Hootoo IP Wireless / Wired Camera

REMOTE PAN/TILT ROTATE

User Manual

Product Components and Features:
IP camera --1 PC
Bracket（optional）--1 PC
Power adapter--- 1 PC
Warranty-Card--1PC
CD--1PC

Table of CONTENTS

General Introduction

IP Camera is a new generation product with the combination of analog camera & IP video technology. Despite 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 PC IE browser to visit IP camera, real time monitor targets, manage and store video or image, PTZ control also is available through network.

As a new member in camera family, IP camera shares 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 extend to both analog and digital signal.

The core of F series IP cameras is 32Bit RSIC, adopts standard MJPEG compression format, camera sensor is CMOS, support auto white balance and backlight balance, support IE, cell phone browser，centralized monitor interface management. In general, according to the function of audio simplex & duplex, infrared, wired, wireless, POE, PZT, local storage, it has hundreds of products, to meet requirements of high, middle, low ranks of users.

1.1. Product Specifications

*- Adopt high Performance, strong function media processor 32Bit RSIC

*- High sensor CMOS

*-Adopt optimized MJPEG video compression algorithm, realize high-definition images transmission in narrow bandwidth;

*-Maximum support 15 users viewing at the same time, no limit for users if using Forwarder Server function;

*- Built in Web Server，it is convenient for users to use standard browse to realize the real time monitoring and setting administration;

*-Support WIFI：802．11b/g wireless networking;

*-Support remote system update;

*-Support DDNS analysis, support LAN & Internet (ADSL、Cable Modem)

*-Support variety of network protocol: TCP/IP, UDP, SMTP, PPPoE, Dynamic DNS, DNS Client, SNTP, BOOTP, DHCP, FTP, SNMP, WIFI/802. 11b/g

*-Parts of modes products support one/ two way audio talkback;

*-Support Motion Detection alarm function (set area & sensitivity);

*-Support image snap

*-Abnormal automatic recovery function，if Network Interruption can auto connection

*-Dynamic alarm function, set alarm period

Parameters Form

Image Compression Format	Standard M-JPEG
Sensor	CMOS，300,000 pixel
Image Resolution Rate	VGA（640x480）/QVGA（320x240）
Network interface	RJ-45/10-100 Base T ，802.11b/g
Network protocol	TCP/IP,FTP,SMTP,HTTP,UDP,DHCP,NTP,DDNS,UPNP,DNS,PPPOE
Image Max Transmission Rate	30 frame/second（QVGA）, 15 frame/second（VGA）
Alert control	Output：1 router（5VDC，0.1A）input：1 router（closure Trigger）
Motion Detection	Support
Software Update	Users automatically upgrade
Monitor Mode	IE browse or special program
Playback Mode	Microsoft Media Player
Security	3rd ranks password authority setting
Minimum illumination	2.0Lux@550nm
Auto White Balance	Support
Working environment	-10C°– 50C°，20% - 80%PH

1.2. Applications

The series products usually are ideal for big department, supermarket, home, factory, workshop etc.

1.3. System Requirements

Minimum Hardware Configuration
CPU: Pentium 1.6 GHz
Memory: 256MB
Audio card: need audio monitor, two way talkback essential
Hard Disk : if it need video image，no less favorable 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

There are two kinds of F series IP camera interfaces: one is body guard interface, the other is the extend line interface, set two representative products as examples, to give explanation:
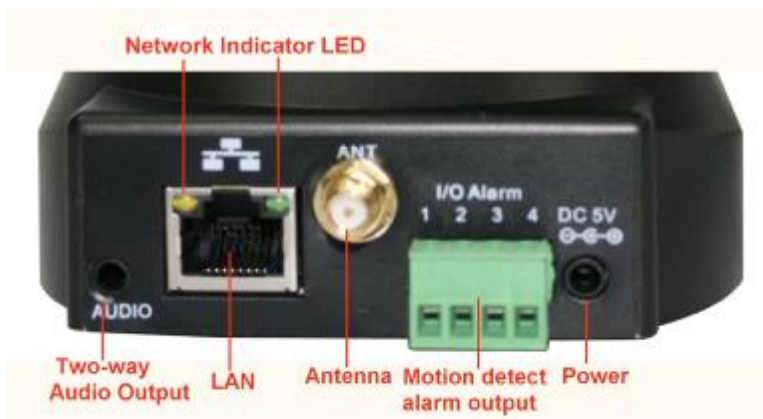
Non-extended line IP Camera icon   Extended line IP Camera icon

