

M Series IP Camera User Manual

Preface

Thank you for choosing our M series products. This Series Products are designed and equipped for network video surveillance system, including wired IP bullet camera, wireless IP bullet camera, IP infrared dome camera, IP infrared waterproof camera, IP high-speed dome camera, 1-Ch and 4-Ch video server etc.. We adopt high performance chip to realize high quality media processor which processes audio and video collection, compression and transmission. Standard MPEG-4 compression format ensures clear and fluent video performance. Embedded Web Server enables users to view via IE browser, centre management software client software and the platform remotely and simultaneously.

This series products are applicable to big, medium-sized and small enterprises, chain store, factory, family and all kinds of scenes which need to use remote network video transmission and control. They are easy to install and operate.

Before your installation, please check all the components in the package provided as below.

Contents:

IP camera -----	1 PC
Bracket (optional) -----	1 PC
Power adapter -----	1 PC
Warranty card-----	1 PC
CD-----	1PC

Instruction:]

For each unit, the default user name of ex-factory setting is admin, no password default LAN IP is 192.168.1.126 with http port 80

Statement:

The version of the equipments stated in this manual may exist differences from that of you are using now. If you meet unsolvable problems according to this manual, please contact the product supplier.

The manual content will update occasionally, we will be subject to change without notice.

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1. General Introduction

IP Camera is a new generation product with the combination of analog camera & IP video technology. In spite of having all functions which analog cameras have, IP camera can compress and encrypt video and audio signal then send it to remote terminals through internet with its built-in processor and web server. With its IP address, users can use standard browser in his PC to visit IP camera, real time monitor objects, edit and store video or pictures, they can also control PTZ through network.

As a new member in camera family, IP camera has the same operation function with the analog camera, such as, auto white balance, auto shutter speed, AGC, auto backlight compensation etc. On the other hand, IP camera supports remote access through internet, and support multi-user visit, some IP cameras are able to output both analog and digital signal.

In order to realize remote monitoring on the basis of using analog camera, video server comes out. Video Server can be considered as IP Camera without image capturing part, it looks similar to IP Camera in structure generally. It is combined with one or more analog video input, digital image processor, compressed chip and a web server. Video Server encodes analog video signal to digital one, and then transmits it to remote terminals through internet, thus the purpose of remote real-time monitoring can be achieved.

M Series Video Server can have 1-Ch and 4-ch video input, that means it can connect 1 or 4 analog cameras to it, through internet, by logging in the video server, users can remote view and control all the cameras connected to the video server.

General speaking, M series products are more popular with the users all over the world with their high quality, strong functions, convenient operation, and great diversity.

1.1. Product Specifications

- *- Adopt high Performance, strong function media processor 32Bit RSIC
- *- Sony Super HAD/ Ex-view CCD
- *-Adopt optimized MPEG-4 video compression algorithm, realize high-definition image transmission in narrow bandwidth.
- *-Maximum support 15 users browse at the same time, no limitation if using Forwarder Server.
- *- Built in Web Server.
- *-Support IEEE 802. 11b/g wireless protocol.
- *-Support remote system upgrade.
- *-Support variety of network protocol: TCP/IP, UDP, SMTP, PPPoE, Dynamic DNS, DNS Client, SNTP, BOOTP, DHCP, FTP, SNMP, WIFI/802. 11b/g
- *-Support one/ two way audio.
- *-Support Motion Detection alarm function (set area & sensitivity)
- *-Support snapshot
- *-Easy recovery.

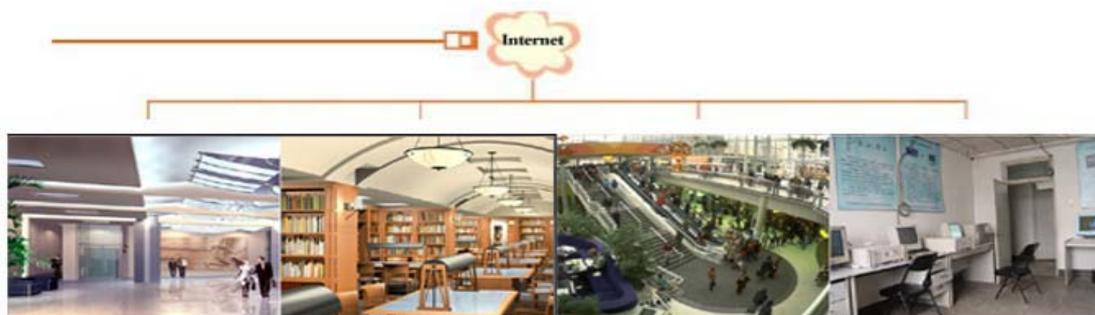
Parameters Form

Video Compression	MPEG-4
Video Resolution	CCD, resolution has D1,CIF, Half D1, QCIF
Video Parameters Adjustment	Brightness, chromaticity, contrast, saturation and image quality
Stream Format	Audio Compound Flow
Video Frame Rate	1-25 frame/second (PAL), 1-30 frame/second (NTSC)
Video Compression Rate	16 Kbit /S~4Mbit / S
Speech Talkback Input	1 router no source microphone input
Speech Output	1 router output
Audio Compression	G.726
Network Interface	One 10M/ 100M adaptive Ethernet interface
Working Temperature	-30°C-70°C
Working Humidity	10~95%
System Requirements	Operation system: Microsoft Windows 98, ME, 2000, XP, Vista. Browser: Microsoft IE 5.0 above etc.
WiFi Modules	Support IEEE802.11b/g Wireless network

1.2. Applications

This series products are widely used in big department, supermarket, school, factory, workshop and any other public places etc. Because of its powerful image processing ability, IP Camera also can be used in such environment as bank, the crossroads etc. which needs high image clarity.

As shown below:



1.3. System Requirements

Minimum Hardware Configuration

CPU: Pentium 1.6 GHz

Memory: 256MB

Audio card: necessary if audio monitoring required.

Hard Disk: no less than 40G

Operation System: 32 bit simple/ English Windows2000、 WindowsXP、

Windows2003、 Windows Vista & 64 bit simple Chinese/English Windows2003、

Windows XP、 Windows Vista etc.

Software environment

IE 5.0 or above version
DirectX8.0 or above version
TCP / IP network protocol

2. Interface & Installation

M Series has variety products with two kinds of interfaces, one is body interface, the other is the extended line interface; here set three representative products as example, to give the explanation.

Non-extended line IP Camera icon

Extended line IP Camera icon



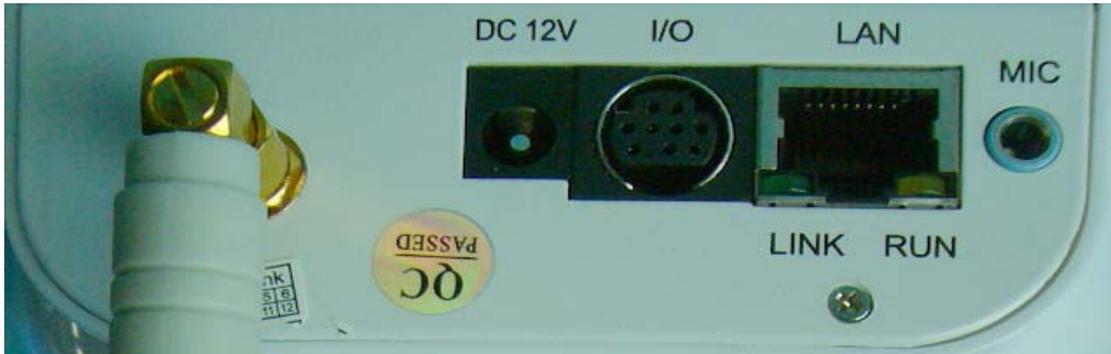
IP Video Server icon



2.1 Interface

2.1.1 IP Camera Interface

The definition of body guard interface:



DC12V: Power

I/O: Alarm output and input, 485 control line

LAN: RJ-45 network interface (10M/ 100M adaptive Ethernet)

LINK: Internet connection indicator

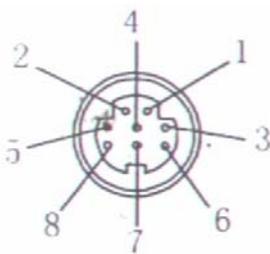
RUN: Power indicator

MIC: External microphone

Extension line interface definition icon:



About S terminal definition:



- 1# +DC12V
- 2# RS485 (A)
- 3# Earth (GND)
- 4# IO2 (OUT PUT)
- 5# RS485 (B)
- 6# IO1 (IN PUT)

GND: Ground, alarm input ground , RS485 ground

RS485: RS485 control interface, left connection RS485 negative right connection

RS485 positive. connect P/T decoder, support variety P/T protocol.

