

Outdoor Wireless/Wired P2P Network Camera Model XX52A

User Manual



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1. INTRODUCTION

It is recommended that you first read the Quick Setup Guide. This shows you how to set up your camera using Peer to Peer (P2P). This setup method is extremely fast and easy, and will get you set up in a matter of minutes. You can then refer to this Owner's Manual for more advanced features.

IMPORTANT NOTICE

The various screens throughout this owner's manual will look different depending on the browser you use. Full functionality is available when using Internet Explorer (IE) with ActiveX (OCX) installed. Limited functionality is available with other browsers, such as Safari, Chrome, and Firefox.

Please Read this manual carefully, according to the browser you are using.

This is an integrated wireless IP Camera solution. It combines a high quality digital Video Camera with network connectivity and a powerful web server to bring clear pictures to your Desktop from anywhere on your local network or over the Internet.

The main function of the camera is to transmit remote video over IP network. The high quality video image can be transmitted with 30fps speed on the LAN/WAN by using MJPEG hardware compression technology. It is based on the TCP/IP standard, build-in WEB server which supports Internet Explorer. Therefore the management and maintenance of your camera becomes simple by using the network to achieve the remote configuration, start-up and to upgrade firmware.

You can use your IP Camera to monitor your home or your office. Also, controlling and managing images are simple by visiting the web site.

1.1 Features

- ☆Powerful high-speed video protocol processor
- ☆ High-sensitivity 1/4" CMOS sensor
- ☆Picture total 300K pixels
- ☆Optimized MJPEG video compression for transmission
- ☆Multi-level user management and passwords definition
- ☆Embedded Web Server for users to visit by IE
- ☆Supports wireless network (WI-FI/802.11/b/g)
- ☆Supports Dynamic IP (DDNS) and UPNP LAN and Internet (ADSL, Cable Modem)
- ☆Gives alarm in case of motion detection
- ☆Supports Peer to Peer (P2P)
- ☆Supports image snapshot
- ☆Supports multiple protocols: HTTP TCP/IP UDP SMTP DDNS SNTP DHCP FTP
- ☆Supports WEP/WPA/WPA2 encryption
- ☆Supports Smart phone control and surveillance
- ☆Supports Firefox, Safari, Google chrome browser

1.2 Packing List

Please check that the following items are included:

- IP Camera
- Wi-Fi Antenna
- User Manual & Quick Setup Guide
- DC Power Supply
- CD
- Network Cable
- Mounting bracket

1.3 Product Views

1.3.1 Front View



Figure 1.1

Light Sensitive Hole: For light sensitive photocell.

Infrared LEDs: For night Vision.

LENS: CMOS sensor with fixed focus lens. (3.6mm).

Antenna: WI-FI Antenna.

Sliding Shell: For protection from sun and waterproofing.

1.3.2 Connections



Figure 1.2

Network Indicator LED: The green LED is on when connected to the network, the yellow LED blinks when data is transferred.

RJ45 Port: RJ-45/10-100 base T, connect the network cable here.

Power Jack: DC 5V/2A power supply.

RESET BUTTON: Press and hold the RESET BUTTON for 30 Seconds to reset the camera back to the

factory default settings. (Please keep the power on when doing a RESET)

1.3.3 Bottom View



Figure 1.3

Please note the unique MAC and DDNS addresses on the bottom of the camera (different for every camera).

Note QR code label for easy P2P setup. (See Quick Setup Guide).

1.4 PC System Requirements

System configuration requirements:

CPU: 2.06 GHZ or above. **Memory**: 256M or above. **Network Card:** 10M or above.

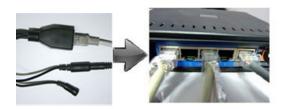
Display Card: 64M or above memory.

Recommendable Operating system: Windows XP, Windows Vista, Windows 7.

1.5 Hardware Installation

You need to set up your camera using a network cable (wired) first before you attempt to use it wirelessly. It is recommended that you set the camera up indoors first, before routing the cables through an external wall to mount it outdoors.

- 1. Install the Wi-Fi antenna.
- 2. Plug the power adaptor into the camera.
- 3. Plug the network cable into camera and router/switch.



- 4. It takes approx 30 seconds to boot up the camera, then you will find the IP address from "IP Camera Tool" (Figure: 1.9).
- 5. When the power is on and the network cable is connected, the green LED on the rear panel will stay on. The yellow LED will keep flashing, and the Indicator LED on the front of the camera will flash. (The indicator LED can be controlled by software).

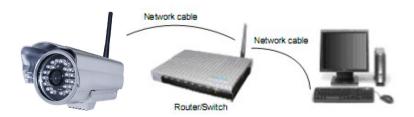


Figure 1.4

1.6 Software Installation

Attention: In order to make the installation correctly, we suggest that you turn off your Firewall and Antivirus software before installing ActiveX. Correct software installation is essential to the successful use of this product. Install the following software:

- **1. IP Camera Tool**: Open the CD, double-click "**IPCamSetup.exe**", then click **next,** to complete the software installation. (Figures 1.6, 1.7, 1.8).
- 2. ActiveX: Double click "Appinstall.exe"—"Next"—"Install"—"Finish".



Figure 1.5



Figure 1.6

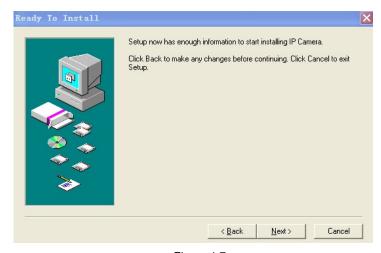


Figure 1.7

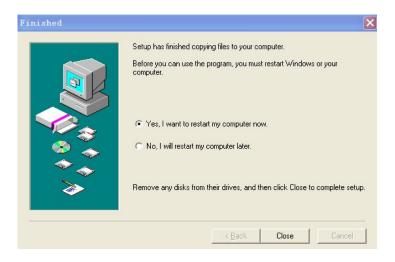


Figure 1.8



After this is done, the icon "IP Camera Tool" will be displayed on your desktop.

CAUTION: Before installing and using the product, please read the following precautions carefully and make sure they are fully understood.

Use only the power adaptor included with the product. Use of an unauthorized power adapter may cause damage to your IP Camera.

IP Camera can be installed in an outdoor environment.

Do not touch the lens of the IP Camera. The optimum focus range has been set for you. If you turn the lens, it may cause incorrect focus and blurry images.

For firmware upgrading, refer to detailed instructions contained in the CD.

SOFTWARE OPERATION

2.1 IP Camera Tool

When the Device has been mounted properly, you can double-click the Icon "IP Camera Tool"



and a dialog box as Figure 1.9 will pop up.

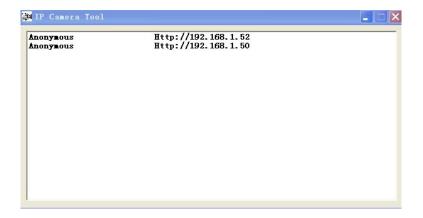


Figure 1.9

Note: The software searches IP Servers automatically over your LAN. There are 3 cases:

- 1. No IP Cameras found within LAN. After about 1 minute search, the Result Field will show "not found IP Server" and the program shut down automatically.
- 2. IP Cameras have been installed within LAN. All the IP Cameras will be listed and the total number is displayed in the result field as shown in Figure 1.9.
- 3. The IP Cameras installed within LAN do not share the same subnet with the monitoring PC. A prompt will be shown in result field (prompt: **Subnet doesn't match, double click to change!**). Click the left mouse button to choose the prompt and click the right mouse button, choose **Network Configuration** to set the static IP address of the Camera to the same subnet as your LAN. (Figure 2.3).

NOTE: If it shows" **Subnet doesn't match, double click to change**!" you can also choose "**Obtain IP from DHCP Server**" to get a dynamic IP. (Figure 2.2).

2.1.1 Six Options

Choose the IP Camera list and Click the right mouse button, there are six options: (Figure 2.0). Basic Properties, Network Configuration, Upgrade Firmware, Refresh Camera List, Flush Arp Buffer, About IP Camera Tool.