2.1. Interface

Non-extended line IP Camera Tailgate

Power Supply Light: constant on after power up

Network light: constant sparkle after power up data transmission. Ethernet interface: RJ-45 interface.

I/O interface: 1 router alarm input, accept 3, 4 two terminals (input terminal grounding, low level effective trigger); 1 router TTL control input, connect 1,2 two terminals (1,2 terminals short connections).

Power input interface: connect direct current 5V Power

Extension line interface definition icon:

Power: direct current 12V.

GPIO alarm interface: accept external connection linkage alarm equipment (for example: door magnet, infrared)

Reset line: two reset line short circuit, equipments restore to ex- factory standards. Ethernet interface: RJ-45 network interface.

Backup: follow-up product extend interface.

About GPIO alarm interface (S terminal) definition:
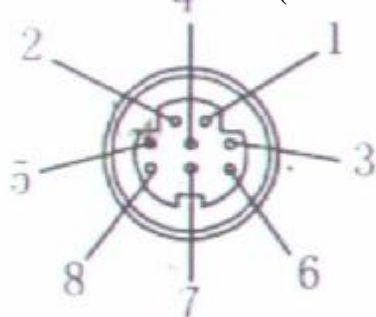
1#   +DC12V
2#   RS485（A）
3#   Earth（GND）
4#   IO2   （OUT PUT）
5#   RS485   （B）
6#   IO1   （IN PUT）
GND: Ground，alarm input ground ，RS485 ground

RS485:RS485 control interface，left connection RS485 negative right connection RS485 positive. connect P/T decoder，support variety P/T protocol.
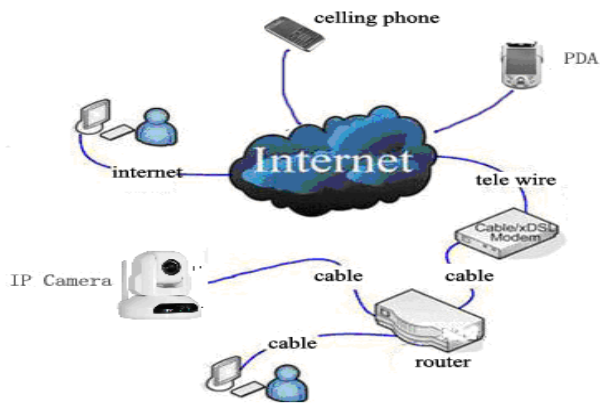
2.2. Installation

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.

3 networking connecting ways are widely applied in IP Camera:

2.2.1. Installation in LAN.

This is the most popular network access way, as long as there is a router, internet cable connect router directly to IP Camera, IP Camera can connect to Internet as normal PC, as shows:

2.2.2. PPPoE Installation

Under the condition, users need set PPPoE dialing parameter on IP Camera: input the username and password ISP supplier' offer permit IP Camera dialing connects to Internet. As to set the PPPoE dialing parameter, you can connect device to network through the first way, then write parameter to the device, also through following third way, direct process parameter written to device. The way how to set PPPoE, please refer to 3.4.5.for detailed steps