2.1.2 Video Server Interface

Here we set four-way (can connect four-Ch video input) video server as example:

Front audio interface



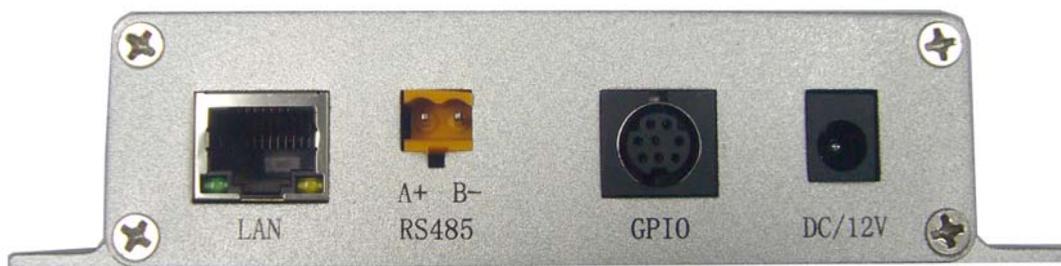
AUDIO: Sound input

VIN 1-4: Video input, BNC interface

DEFAULT: Reset button

Note: this video server is single speech, namely sound only can use with one-Ch video.

Back network interface:



LAN: RJ-45 network interface (10M/100M adaptive Ethernet)

RS485: can external platform, use RS485 protocol

GPIO: alarm input, output

DC/12V: power input, power depends on the model

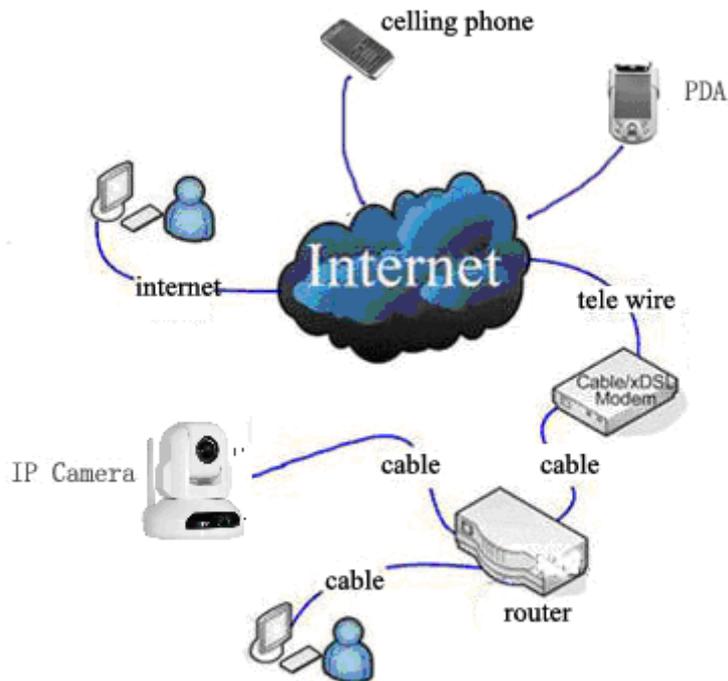
2.2. Installation

IP camera process image transmission on network through the use of Internet technology, it offers DDNS function for static IP, dynamic IP, PPPoE dialing users. IP Camera can connect to outer net through LAN, also connect directly.

According to most of usage mode, we summary 3 kinds of networking ways, to control IP Camera:

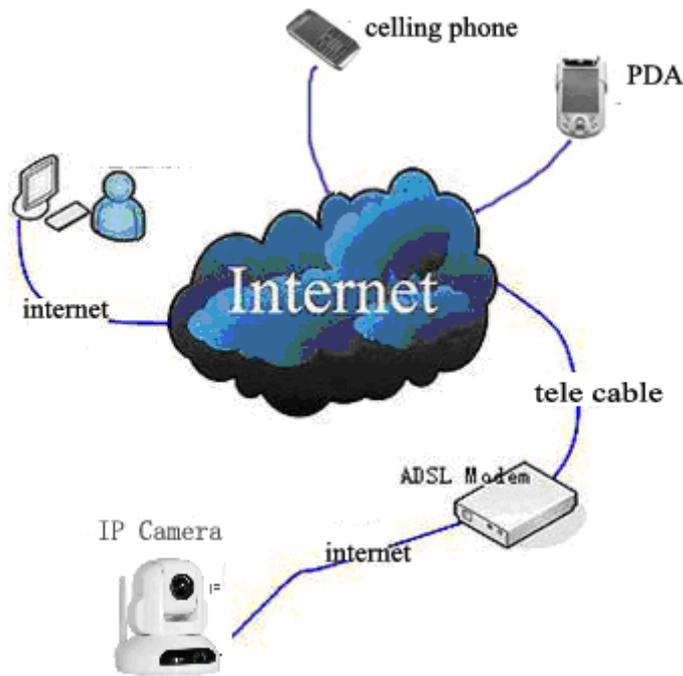
2.2.1. Installation in LAN

This is the most used network access way, as long as there exist router, through net wire can put router RJ-45 terminal direct connect to IP Camera, IP Camera can connect to Internet as normal PC, as image shows:



2.2.2. PPPoE Installation

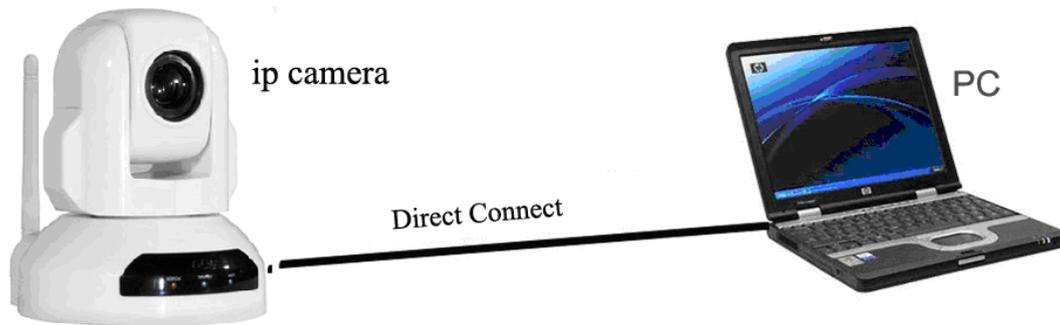
Under this condition, users need set PPPoE dialing parameter on the IP Camera: input the user name and password ISP facilitators' offer permit IP Camera dialing connects to Internet. As to set the PPPoE dialing parameter, you can connect machine to network through the first way, then write parameter to the machine, also through following the third ways, direct process parameter written to machine. How to set PPPoE, concrete steps please refer to 3.4.5.



2.2.3. IP Camera & PC Joint

This way is not used too much, when you process machine write parameter or

program shift, we suggest you adopt the first connect network way, to process the modification of machine parameter.



Put power connects to IP camera (note: don't use wrong power), after one minute modification of IP camera, video could be connected by net wire to IP camera, (if is video server, please connect with audio line); under the normal condition, yellow light is constant on, green light spark, now physical connection of IP camera finish at this time (in order to connect successfully, we advise to set camera IP as the stable IP at the same net range of PC in LAN , how to set, please refer to 8 frequent questions answer).

The use of IP Camera is to cooperate with the ordinary analog camera to transmit digital signal. That is IP video server plus analog camera equals IP Camera. While the installation methods is the same as IP Camera, it is also through the above three methods to install, as between the server and analog camera, only add some video threads to connect.