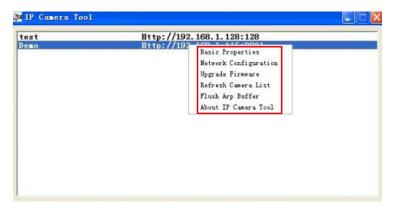


Figure 2.0

2.1.1 .1 Basic Properties

There is some device information in the Basic Properties, such as **Device ID**, **System Firmware Version**, and **Web UI Version**. (Figure 2.1).

The **Device ID** is the camera's **MAC ID**, which should be the same as shown on the sticker on the bottom of the camera. Every camera has a unique MAC ID. So if there are many IP addresses shown in the list, check the MAC ID on the bottom of the camera, so you can ensure which camera it is.

Sometimes, if there is no IP address shown on the IP Camera tool, it could be blocked by a firewall, in this case you need to add the MAC ID to the router, and give it a fixed IP or add the MAC ID as a trusted site. There are two MAC Addresses, one is the Device MAC ID, the other is the WIFI MAC ID.

WIFI MAC ID, you can find it on the sticker on the bottom of the camera, you can also login to your WIFI router, check the host status, which will show all the WIFI devices connected to your router, you can also find the IPCAM's WIFI MAC ID there.



Figure 2.1

2.1.1.2 Network Configuration

Below shows how you can configure the Network parameters.

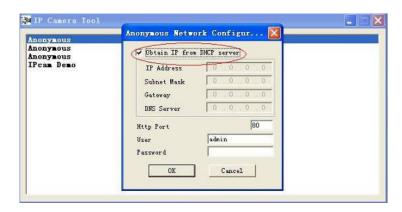


Figure 2.2

Obtain IP from DHCP server: If clicked, the device will obtain IP from DHCP server. In other words, the camera will have a dynamic IP. (Make sure the Router which the camera connects to has DHCP function and DHCP is enabled). (Figure 2.2).

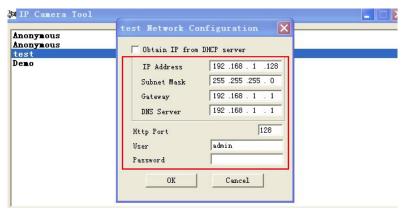


Figure 2.3

IP address: Fill in the IP address assigned and make sure it is in the same subnet as the **Gateway**, and the subnet should be the same as your computer or router. (I.e. the first three sections are the same).

Subnet Mask: The default subnet mask of the equipment is: 255.255.255.0. You can find the subnet mask from your PC or router.

Gateway: Make sure it is in the same subnet with PC's IP address .Here gateway is the LAN IP of your router. **DNS Server:** IP address of ISP network provider. You can also set it to the same as the Gateway.

NOTE: You can find the **Subnet Mask**, **Gateway**, **DNS Server** from your router, or check the local connection status of your computer, to get all the parameters. Normally two DNS servers are optional.

Http Port: LAN port assigned for the equipment, default is 80. You could set another port number like 81, 801, 8001 etc.

User: Default administrator username is: admin (please make sure all are lowercase letters).

Password: Default password is bank, i.e. no password.

NOTE: If the prompt "subnet doesn't match, double chick to change!" appears, please set the **IP Address**, **Subnet Mask**, **Gateway**, **DNS Server** once again, or enable **Obtain IP from DHCP server**.

2.1.1.3 Upgrade Firmware

Enter the correct User and Password to upgrade system Firmware and Web UI. Please **upgrade system firmware first** and **then upgrade Web UI** or it may damage the camera. (Figure 2.4).

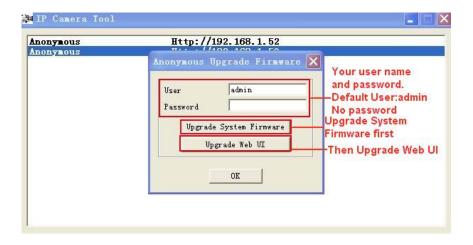


Figure 2.4

Please download the firmware package for the correct type of your camera before you upgrade. Follow the upgrade document carefully to upgrade. Please see readme file first before you upgrade.

CAUTION: You should not upgrade the firmware unnecessarily. It is possible to damage the camera if a mistake is made during the upgrade. If your camera works well with the current firmware, we recommend that you don't upgrade it.

NOTE: When doing an upgrade, remember you must keep the power on, and it's best to use wired mode, connected via the network cable.

2.1.1.4 Refresh Camera List

Refresh camera list manually.

2.1.1.5 Flush Arp Buffer

When cable network and wireless network of the device are fixed IP address, you may encounter a problem where you can search the camera IP but can't open the camera web page. In this case use Flush Arp Buffer.

2.1.1.6 About IP Camera Tool

Check the IP Camera Tool Version and IP Camera ActiveX Control Version here.

2.2 Camera Login

You can access the camera through **IP Camera Tool** or **IE, Firefox, Safari, Google Chrome** or other standard browser directly.

- 1. Double click the IP address of the IP Camera listed (Figure 1.9). The default browser you use will run automatically and go to the camera login interface. (Figure 2.6).
- 2. To access the camera by IE Browser directly, just type the camera's IP address, for example, if the camera's IP address is 192.168.1.123:

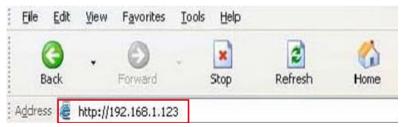


Figure 2.5



Figure 2.6

The default user name is admin, no password (leave blank).

Input the correct user name and password, the Sign In interface will pop-up. There are three models to login (figure 2.7).

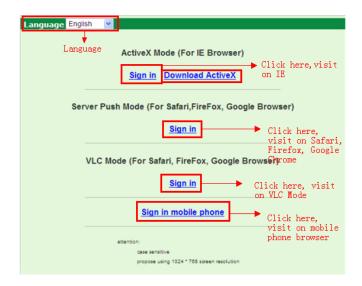


Figure 2.7

- (1) Active Mode (For IE Browser): available in IE 6.0 or above.
- (2) "Server Push Mode": available in Firefox, Safari, and Google Chrome browser.
- (3) "Sign in mobile phone": available in Mobile phone.

Note: If you can not install the ActiveX on IE, pls download and install alone.

2.3 For IE Browser

Choose ActiveX Mode (For IE Browser), and sign in.



Figure 2.8

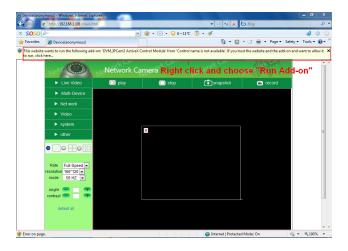


Figure 2.9

The first time you login to the camera, you might get an ActiveX prompt as in the picture above, please click the prompt and choose **Run Add-on**, refresh and login to the camera again, then will see live video, as in Figure 3.0.

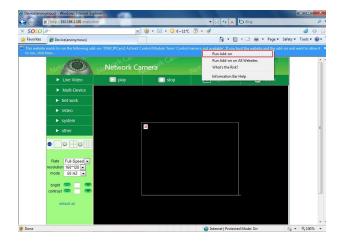


Figure 3.0

Note: If there is still no live video after you run ActiveX, and a red cross shows in the center of the screen, or even just a black screen, please try to enable the ActiveX options of IE security settings. Please do the following steps:

- 1. Close the firewall of your computer.
- 2. Change the ActiveX settings, open your **IE** browser, select **Tools** then **Internet Options** then **Security** then **Custom Level** (See Figure 1.3).

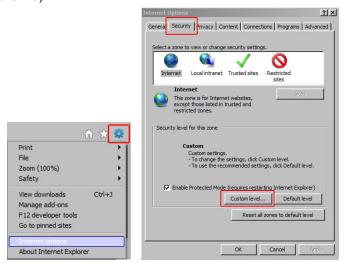


Figure 1.3

Then set the **ActiveX controls and plug-ins**. Set the ActiveX options to **Enable** or **Prompt** as indicated in Figure 1.4.

Note especially:

Prompt: Download unsigned ActiveX controls

Prompt: Initialize and script ActiveX controls not marked as safe

Enable: Run ActiveX controls and plug-ins

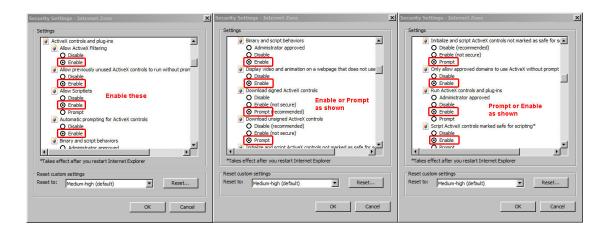


Figure 1.4

Click OK and restart the browser.

