ForSee
KaiCong.net

KAICONG™ SIP1018

2010-5 V4.10

User Manual

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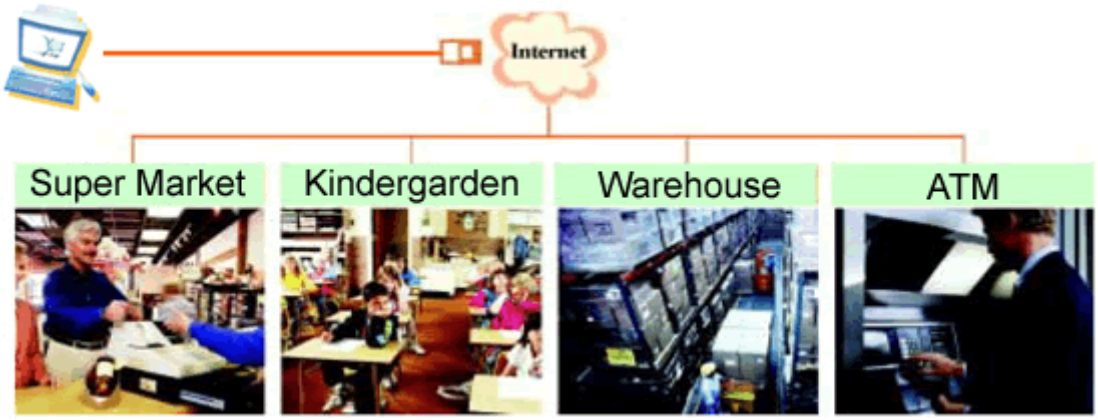
1 Introduction

The KAICONG™ SIP1018 combines a high quality digital video camera with network connectivity and a powerful web server to bring clear video to your desktop from anywhere on your local network or over the Internet.



	Your KAICONG™ SIP1018 package should contain the following items, If any of the listed items are missing, please contact your reseller from where you purchased the camera for assistance.

The package includes:

- ✓ KAICONG™ SIP1018 * 1
- ✓ 5V Power Adapter *1
- ✓ Stand of plastic * 1
- ✓ Cable * 1

2 Function and Features

- ✓ The video is compressed by MJPEG. There are VGA/QVGA/QQVGA three video resolutions optional. User can change some parameters according to their demands to satisfy his own visual prefer.
- ✓ With built-in Microphone, it enables user to monitor the sound on the site. User can also connect this equipment to the speaker, and it supports two-way intercom function.
- ✓ It was equipped with pan/tilt function, horizontally 270°and vertically 90°. Its outlook is smart, easy and convenient to install in many sites.
- ✓ It adopts the TCP/IP network protocols and has inner web server. Users can browse video through IE and other browsers. Data is transferred through one port; it is easy for user to do the network setting.
- ✓ Support 802.11b/g protocol, can build up wireless monitoring.
- ✓ Supports UPNP, port forwarding automatically on the router.

- ✓ Motion detection and alarm pin can be connected to external sensors to detect environmental situation.
- ✓ Alarming record can be stored by email, FTP server. External alarm can be open when detecting unusuality. It also sends alarm info to the alarm server.
- ✓ Infrared LED for night vision covers 5m area, to realize 24 hours monitoring.
- ✓ Support three level of user authority.
- ✓ Support upgrading online.
- ✓ Manufacture provides free software, support Multi-view, Long time recording, video replay etc.

3 Appearance and interface

3.1 Appearance

Figure 1

Note：

- ➢ Status Indicator: the green light is to show the status, when device running, Slow flicker（one per 2 second），indicates the device is searching for network; flicker（one or twice per second）, indicates the wired network connected; Frequent flicker（2~3 times per second）, indicates wireless network connected.

3.2 Interface of Equipment

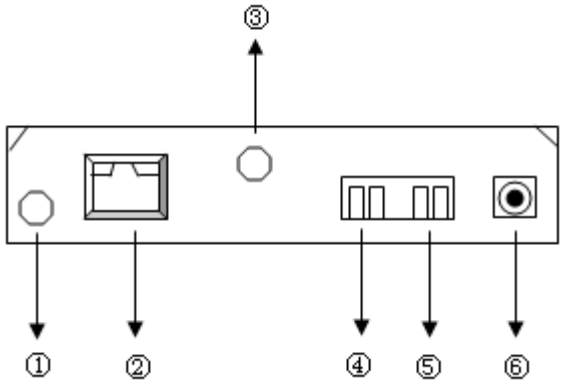


Figure 2

1） **Audio Output Socket:** Audio output socket is for line-out audio player, such as headphone, speaker, etc.

2） RJ45 Ethernet Socket: RJ45 Ethernet socket is 10/100M self-adjust. The equipment can connect to all kinds of network equipments, such as hub, router, switch, etc.

NOTE: Factory setting IP is 192.168.0.178, the http port is 80, the username is admin, the password is 123456.

3） WIFI Antenna Hole: Install the WIFI antenna.

4） Alarm Output Socket: The alarm output socket is connected with a relay in the KAICONG™ SIP1018. KAICONG™ SIP1018 will control the switch to trigger the alarm bell or buzzer to alarm. The relay is able to control the switch of a alarm whose voltage is no more than 36V, and current is lower than 2A. Please refer to the Figure 3 for the connection of an external alarm.

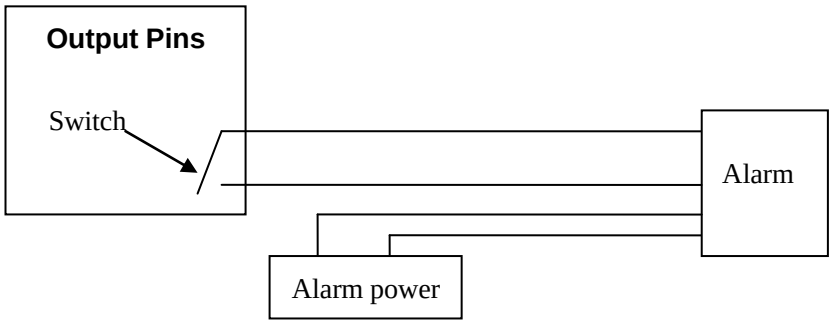


Figure 3

5） Alarming Input Pin: Please refer to the schematic Diagram of Figure 4 for how external detector collects alarm information.

The detector should be switched type (always on or always off). If the detector has detected the smoke or people or animal to enter the area, the detector will switch on or switch off. And it will send the external alarm signal into the KAICONG™ SIP1018.

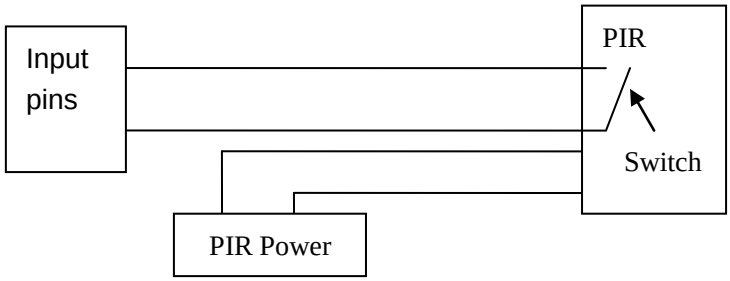


Figure 4

6） **Power Input Socket:** Connect DC adaptor, its output should be 5V power specification.

7） **RESET Button:** reset button is on the bottom of the device, Press the RESET button and hold on more than 10 seconds, the equipment will restart and recover to the factory default settings.