2.2.3. IP Camera & PC connection

This method is not used too often, when you process machine write parameter or program shift, we recommend you adopt the first connect network way, to process the modification of machine parameter.
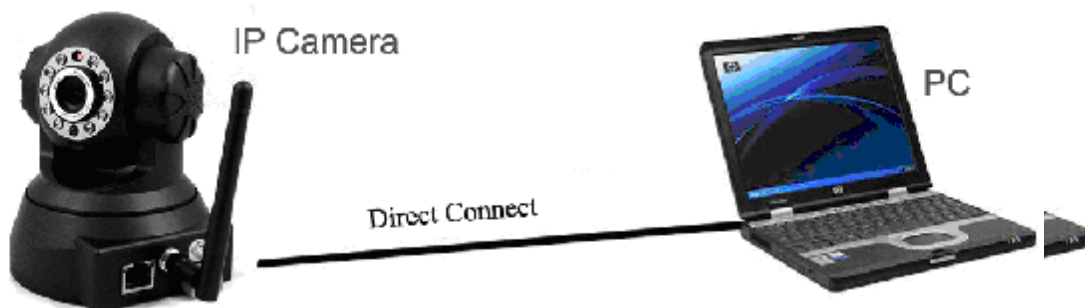
connect   to   IP   camera   (note: don't   apply   for   wrong   power),   after   one

minute modification of IP camera, video could be connected by internet cable to IP camera; under the normal condition, yellow light is on, green light flickers, 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).
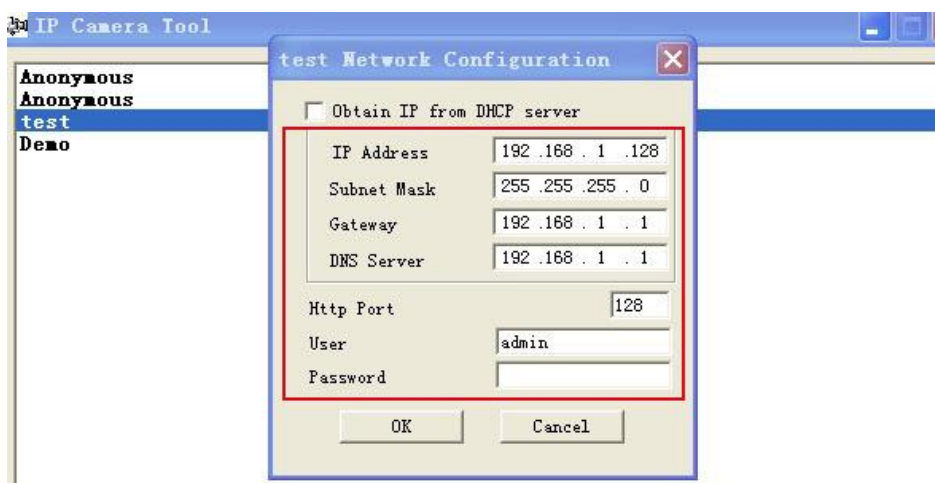
3. **IE Browse to IP Camera**

After IP camera connects to PC LAN through router, you can operate on IP camera via PC, first please run the relative software in the CD kit