You can also click "Start" menu->"Internet Explorer", and choose "Internet attributes", or via "Control Panel" -> "Internet Explorer", to access Security settings.

NOTE: Make sure that your firewall or anti-virus software doesn't block the software or ActiveX. If you couldn't see live video, please close your firewall or anti-virus software, and try again.

If you allowed the ActiveX to run, but still cannot not see live video, only a Red Cross in the center of the video, and the device status light changed to yellow color not green, please change to another port number. Don't use port 80, use another port such as 128, 1008 etc.

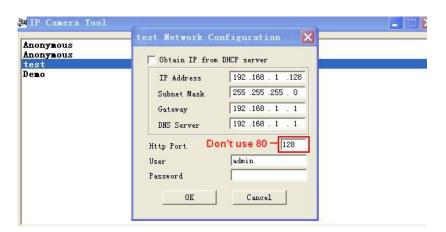


Figure 3.2

NOTE: Make sure that the firewall or anti-virus software doesn't block the software or ActiveX. If you couldn't see live video, please close your firewall or anti-virus software, and try again.

2.4 For Safari, Firefox, and Google Browser

Choose **Server Push Mode (For Safari, Firefox, and Google Browser)**, and sign in.

Server Push Mode doesn't support ActiveX, so some functions are not available, such as **Play**, **Stop**, **Record**, etc. If you want to use these functions, please use IE browser.



Figure 3.3

2.5 For Mobile Phone

Choose Sign in mobile phone, and sign in.

Mobile phone doesn't support ActiveX, only some basic functions can be available in this mode.

It supports iPhone, Smart phone, 3G phone etc. Normally, if the mobile phone supports network video, then it can work with our IP Camera.



Figure 3.4

2.6 ActiveX Mode (For IE Browser)

Login to the camera in ActiveX mode, the main User Interface is as below:

NOTE: There are 3 levels of users, **Visitor, Operator, Administrator**, if you login with different users, the use authority is different. (**See 3.11 User Settings**, Figure 8.5).

2.7 For Visitor

When you login as Visitor, you can enter the IP Camera for visitor. Visitor is the lowest level with only some operation available.



Figure 3.5

Channels:

The IE software supports 9 channels. Click to get different windows.

Click this one to view the main channel of the camera you login to.

Click this one to view 4 Channels of cameras that are connected, from CH1 to CH4.

NOTE: If you want to view 4/9 channels, you should set the Multi-Device first (See 3.1 Multi-Device Settings).

Click this one to view 9 Channels of cameras that are connected, from CH1 to CH9.

Status of Channels:

There are 9 icons at the bottom of the UI which show the status of each channel of the camera.

- Grey color, means there is no device connected to the main device for this channel.
- Green color, means the device is connected for this channel, and it works well.
- Red color, means the device for this channel is recording.
- Yellow color, means this channel is set in multi-device already, but it fails to connect to the main device.



Figure 3.6

OSD Settings:



Figure 3.7

OSD: Means "On-Screen Display", click "**Video**" > "**OSD**", set display date and time on the video.

Disabled: Clicking this one means clear the OSD.

Color: Can set the OSD text color as black, yellow, red, white, blue etc.

Add time stamp on record: if you click this, there will be time OSD on record video files.



Figure 3.8

Rate and Resolution:

Rate: Set video frame here, from "full-speed to 1fp/5s". (Figure 3.9)

Resolution: Set the resolution to be 160*120, VGA(640*480), QVGA (320*240). (Figure 4.0).

NOTE: When doing recording, Rate and Resolution parameter settings is very helpful for getting small size record files, the lower parameter to get the smaller file.



Figure 3.9

Figure 4.0

TOP Menu:



Figure 4.1

Click to get live video. When you want to get back to live video from other menus, just click it.

Only under live video, you can do the operation on the right side, such as **play**, **stop**, **snapshot** etc.

Click to get into play mode, when you click the stop icon, the video will be stopped, then if you click the play icon, it will show the video again.

Click to stop the live video. You can click the play icon if you want to see live video again.

Click to get snapshot. It will show the date and time of the snapshot you get, if you save it, you will find the snapshot file named by "snapshot_MAC ID_date_time".

Click to start recording manually, and the icon will change to red color again, it will stop recording. The record file will be saved to the folder you set. (Figure 10.6 – Figure 10.9).

NOTE: For visitor, if you click other menus which visitors don't have the right to operate, there will be a pop-up for the login interface (Figure 2.6), please input the user name / password for at least 3 times to login again.

2.8 For Operator

When you login as Operator, you can enter the IP Camera for Operator. For operator, it not only supports all the functions for Visitor, but also supports these functions below:



Figure 4.2

Video Settings

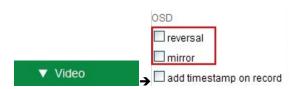


Figure 4.3

Reversal: Click this icon to reverse (flip) the image. Click again to go back to normal. **Mirror**: Click this icon to see the mirror image. Click again to go back to normal.

NOTE: You can choose Reversal and Mirror function when you set up the camera in a special position (upside down for example).

Mode, Bright, Contrast Settings

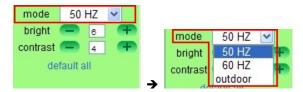


Figure 4.4

Mode: This mode is optional, 50HZ/60HZ for the users who use 50HZ/60HZ frequency, outdoor for users who want to use the camera to monitor an outdoor environment.

Bright: Set the parameters to adjust the image quality of the video. Click to adjust the value.

Contrast: Set the parameters to adjust the image quality of the video. Click to adjust the value.

Default all: Click it to set all the parameters back to the factory setting.

NOTE: If you login to the camera, and there is no video displayed, or the parameter of bright/contrast is blank, you can try to click "default all" to set the parameters back to the factory setting to get live video.

NOTE: In Operator mode, if you click other menus that are not available in Operator mode, the login interface will pop up (Figure 2.6), input the user name / password at least 3 times to login again.

2.9 For Administrator

For details see **Settings as Administrator** (3.1 - 3.20).

3 SETTINGS AS ADMINISTRATOR

Administrator supports all the settings and operations of the camera.

There are some special functions only for administrator as below:



Figure 4.5

3.1 Multi-Device Settings

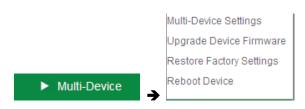


Figure 4.6

Multi-Device Settings

This camera can support max. 9 channels device at the same time.

3.1.1 Set Multi-Device in LAN

In the Multi-Device Settings page, you can see all devices searched in LAN. The 1st device is the default one. You can add more cameras listed in LAN for monitoring. This web software supports up to 9 IP Cameras online simultaneously.

Click **The 2nd Device** and click the item in the **Device List in Lan**, it will fill the Alias, Host, Http Port automatically, then input the correct user name and password, click **Add**. Set more devices in the same way, after you're done, click **Submit**.

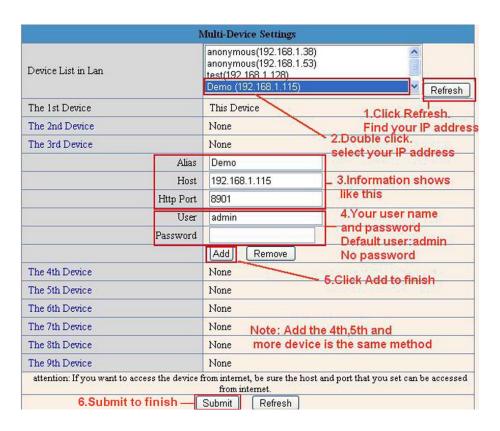


Figure 4.7

Click **Live Video** and then select to see four channels, or click to see nine channels.



Figure 4.8



Figure 4.9

3.1.2 Set Multi-Device for WAN

If you want to view cameras from internet, you have to add these devices by DDNS domain name. Make sure all these cameras you want to add have DDNS set successfully. (See 3.7 **DDNS Service Settings**)

Login the first camera by DDNS domain name and port, this camera will be as the host camera.