4 Network Connecting

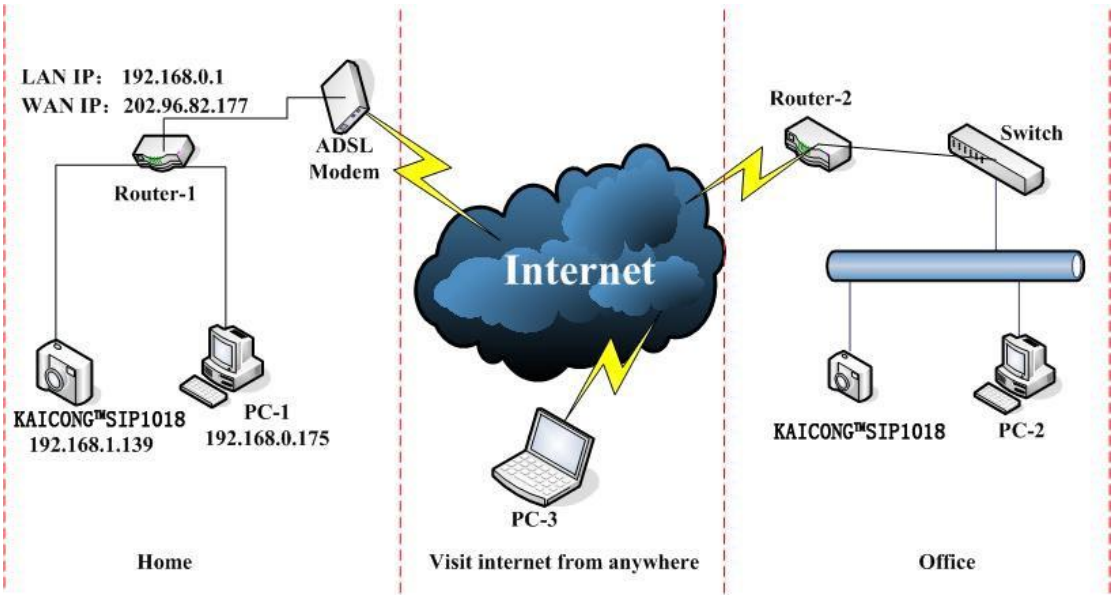


Figure 5

4.1 Connection Instruction

Before visit the KAICONG™ SIP1018, you should firstly connect it to the Network, supply the power to it, and check if the light of RJ45 Socket is normal to make sure all of the communication links are fluent. The connection method is like as Figure 5.

1) KAICONG™ SIP1018-1 and KAICONG™ SIP1018-2 are connected separately to 2 different LANs.
2) And these 2 LANs are already connected to the Internet. In order to get the LANs to be connected to the Internet, they are required to be equipped with router and to

apply for the communication link from the local Internet Service Provider (ISP) and connect to it by ADSL or optical fiber, etc.

3) PC-3 is connected to the Internet.

4.2 Visit Instruction

To visit the KAICONG™ SIP1018, you should do some settings of KAICONG™ SIP1018 and Internet besides getting the communication link fluency.

1) **The PC and KAICONG™ SIP1018 are in the same LAN.** If you want to use this PC to visit the KAICONG™ SIP1018, you need to make sure their IP address is at the same segment. Otherwise you need to do the reset of the KAICONG™ SIP1018's IP address. For example, the KAICONG™ SIP1018-1's IP address in Figure 5 is 192.168.1.139 (at the segment of 192.168.1), while the PC-1's IP address is 192.168.0.175 (at the segment of 192.168.0), then you will be not able to visit the KAICONG™ SIP1018 through the PC-1. You need to change the KAICONG™ SIP1018-1's IP address to 192.168.0.139 firstly.
2) **The PC and KAICONG™ SIP1018 are in different LANs, but they are all connected to Internet.** For the KAICONG™ SIP1018-1 and PC-2 in Figure 5, if you want to visit KAICONG™ SIP1018-1 by PC-2, you should firstly do the setting as 1) to make sure that you can visit KAICONG™ SIP1018-1 through PC-1 and then do the setting of router-1 (do the port forwarding from the router). The PC-2's visit application could be sent through router-1 to KAICONG™ SIP1018-1. Normally, PC-2 could only send the information to router-1, if you don't do the setting of router-1, then PC-2 could not visit KAICONG™ SIP1018-1.

5 Visit KAICONG™ SIP1018 from LAN

5.1 Set IP Address

The IP addresses of KAICONG™ SIP1018 and PC should be at the same segment, for Figure 5, the KAICONG™ SIP1018-1 can't be visited. Run the BSearch_en.exe in the CD, click Search button, and then select the KAICONG™ SIP1018-1 to reset the IP address, as the Figure 6.

Setting Instruction:

- ✓ Please carefully check the "Local PC information" on the top left corner which lists the PC configuration. If there are several network adapters in the PC, please select the one you are using and make sure the IP address of KAICONG™ SIP1018 is as the same segment of the PC.
- ✓ Change the content of "IP config" on the right to make sure the content is the same as "Local PC information". Only the last section of the IP address which needs setting by yourself, you can set it as 139 just like Figure 6.
- ✓ ***If you don't know how to fill out the content of "IP config", you could also tick***

the "Set IP automatically" to get the IP address from the router automatically.

✓ Put the user name and password into "Authentication" (***By default, the user name is: admin, password is: 123456***). Click "Update". The setting will take effect now. Select the device in list box, click "Browse" button, it will open the Browser automatically and pop up a window at the same time which requires to inputting the user name and password. Then you see the home page of the KAICONG™ SIP1018-1, click "English" on the right-top corner, just as below Figure 7. On the right corner of the interface, user can choose the language.

