected the number of sheets , it will capture according to the number of sheets filled . otherwise it will have been captured .

Storage Settings": optional "SD Card", "upload FTP", "Send EMail";

Timing capture divide into "date" and "weeks "

4.4.3.2 Timing recording



- **Channel setting**

  Users choose to checked the different channels of the device , if the "timer recording " is checked ,time recording starts .

- **Parameters setting**

“Disk full" optional automatic overwrite or stop video

"Storage Type" optional "main stream" or "sub-stream";

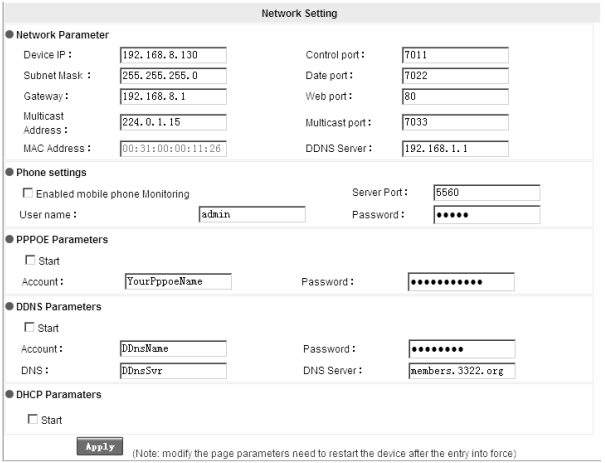
"Storage Media" optional "SD Card" or "Upload to FTP";

"Alarm recording time" Alarm recording time setting

" recording time " to set each day and specific time in week

4.4.4 Network setting

4.4.4.1 Network setting



- **Network parameter**

Equipment the factory default IP address 192.168.1.88； User can customize the configuration settings of network parameters IPCAM

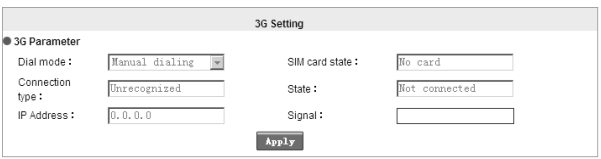
- **PPPOE parameter**
  Check the start , fill in PPPOE username and password ,click the "Apply."
- **DDNS parameter**
  DDNS setting ok , IPC will report regularly to the DDNS server such as dial-up own router equipment to obtain the dynamic IP address .
- **DHCP parameters**
  Automatically obtain IP, check the Startup check box and click the application will restart the device, the device will automatically Get an IP address after the device restart . (router DHCP function must be open

4.4.4.2 WIFI Setting

When enabled the WIFI ,the set interface as below , the user firstly check the "wireless network ",click Apply , restart device , then wireless is enabled . enter into the wireless screen , click the "Search button " (Note： the user should set up the wireless router firstly , mainly including wireless-enabled and wireless connection setting, etc.) selected the set router name in the search results pane, and then do the corresponding setting , according to the set router parameters , click Apply to restart , use the set up IP address to access after the device restart .

（Note : set the IP network and wireless router segment should be the same

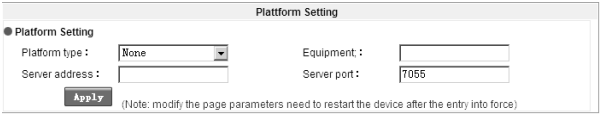
4.4.4.3 3G setting



After connecting the device , the client will automatically indentify whether there is 3G card , if there have 3G card , "sim card status " is working normally (machine halt , then it will

display the shutdown status)"3G card status" didn't connected , it display the card type in the connection type . (such as : Unicom 3G), users can choose different dial-up according to their needs . (here we choose " Manual Dial "), Click to dial (Dial-up process may take some time , please be patient), when the dial-up is ok , , the state of the 3G status is connected . then the IP address has been assigned , can be transmitted through the platform (note: if you set the power-on dial-up , equipment will dial automatically when power on again)