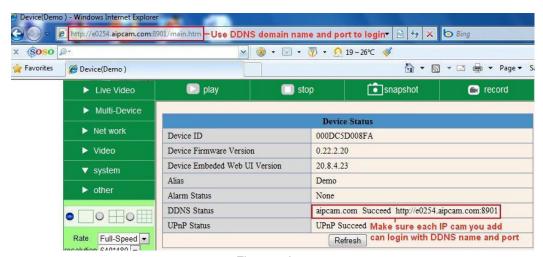


Figure 5.0

Click **Multi-Device**, select **Multi-Device Settings**. Choose **the 2nd Device**; fill in the 2nd camera's Alias, Host, Http Port, User, Password, click **Add**. Set more devices in the same way, after all done, click **Submit**. **NOTE:** The Alias is optional; you can set the alias as you wish. The Host must be the camera's DDNS domain name, and without "http://", it's not the LAN IP address. If you have several cameras, you can use the same DDNS domain name, just set different port number for each different camera.

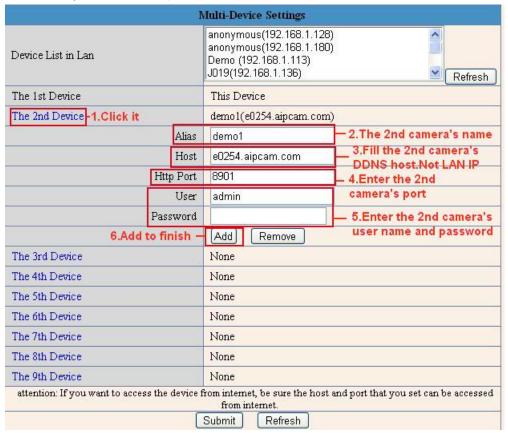


Figure 5.1

Note: Add the other camera in the same way, Click submit to add all of them.

Device List in Lan	J019(192.168.1.136) anonymous(192.168.1.180) Demo (192.168.1.113)	Refresh	
The 1st Device	This Device		
The 2nd Device	demo1(e0254.aipcam.com)		
The 3rd Device	Apexis(Apexiscamera, 3322, org)		
The 4th Device	Anonynous(Apexisipcamera.dyndns.org)		
The 5th Device	None		
The 6th Device	None		
The 7th Device	None		
The 8th Device	None		
The 9th Device	None		
attention: If you want to access t	he device from internet, be sure the host and port that you set from internet. Click Submit after		

Figure 5.2

Click **Live Video** and then select to see four channels, or to see nine channels.

In this case, you can see all the cameras from a remote position by internet, for example, if you are on a business trip, you can use the first camera's (Host camera) DDNS to view all the devices via the internet.



Figure 5.3

3.1.3 Upgrade Device Firmware

If you want to upgrade the camera, please upgrade Device Firmware first, then upgrade Web UI.

Click Browse and choose correct bin file, then click Submit to do upgrading.

NOTE: Before doing an upgrade via Browser, please make sure the IP Camera Tool of your computer could find the camera's IP.

Attention: Please keep the power on during upgrading, and it's better to use wired mode via network cable. Please don't upgrade unnecessarily, wrong operation or incorrect upgrade bin file can damage the camera.



Figure 5.4

3.1.4 Restore Factory Settings

Click **Restore Factory Settings**, will pop-up a prompt, select **OK**, all the parameter will be returned to factory settings, and the device will reboot.

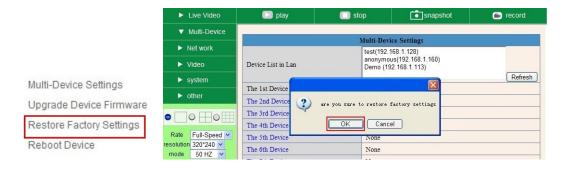


Figure 5.5

3.1.5 Reboot Device

Click **Reboot the device**, will pop-up a prompt, select **OK**, then the device will reboot

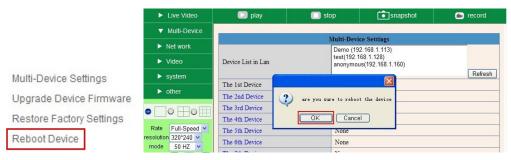


Figure 5.6

3.2 Network Settings

Click **Network**, will pop-up the prompt as below:



Figure 5.7

3.3 Basic Network Settings

Here you can set the camera's IP address; i.e., set the static IP address of the camera manually. You can also do the same settings from IP Camera Tool. (Figure 2.3).

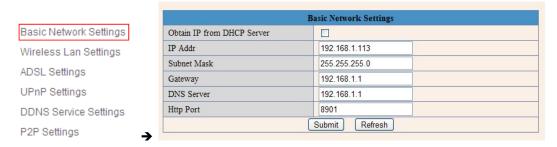


Figure 5.8

If you don't know the Subnet Mask, Gateway, DNS Server. Please check the Local Area Connection Status of your computer; it contains all this information, steps as below:

- 1. Control Panel→Network Connections→Local Area Connections→ Support → Details
- 2. Find the local connection icon from taskbar, left click it, choose Support → Details

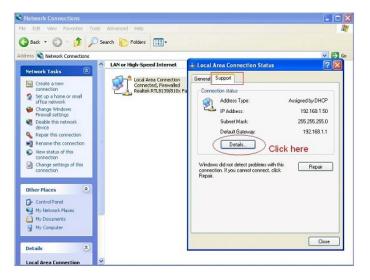


Figure 5.9

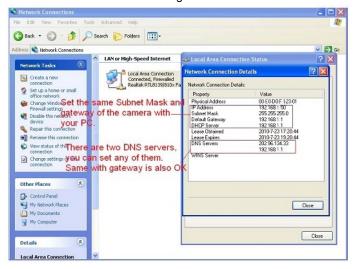


Figure 6.0

If you don't know the DNS Server, you can set it the same as Gateway.

If the router supports DHCP function, you can choose "Obtain IP from DHCP Server" to get dynamic IP.

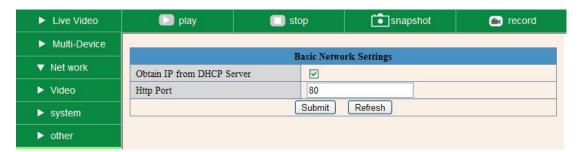


Figure 6.1

Http Port: In most cases, you can leave this value as-is. However, if your Internet Service Provider blocks this port, you may change it to another port number such as 8060.

3.4 Wireless LAN Settings

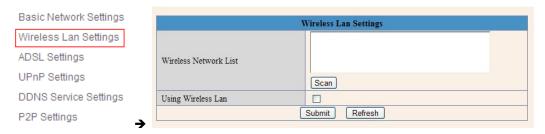


Figure 6.2

You should set up your camera using a network cable (wired) first before you attempt to use it wirelessly. (See Hardware Installation).

- 1. Make sure your router is a wireless router.
- 2. Make sure the Wi-Fi antenna is installed on the camera.
- 3. Determine if your router uses encryption, (see your router's owner's manual for how to do this), if it uses encryption, note the share key.
- 4. Login to the camera using the IP Camera Tool, like you did when setting up with a network cable.
- 5. When you see the screen below, click "**Network**" then "**Wireless Lan Settings**" then click on "**Scan**", wait and then click it again, when you see your network's SSID in the **Wireless LAN settings box**, click on it
- 6. If there is no encryption, just click "Submit", if there is encryption, input the share key, then click "Submit".
- 7. Unplug the network cable and wait about 30 seconds while the camera reboots.