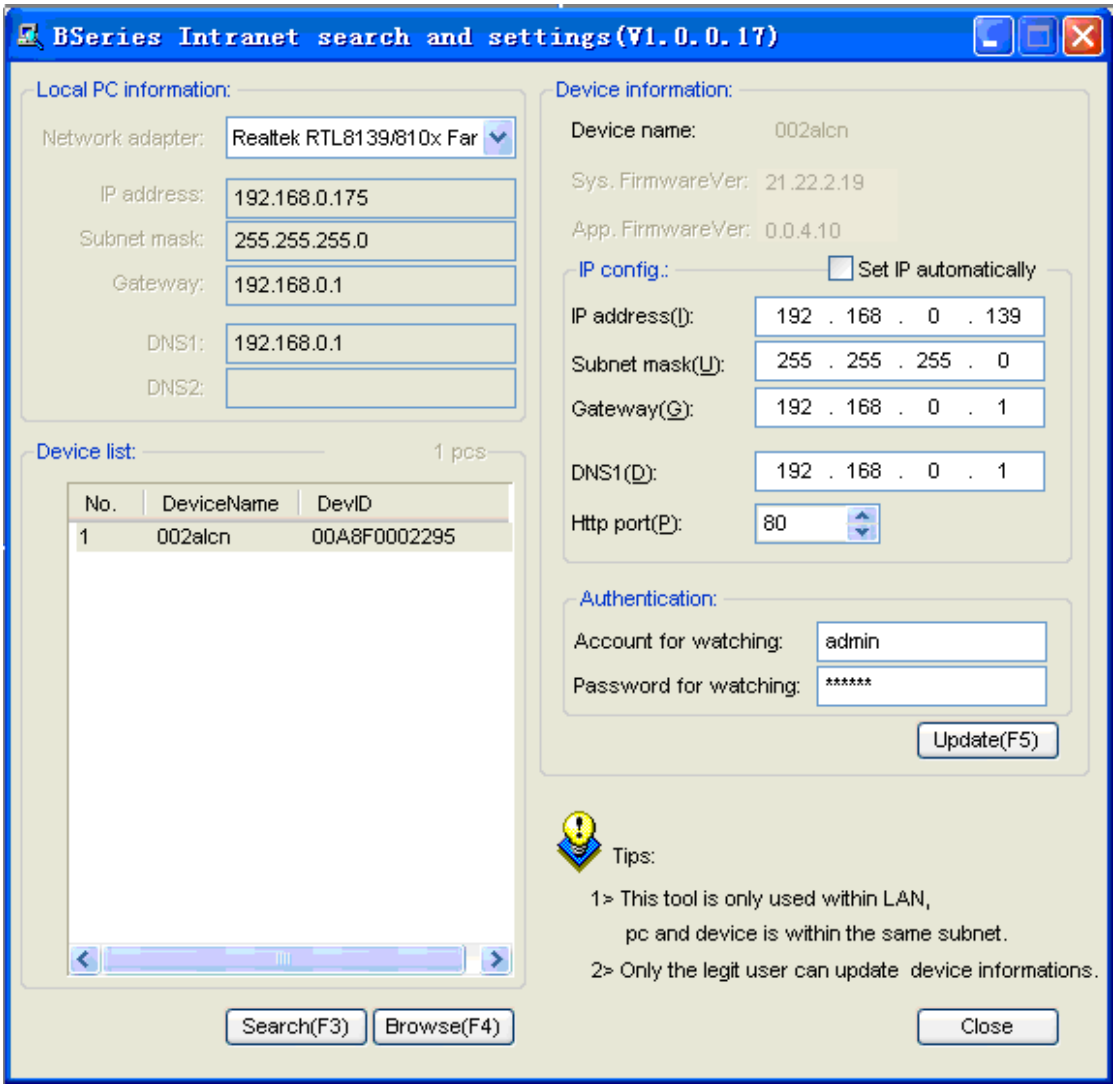


Figure 6

	If you have the firewall software in your PC, when you run the HSearch_en.exe, it may pop up a window to say if you want to block this program or not, then you should choose not to block.

	KAICONG™ SIP1018 by default use fixed IP address 192.168.0.178 and fixed http port 80. If you don't have this software, you could also press down the reset button to go back the factory setting. Then you could use this defaulted IP address to visit the KAICONG™ SIP1018.

Figure 7

5.2 Visit KAICONG™ SIP1018

We suggest using IE kernel browser to view the video （it can provide more functions）, but user need to install Player before viewing the video. Click “download and install player (first use)” link, it will popup dialogue box as Figure 8, click Run, it will automatically download player and install.

Figure 8

After install the plug-ins, click “Mode 1 to view” link in Figure 7 to view the video (video as Figure 9).

Figure 9

1） Menu column

The menu lies on the right of the interface, and different main menu is in line with different submenu.

2） Video Displaying Area

Video display area is according with resolution, the higher resolution, and the larger display. Double click left mouse in the video display area, it will show full screen, and double click again, it will go back to original size. Double click right mouse in the video display area, it will show green icon, click the left mouse, Pan/tilt will remote according to arrow signs.

3） Status Displaying Area

Right up corner is the status displaying area, to show the 9 device's status:

- if not connected , button is gray
- if connected, button is green
- If wrong connected , button is yellow
- If alarm , button is red

4） Multi Channel displaying area

If user add multi channel（refer to 7.3.2）, when shift to 4-Ch, 9-CH, and will automatically to show other device. On the showing area, if choose the image, you can do play, stop, record, control Pan/tilt and other operation.

These buttons mean start video, stop, monitor, talk, record and snapshot. Click button to choose the functions.

5） PTZ and video control

In Pan/Tilt control area, user can control the position according to the arrow sign: up, down, left, right, middle, horizontal cruise, vertical cruise, and stop etc.

Means open IO output and Close IO output.

User can also set the device resolution, brightness, contrast and other parameters.

6 Visit KAICONG™ SIP1018 from WAN

6.1 Port forwarding

Follow the "Visit KAICONG™ SIP1018 from LAN" steps; make sure PC-1 can visit KAICONG™ SIP1018-1. In Figure 5, before the computers in WAN (PC-2, PC-3) can visit the KAICONG™ SIP1018-1, must put the KAICONG™ SIP1018 -1 into WAN. You can set port forwarding on Router-1 to put KAICONG™ SIP1018-1 into WAN.

Open the Router Setting interface on PC-1. The interfaces for different routers are different, and the port forwarding settings are different, please refer the router manual to set. For most routers, "Virtual server" option can be found in setting interface. Fill the IP address and port of KAICONG™ SIP1018-1 into corresponding blank. Figure 10 is an example.

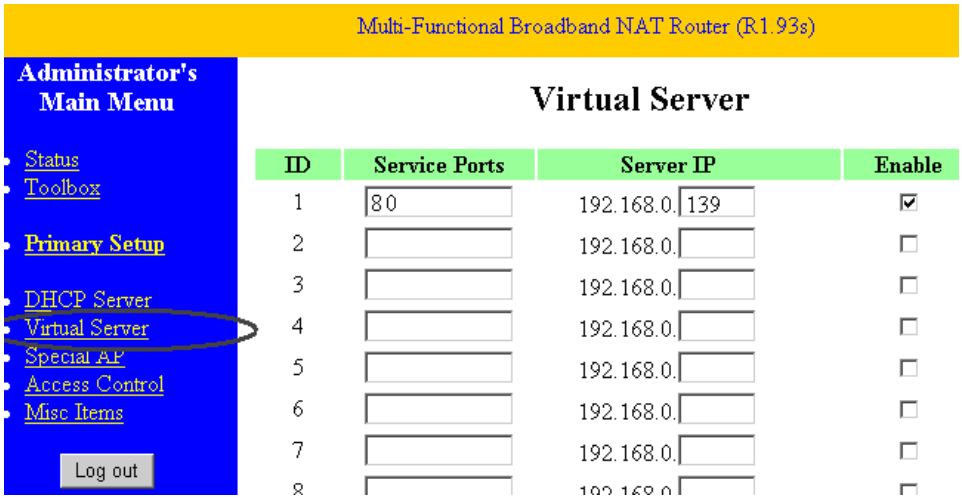


Figure 10

Select "status" option and remember the WAN IP address, enter the IP address in browser of PC-1, if IP Camra-1 can be visited via PC-1, the port forwarding is success. And PC-2 and PC-3 can also visit the KAICONG™ SIP1018-1.

	WAN IP address is allotted by ISP, please make sure it's an available WAN IP address. As WAN IP address is lack, many WAN IP address are available in limited area. If PC-2 and PC-3 are not in this area, the KAICONG™ SIP1018-1 won't be visited by them.

	If user wants to put several KAICONG™ SIP1018s into WAN, every device should set the port forwarding. In order to distinguish these devices, every device should set a different port. If the port of the device is not 80, should add the port to IP address with colon to visit the KAICONG™ SIP1018. Example: http://202.96.82.177:81.

6.2 DDNS

In Figure 5, Router-1 get WAN IP address via ADSL, these WAN IP address is always changing, so, the IP address can't be confirmed when visit the device in WAN. We need the dynamic domain name server (DDNS). KAICONG™ SIP1018-1 send IP configuration to DDNS every few time, DDNS can recognize the WAN IP address of the router-1 which connected with KAICONG™ SIP1018-1. The WAN IP address can be searched on DDNS by domain name. Herein, domain name substitute the dynamic IP address. If the device can't be visited by IP address, this domain name is also unavailable.

6.2.1 Third Party DDNS

User can also use local DDNS, such as www.3322.org. User should apply a free domain name from this website and fill the info into the below blanks (Figure 12) and save the settings. Then the domain name can be used.

