

H.264 IP Camera Server

ES-IPS507

User Manual

V1.3



- IPS507 Three channels wired and four channels wireless video input server
- IPS507WD Four channels wired video input server

Welcome to use our IPS507 server

Please read the manual carefully before you use it, which will provide you a great help. We do our best on improving products software, hardware function, and our service quality.

Please contact the dealer once any doubt on using or product function are not the same with the manual.

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Chapter 1 Introduction

IPS507 server uses the latest codec algorithm to transfer the analog AV signal to digital by H.264 compression algorithm . Using TCP/IP protocol to send low-bit-rate AV encoded data to remote PC by IP package, achieve the remote transmission, monitoring and storage of AV signal to digital. It's built-in Web server,the users can use the standard IE browser on their PC or use specialized client access to visit,watch images and control camera's lens/PTZ from the front end,achieve the omnibearing real-time surveillance.It can be widely used in building control,road monitoring,industrial monitoring, large-scale remote monitoring,remote care,online unicast and so on.

1.1 Usage

Help you correctly use IPS507 series products.

1.2 Declaration

Please setup the IPS507 server according to this manual strictly.The software and hardware will continue upgrade and update.And the change will not give prior notice,please take attention on the announcement from our website.

Chapter 2 Product Description

2.1 Brief Introduction



PS507 server is designed as an embedded control solutions for IP network video and data surveillance. Using the faster computing speed DSP chipset and the latest H.264 codec algorithm, really achieve the low-rate stream high definition. Every frame on CIF is only 1.0KB to 1.5KB. Specially suitable for network transfer. The max transmission speed is up to 25fps(PAL)/30fps(NTSC)

IPS507 is a multi-use IP camera server. Besides providing 3 channels wired AV input, 4 channels wireless 2.4G AV input and network port, it also has 1 channel local AV output and RS485 controlling port.

IPS507 has in-built Web server, stable and reliable system operation. Visit remote images by specialized client port and IE browser. Support multiple network type, include dynamic IP and static IP/PPPOE, to realize the function of image and sound transfer on network. It also supports the function of talkback, multi-linkage alarm, motion detection and other advanced functions.

2.2 Features

Model	3 channel wired channels A/V inputs	4 channel wireless channel (2.4GHz) A/V inputs	Local A/V outputs
IPS507	Yes	Yes	Yes
IPS507WD	Yes(4wired)	NO	NO

- 3 way audio/video control: front panel, remote controller, remote PC.
- Real time remote surveillance of multi audio/video sources.
- Support both WAN(via ADSL MODEM) and LAN connection.Note:3G dial-up connection is under developing.
- Real time video recording via local USB port or on remote PC.
- Playback history recording and picture on remote PC.
- Motion detection: automatic video capture or snap shot when motion is detected.
- External alarms input/output function: such as PIR motion detection, smoke detector, gas alarm.
- PTZ remote control(L/R/UP/DOWN/F+/F-) via optional PTZ decoder.
- 3-level user management system: operator , administrator and super administrator with different level of privileges.
- Image compression format: H.264
- Support DynDNS.org & Oray.net & 3322.org free Dynamic DNS service
- Support catalog server to alias a dynamic IP address

2.3 Parameters

Parameters setting

Image Compression	H.264 format
Image resolution	PAL: D1 (704x576) /HalfD1(704x288)/ CIF(352x288)/ QCIF (176x144) NTSC: D1 (704x576) /HalfD1(704x288)/ CIF(352x288)/ QCIF (176x144)
Image Transmission Rate	PAL: 1-25fps, NTSC: 1-30fps

Interface for Storage devices	1 USB ports (USB2.0 port for storage)
Talkback port	1 USB port (USB port for audio)
AV input	3 channels wired,4 channels wireless at 2.4GHz
AV output	PC :4 channels.Local:1 channel
Recording format	DAT
PTZ Control	RS485
Network interface	RJ-45/10-100 Base T
Network Protocol	Support TCP/IP, UDP, ARP, HTTP, DHCP, FTP etc
Dimension	205×130×47(mm)
Software upgrade	Automatic upgrade with the included software
Video playback	IPSClient software
Security	Access rights setting: Super administrator giving the rights according to the new user
Working Temperature	0 – 50°C
Power supply	DC 5V/3A
Power consumption	< 10W

2.4 Packing List

Open the package and check the items contained against the following list:

- One IP Camera Server
- One DC AC110~240 5V/3A Power Supply
- One AV cable and one T568B standard network cable
- One BNC/ AV adapter
- One CD (IPS507 Driver)
- One remote controller
- One Audio to USB adapter

Contact us immediately in the case of any damaged or short of contents.

2.5 Network requirements and software operation environment

IPS507 series products support 10/100M self-adaptive network port, can connect to 10/100M or 100/1000M self-adaptive network environment. Due to the 7 channels video stream, please keep each device's bandwidth above 2M to ensure the normal operation.