3. IE Browse to IP Camera

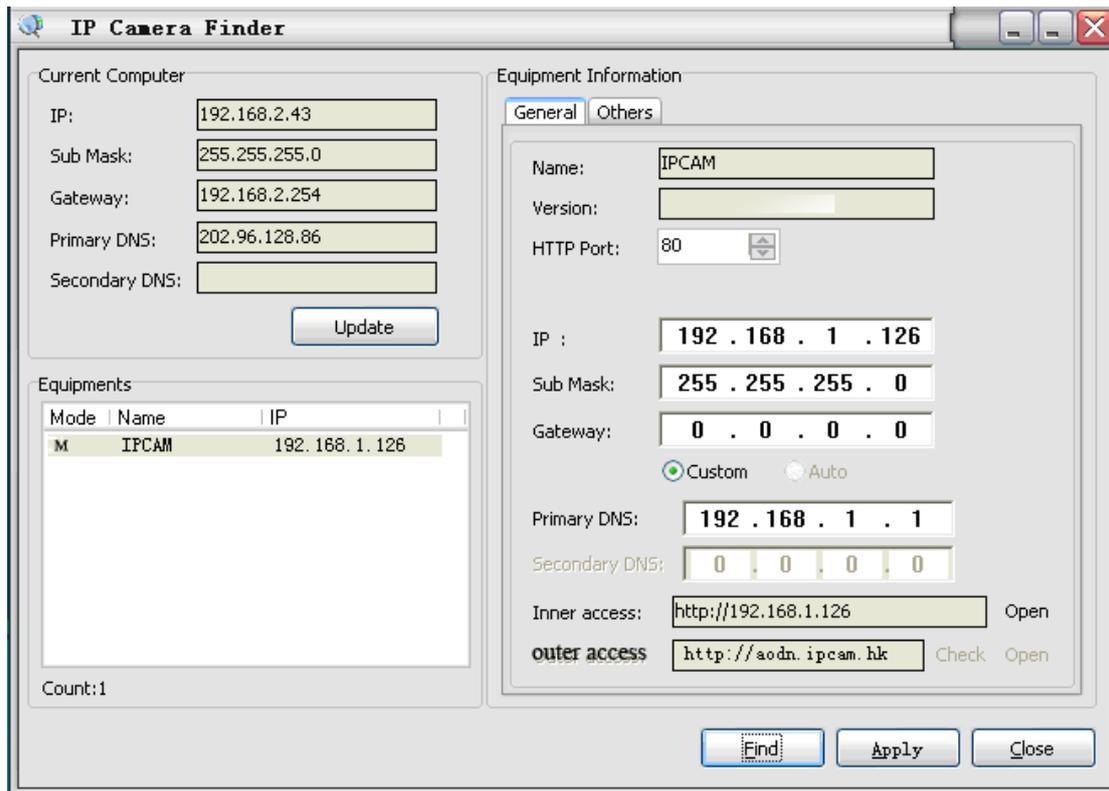
After IP camera connect to PC LAN through router, you could process operations to IP camera via PC, first please put IP camera matching CD insert to CD-ROM operation relative software, as below:

3.1. Use Finder

Open the disk, double click  M Series file, and double click file,

Appear  DevFind search bar icon, double click search bar, and appear

following interface:



If the network cable connect is right, it appears equipment styles, name, and IP address in the equipment list, (if it doesn't appear, please confirm power & network cable work normally).

As the interface, left side is the current computer configuration information; right side is the selected equipment network configuration information. Defaulted IP camera address is 192.168.1.126, HTTP interface is 80.

Note:

1. Equipment information expresses IP camera or video server information.
2. When current computer is the stable IP, (none DHCP IP), the first time use IP Camera, you could click auto set, to let the IP camera IP address, gateway and DNS Local synchronization.
- 3.If it need manual modify camera name, Http interface, IP address, sub-net mask, gateway, main DNS server, backup DNS server, etc. content, please click apply after modification, input IP camera visit username and password in the popped authority verified dialog box, click confirm is OK.
4. Inner visit address is the LAN visit address; outer visit address is WAN visit address.
5. When IP camera connect to outer net by the first way, before outer net visit IP camera, it need process port mapping in the senior router: analog server set. For example, IP address of one machine in the LAN: 192.168.1.126, http interface is 80, so it need open IP: 192.168.1.126 interface 80(TCP) in router, furthermore, in the same LAN, different cameras open different HTTP interface.
6. About port forwarding, please refer to "other" chapter "router port mapping set"

3.2. Logging and ActiveX Installation

Before browse monitor pages through web, it need install video broadcast plug-in,

as following:

1. Open disk, open  M Series file, open  ActiveX file, double click inner  M Serials AcitveX, process installation, the installation process is as below:

a. Click the next step in popped dialog box.



b. Click finish



2. Open web page, you can click open button behind inner visit address or outer visit address in the search bar directly, also directly input relatively inner and outer visit address in web page address bar, like above photo address <http://192.168.1.126> (LAN) , <http://aodn.ipcam.hk> (WAN) .
3. If the item has connect to outer net when browse, it will appear log in interface after LAN or outer net open web: input relatively information, click OK and you can log in. it will appear installation controls hints in downside of address bar, after installation and you can use it. If it appears plug-in installation is blocked by antivirus software, please rest assured to remove blocks.

Note: Defaulted machine log in name is admin, no password.

3.3. Operation Button



Can operate up, down, left, right, and pan tilt auto cruise.



Can adjust speed, zoom, and focus parameters of the ball machine



When products leave factory, there is no default preset position, setting refers to find a setted preset position, call means to number the designated preset position, and remove refers to clear off the preset position. Before the three operations, please choose code in preset position.



Camera parameters settings



Original size: the default picture size (resolution*1)
2 times size: 2 times of the original picture (resolution*2)
Full screen: selected picture covers the whole screen
Note: Modify paths of video, photograph etc., please read Video Settings

3.4. Basic Settings

Note: In basic setting parameters modification, before you have not click save, you can use reset button in the page to help users back to the before modified parameters status. For parameters need to modify, please modifying it, according to the clew to save or restart.

Click setting, to the basic setting page, do the following settings.

3.4.1 Status Information

OCX Information	
OCX Current Version	1.18.4.31
OCX Path	C:\WINDOWS\system32\IMMP4Control.ocx

As in the above picture, in this page, it shows some basic information of the current camera, including system, network status, camera information, wireless network status, OCX information, etc.

Among these, OCX information refers to plug-in version, also the video play plug-in in CD. If you are regular customers, we recommend that you can download the latest version to use from our website.

3.4.2 Audio & Video Settings

OSD	
OSD Text	<input type="text"/>
OSD FontSize	10
OSD Enabled	Yes <input type="radio"/> No <input checked="" type="radio"/>

REC	
REC File	c:\rec
REC Duration Time	0 seconds (0 - infinity)
REC Time Label	Yes <input type="radio"/> No <input checked="" type="radio"/>

As it shows in the picture, OSD display text refers to the text displayed in the upper left foot of the monitor screen. Time of single video files, refers to the maximum lasting time of one video file, zero indicates infinite.

3.4.3 Network Settings

PORT Setting

HTTP Port:	<input type="text" value="82"/>
RTSP Port:	<input type="text" value="0"/> 554 or between 1025 and 65535
RTP Port:	<input type="text" value="0"/> Between 1025 and 65535, MUST be EVEN!
RTCP Port:	<input type="text" value="0"/>

In the above picture: HTTP refers to view video via IE browse needs this opened port. As in the above 3.1. Use the Search Bar note 5, port can set here, also it can modify through search bar; when you use mobile to view it with the RTSP form, you need start RTSP port and RTP port, please fill or modify it according to the behind blank requirements.

3.4 4 Wireless Settings

Wireless Settings

Basic Configuration

Operation Mode:	<input type="text" value="Infra"/>
Wireless Type:	<input type="text" value="802.11b/g mixed mode"/>
Country Region:	<input type="text" value="FCC"/>
Channel:	<input type="text" value="10"/>
TX Rate:	<input type="text" value="Auto"/>
SSID:	<input type="text" value="ipcam_wlan"/>
Ad-Hoc Mode:	<input type="text" value="802.11b 11Mbps Only"/>
B/G Protect:	<input type="text" value="Always Off"/>
TX Preamble:	<input type="text" value="Auto"/>
TX Burst:	Yes <input type="radio"/> No <input checked="" type="radio"/>
Turbo Rate:	Yes <input type="radio"/> No <input checked="" type="radio"/>
Short Slot:	Yes <input type="radio"/> No <input checked="" type="radio"/>

Security Settings

Authorization Type:	<input type="text" value="Open System"/>
Encryption Type:	<input type="text" value="None"/>
Default Key ID:	<input type="text" value="1"/>
WEP Key ID 1:	<input type="text" value="Hex-10 or 26 characters"/> <input type="text"/>

Basic configuration information

< 1 > Operation mode: you have two choices: one is centralized control mode(Infra),the other is equivalence mode(Ad-Hoc).If you usually use AP ,please choose centralized control mode(Infra),if you use point-to-point transportation, choose equivalence mode. The default is centralized control mode.