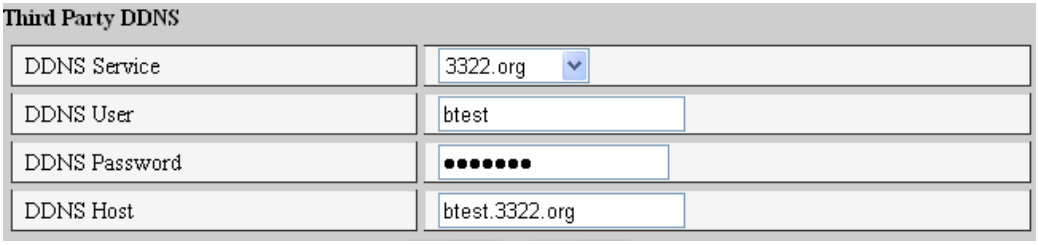


Figure 12

	The third party domain name is realized by analysis manner, the domain name will be displayed in the browser all the time when visit camera. If the port is not 80, the port number should be adding to the domain name with colon. Example: ***http://btest.3322.org:81***

7 Other Settings

7.1 Network Setting

7.1.1 Basic Network Setting

The user can also enter the Basic Network Settings to set the IP address except using the search software. See below Figure 13.

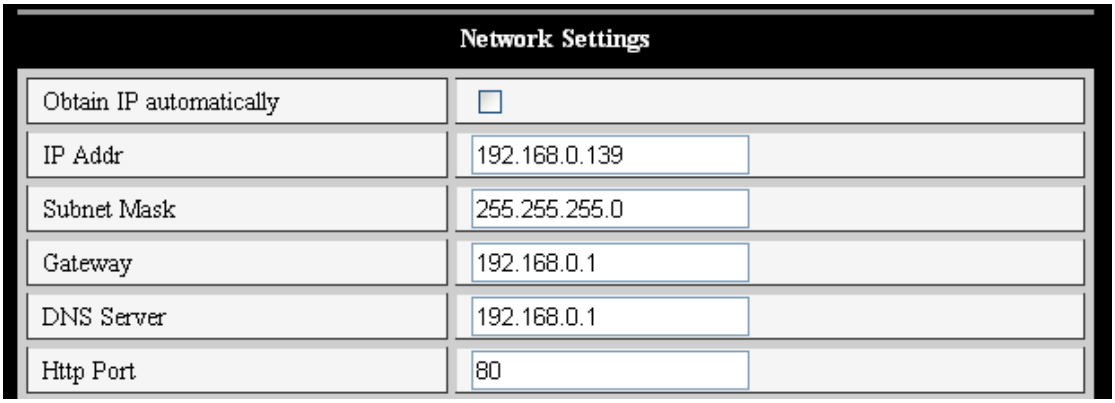


Figure 13

7.1.2 WIFI Setting

If the device is with the cabel, enter the Wireless LAN Setting, just as below Figure 14 shown, click the “Search” button several times, it will show you the wireless network detected in the Wireless Network List column. Select one of them and tick “Using Wireless Lan”, then the relevant data of the selected wireless network will be shown in the following blanks. Put in the password and click “Set”, then the WIFI setting is finished.

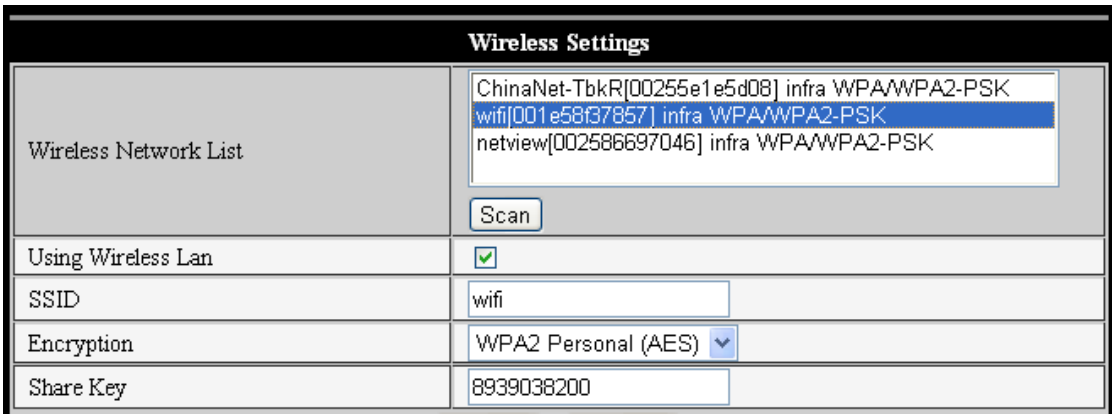


Figure 14

Note: When the device is connected both WIFI and wired, after it starts up, it will firstly connect to the wired network, if it can’t connect to it, then it will change to connect the wifi. The IP address and port is the same, either wireless or wired network.

7.1.3 ADSL Setting

User could enable the ADSL Dialup according to the below Figure 15 (The Telecom Operators will assign the user name and password to you when you apply for ADSL service.) Connect the device directly to the ADSL modem and it is connected to the Internet, but don’t need to do the port forwarding.

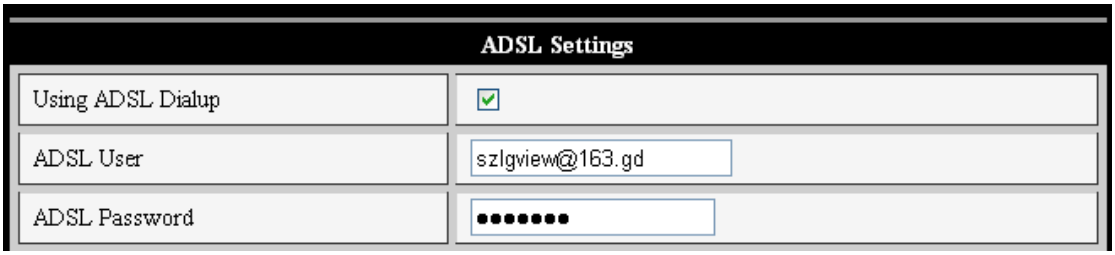


Figure 15

7.1.4 UPnP Setting

UPNP stands for universal plug and play, if you start UPNP, once the KAICONG™ SIP1018 is connected into the LAN, it will communicate with the router in the LAN automatically. It will request the router to open a port to forward its own port. It is no need for the users to log in the router to set the port forwarding. Below Figure 16, tick “Using UpnP to Map Port” and the setting are completed. You could check the UpnP succeeds or not in the interface of System Maintenance.

Figure 16

Before using UPNP function, please make sure the router's UPNP function has been triggered. Because there are so many different routers, and not all of them can support UPNP. Please test if the router work well with the equipment, if not, we would suggest you don't enable this function.

7.1.5 DDNS Setting

Please refer to the content in 6.2.

7.2 Alarm Settings

7.2.1 Alarm Setting

1） Alarm Detect

User can select the motion detect to enable monitor a certain area, if anything happens in that area, it will trigger the alarm. In the motion detect sensibility, the smaller the figure, the more sensitive it is.

As showed in picture 4, if external alarm detector was connected to the device, user will be able to tick the scheduler for alarm. If the external alarm detector is an always on switch alarm. Please choose "open". If the external alarm detector is always off switch alarm, please choose "close".

2） Alarm Action

After every trigger of alarm during the scheduled time, the device can trigger alarm in several ways.

- IO interface for alarm signal output: when relay was switched on (please refer to Picture 3), the external alarm will begin to alarm.
- Send alarm info by email.
- Send the site pictures to the FTP server, user can also set the break time between two pictures.
- Send alarm info to the alarm server.

3） Scheduler

Device will trigger alarm in scheduled time. User can set schedule time to be "all the time". Please set the system time, time zone, and select the scheduled time. Please refer to the Picture 17.