Related equipment software can be run in the following Windows operation system

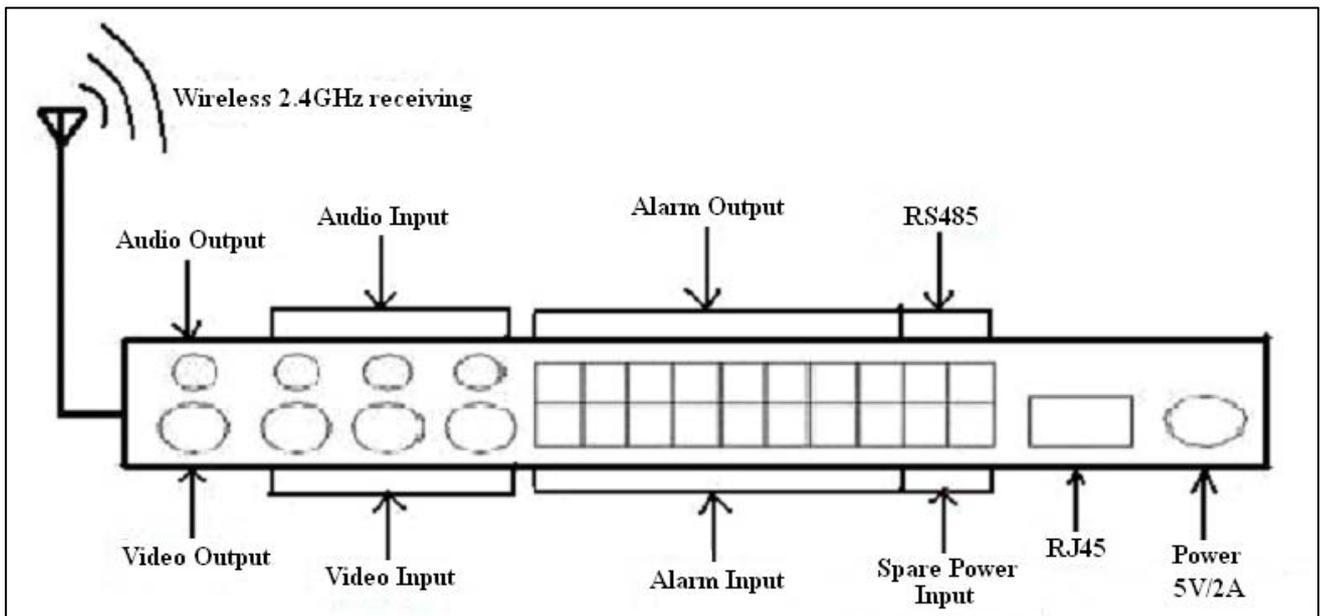
- Windows XP SP2 or above
- Windows 2000
- Windows 2003
- Vista
- Windows 7

Advise to use IE 6.0 or above browser

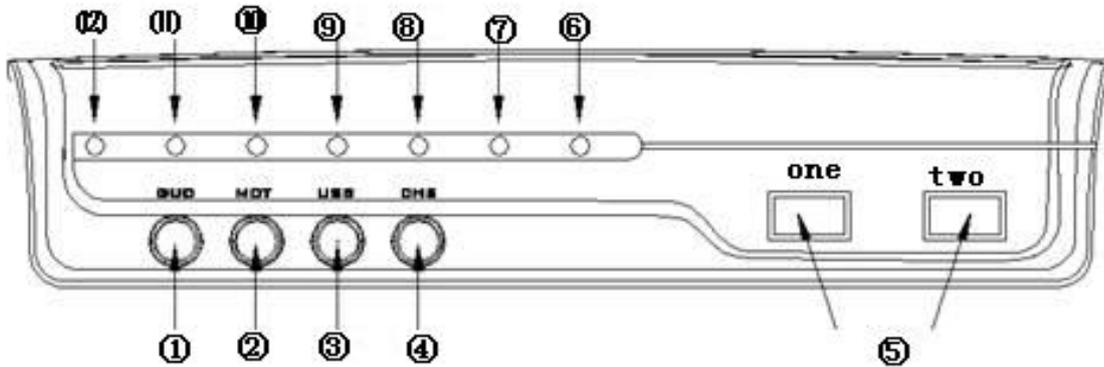
System configuration requirements:

- CPU:2.4GHZ or above
- Memory:512M or above
- Network Card: 10-100M or above
- Display Card: 128M

2.6 Rear Panel



2.7 Keyboard Introduction



The buttons and indicators are described as below:

- ① GUD: a button for system arming/disarming upon external inputs
GUD stands for “guard”, armed for arming and disarming , the system manually following the same working mechanics of the remote controller.

Notes:

Arming manually: the system falls under surveillance when “GUD” or “D” on the remote controller is pushed down; the server buzzer beeps twice if successful armed.

Disarming manually: In the monitoring mode, push “GUD” or “D” on the remote controller again to disarm the system; and the server buzzer beeps twice too.

Indicator for GUD(⑪): It turns on when the system is armed and turns off when it is disarmed manually.

- ② MTD: a button for system arming/disarming of motion detection
MTD stands for “motion guard”, meant for setting the motion detection function to keep watch on the channels under surveillance, following the same way as GUD.

This button function is the same as “B” on the remote controller.

Indicator of MTD ⑩: t turns on when the system is armed manually and turns off when it is disarmed.

- ③ USB: a button for USB plug
The button is meant for controlling USB plug. The USB indicator⑨is light upon detection of USB devices mounted and turns off when the button is pushed down for plugging the devices out in a safe way.
The function of this button is the same as “C” on the remote controller.

CHS: Channel switching button:

CHS stands of “channels”, used to switch the local output channels. The switch of wireless channels is synchronous with the remote monitoring channels.

The function of this button is the same as “A” on the remote controller.

Indicator⑧: It turns on when press “CHS”.

④ USB port

USB port: 2 ports

First port: The server will automatically recognizes the USB devices, lights when plugged in and went out when they are removed.

Second port: Earphone port for audio.Indicator is lighting when talking.

⑤ RUN: an indicator of normal operation

This indicator lights turn on when the system is under normal operation, went out when reset.

⑥ NETWORK: an indicator of network status

This indicator lights turn on when the system network works normally.

⑦ POWER: a power indicator

It is constantly lights when the system is powered on.

⑧ GUD+USB : a indicator of return to default

Press those two keys above 5 seconds it will return to default.

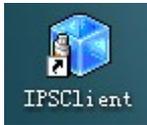
Chapter 3 Operation

3.1 Installation

First, open the included CD; Second, ① Please double click the

driver  

, install to your PC, it will have a icon on your PC

desk after successful installed. 

