

# NEXXT<sup>®</sup>

S O L U T I O N S



# Xpy300

INTEGRATED WIRELESS | IP CAMERA

  
High-performance,  
expandable  
video network  
surveillance software

  
Enhanced security  
to monitor  
highly sensitive areas  
24-hours a day

  
Ultra wide  
coverage and sharp  
video images

  
Ideal for  
commercial  
and residential  
applications

  
Wireless  
connectivity

  
Two-way  
audio capability

Model: **AILR6324U1**

## **Integrated Wireless IP Camera**

### **INTRODUCTION**

Thank you for purchasing the Next Solutions XPY 300 Camera. Our new XPY is an integrated wireless IP Camera solution that combines a high quality digital video camera with network connectivity and a powerful web server to bring a clear picture to your desktop or mobile phone from anywhere on your local network or over the Internet.

## **BEFORE YOU BEGIN**

- This camera is intended for indoor use only.
- Use the supplied power adaptor to connect the camera to the AC mains (5.0V DC, 1.5A). The warranty does not cover any damage caused by applying the wrong voltage.
- Never attempt to disassemble the unit. The warranty does not cover damages as a result of tampering with, or the improper alteration of the device.
- Do not point the camera at the sun or at any other strong light source.
- Do not install the camera where it can be exposed to rain or water
- Wait at least 10 seconds when powering the camera on and off. Otherwise, it can cause serious damage to the CPU.
- When updating the camera, please make sure that:
  - the camera is connected directly to a computer using a network cable;
  - all other programs and windows on the computer have been closed;
  - the camera remains connected during the entire firmware update.

## FEATURES

- The camera combines a high-sensitivity 1/4 CMOS image sensor with a powerful wireless web server in order to capture clear images from anywhere, and to transmit them instantly on your local network or over the internet.
- Can be used on WiFi or wired networks.
- Selectable image resolution of 640x480 and 320x240 pixels.
- The system can be expanded at any time by adding multiple cameras.
- View multiple cameras in split screen view or choose full screen in order to monitor the activity from a single camera.
- Cameras can be viewed via standard PC or Mac browsers, including Internet Explorer, Safari, Chrome and Firefox.
- Infrared LEDs for night vision (up to 15 meters).
- Includes multi-level user management system, which can be configured with passwords for controlled access.
- Easy- to-use web browser controls. They also allow quick configuration changes via the settings menu.
- Compatibility with smartphones enables you to view real-time videos over the internet using any standard browser.
- Supports image snapshots and image forwarding via email and FTP upload.

## NOTES ON WINDOWS AND MAC COMPATIBILITY:

- IP camera setup should be completed on a Windows PC only using Internet Explorer.
- Live viewing, taking snapshots, recording and camera configuration are fully supported on computers with Windows operating systems.

Mac users are only able to:

- view live images** via compatible web browsers including Safari, Firefox and Chrome but are limited to viewing one camera at a time.
- take and save snapshot images** via the web browser interface.

## PACKAGE CONTENTS

Open the box and make sure all items listed below are included:

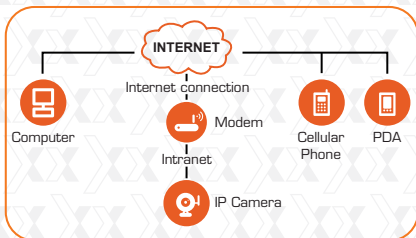
- Wireless IP Camera x1
- AC power adaptor x1
- Quick installation guide x1
- CD-ROM x1  
(includes the IP Super Client Software)
- Network cable x1
- Mounting bracket and hardware

**NOTE:** if any of the listed items are missing or damaged, please notify immediately the Nexxt Solutions reseller from whom you purchased the product for replacement or warranty information.

## CAMERA INSTALLATION

Our WiFi Camera can be set up in minutes for instant monitoring and live viewing on your Windows computer and 3G Smartphone - all via your wireless network router or switch. For optional recording capabilities, simply install the recording software in your Windows PC and configure it according to your particular needs.

1. Begin by screwing the bracket to the camera.  
Connect the camera using the power adaptor that comes with the product.
2. Using a standard Ethernet network cable, connect the camera to your network.  
The camera can either be connected to a router/switch or directly to a PC with an Ethernet network cable. We recommend setting up the camera on your network using a wired connection prior to using the device in a wireless configuration.



3. Continue with the setup of the camera (as described in the following chapter). Once the camera has been successfully connected to your network, it can be mounted on the wall or ceiling using the wall plugs and screws included with the device. (The initial set up must be performed using Windows operating system only).
  1. Plug the cable into the RJ-45 connector on the rear of the camera..