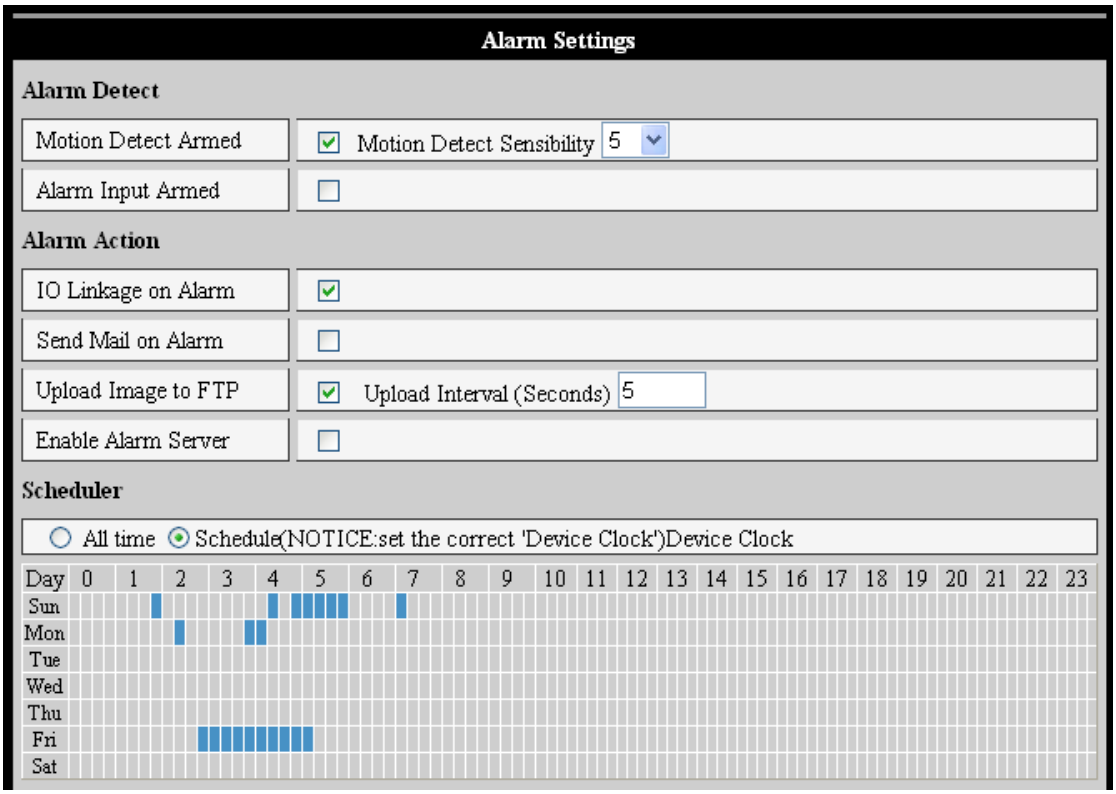


Figure 17

7.2.2 Mail Service Setting

The device will send alarm email to the email address was filled in. Please do the mail settings properly fist, Picture 18 is a mail setting page for your reference. After the setting, please click save and test to check if it works properly.

If have already set the mail server properly, user can tick to enable “Report Internet IP by mail”. After every restart, the device will send its Internet IP address to user’s email address. If this device has been port mapping to the Internet, then users can view the device’s video through the Internet IP address.

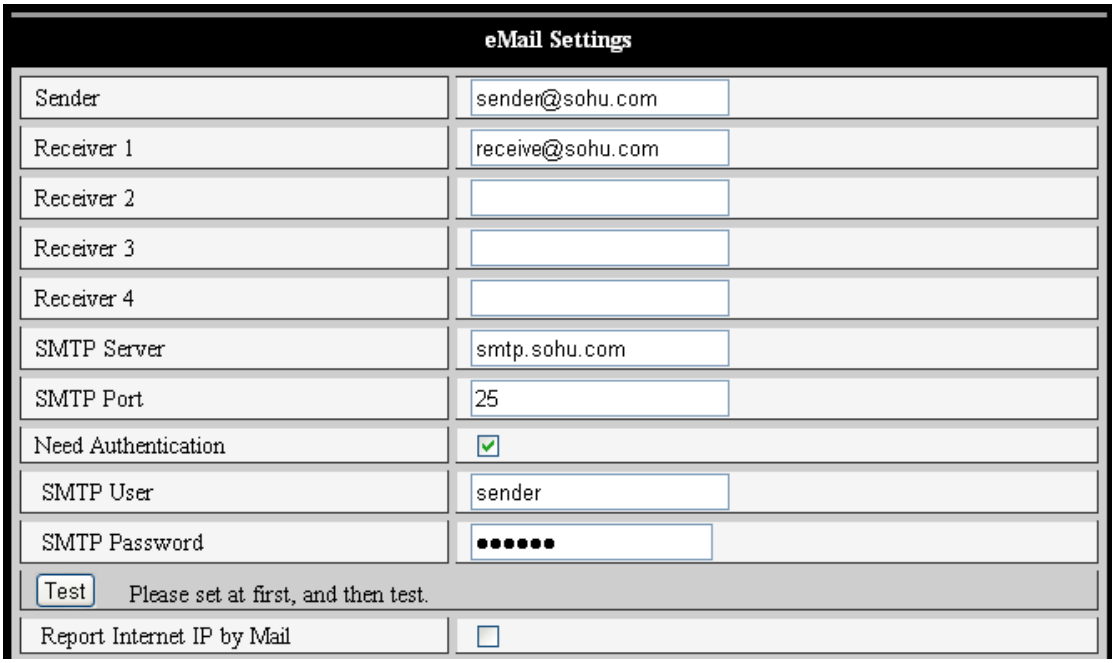


Figure 18

	Please make sure your email server open POP3 functions, or the mail can't be sent.

7.2.3 FTP Service Setting

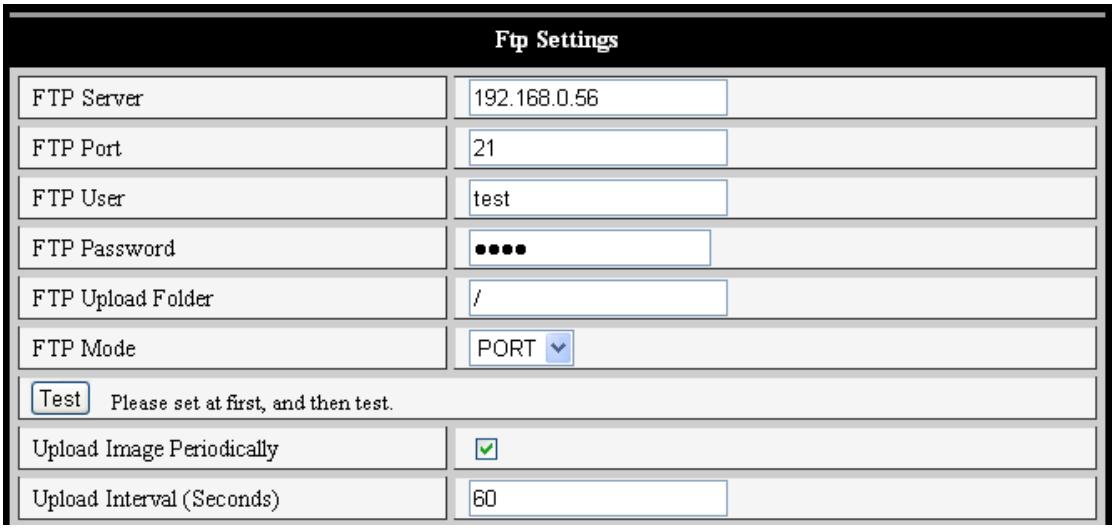


Figure 19

When alarming, device will snap and send the image to FTP server, please make sure the FTP setting is correct. Above Figure 19 of FTP setting for your reference, click setting to store the setting info and click test to check the setting.