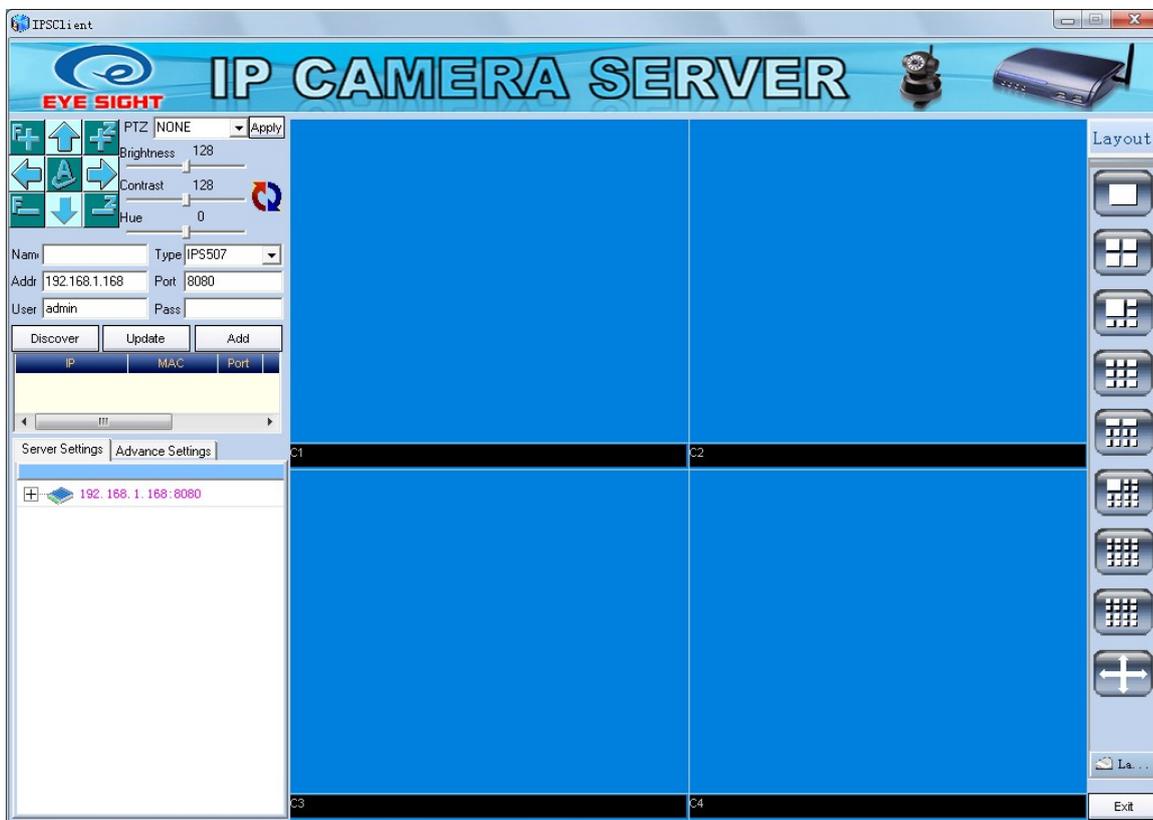


② Double click the “IPSCliant”, it will come out a dialogue.

Please entering the user name and password after click. Default user name is “admin”, no password.



③ Below image window will display upon successful login.



Software interface divides into 4 parts:

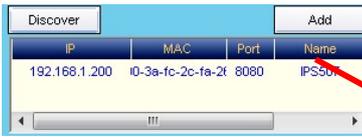


① Video window

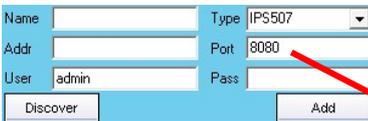


② Basic

setting and management



③ LAN searching: search video servers from LAN



④ Network setting

3.2 Image Window page

① **Video window** : video display of the network video server, there shows data of name, time, frame, server address under each channel.



1) Image function



C1 : Channel name, can be changed

Time :2009-9-1 21 :29 :24

IP address : shows WAN/LAN IP address or domain name

Speed : real transferring frames per second

2)Click image via right button to get follow function

Close :close present channel image

Record: record present channel. When recording, it has a red point coming out, but to choose well saving path, more description in 5.1

Snapshot:Taking picture for present image, manage taken pictures:①text font ②text position ③text format④text custom ⑤ saving path ⑥picture format and watermark



Audio out: Open audio out, a speaker icon will come out.

② **Basic setting and management** : basic setting of image and selected server, multi-server management.

③ **LAN searching: search video servers from LAN**

First login client software, find LAN searching window, click **Discover** , available IP address will coming out as below picture:

IP	MAC	Port	Name
192.168.1.200	10-3a-fc-2c-fa-2f	8080	IPS507

choose it then click **Add** .

④ **Network setting**: User can add the already on line device to server list on software.

Name	ES-IPS507	Type	IPS507
Addr	es-ips507.3322.org	Port	8090
User	admin	Pass	*****
Discover		Add	

Write all info as above picture and confirm by click **Add** .

Name: can write whatever user want,

User and pass: device user and password

Addr: WAN IP address

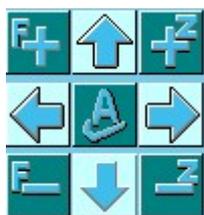
Port: client software port, above 8080

⑤ **PTZ control**: No matter which video server's video screen has been dragged into the video window, it all can be controlled (the camera should be connected with rotator and decoder).

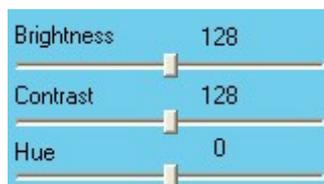
Click image and choose the control protocol ,



A dropdown menu showing control protocols: NONE, PELCO-D (2400), PELCO-D Mini (2400), PELCO-D Specll (2400), and PELCO-P (9600). Below the menu is an **Apply** button.



full function icon



color adjust



focus+ and-



Zoom in and out



auto crusion



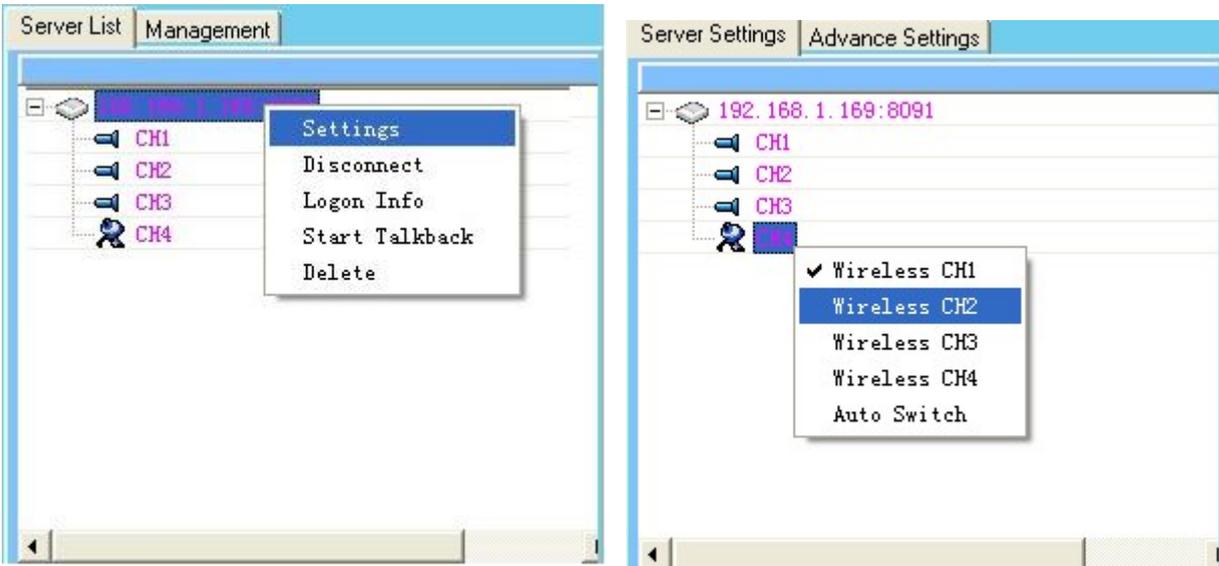
default.