4.4.4.4 Platform setting



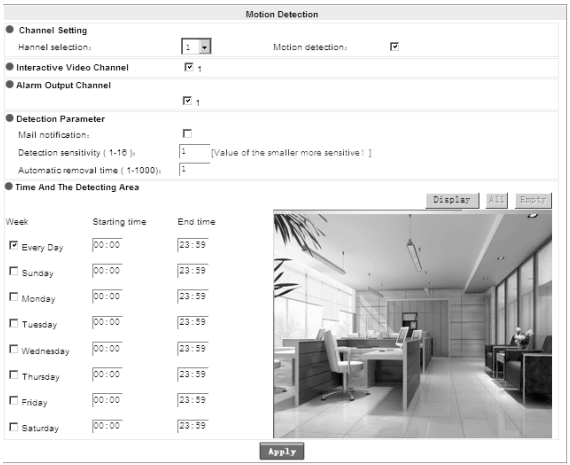
- open platform setting , the server will connect to the server initiatively

4.4.5 Alarm setting

4.4.5.1 Motion detection

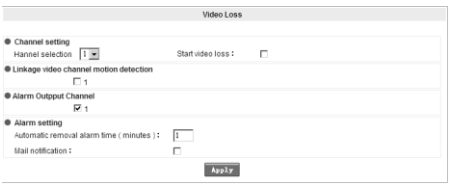
If you want to monitor an area of fixed, when an exception occurs within the region, that started the alarm, you can select motion detection. Motion detection settings interface as shown below, the device supports four regional settings, check the bottom of the page of the options box to enable the appropriate area. Start a region, will be displayed area box on the screen and list the area code, move the mouse to the area frame, you can drag the

block diagram to place the image anywhere, you can also move the mouse to the lower right corner of the red box, drag to change its size. After setting, click Apply, motion detection settings to take effect



4.4.5.2 Video loss

power or equipment failure resulting in loss picture . if you need to prompt in the video loss , you can start video loss detection , set the channel of the alarm output , the user can also set the alarm time .

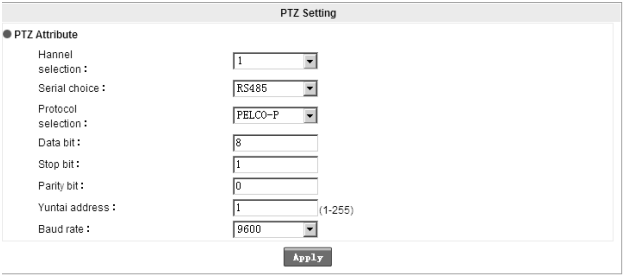


4.4.5.3 Probe alarm

Normally open mode , the need to trigger the alarm (input the switch signal)
Normally closed mode , the network camera has been in the alarm state, stop to alarm after triggering alarm (switch signal is received) , Starting trigger channel capturimages whichstored in the front-end storage devices . After the alarm stops. Start trigger channel capture images stored in the front-end storage devices.

4.4.6 PTZ Setting

4.4.6.1 PTZ Setting



IP camera supports the standard 485 protocol , you should to choose the PTZ protocol , address code and Baud rate , IP camera just support the PELCO-D and PELCO-P protocols .

4.4.7 Advanced setting

4.4.7.1 User management

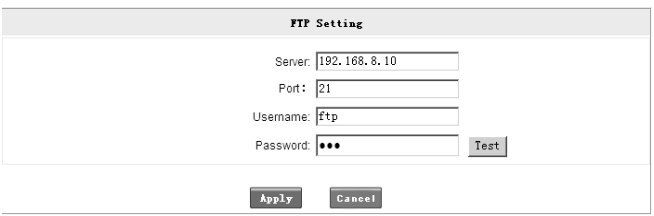
System System can be set for three users, admin users with the highest authority, can be any set. Other users can not enter the parameter setting, you can perform basic operations,

can not modify the parameters. The three default user password are "admin", "user1", "user2". Users with admin privileges can modify other user's user name and password.

4.4.7.2 E-mail setting

E-mail setting is used to send an linkage alarm message or alarm snapshots when alarm occurs