< 2 > Wireless types: You have two choices: one is 802.11b/g mixed mode, the other is 802.11b mode. The default is 802.11b mode.

< 3 > National regions: Here you can choose the wireless card what the national regions used, the default is FCC, and specifications are going with the Mini PCI

wireless card settings. Relevant information please refer to the behind indication in each wireless card.

< 4 > Channels: You can choose different channel to reduce the interference of radio, can select 1~11, the default is 10. This number must consist with wireless router or AP.

< 5 > Transmission rate: here you can set the transmission rate, setting number has Auto, 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54Mbps, you can choose any. The default is Auth.

< 6 > SSID: When the input SSID the same as the wireless router or APS SSID, then you can connect it to use. The default is ipcam_wlan.

< 7 > Ad-Hoc mode: there are two transfer modes: 802.11b and 802.11g . The default is 802.11b.

< 8 > B/G protection: if your network environment has 802.11b and 802.11g, please start this protection. This will increase the probability of 802.11b or 802.11g data collisions. Yet the transmission efficiency will reduce a little, because there always transfer a lot of data. Automatic--- according to network condition to open or close the protection mode automatically. Always open--- start protection mode, always close--- close protection mode.

< 9 > TX Preamble: define the length of CRC block under equivalence mode. You have three choices: Auto, Long or Short, if you choose “auto”, it shows that the wireless card will judge automatically.

< 10 > TX Burst: selected it will has more throughput.

< 11 > Turbo Rate: it can increase to 108M, but the nic must be Ralink.

< 12 > Short Slot: increase the speed of connection, but the transmission speed will reduce.

Security Settings

< 1 > Authentication types: You have two modes to select: open system or Shared Key. The default is Open system.

< 2 > Encryption type: now we only provide WEP encryption or not encryption mode. The default is None.

< 3 > The default keys ID: now we only provide 64Bit and 128Bit encryption function. In Default ID, there are four groups, but only one group is utility. Namely here you must choose a true Default Key ID (please refer to you AP setting).It will certificate whether the Default Key ID on WEP Key ID is true or not.

< 4 > WEP Key ID 1~4: in the pull-down choices, you can choose the input ID is HEX mode or ASCII mode. Pull-down menu can divided into two types basically, when you choose HEX mode, please input the 0~F ID content, its byte length depends on your encryption length. If you use 128Bit, please input 26 bytes password length. If you choose 64Bit, please input 10 bytes. Another ID input form is ASCII; you can choose 64Bit please input 5 bytes, 128Bit can input 13 bytes.

Note: here please choose the correspondent channel, SSID, Ad-Hoc mode with the wireless signal emission equipment.

3.4.5 PPPoE

If you need use PPPOE function, also camera and internet connection dial-up directly, you need fill in the camera with ISP provide dial-up account and password. Specific operation as follows:

<ul style="list-style-type: none"> ▶Basic Configuration -STATUS -VIDEO&AUDIO -NETWORKING -WIRELESS LAN -PPPoE -DDNS -DATE & TIME ▶Advance Configuration ▶REC View 	<h2>PPPoE</h2> <h3>Configuration</h3>
	<p>Enable PPPoE: Yes <input type="radio"/> No <input checked="" type="radio"/></p> <p>User Name: <input type="text"/></p> <p>Password: <input type="text"/></p> <p>MTU (128~1492): <input type="text" value="1492"/></p> <p>Email Notification when IP is changed: Yes <input type="radio"/> No <input checked="" type="radio"/></p>

- a. connect the camera with PC directly or under router(switch),
- b. input the camera IP and port via IE, for example : http://192.168.1.126:80
- c. click basic settings ———> PPPOE
- d. set up the dial-up account and password according to picture at the same time, click save.
- e. connect the cable of the camera with the dial-up cats. At this moment, you only need input the camera IP of the equipment in PC which connects with internet: for example: http://abcd.ipcam.hk.

3.4 6 DDNS Settings

<ul style="list-style-type: none"> ▶Basic Configuration -STATUS -VIDEO&AUDIO -NETWORKING -WIRELESS LAN -PPPoE -DDNS -DATE & TIME ▶Advance Configuration ▶REC View 	<h2>Dynamic DNS Setting</h2> <h3>Dynamic DNS</h3>
	<p>Choose Server <input type="text" value="IPCam"/> <input type="text" value="user.ipcam.hk"/></p> <p>User Name <input type="text" value="azez"/></p> <p>Password <input type="text" value="*****"/></p> <p><input type="button" value="Manual_Update"/></p> <p>Status <input type="text" value="DDNS OK"/></p>

Here the information before leave the factory is setted; users generally do not need to change. As a result of accidental loss, you need to re-obtain the domain name, the user can fill it themselves, he should fill in the content as shown above, the user's name is just the first four letters when reach the remote address . For example, http://abcd.ipcam.hk, the user's name is abcd. The password is DDNS. (The password is available on the shell label of the device or to contact the supplier label). When connected, the connection information is displayed "DDNS OK", it means that it was successfully set. If you need to use your own DDNS, please select the appropriate service providers then put in the following information, at last it can be saved.

3.4. 7 Time & Date

Here input or choose the time zone and time server address, also you can modify date and time manually.

3.5 Advanced Configuration

In it, you can set the information of camera users, email, and alarm.

3.5.1 Maintenance & Upgrade

Click browse, search the upgraded file, and click upgrade.

Note: Upgrade process must according to the following clew.

3.5.2 Administration

Here we can add or delete the users of IP Camera, users can divide into administrator and ordinary users, the user of admin can not delete. After activating anonymous login, ordinary users do not need user name and password; this user can not modify settings. Here you can modify the name of camera, after you change it, it will reflect on searching machine.

3.5.3 Change Password

Change the password of user, operation as follows:

- connect the camera with PC directly or under router(switch),
- input the camera IP and port via IE, for example : http://192.168.1.126:80
- click advanced settings——> change password, fill in the password in the textbox which appears on the right, at last click save.

User Name	User Group
admin	Administrator

3.5 4 SMTP Settings

SMTP (E-Mail)

SMTP Server1 Settings

Mail Server:	<input type="text"/>
From E-Mail address:	<input type="text"/>
To E-Mail address:	<input type="text"/>
Authentication:	Yes <input type="radio"/> No <input checked="" type="radio"/>
User Name:	<input type="text"/>
Password:	<input type="text"/>
Send a test e-mail with SMTP server	<input type="button" value="Test"/>

¹ Mandatory fields. If these are not set, no mail can be sent.

² If a host name is used, a valid DNS server must be specified in the TCP/IP network settings.

Here is mainly to prepare for the following alarm settings, which the mail server is filled with the server address for receiving SMTP address. The user's name and password refer to the sending SMTP address and password. When input is completed, clicks save. The SMTP server and other information can be obtained from the mail service provider. If the alarm does not need to SMTP tips, here you needn't to fill in.

3.5 5 FTP Settings

FTP

FTP Settings

FTP Server	<input type="text"/>
User Name	<input type="text"/>
Password	<input type="text"/>
FTP Command Port	<input type="text" value="21"/>
Path & File Name	<input type="text" value="."/>

Like the above mail server, if you need upload pictures or video when alarming, here please fill in the information of FTP server. About FTP slogan, it depends on FTP server itself.

3.5 6 Alarm Settings

3.5.6.1

Embedded Motion Detection Setting

Set Motion Detect Region: 0 Or

Motion Detection Enabled Yes No

Sensitivity

Embedded Motion Detection Event

Send E-mail with a JPEG or send to FTP with *.AV

GPIO Output

Motion Detection refers to the screen to set the region to detect movement of a certain degree. For the motion detecting alarm, you can send pictures to e-mail or upload to FTP to record. It can prevent the occurrence of adverse events.