After correct setting FTP server, you can use "upload Image Periodically" function. Even no alarm, device can also send the snap image to FTP periodically.

	In order to use FTP function, user should apply username and password on the FTP server first. And please apply some storage, and the authority to write and create sub-category into it.

7.2.4 Alarm Server

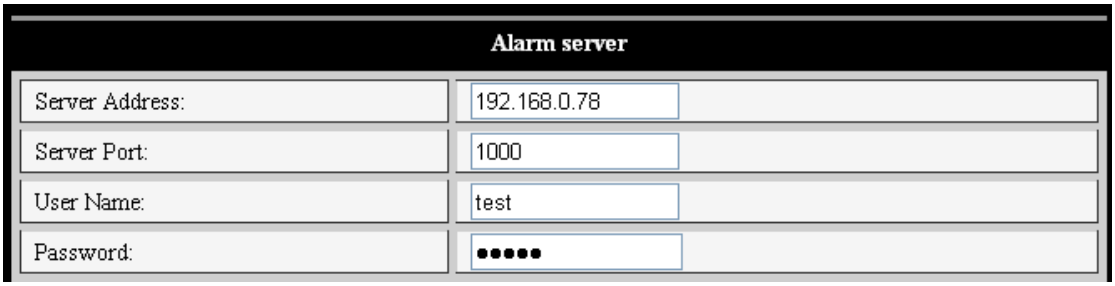


Figure 20

Please confirm if you have connected to alarm server. The alarm message format as follow:

GET /api/alarm.asp?
username=username&
userpwd=password&
rea=alarm type (1=Motion Detection, 2 =Alarm from Alarm in port)&
io=0

Alarm server need develop by customer , user can extend other functions on this server , like SMS , MMS alarm , and mobile phone etc .

7.3 Advanced

7.3.1 User Setting

There are three levels of authority; they are Administrator/Operator/Visitor. Administrator have the highest authority, it can do any change to the settings. Operator account only can operate the KAICONG™ SIP1018, can't do changes to the settings. Visitor account only can watch the video, can't do any operation to the KAICONG™ SIP1018. ***By default, the administrator's user name is admin, password: 123456***.

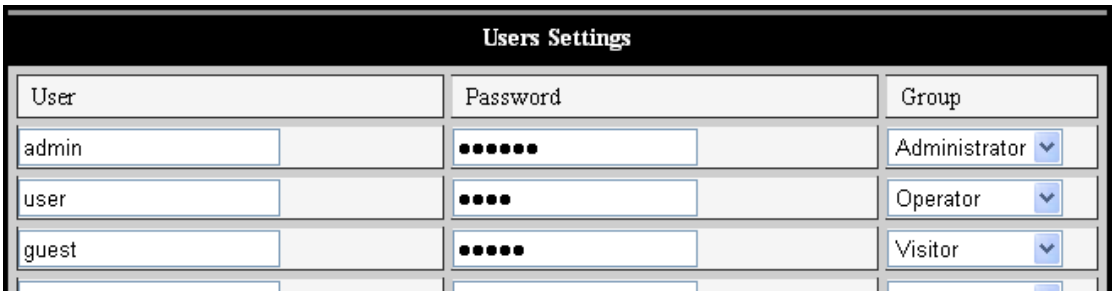


Figure 21

7.3.2 Multi Device Setting

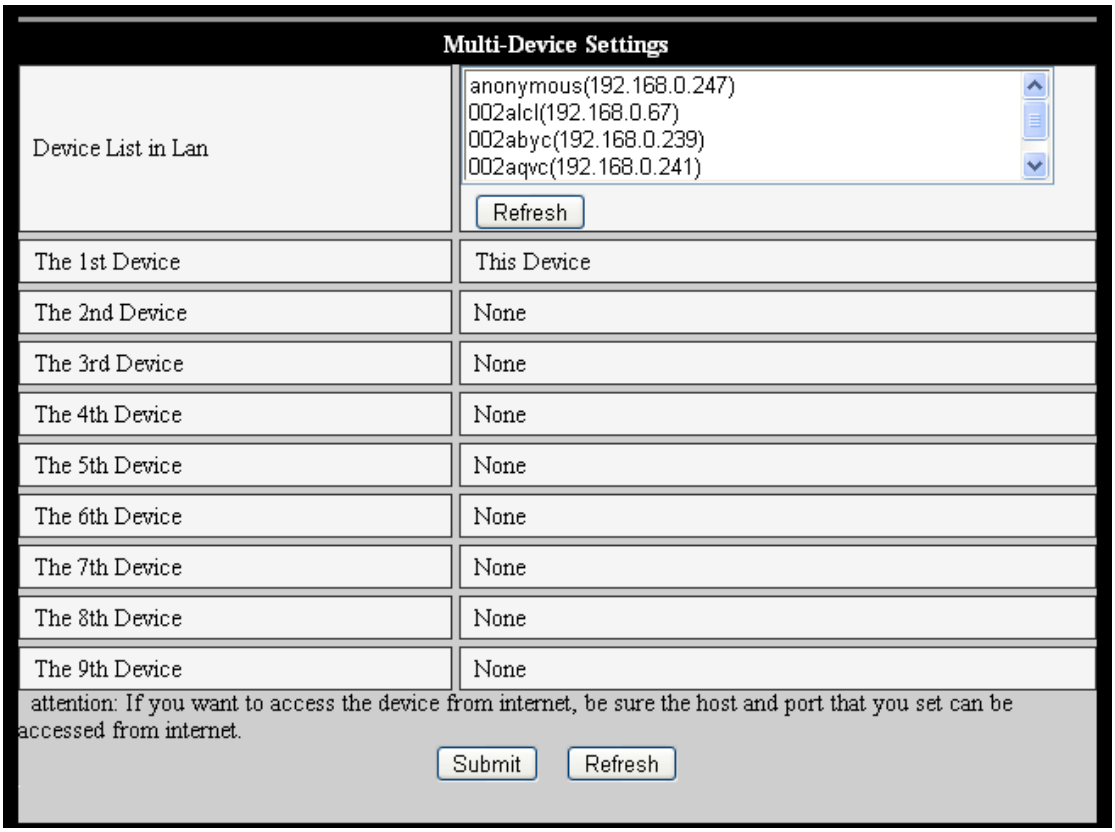


Figure 24

As Figure 24, User can maximum add 9 devices to view the device simultaneously. Click refresh button to check the device in the LAN. When click the device, will popup setting dialogue box and input the device info, as figure 25 and click save. After that, must click submit button to save.

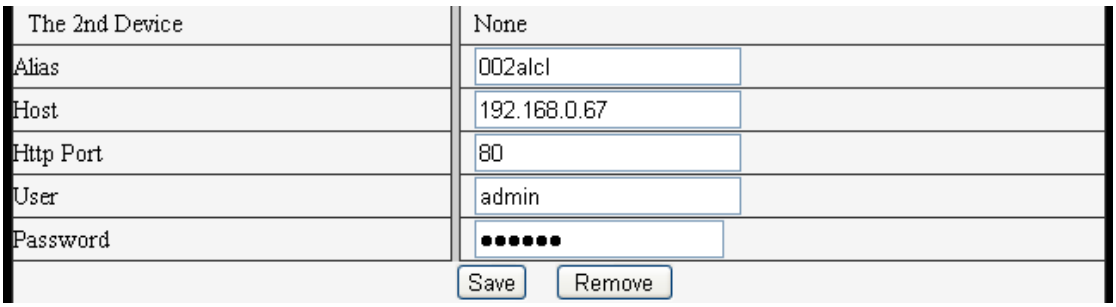


Figure 25

7.3.3 Other settings

You can choose open or close indicator LED. If set PTZ center on start 'Yes', when start device, Pan/Tilt will move to center and then stop. You can also set the Horizon patrol rounds and vertical patrol rounds, when you click patrol on the 'view' interface, it will round according to your setting rounds. You can also set PTZ rate, 0 means fasterst.