4.4.7.3 FTP setting

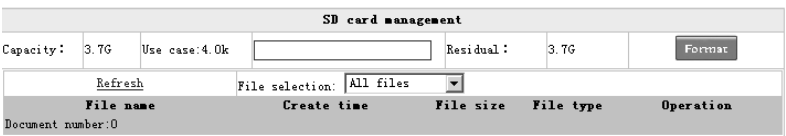


linkage upload will take effect after the server set OK

4.4.8 Front-end storage

4.4.8.1 SD card management

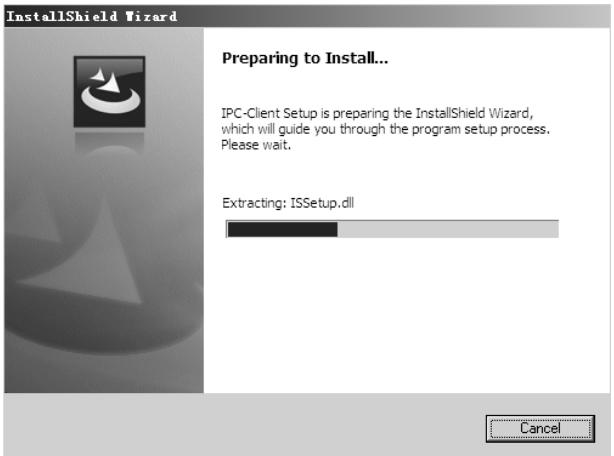
Click the SD card management on the left menu bar , all the information about the SD card appear in the list on the right. files in the SD card can be view and delete, if users want to view the files in the SD card, you must to download the file firstly before opening file



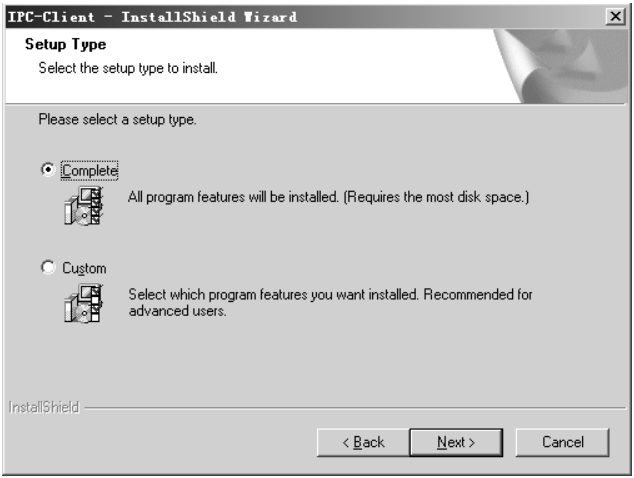
5 Client Instruction

5.1 Client software installation

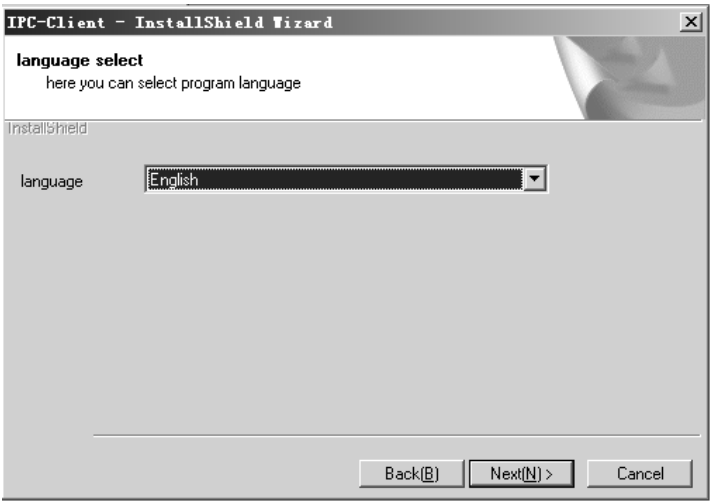
Double click the installer, as shown below :



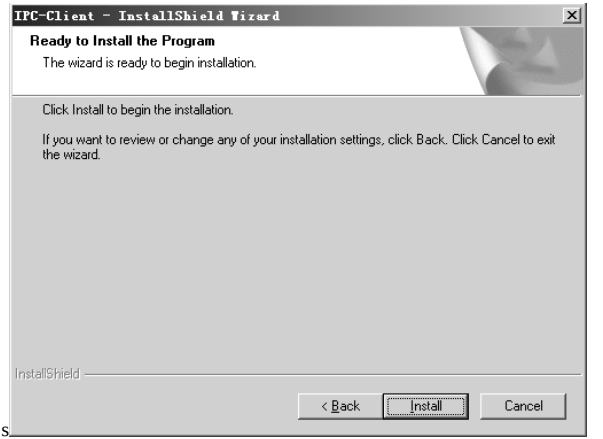
Click [Next], the pop-up installation interface, click [Next] as shown below:



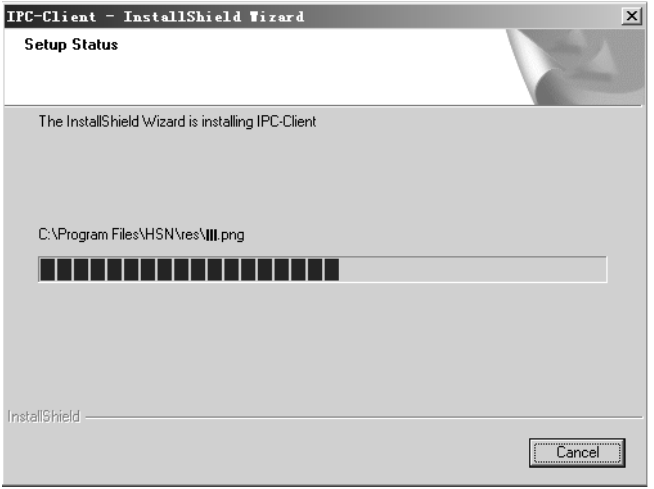
Click [Next], as shown:



Select the installation language and click [Next]:



Click [Install] button to start the installation:



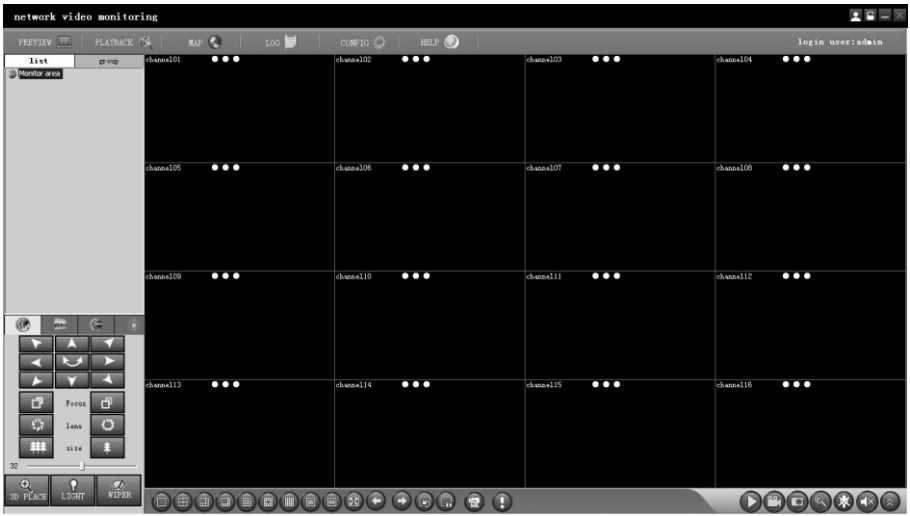
Installation is completed, click [Finish] button to complete the installation.

5.2 Parameters configuration through the client software

Running Software:

After installing the client software Client "IPC Client ", Open Client software in the system's "Start" "Programs" "IPC Client" (if generate a shortcut on the desktop, then double-click the icon directly), run the software, the following dialogue box:

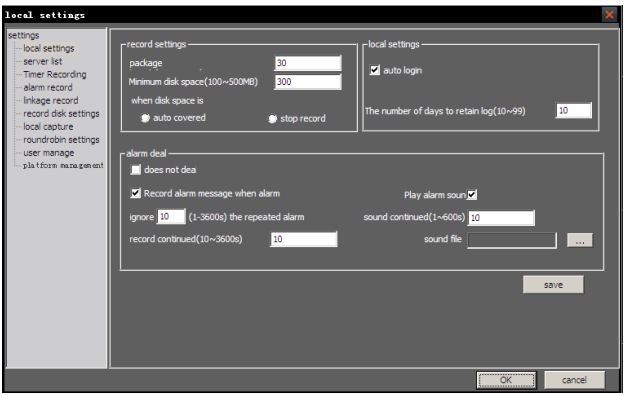
Enter the user name and password (default username: admin, password is blank), click on "Login", then enter the preview screen:


network video monitoring
PREVIEW
PLAYBACK
MAP
LOG
CONFIG
HELP
login user:admin
list
group
Monitor area
channel01
channel02
channel03
channel04
channel05
channel06
channel07
channel08
channel09
channel10
channel11
channel12
channel13
channel14
channel15
channel16
Focus
lens
size
32
3D PLACE
LIGHT
WIPER