Zoom function

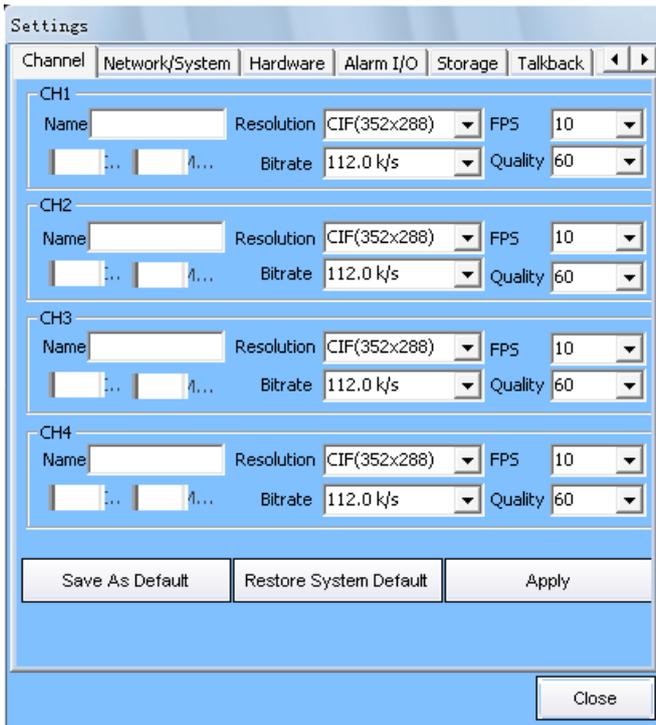
Chapter 4 Video server setting

4.1 Video Server Setting



Select a on line video server in list, right click and choose settings, enter setting page.

4.1-(1) Channel parameters



Name: name for each video channel

CBR: fixed stream(the WAN network speed will influence the fixed stream)

Mobile: set to show images in mobile phone or not

Resolution: for video images, there are 4 types:

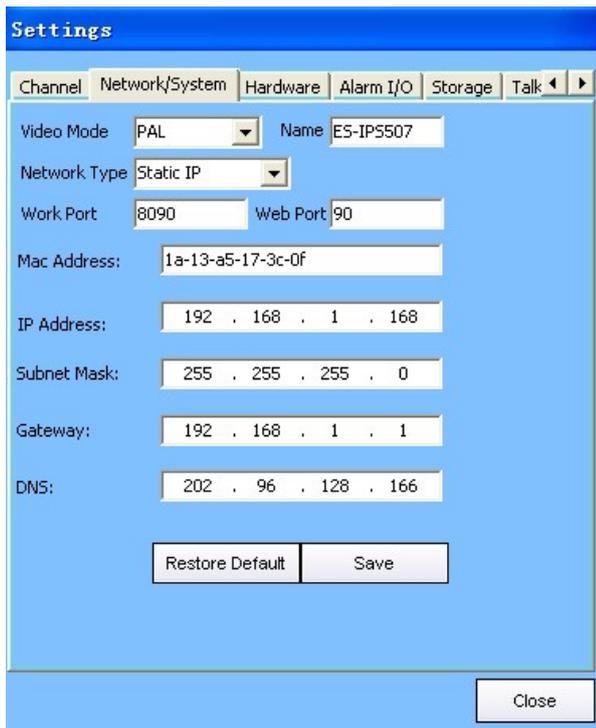
- 1.“D1 (704×576) ”
- 2.“HalfD1 (704×288) ”
- 3.“CIF (352×288) ”
- 4.“QCIF (176×144) ”

Image FPS and quality: It has different quality in different image resolution. User can adjust it according the video images.

Fixed stream and browse in mobile phone is the factory default setting. In order to get better quality, please do not mark in each option, and adjust the image resolution, stream, frame to get better image quality.

Notes: please save as defaulted after changed the settings, otherwise it will recall to factory default setting when server power off or restart.

4.1-(2) Network system setting



TV systems: PAL/NTSC

Name: name for server

Network type: dynamic IP/static IP/ PPPOE auto dial-up Internet access

Working port: used for remote client software browsing

web port: for web

MAC address: server MAC address

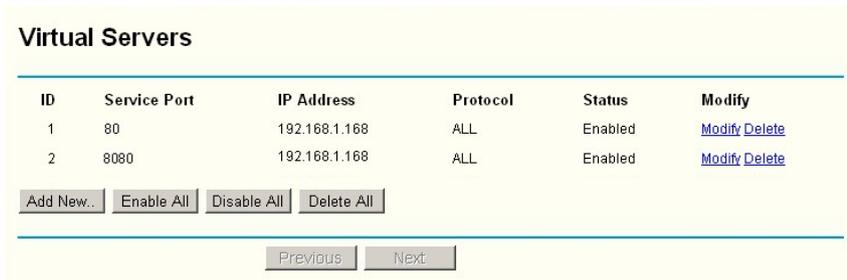
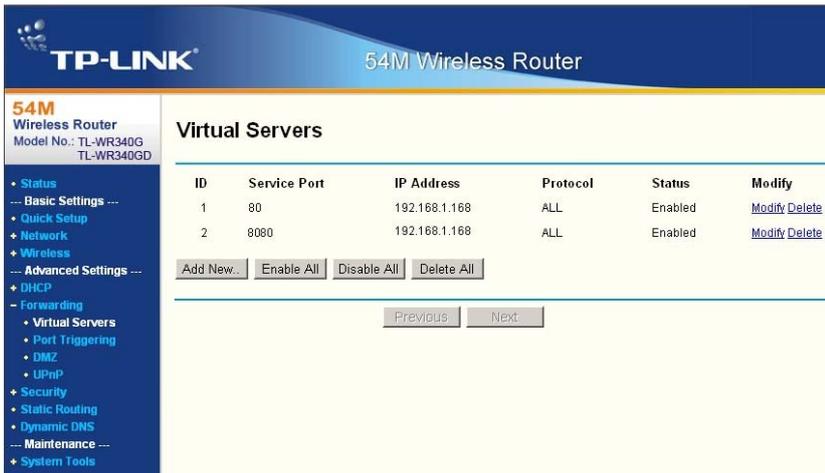
IP address: server address in LAN