2. Plug the other end into an available RJ-45 port on your router.



3. Connect the power cable to the wall outlet. Please note that if you are using the camera on a wireless network, you will need to configure the camera for wired use, prior to configuring wireless settings in the device (later described in this manual).

## Accessing the IP camera Using the IP Super Client Software

**Note:** The IP network camera is designed to work in a local area network (LAN) or over the internet. For the first method, we highly recommend using the software included in the CD. The installation steps are described below.



### IP Camera Super Client

#### 1. Introduction

The IP camera Super Client is an easy-to-use software designed for surveillance applications with multiple cameras. This software includes PT controls, recording, alarm notifications, in addition to a central management feature that allows the administration, configuration and access control settings for each individual device.

## Functions:

- \* Supports up to 81-video monitoring in one screen
- \* Supports multi-level structured device list.
- \* Supports scheduled recording with alarm.
- \* Supports panoramic recording.
- \* Supports motion detection, sound alert and external alarm trigger.
- \* Supports audio, SMS, SMS modem, dialing, email, FTP and alarm output switch.
- \* Supports inquiries, browsing of alarm and operation log records.
- \* Supports multi-level access management.
- \* Supports remote login to check records and alarm records.



## IP Camera Super Client

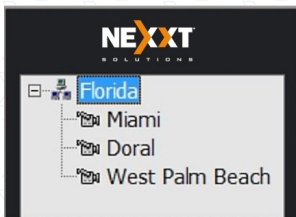
### Adding devices

After installing the client software, we need to add the devices. When running the program, the device list on the right of the main interface is empty; there is a guide to show you how to add the devices.



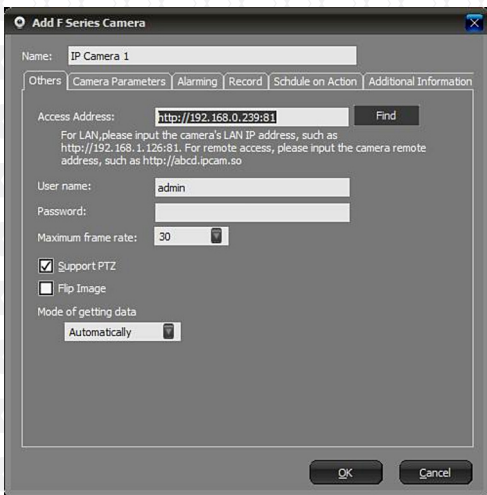
Click the right button to choose “**add new device**” or “**add new group**”. This program supports a multi-level structure to manage existing devices.





Now, let's take the 300-series and 330-series as examples to introduce the adding device option.

### 300-Series Image:



## 330-Series Image:

**Add H Series Camera**

Name:

Connect Others Alarming Record Camera Parameters Additional Information

Access Address:  Find

For LAN, please input the camera's LAN IP address, such as http://192.168.1.126:81. For remote access, please input the camera remote address, such as http://abcd.ipcam.so

User name:

Password:

OK Cancel

**Add H Series Camera**

Name:

Connect Others Alarming Record Camera Parameters Additional Information

Support PTZ

Flip Image

Apply to all cameras

Apply to the same group

OK Cancel

**Name:** name assigned to the camera, used to distinguish it from other devices connected. This

name will be displayed on the camera list name will be displayed on the camera list.

**Basic information:** the basic information used for connecting the camera, such as connection method, username, password, PT protocol, etc.

**Device parameters:** set size of the image and frame rate. Not all series have this option available.

**Alarm:** this menu contains all the alarm-related settings.

**Record:** this menu contains all recording related settings.

### Connection Information

**IP/Domain mode:** This mode provides LAN access to the camera, or to a camera which has a domain or fixed IP. To use this mode, an incoming port should be assigned. By default, this port is set to 81.

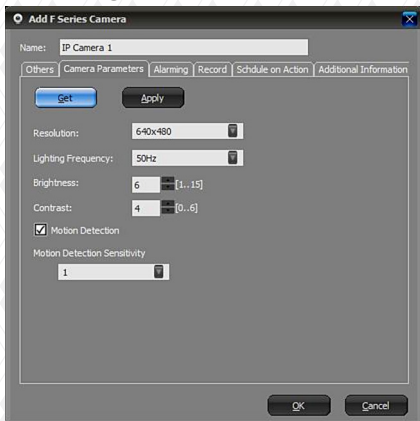
**Username/Password:** the username and password used to access the camera.