Introduction of motion detecting setting: first click “Start editing”, and then select the number between 0 to 15, click “Editing area”, use mouse to draw selected range in the picture, it will appear the red rectangle with numbers, click save editing, the rectangle will turns to white, edit end. If you want to delete a motion detection area, choose one number, click “Delete area”. Set up, start motion detection function, according to the needs, set up good sensitivity (lower sensitivity values, higher sensitivity), click Save.

You can select some actions for motion detecting alarms. Alarm events support “without incident, send E-mail pictures, upload FTP pictures, upload FTP video” four ways, and alarm output support "no output, alarm output 1output, alarm output 2 output" three ways.

3.5.6.2

GPIO Alarm Input

GPI(Input)	Alarm Level	Alarm Event	GPIO Output
GPI1	No alarm ▾	None ▾	None ▾
GPI2	No alarm ▾	None ▾	None ▾

GPIO Alarm Output

GPO(Output)	GPO Status	Maintain Time
GPO1	High <input type="radio"/> Low <input checked="" type="radio"/>	10 (s)
GPO2	High <input type="radio"/> Low <input checked="" type="radio"/>	10 (s)

Alarm Server

Alarm Server

user.ipcam.hk

Besides motion detecting alarm input, camera also supports GPIO alarm input. There are two types of inputs, "high level, low level", and triggers are the same as the above motion detection. In the choice of GPIO alarm output, you can set alarm way and alarm duration. Finally, fill in alarm server, and click Save.

Note: Alarm server is user.ipcam.hk.

3.5 7 RTSP Settings

RTSP Setup

RTSP Special Setting

Depend on your network, change to suitable framerate and compression setting when RTSP live play.

Note: This setting just effect when RTSP playing!

Limit Frame Rate to: 10 ▾

Compression 14 ▾

Save

Reset

Choose frame rate and compression ratio, usually on factory default.

3.5 8 Special Settings

Special Setting

Video Advance Setting

Compression	<input type="text" value="8"/>
P/I Ratio(P frame ; I frame)	<input type="text" value="25"/>
Camera Type	<input type="text" value="AUTO"/>
CMOS Frequence:	<input type="text" value="50Hz"/>
Enganced Sharpness	<input type="text" value="Normal"/>

RGB

UseRGB Yes No

Cut Pixel

Scan Begin	<input type="text" value="80"/>	Scan Scale	<input type="text" value="56"/>
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4. IE Browse to Video Server

IP video server, give opportunities to the digital traditional analog camera, analog signals transform into digital signals through video server, and then through the network transmission to the Internet, we can say: analog camera + IP Video Server = IP Camera.

IP Video Server surfing way is the same as camera, you need download ActiveX for viewing, server and camera web surfing ActiveX installation is the same, only once is OK. And then refresh to log in. (See below photo)



5. Brief Introduction to CMS (centre management software)

Previously, we introduce IE browse and video server for IP camera. It is related with use of central management system (short fro CMS). CMS refers to a platform which set a centralized management of IP Camera, powerful, extensibility, can add the series products of our company, ES,FS, MS, VS, AS, HS, here briefly introduce MS series products in the use of centralized monitoring.

5.1 Installation and Registration



Open CD; install CMS, shortcut icon appears on desktop, Double-click the shortcut, open software, the first use will appear registration, click registration, input the code on CD, register. Or skip this step, click ICONS of control



interface on lower right, select register.

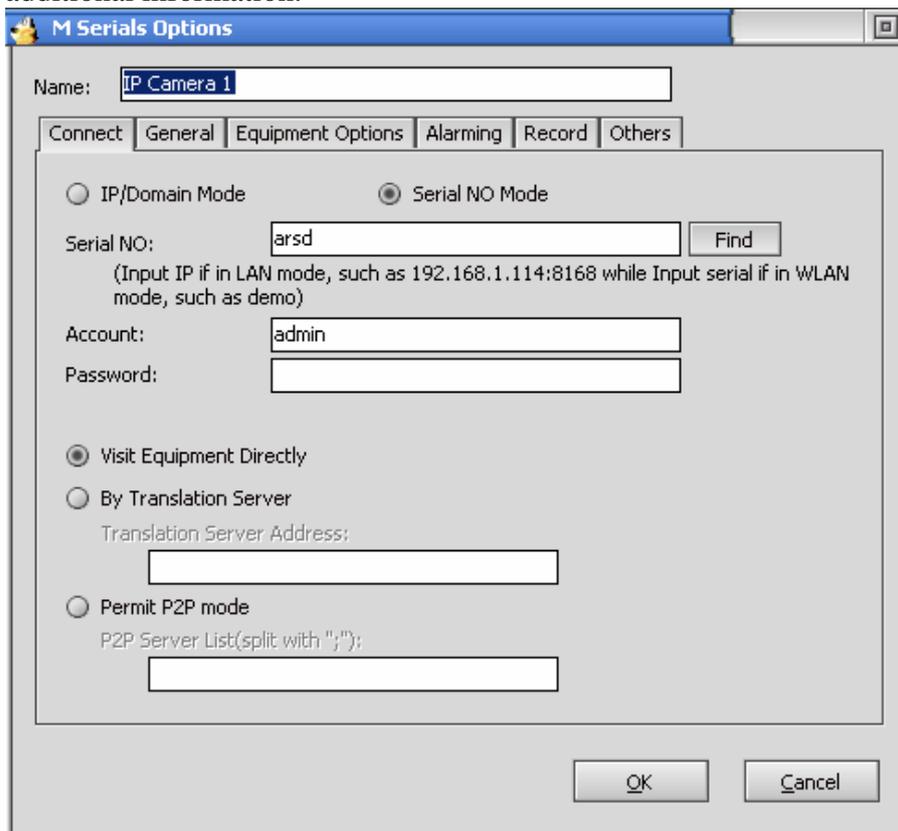
5.2 Add Equipment

According to the software interface on upper right, and the gray text hint to add an IP Camera to CMS, choose M series, click ok.

5.2.1 Connection Information

Select IP/domain mode or airframe encoding, if you need to find LAN network equipment, click search. Input user ID and password, choose the access method, and click ok. Note: There are three visit ways here, direct access devices are limited with a maximum of 15 people online, and there is no limited with the use of forwarding server and P2P.

After finish the addition of cameras, if we need set others, please select the camera, right click, and choose equipment setting, or click , set the camera, appear connection information, basic information, equipment parameters, alarm, video, additional information.



M Serials Options

Name:

Connect | General | **Equipment Options** | Alarming | Record | Others

IP/Domain Mode Serial NO Mode

Serial NO: Find

(Input IP if in LAN mode, such as 192.168.1.114:8168 while Input serial if in WLAN mode, such as demo)

Account:

Password:

Visit Equipment Directly

By Translation Server

Translation Server Address:

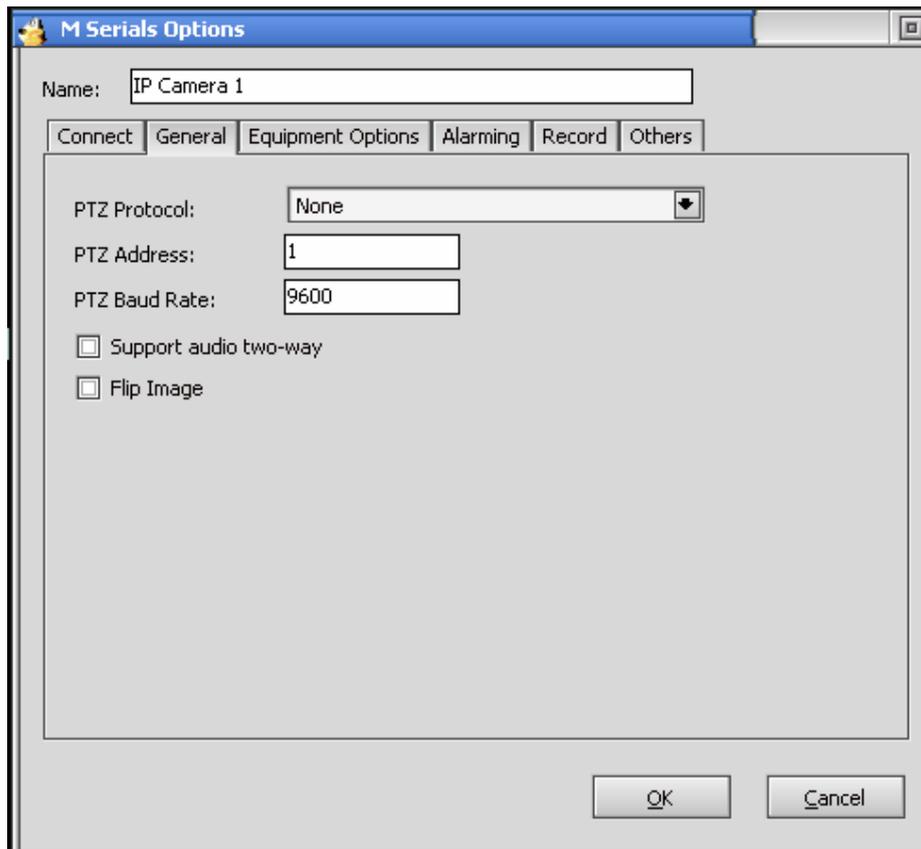
Permit P2P mode

P2P Server List(split with ";");

OK Cancel

5.2.2 Basic Information

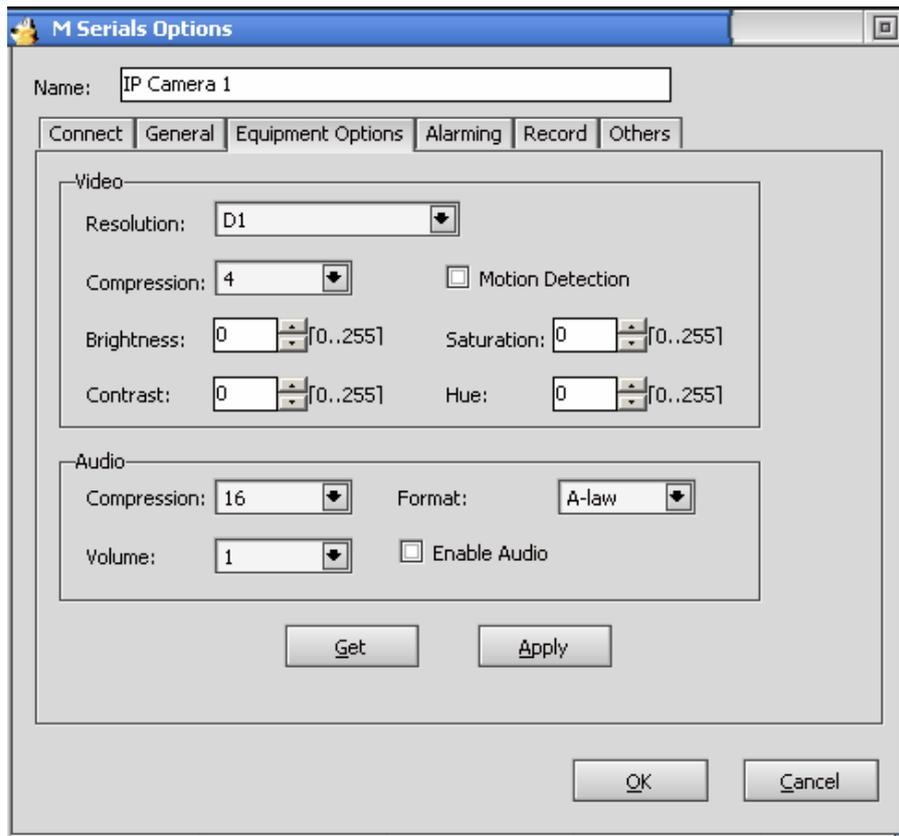
According to your need here, you can choose pan-tilt agreement, support two-way voice, reverse images. There is no pan-tilt, namely no pan-tilt agreement, on factory setting. Also you can apply to all equipments or group equipments according to conditions.



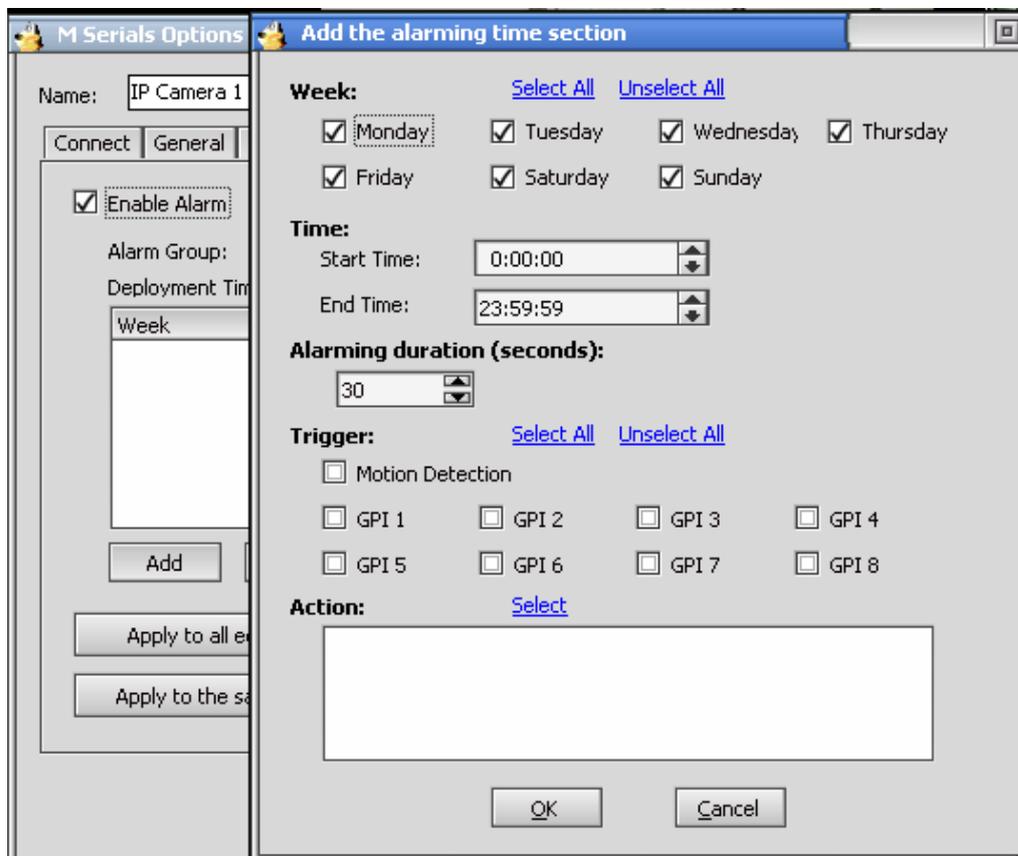
5.2.3 Equipment Parameters

This page contains the audio information of the equipment, the current page information refers to CMS factory defaults, click for information, and obtain the current information, and then you can modify it. Click application, save it.

Note: This amendment is for camera itself, after modification, other browse way can have the same effect. For example: The resolution for obtain is D1, modify it to CIF, IE browsing, resolution turns from D1 into CIF.



5.2.4 Alarm



When you need to enable alarm, select open alarm, clicks add, as the above photo. Here you can select alarm week, time, alarm duration time, trigger term and trigger action.

The trigger action supports audio, video, alarm, people flow statistics, e-mail, equipment terminal siren etc. detail information please refer to CMS introduction.

Note: trigger term contains motion detection and alarm input two ways.

5.2.5 Record

Here you can set to record video or not, and video period, etc.

5.2.6 Others

Use to add some remark information for IP camera here.

6. Platform Introduction

Platform address: <http://app.ipcam.hk/>

From the comparison aspect of website browse and CMS, platform is as the integration of all advantages, it does not only realize website browse & multiple images management, but also add many feature functions:

- Use network browser to visit, no need install client software.
- Multiple equipment management
- Multiple images real time monitor
- Fixed time photo
- Alarm message note and alarm photo
- Support mobile monitor real time image & alarm record
- Message check equipment work condition
- Log records
- Sub-username function

For the first time to use the platform, you need install platform broadcast ActiveX, Click platform address, log in platform, when it need video broadcast. There will be a hint of installation ActiveX, follow the instruction to install and use the watch function.