Subnet Mask: set up comply with router

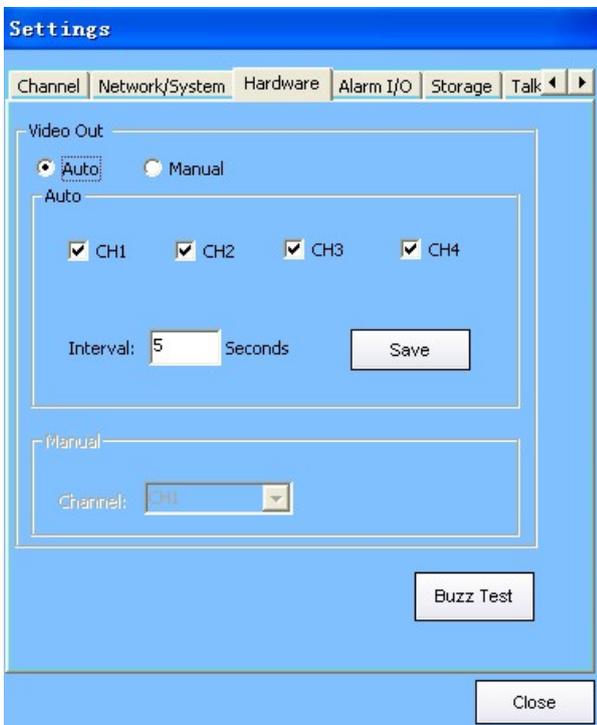
Gateway: set the gateway in LAN

DNS: Please fill the correct DNS(different place with different DNS address), please inquire from local Service providers.

Refer to above information, setting in router, add IP address, setting port range forward and DNS, then the IP server can be visited in WAN



4.1-(3) Hardware setting



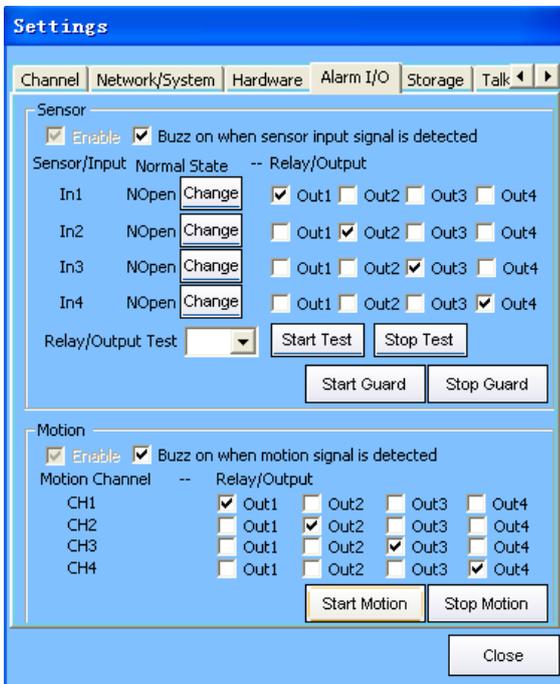
Output to local monitor

Auto: user can select auto-switch in monitor, as well as the switch time for each channel.

Manu: select to display one channel by manual.

Notes: audio will output to monitor follow video(video and audio are in same channel)

4.1-(4) Alarm input/output



Input/output link

- 1、 Input: there are 4groups external sensor signals, with Nopen(Normal open) and Nclose(Normal close) status.
- 2、 Relay output link: there are 4groupes Relay output.

For example, External sensor(PIR detectors, Smoke detectors and door magnet), the default status is Nopen, then it must be Nclose in the software. When alarm sensor is triggered, the nopen will change to nclose in relay, and send signal to external alarm like speaker.

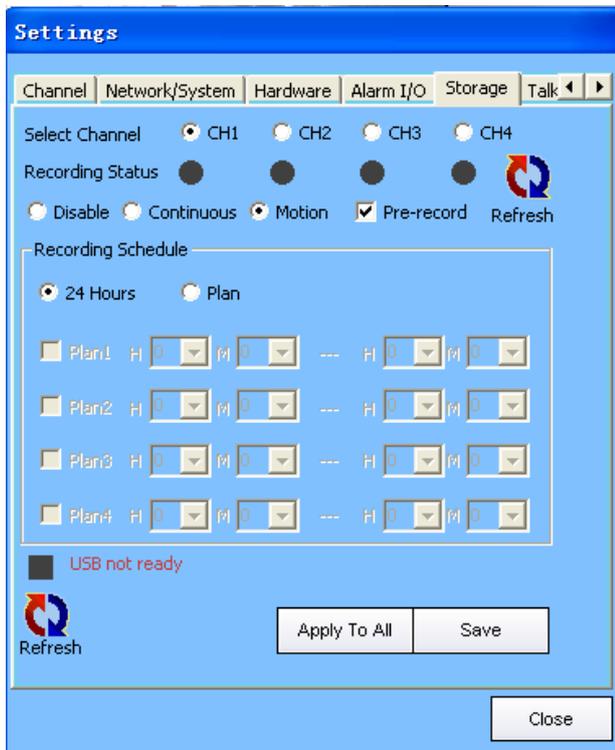
Buzzer alarm link: when alarm sensor is triggered, user can choose buzz link to alarm or not.