**Forwarding Server:** it provides access to videos by retrieving the files from the server. This requires the setup of server settings. This mode cannot support PT control.

**Support P2P:** supports P2P technology. This mode cannot support PT Control.

## Camera Parameters

### 300-Series Image



### 330-Series Image



This menu is used to quickly set the camera parameters. Not all models have this function. Click the **Get** button to obtain the current settings. Click **Apply** or **Set** depending on the model to save your modifications.

## Alarm

It includes all the alarm-related settings. Please refer to the Alarm section for more details.

## Record

It includes all the recording-related settings. Please refer to the Recording section for more details.

## Freq./Time setup

It is used to schedule a timing action to change the lightning frequency.

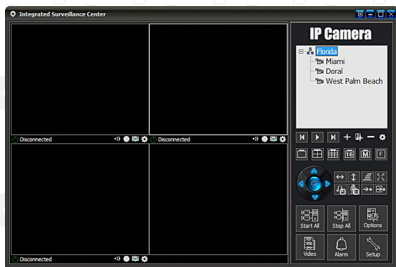
## Additional information


It is used to enter personal-related information, such as user name, telephone, address, and memo.



## Introduction to the main window

Below is the main window of the client software.



**Device Tree Components:** this tree provides a visual representation of all detected devices. Supports multi-level structure from which users can connect or disconnect devices in a particular group. Users can double click on a device to connect it and see the video in the display area, or click the  **Camera/Group Options** button to modify the settings.

**Display Control Panel:** users can choose between full view in a single screen or a split screen configuration of 4, 9, 16, 25, 36, 49, 64 or 81 frames.

**PT Control Panel:** direction buttons for controlling the Pan and Tilt feature of the camera. This only applies to the P/T camera models.

**Main Menu:** Allows the user to connect or disconnect all the devices, open the history manager, system setup, and other functions.

#### IP Camera Super Client

### PT Control

This feature is available based on the model of the camera. If your camera supports the Pan and Tilt feature, enable it using the client software. Once enabled, the movement of the camera can be controlled with the buttons in the PT control area.




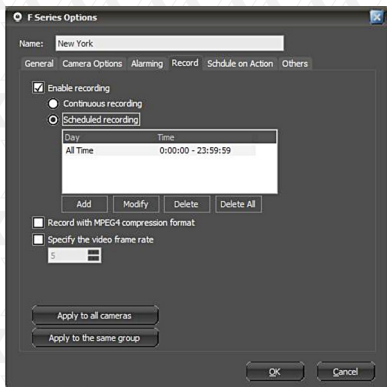
#### IP Camera Super Client

### Video Recording

Video recording is a basic function of the client software, where users can choose to record

continuously, schedule a recording or setup a recording whenever an alarm is triggered. Under the **Scheduled recording** option, users can set specified dates and times. Records will be then saved to the assigned folder path set in the options settings, and will automatically overwrite the earliest files when the disk is full. The user can set the parameter of how long to keep the files. For the IP camera with MJPEG format, the client software can compress the saved data into MPEG4 format, which can be used to reduce the usage of space on the disk.

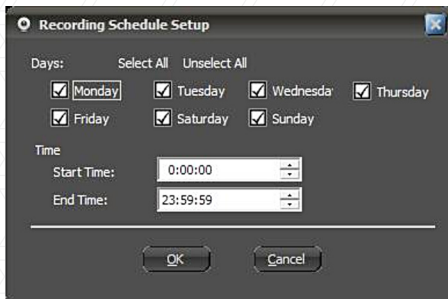
To set record function, right click the device and choose Camera Options or click the  **Camera/Group Options** button. Next, go to **Alarm** tab.



**Enable record:** when selecting this option, the recording function will be enabled.


**Continuous recording:** the client software will record all the time.

**Scheduled recording:** users can appoint a certain period in which the client will start recording.

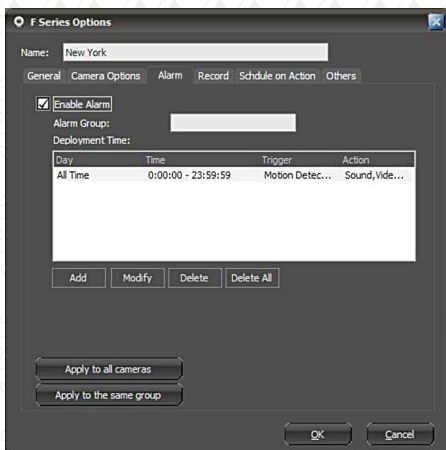


## Alarm

The Client software supports various kinds of alarm triggers, alarm events, and can be used to set an alarm schedule.