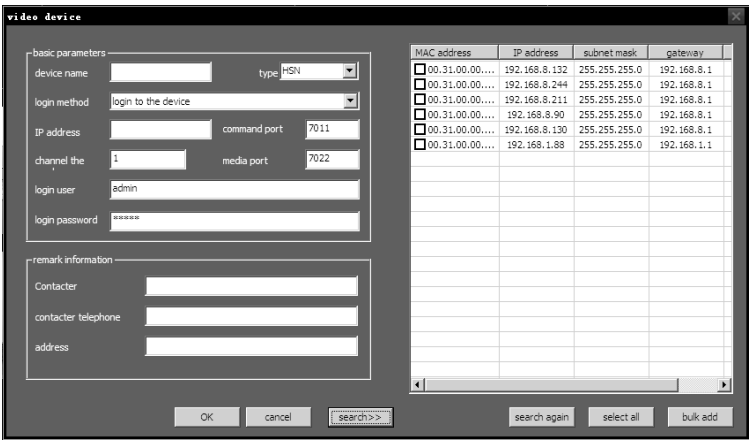
5.2.1 Preview

5.2.1.1 Add device

In the "Configuration" Select "System Settings" pop-up the following screen



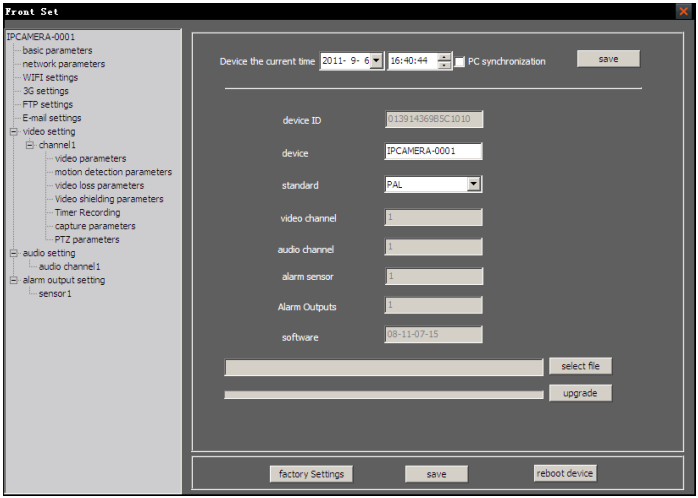
Select "Server assigned" the right display column monitoring area, select the right control zone, add the device can also add a zone, select the area, right click, add the device (can also be added equipment directly in the list of the right button , . As shown



Enter the server name, IP address, click [OK], then successfully added the server. In addition, you can also add through a search server, in particular: Click on [search], all the devices appears within the network , select the appropriate device, click [OK], then added successfully; can also select multiple devices, click to add bulk without the input can be added successfully. Click [OK] to return to real-time monitoring page, select the channel, double-click the device name, show the relevant channel images can be displayed image by dragging the device to the channel . shown as below :

5.2.1.2 Timing recording setting

Configuration -> Local Settings -> Timer recording

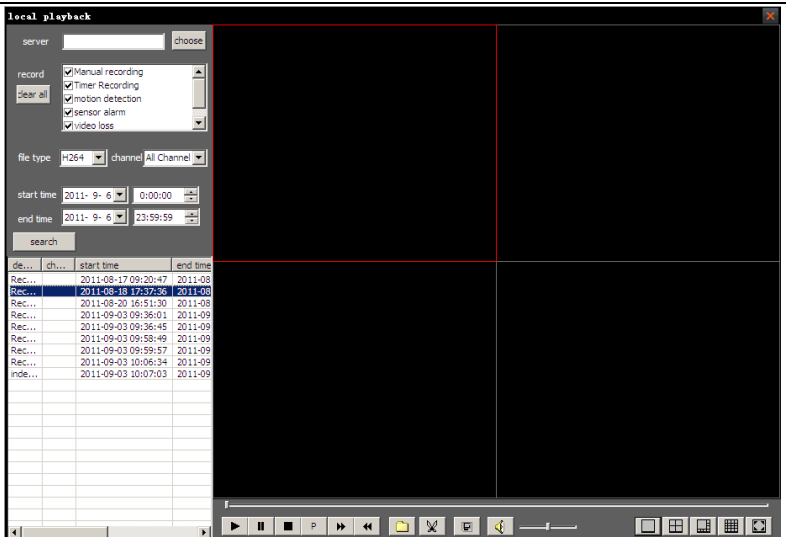


select the "timer recording" device which need to be set from the "Select Device" box, then check in the front of "timer recording" check box tick and do the time setting , it will be effect after saving