Motion detection/relay link: when user need to enable this function, please set external alarm equipment(ex: speaker). Notes: the motion signals, can be output to any relay(to any external alarm equipment)

- 3、 Completed all settings, please activate the motion detection setting in 5.3
- 4、 PC audio alarm link, relative reminds in the images of client software, please refer

to alarm management setting 5.4

4.1-(5) Storage On IPS507



Storage: videos,

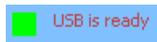
Continual recording, motion detector, Prerecorded(prerecorded can work with others, but continual recording and motion detector can not).

1, User can set different video recording types toward to the 4 channels, like disable, continuous, motion and pre-record. Default to Disable and pre-record.

2, Recording Schedule. Recording time can be set as 24Hours or Plan. When choose Plan, pls relatively set up details in below time schedule.



Motion detection alarm, recording



Detected USB moveable storage card

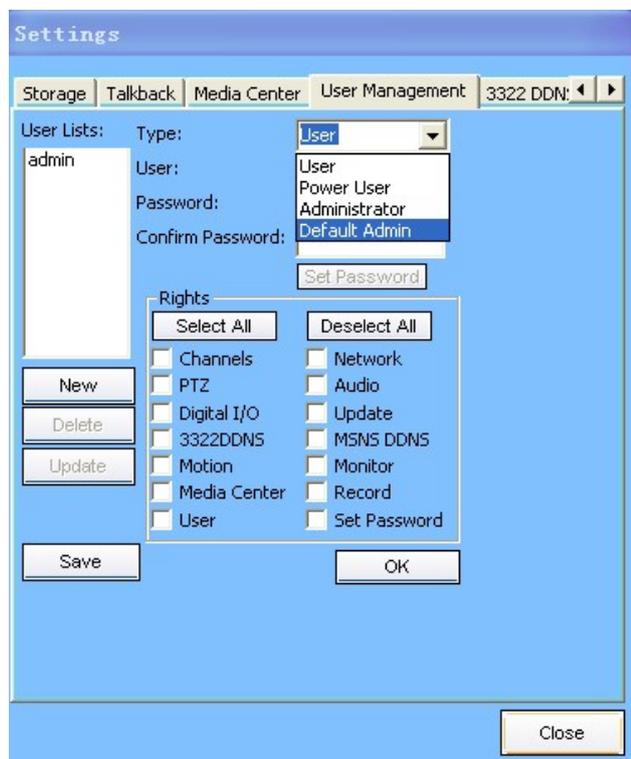
4. 1-(6) Talking

Enable talkback function(that is same function in 4.4)

4.1-(7) Media Center

Server connected with media center, it's easy for controlling. This function will be update, can not work right now.

4.1-(8) User management



There are 4 kinds of user

User: normal user, only can browse images.

Power User: can control some function keys

Admin: with all functions(can open or delete user, including power user.)

Default admin: with all functions(it can be revised password, but can't be deleted)

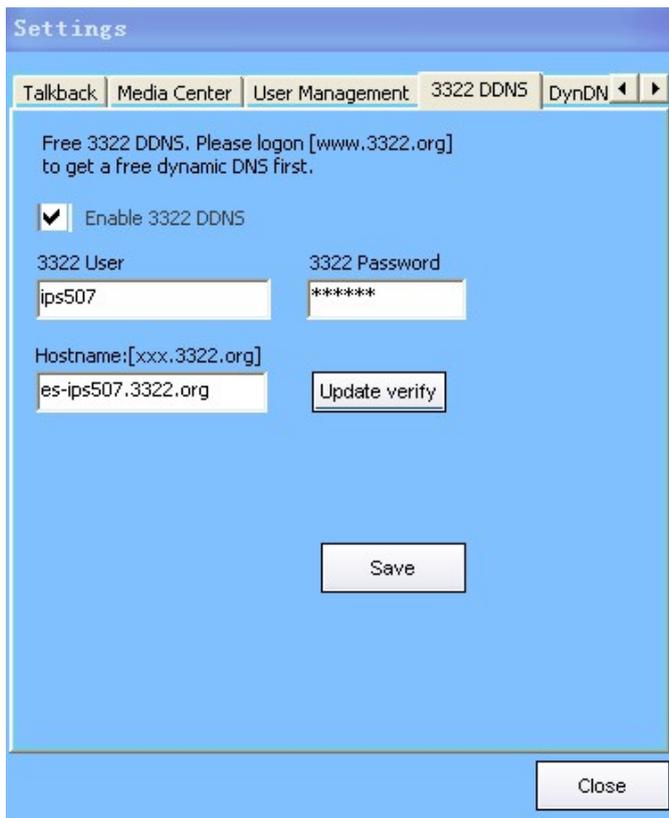
For example:

”user” user can not change the setting no matter Intentionally or unintentionally.

Therefore, “user” can run the files which had be proved, can not run most old edition Application; For example, the network property and other important option can not be changed. Even the virus infects computer, it won't cause great damage to the system

Power user has most of the management authority, of course it with some restrictions.

4.1-(9) 3322 DNS



The screenshot shows a web-based settings interface for 3322 DDNS. At the top, there is a navigation bar with tabs for 'Talkback', 'Media Center', 'User Management', '3322 DDNS', and 'DynDN'. The '3322 DDNS' tab is selected. Below the navigation bar, there is a message: 'Free 3322 DDNS. Please logon [www.3322.org] to get a free dynamic DNS first.' Below this message, there is a checkbox labeled 'Enable 3322 DDNS' which is checked. There are two input fields: '3322 User' with the value 'ips507' and '3322 Password' with the value '*****'. Below these, there is a 'Hostname:[xxx.3322.org]' label and an input field with the value 'es-ips507.3322.org'. To the right of the hostname input field is a button labeled 'Update verify'. At the bottom center of the form is a 'Save' button. At the bottom right of the window is a 'Close' button.

3322 DNS: China second level free domain name. Easy for user to apply a free domain name. Then analyse IP server's IP address and port on router. To realize internet browsing.

4.1-(10) DYN DNS

There are many free domain names applicable. User need to apply a domain name, to setup the ip address and port inside router, then it can access to Internet.

4.1-(11) Email



Email receiving: please fill in one available email address.

Email sending: please fill in email address which support SMTP

Sender name: can be any name

SMTP server: sending email address need to support SMTP, and port means the SMTP server port.