Select the camera in the display area or from the device list, click the right button to choose **Camera Options**, or click the  **Camera/Group Options** button. Next, go to Alarm tab.



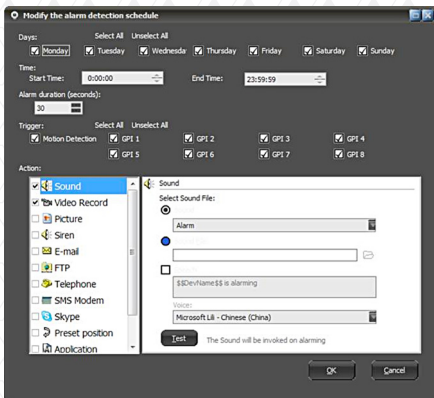


**Enable alarm:** in order to use the alarm function, you must check this option.

**Alarm group:** it is a user-defined name to identify and link cameras belonging to the same group.

**Alarm lasting time:** the period of time the software will keep the alarm active. That will have the same duration as the event causing the alarm, which includes the capturing of audio and the video recording time.

**Schedule trigger:** sets the schedule during which alarm can be triggered.



**Days:** specify the day(s) of the week the alarm will be triggered.

**Time:** sets a starting and ending time for the alarm.

**Trigger mode:** specifies the type of event that would trigger an alarm.

It currently supports motion detection and alarm sensor input (depending on the model).

An action on alarm defines how the software will respond once the alert is triggered.

The actions supported are: sound, video recording, snapshots, alarm siren, email, FTP uploading, SMS, calling, SMS modem, alarm-output switching, program executing and URL opening. Below is the detailed explanation for each alarm action.

**Sound:** When an alarm is triggered, the program will play a sound on the computer to frighten the intruder. Sounds can be customized.

You can choose the sound from the list in the

program. Select the sound and click OK to save the setting.

You can also choose other sound files from your local disk drive. In other words, you can record “Catch the thief” in a file, save it and then select the sound file by clicking the folder button to add the file you want.

If you want to read a text on alarm, you can check the “Speech” icon and edit the contents to be read. In addition to reading the normal text, the program also displays the description of pre-defined features, such the name of the alarm device and alarm time. These pre-defined contents appear within the “\$\$” symbols. The software includes the following pre-defined content:

\$\$DevName\$\$: the name of the device sending the alert signal.

\$\$AlarmTime\$\$: displays the time when the alarm occurred.

\$\$Trigger\$\$: displays the event triggering the alarm.

If you only need to read a text having no audio being played, you can choose “sound file” without specifying the use of one. Check the “Speech” box below.

Sound

Select Sound File:

Sound

Alarm

Sound File

Speech

The \$\$DevName\$\$ alarm is going off

Voice:

Microsoft Simplified Chinese

Test This sound will be played when the alarm goes off

**Email:** when the alarm goes off, the program will send an email acknowledgement with the pictures or video recording attached.

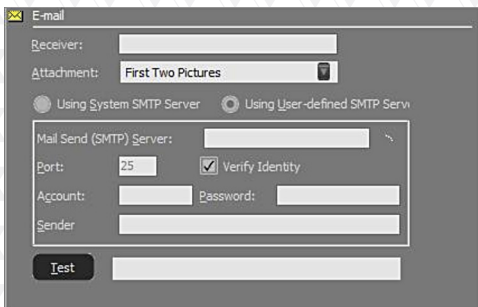
**Attachment:** the user can choose to send emails with or without attachments, or with pictures or videos. However, when choosing to send an attachment, the user needs to have the live recording function enabled first.

**Receiver:** it is the email address to which the alarm acknowledgement will be sent to.

**Copy:** it is the email address or addresses to which the alarm acknowledgement will send a copy of the message and attachments. Use commas to separate multiple email addresses.

**Test:** when you click this button, the program will send a test email. Users can check whether it was correctly sent or not. If sending fails, the program will show you the details of the failure.

Users have the option to choose the mail server according to their own needs.



The image shows a screenshot of an "E-mail" configuration window. The window has a title bar with a close button and the text "E-mail". Below the title bar, there are several input fields and options:

- Receiver:** A text input field.
- Attachment:** A dropdown menu showing "First Two Pictures".
- Server Selection:** Two radio buttons: "Using System SMTP Server" (selected) and "Using User-defined SMTP Serv".
- Mail Send (SMTP) Server:** A text input field.
- Port:** A text input field containing "25".
- Verify Identity:** A checked checkbox.
- Account:** A text input field.
- Password:** A text input field.
- Sender:** A text input field.
- Test:** A button with the text "Test" next to a text input field.