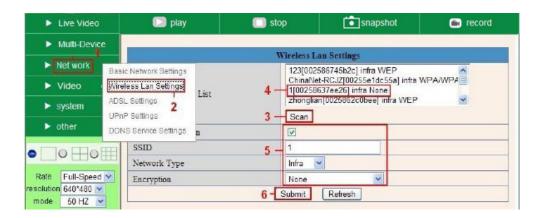


Figure 6.3

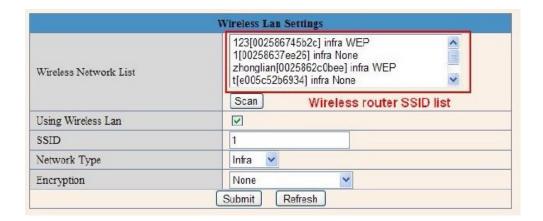


Figure 6.4

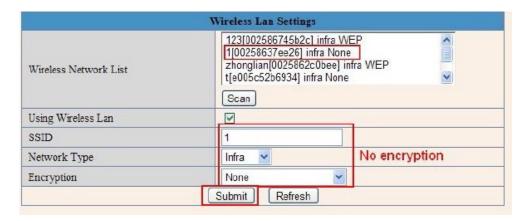


Figure 6.5

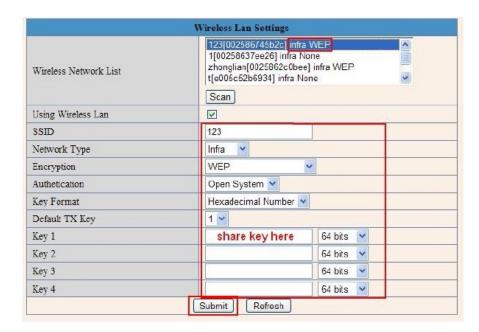


Figure 6.6

3.5 ADSL Settings

When connected to the Internet through ADSL directly, you can enter the ADSL username And password obtained from ISP.

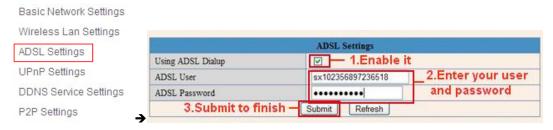


Figure 6.7

3.6 UPnP Settings

Click UPnP Settings to choose Using UPnP to Map Port:

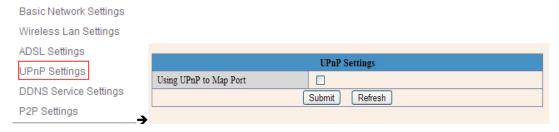


Figure 6.8

Select it and click **Submit**, then the camera will support UPnP port forwarding automatically. It's helpful for using DDNS, if your router supports UPnP, then you won't need do port forwarding in router.

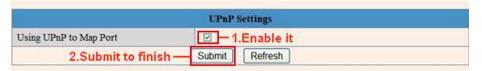


Figure 6.9

NOTE: Here UPnP is only for port forwarding. It relates to the security settings of your router, make sure the UPnP function of your router is ON.

Attention: If your router doesn't support UPnP function, it may show error information. So we recommend you do port forwarding manually in your router. (For details see Figures 7.5 - 7.9).

3.7 DDNS Service Settings

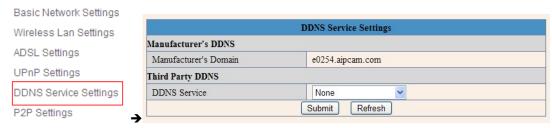


Figure 7.0

There are 2 options:

Manufacturer's DDNS: This domain is provided by the manufacturer.

Third Party DDNS: This domain is provided by the third party, such as Dyndns, Oray, 3322 etc.

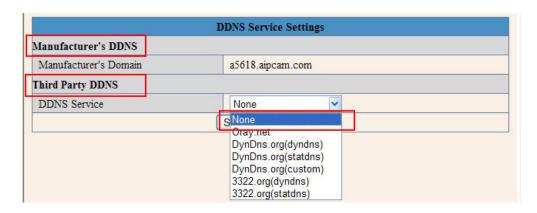


Figure 7.1

Third Party DDNS

If you use third party DDNS, please choose the server you use, such as "3322.org" or "dyndns.org" as below:

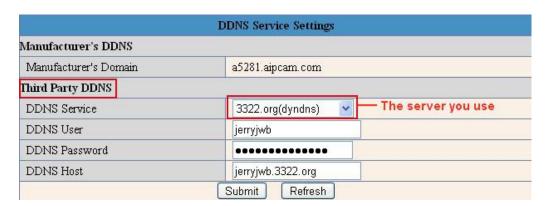


Figure 7.2

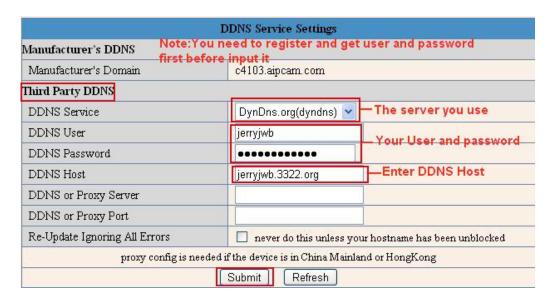


Figure 7.3

You have to register an account first, enter the user, password, and host.

NOTE: Only one DDNS can be chosen, for example, if you use the manufacturer's DDNS, the third party one won't work, if you use the third party DDNS, the manufacturer's one won't work.

To change the camera's port.

The default port of camera is "80", please change "80" to any other one you like, such as "81", "100", "8091" etc. (It's best to use high numbers, like 8091 for example). Click "OK", the camera will reboot, wait about 30 seconds.

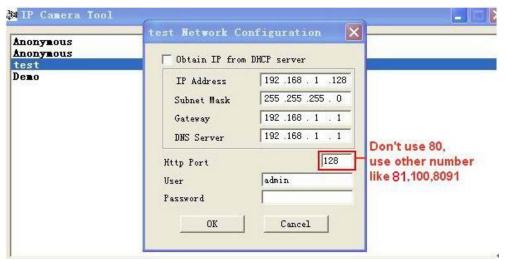


Figure 7.4

Make sure the "Subnet Mask", "Gateway", "DNS Server" is the same as your router.

Set Port Forwarding in the router.

This is the most important step. You need to set port forwarding in your router, to refer to the IP of your camera correctly, for DDNS to work. There are so many kinds of routers, so it's difficult to show fixed steps, but here are some samples of different router's port forwarding settings, just for reference:

TP-LINK:

1. Login to the router.



- 2. Choose "Forwarding", select "Virtual Servers"
- 3. Click the Add New button, pop-up below:

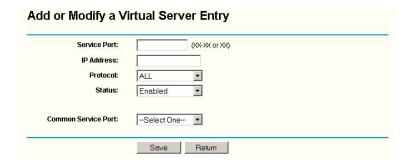


Figure 7.5

Fill in the service port (**don't use 80**), IP address of the camera, then click Save **NOTE**: The port and IP address should be the same as the camera.

BELKIN:

- 1. Login to the router.
- 2. Choose "Firewall", select "Virtual Servers"
- 3. Input the port (don't use 80) and IP address, then click save.

NOTE: The port and IP address should be the same as the camera.

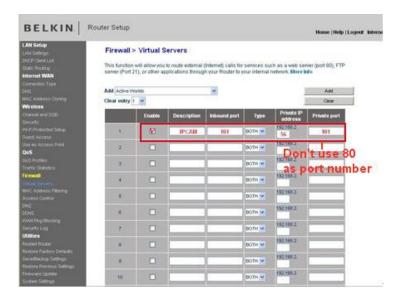


Figure 7.6

DLINK:

- 1. Login to the router.
- 2. Choose "Advanced", select "Virtual Servers"
- 3. Input the port, IP address, Protocol, then click save.

NOTE: The "public port" & "private port" should be the same as camera's port, choose the protocol to be "both".

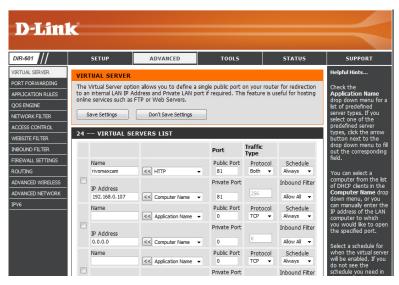


Figure 7.7

After all these 4 steps are done, you can use DDNS, check the DDNS status from the camera as below, and get the link of DDNS for internet viewing.

Step: "Login">"System">"Device Info":



Figure 7.8

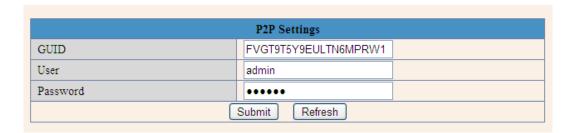


Figure 7.9

3.8 P2P settings

Check P2P information here, using the GUID, you can view the camera via iPhone, or Android phone at any time, from anywhere, when connected to the network.

You can set your own user name and password here.



3.9 System Settings



Figure 8.0

3.9.1 Device Info

You can find the information about **Device ID**, **Firmware Version**, **Embedded Web UI Version**, **Alias**, **Alarm Status**, **DDNS Status**, **UPnP Status and MSN status**.