3.1. Use Finder

Open the disk, doubl click "**IPCamSetup.exe"** file, only click **next,** you will complete the software installation and appear the following interface:
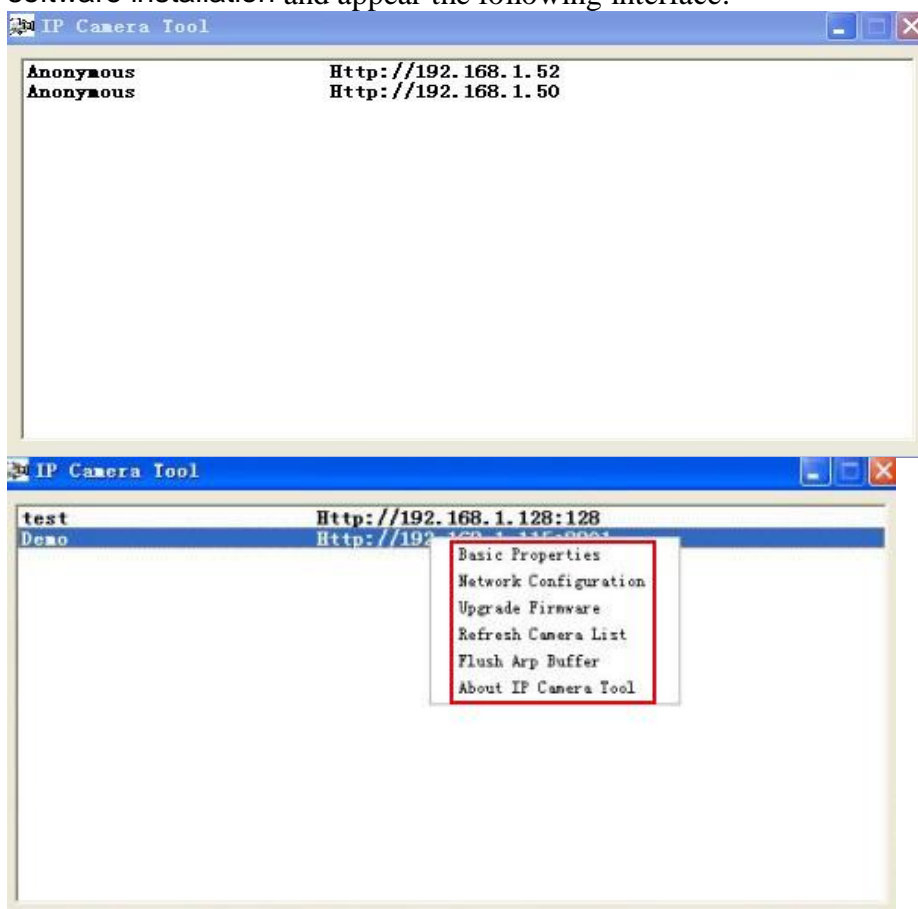
If the internet cable power connect is correct, it appears device styles, name, and IP address in the device list, (if it doesn't appear, please confirm power & internet cable work normally).
As the interface, left side is the current computer configuration information; right side is the selected device network configuration information. Default IP camera address is 192.168.1.126, HTTP interface is 80.
Note:
1. Device information indicates IP camera information.
2. When current computer is the stable IP, (none DHCP IP), the first time use IP Camera, you could click auto set, to sync local Information to the IP camera IP address, gateway and DNS
3. If it needs manual modify camera name, HTTP interface, IP address, sub-net mask, gateway, main DNS server, backup DNS server, etc. please click apply after modification, enter IP camera username and password, click confirm is OK.
4. Inner visit address is LAN visit address; outer visit address is WAN visit address.
5. When IP camera connects to outer net by the first way, before outer net visit IP camera, port forwarding **is necessary** in the senior router: analog server set. e.g., IP address of one device in the LAN: 192.168.1.126, port is 80, so it's necessary to open IP: 192.168.1.126 port 80(TCP) in router, besides, in the same LAN, different camera should come with different port, to make sure there is no port interference in LAN;
6. As port forwarding in the router, please refers to other chapter in router port forwarding set.

3.2. Logging and Active X Installation

Before IE monitoring through web, it is necessary to install video plug-in,
Double click "**Appinstall.exe**"—"**Next**"—"**Install**"—"**Finish**".
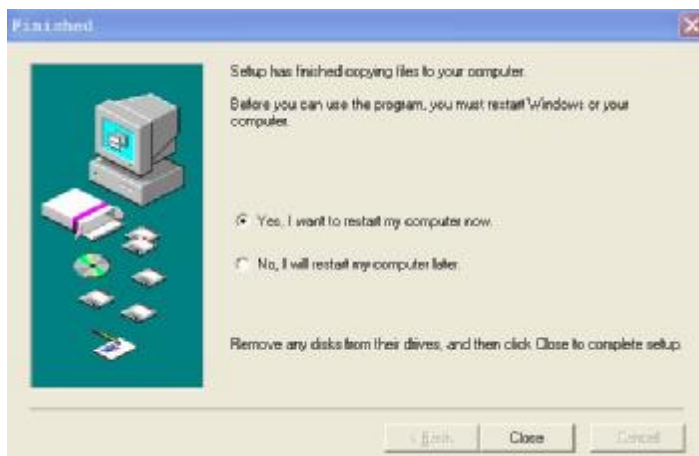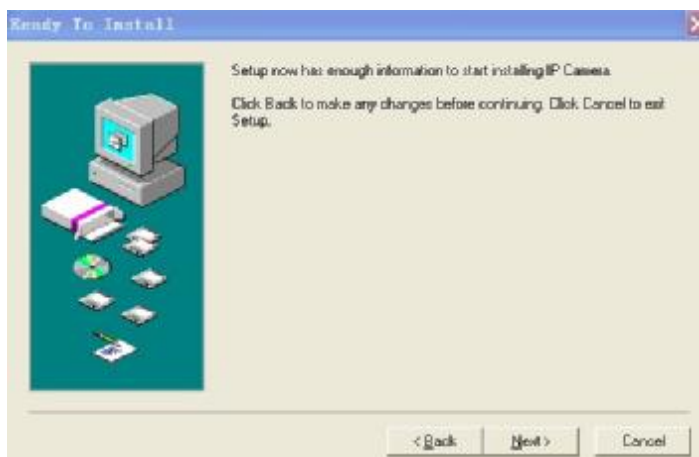
After this done, the icon "IP Camera Tool" will be displayed on desktop automatically.