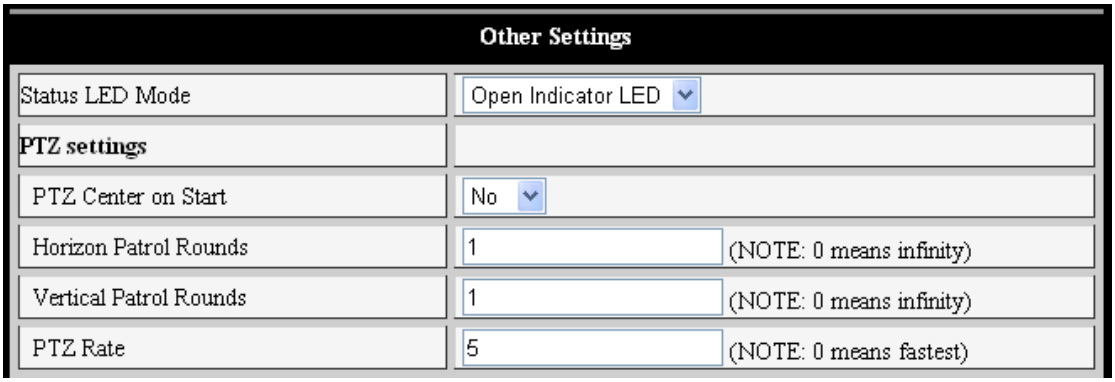


Figure 26

7.4 Maintain

7.4.1 Device Information

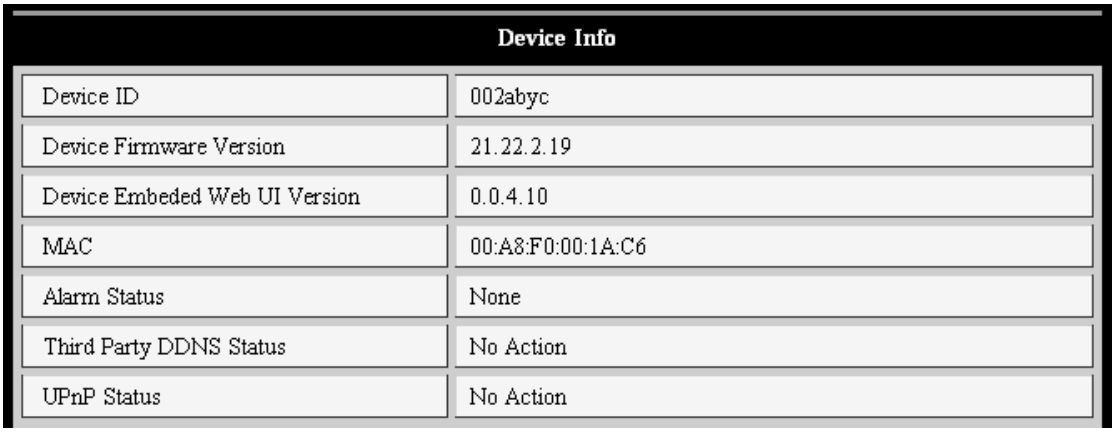


Figure 27

7.4.2 Time Setting

If the device is connected to the Internet, you enable the NTP server to correct the time and select the right time zone. Or you should use the PC's time to correct its time.

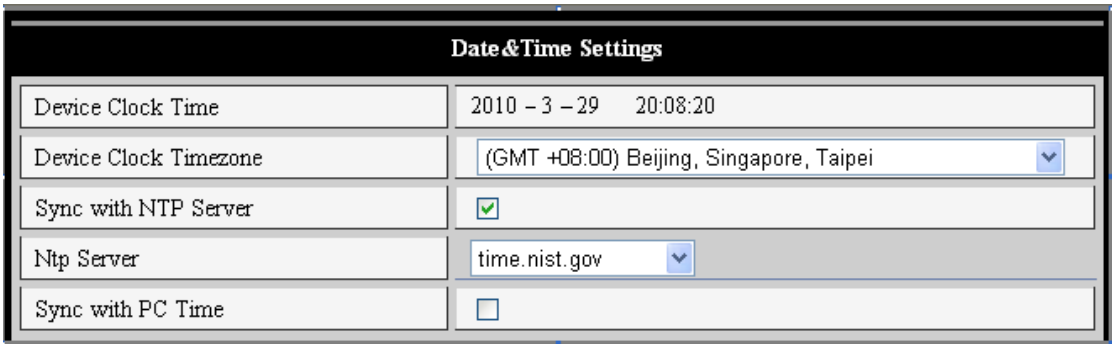


Figure 28

7.4.3 Firmware upgrade

The device runs 2 kinds of programmer, one is system firmware, the other is application firmware. They could be upgraded separately.

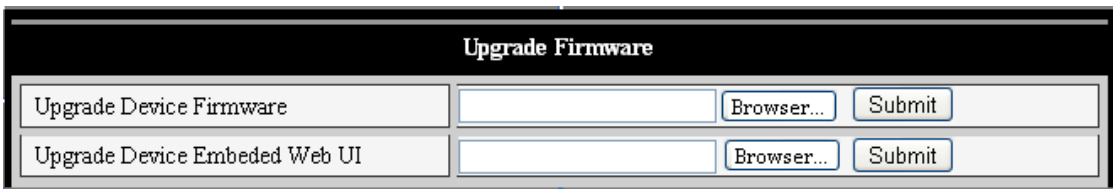


Figure 29

7.4.4 Restore Factory Default

Click “Restore Factory Default”, it will pop up a dialogue to confirm if you really want to restore the factory default. After confirmation, the system will restore the factory default and reboot.

7.4.5 User browsing Log

After enter the log interface, you could view who and when the device is visited.