Device Status		
Device ID	00606E8AF1C9	
Device Firmware Version	17.25.2.30	
Device Embeded Web UI Version	20.8.3.30	
Alias	demo	
Alarm Status	None	
DDNS Status	aipcam.com Succeed http://a5618.aipcam.com:191	
UPnP Status	No Action	
	Refresh	

Figure 8.1

3.10 Alias Settings

Default device name is anonymous. You set any new name for your camera here, then click **Submit**.

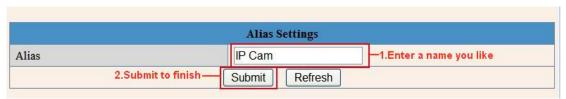


Figure 8.2

3.11 Date &Time Settings

Set the date and time for your camera.

Choose the **Clock Time zone** of your country.

You can choose Sync with NTP Server (Figure 8.3) or Sync with PC Time (Figure 8.4).



Figure 8.3



Figure 8.4

3.12 Users Settings

Eight accounts are acceptable for this system. Here you can set the user names and password as Administrator, Operator or Visitor, the permission for them as below:

- **Visitor:** In this mode, you can only view. (Details 2.7)
- Operator: You can control the direction of IP Camera and set some parameter. (Details 2.8).
- Administrator: You can setup the advanced configurations of the IP Camera. (Details 3.1-3.20).

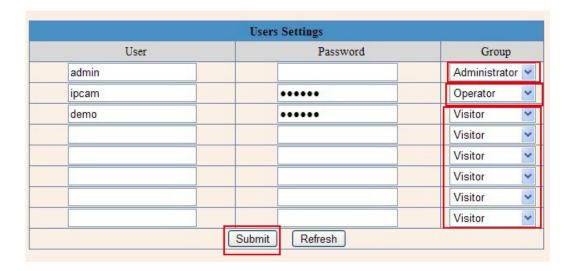


Figure 8.5

3.13 Backup & Restore



Figure 8.7

- 1) **Backup**: Backup IP Camera all the Parameter, if you want to save all the current settings that you have set already, you can click **Submit**, then all the parameters you set will store as a parameters bin file.
- 2) **Restore**: Restore IP Camera all the Parameter, if you want to change the camera's settings to a certain status which has a backup, click **Browse** to load the bin file, then **Submit** it.

Log

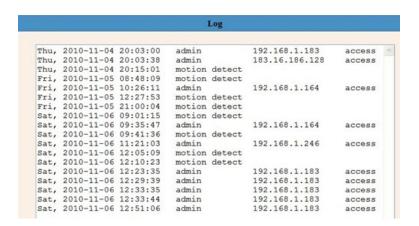


Figure 8.8

Record User information, including weekday, date, time, user name, visitor IP address etc.

MSN Settings

MSN Settings		
User	test@hotmail.com	
Password	•••••	
MSN buddy list	ipcamtest@hotmail.com	
	Submit Refresh	

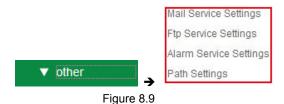
NOTE: Set the port forwarding successfully before setting MSN (Refer to port forwarding in DDNS settings). Then get to the MSN settings page, fill in the correct user name and password, add the MSN buddy, max. up to 10 friends, after submit, the user will be shown in your MSN friend list.

Click System—Device Info to check the MSN status.

Device Status		
Device ID	00EA2162836A	
Device Firmware Version	17.22.2.36	
Device Embedded Web UI Version	20.8.1.82	
Alias	DEMO_011	
Alarm Status	None	
DDNS Status	cipcam.com Succeed http://a5790.cipcam.com:91	
UPnP Status	UPnP Succeed	
MSN Status	Succeed	
	Refresh	

After you run your MSN, open the chat dialog, type in the word "**url?**", after a few seconds, you will get a reply for the remote access IP address for this IP camera.

3.14 Other Settings



Here you can configure some additional functions such as **Motion Detection**, **Alarm**, **Schedule**, **FTP Upload**, **Alarm Mail Alert**, **Record Path** etc.

3.15 Mail Service Settings

Set Mail Service Settings to enable the camera to send e-mail alerts when motion is detected.

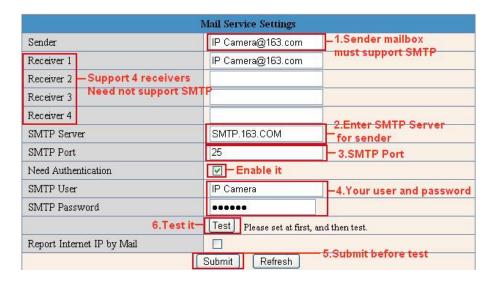


Figure 9.0

Sender: Make sure the sender mailbox server provider supports SMTP, and the mailbox should not enable SSL or TSL encryption.

Receiver: Here you can set four receivers. For receiver, there is no SMTP limitation.

SMTP Server: The sender's SMTP Server.

SMTP Port: The sender's SMTP Port, usually is 25, some SMTP server have its own port such as 587.

Need Authentication: If there is SMTP user & password, please select authentication.

SMTP User: Input correct SMTP User here. Some SMTP User is the sender's full email address, such as

test@qq.com, some are without suffix, only the username, such as **test**.

SMTP Password: Input correct SMTP password here.

NOTE: Click **Submit** first before choosing **Test**. You will see the test result after you click **Test**.

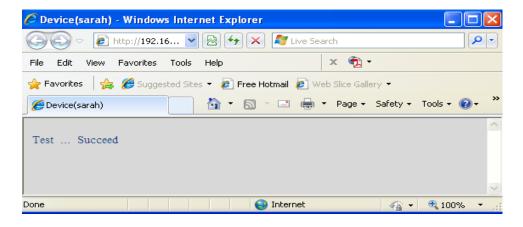


Figure 9.1

If it prompts these following errors when you click **Test**. Please check that the information you filled in is correct and try it again.

- 1) Cannot connect to the server.
- 2) Network Error. Please try later.
- 3) Server Error.
- 4) Incorrect user or password.
- 5) The sender is denied by the server. Maybe the server needs to authenticate the user, please check and try again.
- 6) The receiver is denied by the server. Maybe because of the anti-spam privacy of the server.
- 7) The message is denied by the server. Maybe because of the anti-spam privacy of the server.
- 8) The server does not support the authentication mode used by the device.

Report Internet IP by Mail: If selected, you will receive e-mails that contain the camera's internet IP. When camera is powered on or Internet IP changed, it will send the internet IP by e-mail. (For example: IPCAM's URL is http://121.213.109.69:1008).

3.16 FTP Service Settings

Set the FTP Service, you can upload images to your FTP server when motion is detected.

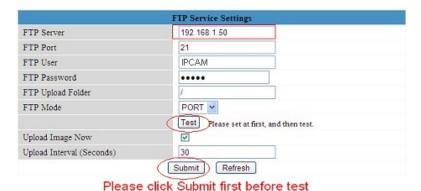


Figure 9.2

Ftp Service Settings FTP Server ftp.ipvideo.com FTP Port 21 FTP User test@ipvideo.com FTP Password FTP Upload Folder FTP Mode PASV V Test Please set at first, and then test. Upload Image Now ~ Upload Interval (Seconds) 20 Submit Refresh

Figure 9.3

FTP Server: If your FTP server is set up in LAN. You can set as Figure 9.3.

If you have an FTP server that can be accessed from the Internet, you can set as Figure 9.4.

FTP Port: Usually the port is 21.

FTP Upload Folder: Make sure that the folder you plan to store images in exists. The camera cannot create the folder itself. Also, the folder must be erasable.

FTP Mode: It supports standard (POST) mode and passive (PASV) mode.

Upload Image Now: It will upload images when you selected it. Here **Upload Interval** refers to the time between the current image and the next image.

NOTE: Here upload image now means it can upload images freely, no alarm trigger needed.

Click **Submit** after these settings. Then click **Test**. You will see the following picture.

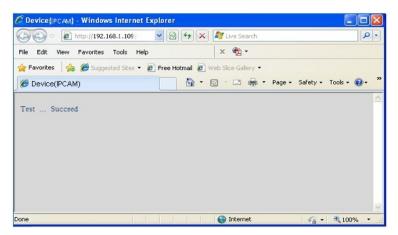


Figure 9.4

If it prompts error information as follows.