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 the above photo address http://192.168.1.128

（LAN），http://aodn.aipcam.com（WAN）

3. When the item connects to outer networking, a log-in interface will appear:

IP Camera

User	
Password	
Lanauge	English ∨

Sign in

Select the needed language, enter log in information, click OK to enter, an installation pop-up will appear, after installation and you can use it. If it is blocked and requires plug-in installation by antivirus software, please remove block.

Note：

1. Default device account is **admin**，no password.

2.M series IP camera doesn't support Firefox browser，but F series support.

3.3. Operation Button

Enter device, on left side displays monitor image, right side is control used for operations:

3.3.1. Equipment Status

When login name or password is wrong, it will show the following hint:

Microsoft Internet Explorer

⚠ fail to connect to the device : incorrect user

OK

3.3.2. Administrator Operation

Click **Sign in**, a pop-up will show

3.3.3. Operation

1. Image mirror indicates a reverse image.
2. Resolution, mode, brightness, contrast default setting are：320*240、50HZ、6、4，
   mode is mainly for the adjustment of
   Light strength, please adjust to 60HZ when light is poor or in dark.
3. There are 3 browse modes in IE mode: visitor, operator, administrator, the authority of
   administrator is the highest, log in different authorities, the operation will be different.
   Regarding to 3 user authorities, please refer to 3.4.4. Equipment User Administration.

3.4. Basic Settings

Click   administration   operation ,enter the parameter

Note: in basic setting, when you make a modification, please click setting. A hint interface
will pop up

1）the right interface will indicate
the parameter setting operation is successful, please click OK
then refresh.

2) the right interface will indicate the parameter setting
    operation is successful, and need restart to finish
    setting, please click OK.

If system indicates to restart (as right photo), please single
click yes (Y) and then enter again.

3.4.1. Device Information

The   device   information   includes   the   above   interfaces,   device   serial   number
（MAC）device system firmware version, device application firmware version.

3.4.2. Device Name Settings

Here it displays camera name, e.g.: search displayed name on search bar, the following
refer multiple channels equipments setting etc.

3.4.3. Device Clock Settings

Date&Time Settings	
Device Clock Time	1970年1月1日 8:20:02
Device Clock Timezone	(GMT) Greenwich mean time; London, Lisbon, Casablan ⌄
Sync with NTP Server	☑
Ntp Server	time.nist.gov ⌄
Sync with PC Time	☐
	Submit Refresh

From this interface, you can adjust time through NTP server or PC.

3.4.4. Device User Settings

User can proceed with setting according to the interface below. The system is available for administrator, operator, visitor, and the authority will in turn.