Detail helps information please log in back-end platform and refer to online help.

7. Mobile View

First, cell phone must open WAP function, and then install cell phone software; there are two installation ways as follow:

7.1. Download Program on Mobile

Http://mob.ipcam.hk

After visit, it appears the following interface.

Select the version language, for example, select English version, and appear the following image:



Offer JAD & JAR file download, generally, we download JAD file is enough. If JAD file is downloaded but failed installation, please try to download JAR file



7.2. Download Program on Computer

Download file from computer

English version: <http://mob.ipcam.hk/en/MobileView.zip>

Chinese version: <http://mob.ipcam.hk/cn/MobileView.zip>

Decompress the download file, put on cell phone. Install program on cell phone.

Following is the use instruction

Operate program Mobile View on cell phone.

Interface appears as follows: (different cell phones may exist differences in interfaces)



Select "add", add visited equipment, interface appears as follows:

Add Address

SII:

Input User Name:

Input Password:

Device Model
 M Serial
 F Serial

Input visit address/ item mode: input equipment item code or visit address. For example, the equipment item code is aqht and then you input aqht.
 Input visit username: input equipment visit authority.default: admin
 Input equipment visit password: input equipment visit authority password.
 Default password:empty.
 Equipment type: according to different equipment to select, the series is F.

Add Address

SII:

Input User Name:

Input Password:

Device Model
 M Serial
 F Serial

Finish input, if you need to add to keep list, so as to visit again next time, select “save”, if it need not save, visit directly, and please select “open”. Then select “ok”.

The first screenshot shows the 'Add Address' form with a menu overlay. The menu has three options: 1 Open, 2 Cancel, and 3 Save. The 'Open' option is selected. The second screenshot shows a dialog box titled 'OK to Send Information?' with the text: 'MobileView wants to send information. This will require the use of airtime which may cost you money. Is this OK? (http)'. There are four radio button options: 'Yes, always. Don't ask again.', 'This time. Ask me next time.', 'Not this time. Ask me next time.', and 'No. Shut off MobileView.'. The 'This time. Ask me next time.' option is selected. The third screenshot shows a screen with the text 'connecting...' and a red and green circular indicator.

Click “ open”、 “ ok”,and waiting, display following interface, you can see the live image:



During the watch process, press cell phone keyboard 2 can control P/T upward, 8 controls downward, 4 & 6 leftward & rightward. Or use direct button to control.

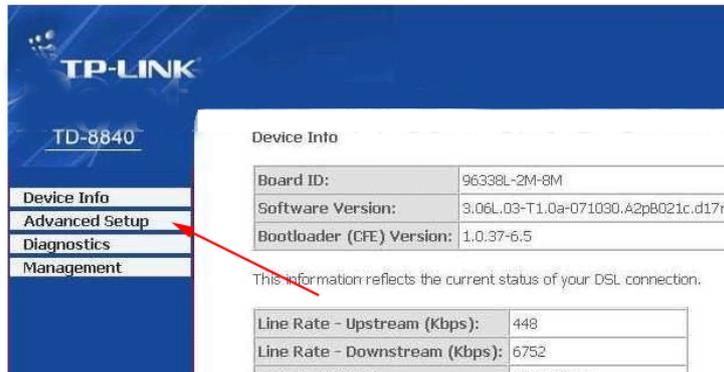
8 Router Port Forwarding Settings

8.1. Port Forwarding Settings in router

When a remote access via internet visit, port forwarding in router is a must, different brands routes have different name, but the operation is the same.

Take the TP-LINK TD-8840 router port mapping setting as example. To set up IP Camera as an example: router inner web IP is 192.168.1.1, IP camera inner web address is 192.168.1.50, and port is 80.

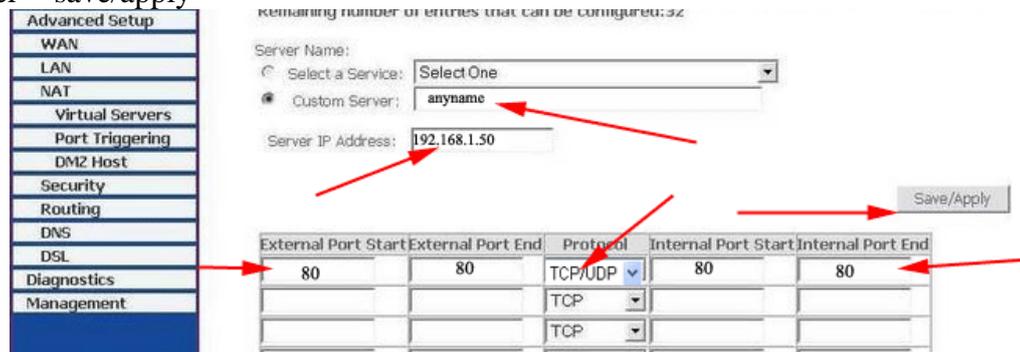
1. First log in router web administration interface.
2. Click in front of left side “Advanced Setup”



3. Click “virtual server” in the unfolded menu.



4. fill “80” under the right **port start** or **port end**, **Server IP address** fill "192.168.1.50", protocol select "TCP/UDP"OR” “TCP” , finally don’t forget click under “save/apply”



Detailed information please refer to following photo: When complete port forwarding, you can visit camera through device code in outer net remotely;

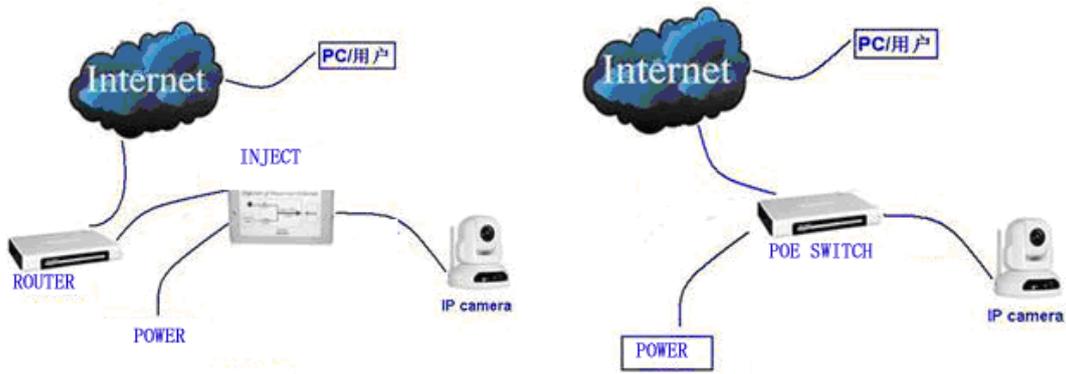
Common router default visit address

1. DLINK ex-factory definition router address is 192.168.0.1
2. Linksys ex-factory definition router address is 192.168.1.1
3. 3com ex-factory definition router address is 192.168.2.1
4. Microsoft ex-factory definition router address is 192.168.2.1
5. Net gear ex-factory definition router address is 192.168.1.1
6. Asus ex-factory definition router address is 192.168.1.1

8.2 POE

POE (Power of Ethernet), namely supplies power by network. POE (Power of Ethernet) technology is in the existing Ethernet twisted-pair wiring infrastructure and not making any changes in the situation, for some based on IP (such as IP telephone, terminal wireless LAN access points AP, IP Camera) while data transmission signal, still can provide direct power for such equipment.

POE standard defines two configurations to the use of Ethernet direct transmission cable to the behind POE compatible equipment (diagram as bellows): one called Mid-Span, use Ethernet cables are not used to transmit dc, the corresponding Endpoint PSE support POE function of Ethernet switches and routers, hubs or other Internet exchange equipment. The other called End-Span, in data transmission core, at the same time transmits dc; the transmission adopts different frequency signal with Ethernet. Mid-Span PSE is special power management equipment, usually connects with switches together. Its correspondent each port has two RJ45 jacks; one connects with switch in a short line, another connects with remote device. We can foresee that End - Span will quickly get promotion, it is due to the Ethernet data transmission using public line with the need to save the independent transmission lines, and this is significant to the only 8 core cables and matching standard RJ - 45 sockets.