Verify information: please fill in the sender's account and password

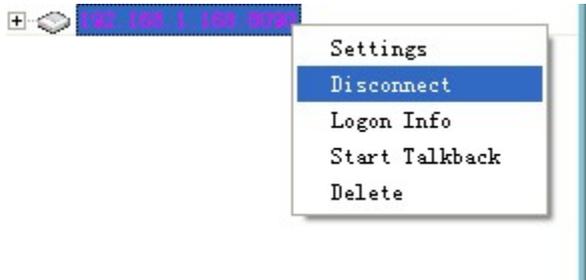
4.1-(12) System Monitor

System monitor: To reboot the on line device.

4.1-(13) Update

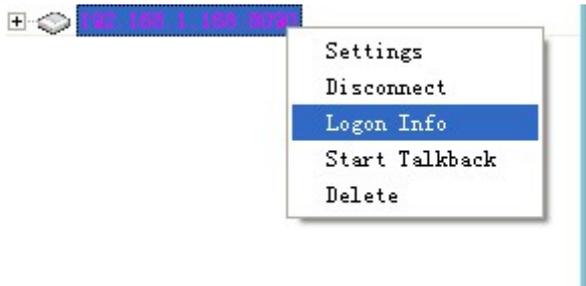
Update: application upgrade.

4.2 Disconnect



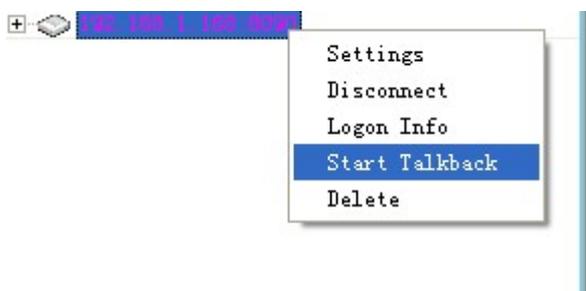
Disconnect the device to be on line, disconnected can be click to connect, set it to be on line again.

4.3 Login Info



Login info, right click to read the server data, but can't be modified.

4.4 Talking



Right click to start talking with local device, same with 4.1-6

4.5 Delete

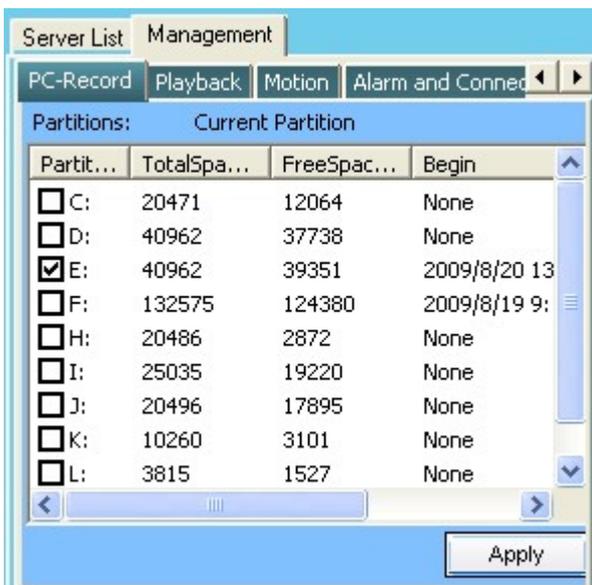


Right click to delete connected on line server on software.

Chapter 5 Basic Setting

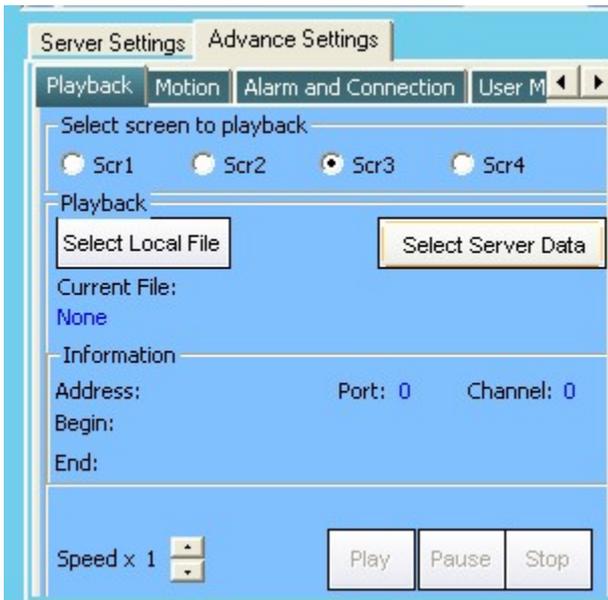
To non-fixed device, you can set up the relative setting only if there has video in video window)

5.1 PC recording



Select recording path: can select recording video in several partitions. After choose well path, right click video which need to be recorded. A red point coming out means recording begins. Recording format is dat, when file is over 32M, it will build a new file for recording automatically. It will repeat building new file until the disc is full.