Users Settings		
User	Password	Group
admin		Administrator ⌄
		Visitor ⌄
		Visitor ⌄
		Visitor ⌄
		Visitor ⌄
		Visitor ⌄
		Visitor ⌄
		Visitor ⌄
	Submit Refresh	

Note: At least one administrator is needed for the device;

3.4.5. Basic Network Settings

Basic Network Settings	
Obtain IP from DHCP Server	☐
IP Addr	192.168.2.126
Subnet Mask	255.255.255.0
Gateway	192.168.2.254
DNS Server	202.96.128.86
Http Port	81
	Submit Refresh

This sector is for DHCP and IP configuration，port forwarding is needed, If you choose to set IP address，please fill in the relative IP address、subnet mask, gateway,DNS server, Http port;

3.4.6. Wireless LAN Settings

Wireless Lan Settings	
Using Wireless Lan	☑
SSID	dink
Encryption	None ⌄
	Submit Refresh

In the wireless networking setting, there are 5 security modes: **None、WEP、WPA Personal（TKIP）、WPA Personal（AES）、WPA2 Personal（AES）、WAP2（TKIP+AES）.**
Note：
1. To connect internet through wireless network, the camera SSID must be the same with the wireless router and other AP device SSID number,
2. Our default camera SSID is dink.

3.4.7. ADSL Settings

ADSL Settings	
Using ADSL Dialup	☐
Submit Refresh	

When camera needs to connect with ADSL directly, just tick the ADSL box to run, then enter the ADSL user and ADSL password that provided by ISP (network suppliers), and click to save;

3.4.8. UPnP Settings

UPnP Settings	
Using UPnP to Map Port	☐
Submit Refresh	

The full name of UPnP is Universal Plug and Play，just plug and play, it refers to automatic port forwarding. If users need to use this function, router must support this function and run it, just tick the box;

3.4.9. DDNS Settings

DDNS Service Settings	
Manufacturer's DDNS	
Manufacturer's Domain	e0426.aipcam.com
Third Party DDNS	
DDNS Service	3322.org(dyndns)
DDNS User	IPCam
DDNS Password	●●●●●●●●
DDNS Host	ipcam.3322.org
DDNS Status	aipcam.com Succeed http://e0426.aipcam.com
Set Refresh	

All the above information is set up when the device is ready to deliver; users generally do not need to change. In case of any accidental loss, user needs to re-obtain the domain name, and fill it himself, juts do as the above, the user's name is just the first four characters, and this is for remote access. For example, http://abcd.ipcam.hk, the user's name is abcd. The password is DDNS. (The password can be obtained on the device body or contact the supplier). When connected, it displays "xxxxx is OK" on DDNS state; it means that it was successfully set. If you need to use your own Dynamic DNS, please select the appropriate service providers (on DDNS service) then enter the following information, then save it;.

3.4.10. SMTP Settings

Mail Service Settings	
Sender	
Receiver 1	
Receiver 2	
Receiver 3	
Receiver 4	
SMTP Server	
SMTP Port	25
Need Authentication	☐
	[Test] Please set at first, and then test.
Report Internet IP by Mail	☐
	[Submit] [Refresh]

The above setting is a preparation for the alarm function, the sender should be entered the sender's email address，recipient 1、2、3、4 is filled with recipient E-mail address；SMTP server should be filled with the sender email SMTP server，e.g. the sender email address is abc@163.com，and enter mail.163.com. Generally SMTP port is 25，do no need to change；when needs to check, just tick it, and enter SMTP user and SMTP password，both of them are provided by Email provider，and test according to reference；when needs to send, please tick Email notification Internet IP address；

The e-mail server and other information can be obtained from the mail service provider the email notification is image captured when alarming if no email notification is needed when alarming, and then no need to enter

3.4.11. FTP Service Settings

Ftp Service Settings	
FTP Server	
FTP Port	0
FTP User	
FTP Password	
FTP Upload Folder	
FTP Mode	PORT ▾
	[Test] Please set at first, and then test.
Upload Image Now	☐
	[Submit] [Refresh]

The above setting is equally similar to Mail Server Settings，when alarming is triggered it also sends image，please enter FTP server、FTP port、FTP user、FTP password、FTP upload directory、FTP mode，FTP mode has two options: PORT and
POSV . If needs a quick upload image, then select it, edit upload image interval
（second）。

3.4.12. Alarm Service Settings

As shown below, there are two modes of alarm trigger, first one is motion detection, pleas refer to below interface，the sensitivity of motion detection can be adjusted according to the users′ requirement, the higher the number is, the lower sensitivity is; Another mode is input alarm, when connected, it triggers alarm through alarm input signal which connects to linkage alarm GPIO;