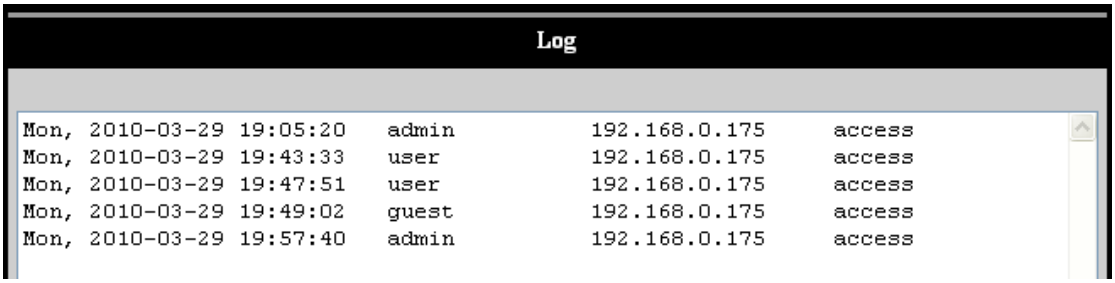


Figure 30

8 Centralization Control

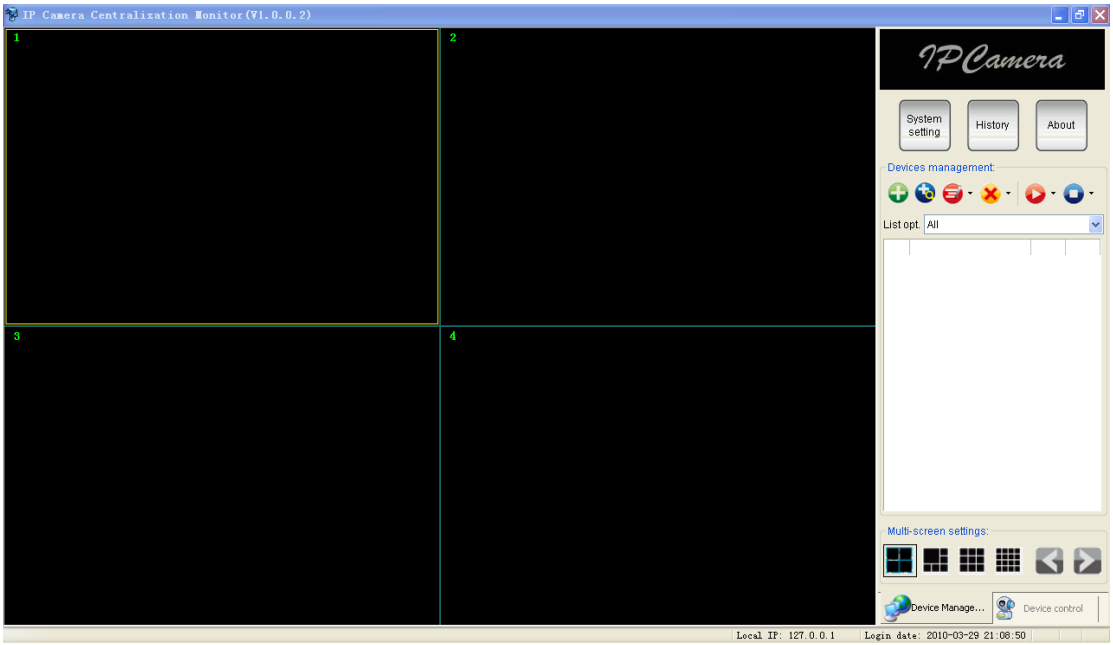


Figure 31

Highly recommend IPCMonitor , a free software that several devices(eg.KAICONG™

SIP1018,KAICONG™SIP420,KAICONG™SIP285 ect.) on LAN and WAN can be browsed at the same time. The software also supports snap, video record, alarm and so on. The below Figure 31 is the interface.

9 Technical Parameters

Item	Sub Item	Description
Image Capture	Sensor	1/4" CMOS sensor
	Total of pixel	300k
	Minimum illumination	IR on，0 Lux
	Lens	f=4.5mm, F=2.0, Fixed Iris
Pan/Tilt	Pan Coverage	270°
	Tilt Coverage	90°
Assistant	Lighting Control	10pcs 850nm Infrared LEDs, 5m distance
	Lighting	Auto control
Video and Audio	Resolution	640*480(VGA)/320*240(QVGA)/160*120(QQVGA)
	Compression	MJPEG
	Frame rate	30fps
	Bit rate	128kbps ~ 5Mbps
	Image Rotation	Mirror /Up-side down
	OSD	support
	Audio Compression	ADPCM
Network	Basic Protocol	TCP/IP、UDP/IP、HTTP、SMTP、FTP、DHCP、DDNS、UPNP、NTP、PPPOE
	Other Protocol	802.11b/g
Other Features	Video control	support
	Dual way audio	support
	Motion Detection	support
	Triggered Actions	Email/FTP/external alarm/send message to alarm server
	User Setting	Three levels
	Date/ Time Setting	support
	Upgrade	Upgrade from network
	DDNS	A free DDNS provided by manufacturer
Hardware Interface	Ethernet	10Base-T/100base-TX
	Alarm In	1 way
	Alarm Out	1 way
	Audio In	Internal mic
	Audio Out	Audio Line-out interface x 1
Physical	Weight	245g

Index	Main body	100mm(L)*99mm(W)*118mm(H)
	Power	DC 5V
	Power consumption	<6W
	Operating temperature	0℃~ 45℃
	Operating temperature	10% ~ 80% non-condensing
Software(PC Side)	OS Supported	Microsoft Windows 98/2000/XP/Vista
	Browser	Internet Explorer6.0 and Above or Compatible Browser, Firefox,Safari etc.
	Application Software	IPCMonitor.exe

10 FAQ

1) Unmatched power adapter will damage the equipment or power adapter

When plug in the power adapter , please check carefully the voltage , it should be 5V adapter for this equipment.

2) Slowly browse speed

This equipment adopts MJEPG compression format, it needs large network bandwidth, the narrow bandwidth will affect the browse speed . The typical bandwidth uses situation as below:

640x480@10fps : 4.0 Megabits ～ 5.0 Megabits

320x240@30fps : 1.2 Megabits ～ 1.6 Megabits

3) Color difference

The default is infrared lens, when visit outdoor or strong infrared light scenes, there are color differences, the color is not accordance to the real scenes. User can change it to color lens to solve this problem, but color lens can only use under the daylight situation.

4) Can't find equipment via search software after connect to LAN

Make sure the equipment and PC is in the same LAN; if install firewall software, please close it and try again.

5) Can find equipment via search software, but can't visit

If the IP address of KAICONG™ SIP1018 and PC is not in the same Network Segment, you should change them on the same Network Segment before visit. Network Segment is the first three number of IP address. If the IP address of PC is 192.168.0.100, so it can only visit the equipment which IP address is between 192.168.0.1~192.168.0.255.

6) Can't visit the equipment via Internet

Please refer to:
Chapter 4 (Figure 3) to check if the internet connection is correct;
Chapter 5 to check if you can visit via LAN;
Chapter 6 to check if the port forwarding is correct; and check the route setting if it forbid this equipment sending data to internet.

7) Can visit via public IP address, but can't visit via manufacturer's domain name

Make sure the DNS setting is same as your PC , as below Figure 32 , in the search tool , the DNS 1 and DNS 2 on both side should be same.

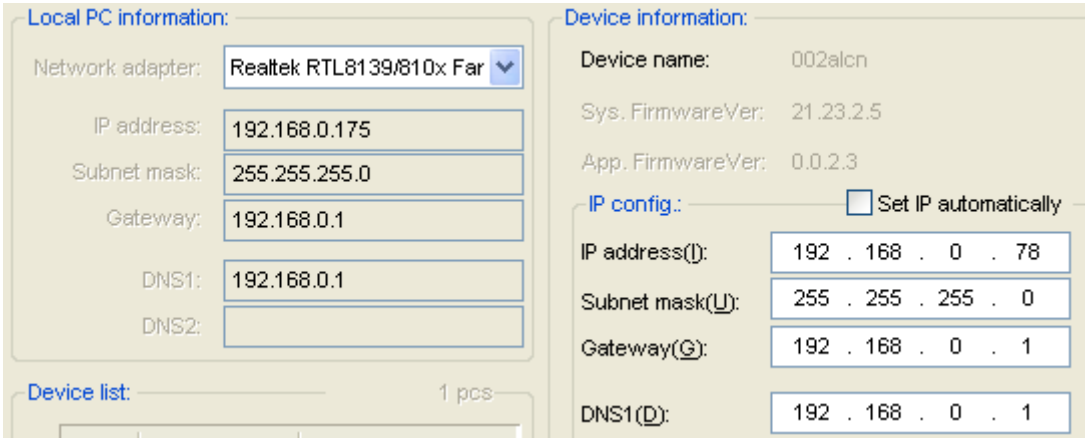


Figure 32

8) About Cell phone View

User can use the cell phone which use PUSH to view the device, like Safari on IPHONE, visit format as below: http://ip address: port/mobile.html

User who is interested in cell phone view can do the test by you; KAICONG co.ltd don't give the service support for cell phone view at present.

KaiCong technical support :+86-21-51035895-8007
KaiCong website: www.kaicong.net;
KaiCong Support QQ: 741976692; 775354526
KaiCong Msn support: kaicongcn@hotmail.com