5.2.2 Playback

5.2.2.1 Local playback

The extent permitted by the authority, the client can retrieve and playback the video file in the server, as shown.


local playback
server
choose
record
clear all
Manual recording
Timer Recording
motion detection
sensor alarm
video loss
file type
H264
channel
All Channel
start time
2011- 9- 6
0:00:00
end time
2011- 9- 6
23:59:59
search
de...
ch...
start time
end time
Rec...
2011-08-17 09:20:47
2011-08
Rec...
2011-08-18 17:57:36
2011-08
Rec...
2011-08-20 16:51:30
2011-08
Rec...
2011-09-03 09:36:01
2011-09
Rec...
2011-09-03 09:36:45
2011-09
Rec...
2011-09-03 09:58:49
2011-09
Rec...
2011-09-03 09:59:57
2011-09
Rec...
2011-09-03 10:06:34
2011-09
inde...
2011-09-03 10:07:03
2011-09

Retrieval and video playback functions include: EVD format, ASF format, MJPEG format, H264 format document retrieval and playback, video playback server, the local video playback. Video playback based on the video type, file type, video channel, start date and other conditions of the search, the user select criteria and click Search, the search results displayed in the blank form , user can double-click the video during playback, you can also drag the video, if the user want to watch multiple video, you can select options for the lower right corner of the screen (the screen can be divided into single, four, eight, 16-channel), then select the picture, and then double-click or drag the video , then the file can be viewed , Users can crop the video in the process of watching according to their needing (Note: The cut pieces are cut from the beginning to click Save so far) can also click on the button for single-frame playback. Users can also click on icon, playing other video files. Note: If the video file stored in less than one Video frame, double-click or drag the video files will not play.

6 Frequent asked question

- **Fail to access the IP Camera through the browser**
  - Possible Cause : The network is disconnected
    Solution : Connect PC to network to test whether the network work normally . Firstly clear the cable fault and network fault caused virus till Ping the network between PCs successfully.
  - Possible Cause : IP address is occupied by other equipment.
    Solution : Disconnect the IP camera and network ,and then connected camera to the PC solely . Also , reset the IP address according to appropriate recommended operations
  - Possible Cause :IP address is located in different subnets
    Solution ： Check the setting of IP address of IP camera , the address and getaway .
  - Possible Cause :Uknown
    Solution : Restore the factory-set default by pressing the restore button behind the IP camera .
- **Can not play Video after Program Updating**

  Solution : Close all the browser ; search NetClient.dll、NetViewX.cab、NetViewX.ocx.file delete it . Then connect the IP camera by the browser again , the IP Camera will automatically display after install the plug-in again .

- **Cannot Get Date Pass Through Switch**
  impossible reason ：
  Layer Switch , the address is written wrong ?

Three switches , The binding of port and physical address are done or not ?
When configuring the firewall rule , whether take IP camera into account ?
Solution：

- Before searching the network fault , please make sure to use the ping command in command mode to connect the IP address . To check the message returned from ping is very important step . If no message is returned , it indicates that some faults must exist in the network
- If the IP address and Mac address are bound , adding a new binding of IP address and Mac address of the IP camera within the exchanger is required inside switch。

◆ **Errors Occur After Updating**

Delete the buffer of the browser . The detailed steps are as follows : open the tool menu of browser to open the internet option ,and then click the " Delete File " button in the second item (temporary file of Internet) and check the " Delete All Offline Contents " . then confirm , and login the IP camera again .

◆ **factory default network parameters：**

parameter	Default
IP address	192.168.1.88
subnet mask	255.255.255.0
gateway	192.168.1.1
Web port	80
DDNS	close
motion detection	close
Probe alarm	close
PPPOE	not start
WIFI	close

◆ **users and password**

parameter	user name/password
administrator use name	admin/admin
ordinary users 1	user1/user1
ordinary users 2	user2/user2
ordinary users cannot set parameter	

Thanks for using our network camera . If the appearance or function didn't in accordance with our handbook, which may be caused by the differentia between different models or update of system software, you can contact with our company anytime. We apologize for haven't informed you about these changes in time.