When triggered, there are 3 alarm modes：one is IO alarm linkage, camera connects with linkage alarm box through GPIO, sound the siren ；the second is email notification, send email with images captured；the last is upload pictures alarm，as the way mentioned before FTP upload pictures alarm, Upload pictures interval（second） keeps consistent with the mentioned upload pictures interval of Ftp service settings. The schedule refers to arming time，as the selected time interval： 0：00 minute per week to 0：45 minutes and Monday 1：00 hour and 2：00 hour。

3.4.13. Reset/Firm Ware Upgrade

This sector is for camera firmware upgrade, it includes device system firmware and device application firmware. Be cautious to apply for it!

3.4.14 Restore factory Settings

When users forget password, we can restore ex-factory settings, when click, a picture will pop up, Click ok, and wait for 1 minute and you can use it normally. User setting feature restores

3.4.15 Reboot Equipment

Click restart, it appears the above picture, click ok, wait for 1 minute and you can use it normally.

4. Others

4.1. 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"
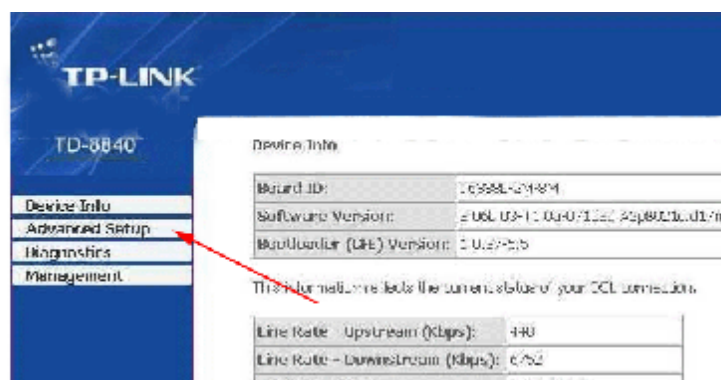
3. Click "virtual server" in the unfolded menu.

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"

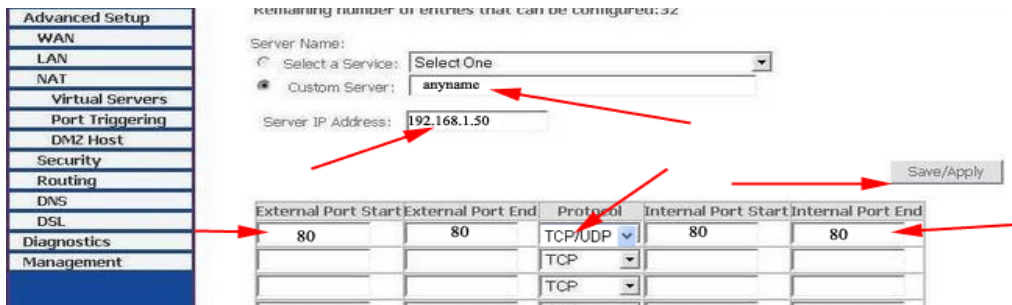Detailed information please refer to following photo: When complete port forwarding, you can visit camera through device code in outer net remotely;
Common router default visit address
1. DLINK ex-factory definition router address is 192.168.0.1
2. Linksys ex-factory definition router address is 192.168.1.1
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

4.2. Linkage Alarm Host

Linkage alarm host is a configured product combined to IP camera perfectly, wireless alarm detection equipment send off wireless alarm signal, e.g., wireless door sensor, wireless IR detector, etc. Event triggers alarm, alarm host starts to alarm, at the same time, camera starts to record image etc. fixed events, realize a perfect combination of video & audio.