- 1) Cannot connect to the server. Please check FTP Server is correct.
- 2) Network Error. Please try later.
- 3) Server Error.
- 4) Incorrect user or password. Please check the username and password is correct.
- 5) Cannot access the folder. Please be sure the folder exists and your account is authorized
- 6) Error in PASV mode. Please be sure the server supports PASV mode
- 7) Error in PORT mode. PASV mode should be selected if the device is behind a NAT
- 8) Cannot upload file. Please be sure your account is authorized.

Please check if parameters you filled in are correct. The format of image is like 000DC5D008FA (IPCAM) _0_20101115152525_25.jpg

Please check if your FTP server supports this format of file name

3.17 Alarm Service Settings

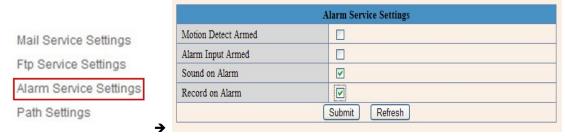


Figure 9.5

Enter Alarm Service Settings page to configure Motion Detection function.

3.17.1 Motion Detect Armed

If you enable Motion Detect Armed, it will record and make a sound of alarm when there is motion detected.

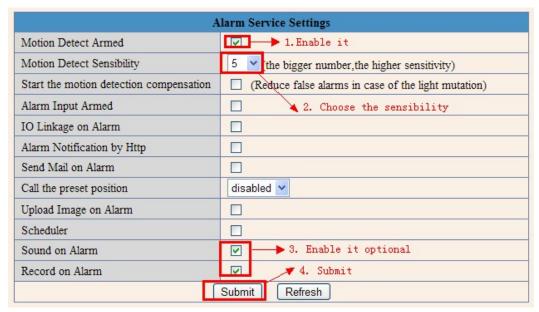


Figure 9.6

After you enable motion detect armed, if there is motion detected, the **Alarm Status** will turn to **Motion Detect Alarm**. (Figure 9.7).

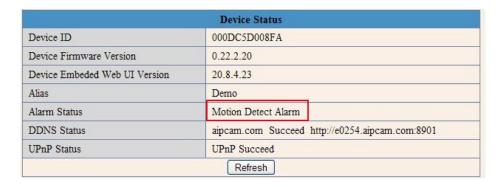


Figure 9.7

3.17.2 Motion Detect Sensitivity

You can choose level 1-10; level 10 means the most sensitive, 1 means the least sensitive.

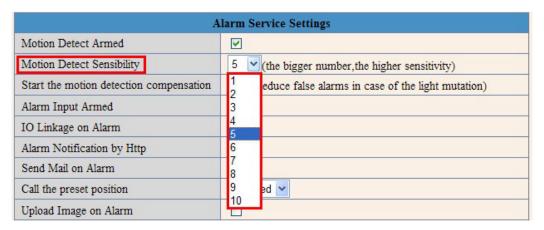


Figure 9.8

3.18 Send Mail on Alarm

When chosen, it will send picture and e-mail to your e-mail once alarmed. (First you should finish the e-mail Service Settings. Figure 9.0).

NOTE: Usually 6 snapshots will be sent by one e-mail to your mailbox for each alarm triggered. Each alarm will last for 60 seconds.

Upload Image on Alarm

Enable **Upload Image on Alarm** to set upload images to FTP once alarmed.

Upload Interval: Set the upload interval (Seconds).

NOTE: The total alarm time is 60 seconds.



Figure 10.2

Scheduler

Here you can set the camera alarm during the time you set. Choose Scheduler and set the date & time range. (Figure 10.3) From Monday to Sunday, and every day divided into 24 hours, each hour divided into 4 quarters. Left click the frame of the time range, it will turn to blue color, which means the time you choose to be armed. Click it again, it will turn back to gray, which means delete the scheduler.

NOTE: Make sure the date & time settings are correct first. (Figure 8.3).

ATTENTION: If you don't choose Scheduler, the camera will alarm anytime when motion triggered.

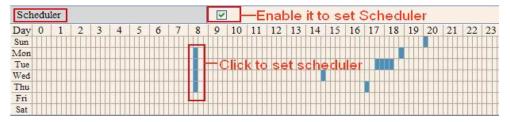


Figure 10.3

Sound on Alarm

When motion is detected, there will be a beep sound during the alarm, you can control this sound here.

If Enabled, there will be sound once alarmed.

If Canceled, there will be no sound once alarmed.

Record on Alarm

If you want the camera do recording for every alarm, choose Record on Alarm to enable it.

If you do not want the camera do recording once alarm triggered, cancel it here.

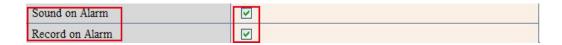


Figure 10.4

Once an alarm has occurred, there will be indication as below:

1. The corresponding status light turns Red and keeps blinking.



Figure 10.5

- 2. If you set **Sound on Alarm**, you can hear a beep sound from your computer you use when alarmed. (Figure 10.4)
- 3. If you set **Record on Alarm**, the camera will record automatically for approx one minute. You can find the record file in the folder which you set. (Figure 10.4).
- 4. If you set Send Mail on Alarm, you will receive e-mail alarm alert once motion is detected. (Figure 9.9).
- 5. You can also set **Scheduler** to enable the camera to send e-mails during a special time range you want. (Figure 10.3).
- 6. If you set **Upload Image on Alarm**, it will upload images to the FTP Server you set already, once alarmed. (Figure 10.2).

NOTE: Each alarm only lasts for approx one minute, all the above functions for motion detection triggered only.

REC Automatically and Save to PC

When you enable motion detect and open the camera monitoring page on the PC, if there is an alarm triggered, REC will start automatically for several seconds and save to the PC.

New Feature: Start the motion detection compensation and Alarm notification by Http.

3.19 Path Settings



Figure 10.6

Here you can set record path and alarm record path for the camera.

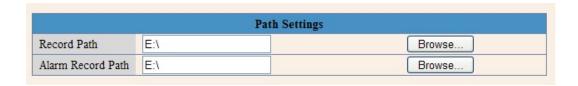


Figure 10.7

Record Path: Here you can set the manually record path. Click record then start manual recording, the record file will be saved to the specified path you set here.

Alarm Record Path: Here you can set the alarm record path. When motion is detected, and record enabled, it will start alarm record automatically, the record file will be saved to the specified path you set here.

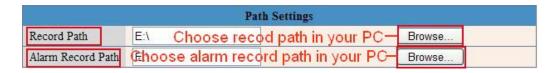


Figure 10.8

NOTE: If you couldn't set the path here in Windows 7 or Vista, please do it as below: Windows 7 or Vista's security level is higher than Windows XP, for "**Path Settings**"

- 1. User could add the Device IP address to the IE's 'Trusted sites' first. The step is:
- "IE browser→Tool→Internet Proper→Security→Trusted sites→Sites→Add".
- 2. You can also run the IE as administrator, input the IP address of the camera manually. (Figure 10.9).

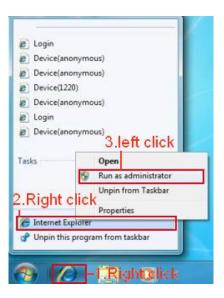


Figure 10.9

3.20 Server Push Mode (For Safari, FireFox, and Google Browser)

Choose Server Push Mode, login the camera, you will see the main user interface as below:



Figure 11.0

NOTE: Server Push Mode does not support ActiveX.

Play, Stop, Record, Multi-device settings, Path settings functions are controlled by ActiveX, so if you use Safari, Firefox, Google chrome browser, it is not possible to use these options. The other functions are the same as for **IE Browser**.

3.21 Sign in mobile phone

If you are using a mobile phone, choose **Sign in mobile phone**, login the camera, you will see the main user interface as below:



Figure 11.1

NOTE: Mobile phone Mode doesn't support ActiveX.

In mobile phone mode, it only supports some simple functions, such as **Resolution**, **Mode**, **Bright**, **Contrast**, **Snapshot**, **Reversal**, **Mirror** functions.

4. APPENDIX

4.1 Frequently Asked Questions

Note: For most problems you might encounter, please check Network connections first.

Check the working status revealed by the indicators on the network server, hub, exchange and network card. If abnormal, check the network connections.

4.1.1 I have forgotten the administrator username and/or password.

To reset the administrator username and password, press and hold down the RESET BUTTON for 30 seconds. Release the power button and the username and password will be reset back to the factory default administrator username and password.