POE IP Camera is network camera, using POE technology to realize the network video monitoring; it has the function of POE power equipment, the supply of electricity using Ethernet devices (PSE) to provide dc, through the twisted-pair cable transmit to PD. Compared with the traditional IP Camera, POE IP Camera has the following advantages: except for the connecting cable from Ethernet devices provide general use of power support, POE reduce the investment, thereby reducing the IP infrastructure in the unity of electric equipment of the total cost of deploying. POE exempts the need for terminal equipment installation wall power connection, so lower the socket cost related to terminal equipment. It also can be deployed in local ac power relatively difficult place to install network connection device, provides more flexibility. In practical application, we can also strip the camera from POE IP Camera, and divided into ordinary IP Cameras and POE adapter. In front also have Ethernet switches which provide POE power, back have POE adapter, it converts the dc what transmit by twisted-pair cables to IP Camera, provide IP Camera the working power. Because electric power module supports the function of recognition circuit, when we use UPS to supply power, the energy-saving advantages are more apparent.

8.3 Alarm Block Box

Alarm block box is a configured product combined to IP camera perfectly: on the basis of the existing IP Camera series products, add the wireless alarm receiving module. This module can receive the wireless alarm signal sending by the common wireless alarm detecting equipment, for example, wireless door magnet, wireless infrared detector, etc. Event triggers alarm, alarm host starts to work, at the same time, camera starts to video and photo etc., realize the perfect combination of video & audio.

The picture of Alarm

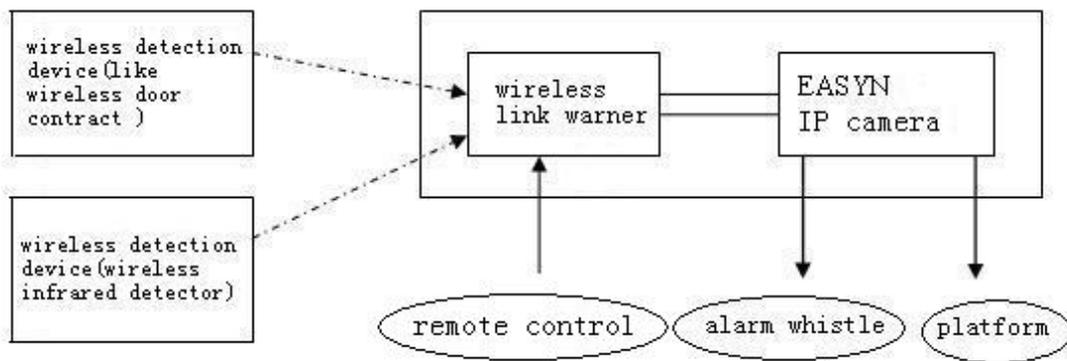


Block Box:

Normal Specification:

Received frequency	315MHz, can receive frequency wireless equipment on market, such as door magnet, infrared etc.
S terminal	No.4pin earthing, No.5pin connect 12V or 5V (selected) No.2pin connect low-level input current, No.5pin connection output
Output terminals	Relay output 1 Router + 12V/0.3A, External connection siren
touch switch	Code use
external shell	aluminum alloy
Size	106mm x 92mm x 29mm
Weight	170g
Supply Power	DC +12V/0.3A
LED display	Code display

Alarm Block Box Use Connection:



Common alarm device:



Arm and withdraw garrison remote controller Wireless Magnetic Door Infrared detector
Concrete settings please refer to linkage alarm host help instruction.

8.4 M Series Production Specification (Part)

The series own variety of different configured production specification, users can select to use as required.

Image	Specification
	Indoor, wired/ wireless selected, one-way speech
	1) outdoor, infrared 20m/40m/50m/100m selected, wired/wireless selected, one-way speech 2) infrared 100m with zoom, various zoom specifications selected
	Indoor, wired/wireless selected, overall pan tilt, Preset position, high-speed, zoom, one-way speech
	Indoor, wired/wireless selected, overall pan tilt, Preset position, constant speed, infrared 10m, one-way speech
	Prevent type, infrared 20m/ 30m selected, one-way speech
	Indoor, absorb ceiling/ hanging selected, wired/wireless selected, infrared 20m selected, pan-tilt rotation control, constant speed, one-way speech
	Indoor, absorb ceiling, infrared 20m selected, one-way speech
	Internet high-speed ball/ constant speed ball/low speed ball, waterproof, rotary control, can set preset position, various zoom specifications selected, one-way speech.
	Network infrared ball, outdoor, waterproof, infrared 40m/80m selected, rotary control, can set preset position, various zoom specifications selected, one-way speech.
	Network matrix infrared constant speed ball/ high-speed ball, outdoor, waterproof, infrared 100-140m, rotary control, can set preset position, various zoom specifications selected, one-way speech.
	Single/four-way video server wired/wireless selected, one-way speech.

9. Frequently Asked Questions

Asked: Why I use finder can not find our camera?

Answer: Please check whether IP camera and search bar locate on LAN network; Net wire or power connection problem also leads to **【under normal phenomenon, power light (yellow) constant on, network light (green) constant sparkle】**

Asked: Do M series support P2P technology ? What about other series?

Answer: M series support P2P technology. You can watch it by centralizing management interface or platform to realize P2P visiting. F series have the same function.

Asked: How many pieces do M series motion detection area support ?

Answer: M series support 15 pieces motion detection area.

Asked: Do M series browse dynamic picture on mobile?

Answer: About mobile browse: M series can watch dynamic picture

Asked: Where can we download program by visiting mobile?

Answer: Please refer to help text mobile visit, first chapter.

Asked: Does your centralized monitor interface support Vista & Linux system?

Answer: We can support Vista system, but not support Linux system now.

Asked: How to set the same network segment with IE Camera & PC in LAN

Answer: Using search bar to find out camera, click auto set button.

Asked: Can network signals and analog video signal transmit simultaneously?

Answer: Yes.

Asked: What modes of cell phone does the M series camera support to visit?

Answer: Windows mobiles or Symbian S60, 3rd edition intelligent system cell phone (NOKIA E71, 6122C, MOTO A3000, NOKIA N70-73 N95 N98, SAMSUNGU608etc.)

Asked: Why the cell phone software can't visit camera?

Answer: If cell phone use Java, cannot visit, indicating the unknown error, please check whether the equipment program support the version of mobile visit.

Asked: Does the camera can work under complicated situation? Such as flash light.

Answer: If light changes too often, we suggest using ultra wide dynamic IP Camera or ultra wide dynamic camera with video server.

Asked: How to ensure the quality after service?

Answer: Please keep the appendix warranty card, non-artificial damage or force majeure causes, manufacturers provide one-year warranty. Please cut down the card with equipment submit together to local dealers or designated offices.

10. Warranty

According to the warranty card, under normal using condition, products resulting from its own failures in the warranty period will be free maintenance.

10.1 Warranty Terms

- a) Charge-free maintenance of the product is one year. Since products left factory, we can change it for free in three months, and one year warranty. We can repair it for free during the warranty period (Damages not caused by misuse or vandalism). Repair over guarantee period, we will charge maintenance fee.
- b) During warranty period, breakdown caused by misuse or other reasons out of range of warranty. You could require repaired depending on the card. We only charge for changed components, the maintenance charge is free.
- c) When the products need maintenance, hand up the card with products to the manufacture or local distributor.
- d) Take apart item crust, tear up the sealing label privately, it is out of warranty range.
- e) We do not accept the damaged item due to modification or adding other functions.

The Following Circumstances will not be free warranty

- a) Period check, maintenance or change components due to normal damage
- b) The damages due to crash, extrusion, artificial flooding, moisture or other personal causes.
- c) The damages due to floods, fire, lightning strike and other natural calamities or force majeure incidents factors
- d) Repaired item by non-authorized repair centers

Above all, if changed, regarded to relevant regulations.

10.2 Warranty Card

Manufacturing Date:		Product Specification:	
Inspector:			
Version number :			
Product Model			
Sale Dates			
User Company			
User name			
Customer Address			
Contact Number			
Maintain Date	Failure Conditions	Results of Maintenance	
		Maintenance	
Remark:			
Note: please fill the card and offer it with products if guarantee of repair			

WE ARE KEEP WORKING HARD!