Linkage Alarm Host Use Connection：
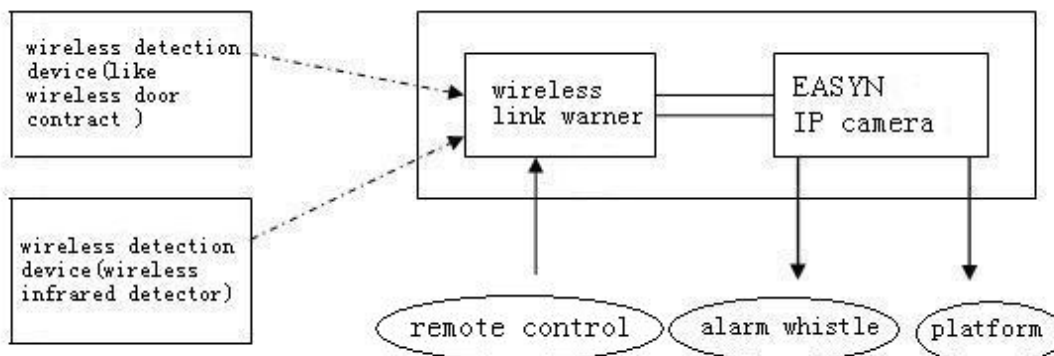
Linkage Host Specification:

| Received frequency | 315MHz，can accept frequency band   wireless equipment, such as door sensor, IR etc. |

terminal	No.4pin，No.5pin connect12V 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/ Weight	106mm x 92mm x 29mm 170G
Supply Power	DC +12V/0.3A
LED display	Code display

Matching alarm device：

Matching alarm device：

Arm and withdraw garrison remote controller　　Wireless Magnetic Door　　Infrared detector

Concrete settings please refer to linkage alarm host help instruction

4.3. Frequently Asked Questions

Asked：Why I can not find our camera when using search bar ?

Answer: 1. Please checks whether IP camera and search bar locate in the same LAN network;

2. Internet cable or power connection problem also leads to【under normal phenomenon, power light (yellow) constant on, network light (green) constant sparkle】

3. Whether the computer where the search bar is installed firewall.

Asked：Do F series support P2P technology ?

Answer：F series support P2P technology. You could watch it by centralized management interface or platform to realize P2P visit. Using P2P technology can solve multiple users visit one IP camera at the same time; the principle is mainly through the network technology to visit users to share IP camera video data.

Asked：How many pieces do F series motion detection area support ? Answer：F series support 1 piece motion detection area, that is the whole image.

Asked：Do your F series browse dynamic video in cell phone ?

Answer：F series can watch dynamic video through cell phone which supports JAVA.

Asked：Where can we download cell phone visit program ? Answer：Please refer to help text cell phone visit, first chapter.

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

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

Asked：How to set IP camera & PC as the same network segment in LAN Answer：Use search bar to find out camera, click auto set button.

Asked：What mode of cell phone does the F series camera support to visit？

Answer：Generally, Java MIDP 2.0 cell phone can process dynamic video visit.

Currently, confirmed cell phone modes are NOKIA E71, 6122C MOTO A3000，NOKIA N70-73 N95 N98，Samsung U608 etc.

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

Answer：1. whether used cell phone support Java program；

2. Whether the cell phone open WAP function, and set WAP options correctl

3. Confirm IP camera can pass Internet visit；

Asked：Why IP camera image is too white or too dark.

Answer：Open IP camera interface, try to modify camera mode.

5. Warranty

> Under normal use condition, products resulting from its own
> Failures in the warranty period will be free maintenance

5.1. Warranty Terms

a) Charge-free maintenance of the product is one year. We can repair it for free during the guarantee period (Damages not caused by misuse or vandalism). Repair over guarantee period, we will charge maintenance fee.

b) During guarantee period, breakdown caused by misuse or other reasons out of range of warranty. You could ask repair depend 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, this is out of warranty range.

e) We do not accept the damaged item due to modification or add other functions.

The Following Circumstances will not be free warranty
   a) Period check, maintenance or change components due to normal attrition.
   b) The damages due to crash, extrusion, artificial flooding, moisture or other personal reasons.
   c) The damages due to floods, fire, lightning strike and other natural calamities or force majored incidents factors
   d) Repaired item by non-authorized repair centers.

All above terms, if changed, regarded to relevant regulations.

5.2. 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
Remark：		

Note：Please fill the card and offer it with products if guarantee of repair