Default administrator username: admin

Default administrator password: None, i.e., no password

4.1.2 Subnet doesn't match, dbclick to change

If IP Camera Tool shows error information "Subnet doesn't match, double-click to change!" Please choose **Obtain IP from DHCP server**. (Figure 2.2).

If it still shows this error after obtaining IP from DHCP server, please check local area connection of your computer, change subnet, gateway of the camera. Keep them in the same subnet as your computer. (Figure 2.3).

4.1.3 IP Address configuration

Check whether IP address of the IP camera server shares the same subnet as your computer: Click My Computer > Control Panel > Network & Dial-up Connections > LAN > Attributes > Internet Protocols (TCP/IP), and check IP Address and Subnet Mask. Make sure they are in the same subnet when configuring the camera's IP address manually.

4.1.4 Can't access IP camera via the Internet

Some typical reasons:

- 1. ActiveX controller is not installed correctly (for more details see: (see more details: Figure 2.9 –Figure 3.1).
- 2. The port that the camera is using is blocked by your Firewall or Anti-virus software. Please change to another port number and try again. (Figure 3.2).
- 3. Port forwarding is not successful (see more details see: Figure 7.5- Figure 7.9) Double check these settings and make sure they are correct.

4.1.5 IP Camera Tool could not find camera's IP

Make sure the camera is connected to its power supply and the power supply is plugged in.

Check if the network cable is not loose.

Make sure DHCP is enabled in your router, don't enable MAC address filter.

Make sure that firewall or anti-virus software does not block the camera. You can add the camera as a trusted site in your firewall or anti-virus software.

4.1.6 UPnP always fails

UPnP only contains port forwarding in our recent software. Sometimes, it might fail to do port forwarding automatically because of firewall or anti-virus software. It also relates to your router's security settings. So we recommend you do port forwarding manually. You can view your camera via the Internet successfully after you do port forwarding manually in your router.

4.1.7 Couldn't find the shortcut on desktop after install IP camera tool

If you use Windows 7 or Vista, and you could not find the shortcut on desktop after installing the IP camera tool, please check if the path of the tool port to is correct.

For example, was it was pointing to C:\Windows\System32\IPCamera.exe.

Please fix this by pointing the shortcut to the correct path <u>C:\Windows\SysWOW64\IPCamera.exe</u>. After this you should be able to use the shortcut without any problems.

4.1.8 I can't change the record path

When you use Windows 7 or Vista, you may be not able to change the record path due to the security settings of your computer.

1. Please add the camera as a trusted site to solve this issue.

The step is: "IE browser→Tool→Internet Proper→Security→Trusted sites→Sites→Add".

2. You can also run the IE as administrator; input the IP address of the camera manually.

4.1.9 I can't find multi-device settings and record icon

Record and multi-device function are controlled by ActiveX controller.

So if you use Safari, Firefox, or Google chrome, it is not possible to use these functions.

4.1.10 Camera cannot connect wirelessly

If your camera could not connect wirelessly after you set wireless settings and unplug the Network cable:

Please check whether your settings are correct. (Details: Wireless LAN settings).

If the camera can't connect wirelessly it is usually because of wrong settings.

Double check the SSID, Encryption share key, Channel, should be the same as your wireless router.

Share key should not contain special characters, only letters and numbers.

Don't enable MAC address filter.

4.1.11 I can't see other cameras in multi-device configuration by remote access

If you want to view all the cameras in your WAN. Make sure that each camera you add in multi-device settings can be logged-in using DDNS name and port number. Use DDNS domain name to fill in the host checkbox, not camera's LAN IP. Double check your settings. (Details: **Set Multi-Device for WAN**).

4.1.12 I only see black screen or unusual code when remotely logged in

If you could access the login page in a remote place, it indicates that your DDNS settings are correct. But if you could not see live video, but only some undefined characters, it may be internet speed problems, especially if the camera works OK via Wi-Fi.

4.1.13 There's no picture (Problems with ActiveX Controller)

If using IE browser to connect the camera for the first time, and there is no image displayed, you might need to install ActiveX. You need to change some browser settings to enable ActiveX. (See: **For IE Browser**).

4.1.14 Problems with network bandwidth

The image frame rate is subject to the following factors:

- 1. Network bandwidth.
- 2. PC performance, network environment and display preference setting (brightness, theme, etc).
- 3. The number of visitors (too many visitors will slow down the image frame rate).
- 4. Choice of switch or hub (use a switch for multiple IP Camera Servers rather than a HUB).

4.1.15 How to register an account from DDNS web

You can enter http://www.dyndns.com and register an account.

4.1.16 Pop-up the prompt" Fail to connect to the device..."?

This prompt only appears in the case of using multiple cameras.

When you set multiple cameras, and the device status light changes to yellow please make sure the cameras are connected to power and working correctly.

4.2 Default Parameters

Default network Parameters

IP address: dynamic Subnet mask: dynamic Gateway: dynamic DHCP: Disabled

DDNS: factory DDNS and third party DDNS

Username and password

Default administrator username: admin

Default administrator password: None, i.e., leave blank.

5. SPECIFICATIONS

Model	XX52A		
Image Sensor			
Sensor	1/4" Color CMOS Sensor		
Resolution	640 x 480 Pixels (300K Pixels)		
IR Lens	3.6mm, F 2.0		
Viewing Angle	90° Diagonally, 68° Horizontally		
Minimum Illumination	0.5Lux @ F2.0		
Video/Image Setting			
Video Compression	MJPEG		
Video Frame Rate	15fps (VGA), 30fps (QVGA)		
Resolution	640 x 480(VGA), 320 x 240(QVGA)		
Flip Mirror Images	Vertical / Horizontal		
Light Frequency	50Hz, 60Hz or Outdoor		
Video Parameters	Brightness, Contrast		
Communication			
System Interface	10Base-T/100Base-TX Ethernet Port		
Supported Protocols	TCP/IP, DHCP, SMTP, HTTP, DDNS, UPNP, PPPoE, FTP, DNS, UDP, GPRS		
Wireless LAN	Supports wireless networks (Wi-Fi/802.11/b/g)		
WEP Encryption	Disable / 64 bit / 128 bit		
WPA/WPA2 Encryption	TKIP / AES		
Physical / Environment			
Power Supply	5VDC/2A External Power Adapter		
Power Consumption	5W (Max.)		
Operate Temperature	-10°C ~ 55°C (14°F ~131°F)		
Operate Humidity	20%-85% non-condensing		
Storage temperature	-10°C ~ 60°C (14°F ~140°F)		
Storage Humidity	0%-90% non-condensing		
PC System Requirement			
CPU	2.0 GHZ or above		
Memory Size	256MB or above		
Display Card	64M or above memory		
Supported OS	Microsoft Windows 98/ME/2000/XP/Vista/7		
Browser	IE6.0, IE7.0, IE8.0, Firefox, Safari, Google chrome etc		
Certification	CE, FCC, RoHS		
Warranty	90 Day Limited Warranty		

6. OBTAINING TECHNICAL SUPPORT

We hope your experience with your IP network camera is enjoyable, but if you experience any issues or have any questions that this User's Guide has not answered, please visit www.x10.com/support, or e-mail support@x10.com. If your camera does not support some special functions shown in this manual, please contact our technical support team to obtain the latest Firmware and WEB UI file for upgrading.

FCC Caution

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the limits for remote control devices in accordance with the specifications in Sub-Parts B and C of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by unplugging the equipment, try to correct the interference by one or more of the following measures.

- Reorient the antenna of the radio/TV experiencing the interference.
- · Relocate the equipment with respect to the radio/TV.
- · Move the equipment away from the radio/TV.
- Plug the equipment into an outlet on a different electrical circuit from the radio/TV experiencing the interference.
- · If necessary, consult your local dealer for additional suggestions.

NOTE: Modifications to this product will void the user's authority to operate this equipment.

X10 AIRSIGHT 90 Day Limited Warranty

X10.com, a division of Authinx Inc., warrants this product to be free from defective material and workmanship for a period of 90 days from the original date of purchase at retail. X10 agrees to repair or replace, at its sole discretion, a defective product if returned to X10 within the warranty period and with proof of purchase. If service is required under this warranty:

Call 1-888-384-0969, visit www.x10.com, or email support@x10.com