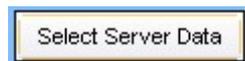
5.2 Playback

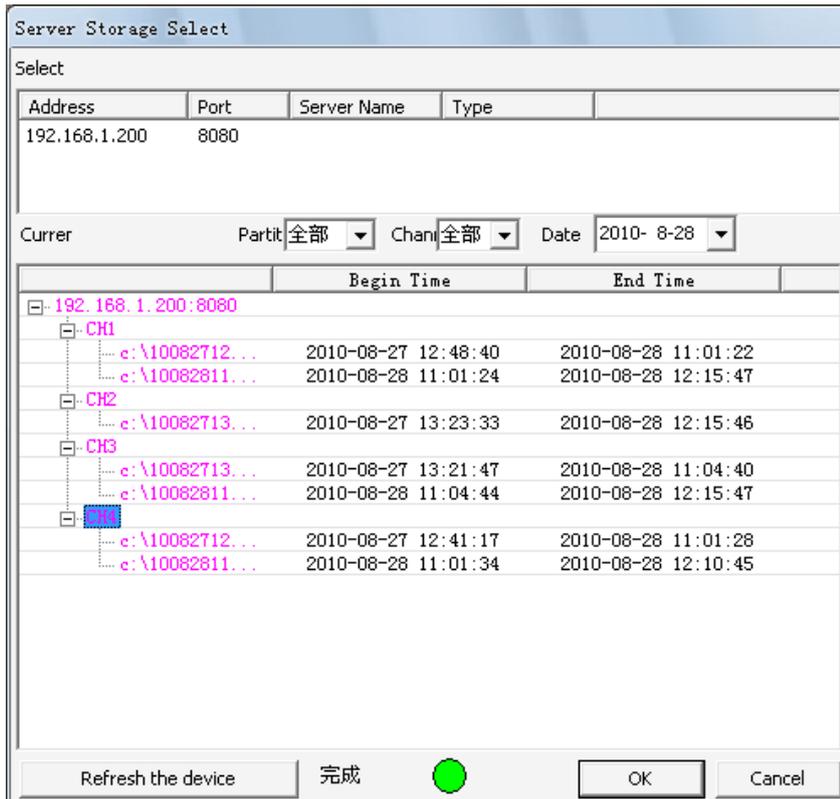


Select Local File: Playback recorded file on PC port. Please select channel, then choose different files(You can speed up the speed of reviewing).After setting well,please click “Play” to start playback.

Select Server Data: Review recorded file from USB storage device. Please select reviewing channel,then choose different files(You can speed up the speed of reviewing).After setting well,please click” Play” to start review.

Demo:Click:





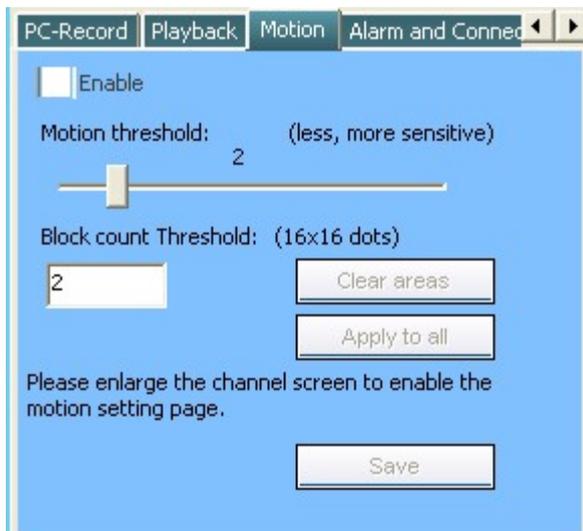
Choose recorded file then

press OK and press , you can set the reviewing speed by

click:



5.3 Motion Detection

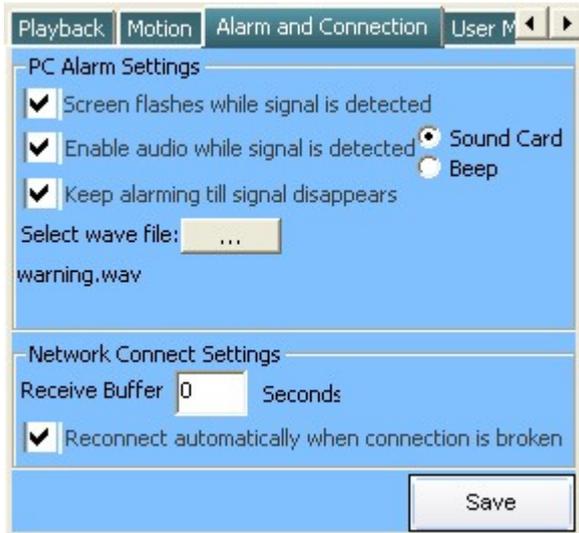


Choose a video to set up motion detection first, double click to amplify picture. When

picture is amplified to big enough, motion menu will become black color from gray color, then user can set its sensitive, choose area(can be 2 area in one picture) then save it. Pls double click picture back to normal picture, motion detection begins.

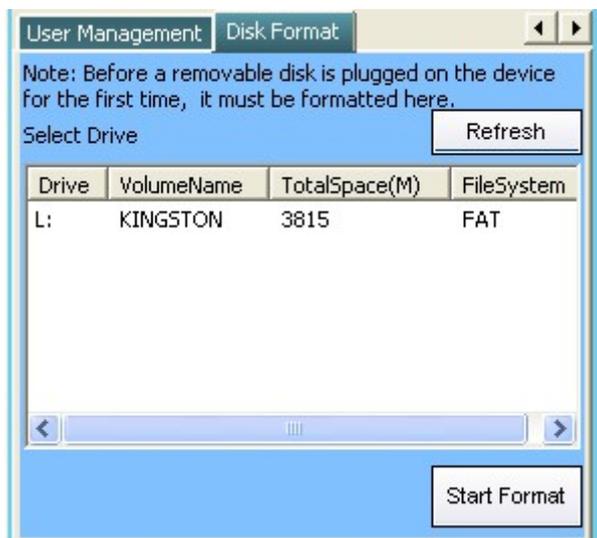
Available motion detection recording, please refer to 4.1-(5) storage on server.

5.4 Alarm Setting



After set up motion detection and hardware alarm well, relate it to software alarm setting. User can choose voice file.(can be a song or a word). Note, voice file can be only .wav file. User also can set up auto re-connection when connection is broken.

5.5 User management and format disk



After format the moveable storage disk, it will become a storable video file system.
Steps of format: please format U disk on PC first (Note: please format the file system of U disk to FAT32), then format again on IPSCient software and it will automatically become DAT video file. (Pls don't insert the U disk to server device but only plug to PC for format)

Support mobile phone monitoring.

Demand:

Most of smart phone with JAVA software are workable.

Below is a list for suggestion:

NOKIA

S60 or above

S60 version , smart phone 3rd version.

Symbian OS v9.1 DP S60 3rd

Models: 3250 5500 N71 N73 N77 N80 N91 N92 N93 N93i E50 E60
E61 E61i E62 E65 E70

Symbian OS v9.2 DP S60 3rd FP1

Models: 5700 6110N 6120C 6121C 6290 N76 N81 N82 N95 E51
E90 E66 E71

Symbian OS v9.3 DP S60 3rd FP2

Models: 6210N 6220C N78 N96 5320xm 6650

Note: S40 2ed are not supportable.

Sony Ericsson

All smart phone like P and G serials, and also W serials.

MOTOROLA

Support WM (windows mobile) serial

HTC

windows mobile 5 and 6

Summary: Only if mobile phone support WM 5 or 6, or symbian s60 V2/V3/V5 are compatible with our device. Relative mobile operation instruction is attached.