**FTP Uploading:** when the alarm is triggered, the program will upload the snapshots to the FTP server.

**Upload file:** three options are available: picture only, video only, or both picture and video.

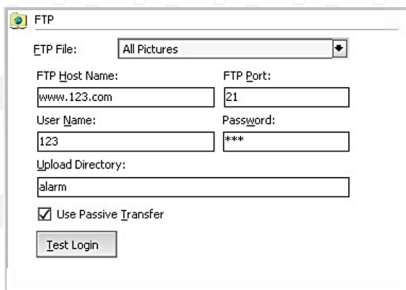
**FTP host address:** account information required to access the File Transfer Protocol host.

**FTP port:** the default is set to 21.

**User name:** the user name used in the FTP login window.

**Password:** the FTP password used in the login window.

**Upload Directory:** This is the path used for saving uploaded files. The program will create a folder using the time the alarm went off. The pictures and videos will be saved to this directory.



The image shows a dialog box titled "FTP" with a standard Windows icon. It contains the following fields and controls:

- FTP File:** A dropdown menu currently showing "All Pictures".
- FTP Host Name:** A text input field containing "www.123.com".
- FTP Port:** A text input field containing "21".
- User Name:** A text input field containing "123".
- Password:** A text input field containing "\*\*\*".
- Upload Directory:** A text input field containing "alarm".
- Use Passive Transfer**
- Test Login** button

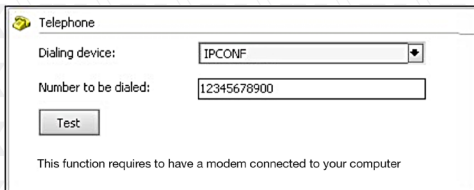
**Dialing:** when the alarm is triggered, the program will dial the assigned telephone number automatically using the PC's modem. This service requires a modem to be installed on the PC which supports dialing functions.

**Dialing device:** choose the modem from the list that

supports the dialing feature.

**Number to be dialed:** the number which will be dialed once the alarm is triggered.

**Test:** Click **Test** to make sure this setting is functional.



The image shows a configuration window titled "Telephone" with a telephone handset icon. It contains two input fields: "Dialing device:" with a dropdown menu showing "IPCONF" and a small arrow icon, and "Number to be dialed:" with a text box containing "12345678900". Below these fields is a "Test" button. At the bottom of the window, there is a note: "This function requires to have a modem connected to your computer".

**SMS modem:** when an alarm is triggered, the program will send a Short Message Service transmission to the assigned phone through the modem.

This service requires an SMS modem to be installed on the PC.

**SMS modem port:** the serial port number which is attributed to the SMS modem.

**Receiving phone number:** the enabled-SMS land line or mobile phone number which will receive the incoming message when the alarm is triggered.

**SMS interval (in minutes):** defines the time interval in minutes that the SMS alerts will go off while the alarm is active.

**Test:** click this button to test this service, the program will send a SMS to the assigned phone number.

SMS Modem

GSM Modem Port:

Destination Number:  
  
\*Several numbers splited with comma

Interval of two SMS(minute)

**Skype:** when an alarm is triggered, the program will use Skype to send Skype messages, text messages, Skype calls and call a mobile phone. This feature requires for Skype to be installed on your computer. When the alarm is triggered, the program will call or open the Skype interface, so that it can execute the actions mentioned above. If Skype is not running, the program will automatically start Skype. You can download Skype by going to <http://www.skype.com>.

**Send Skype Message:** this option sends a text “message” to the designated Skype account.

**Send SMS:** this option sends a text “message” to the designated phone. Please note that this feature requires a Skype account balance. To know more about using Skype to send SMS, recharge information, etc., please visit the official Skype website.

**Call:** it places a call to the designated Skype account or to a designated phone number. Please note that the “**dial a designated telephone number**” feature requires a Skype account balance. To know more about using Skype to make calls, please visit the Skype official website.

**Test:** Click **Test** to make sure this setting is functional.

Skype

Send Skype Message

Receiver:

Message:

Send SMS

Mobile Phone:

Call

Skype/Mobile Phone:

Need to install Skype

**Application:** when the alarm is triggered, the program will execute the selected program.

**Program:** it defines the path for the .exe file belonging to the selected program.

**Run parameter:** the run parameter values should be entered in this box.

**Run once:** this option will execute the command only when the alarm goes off for the first time, with no further action after that.

Application

Application:

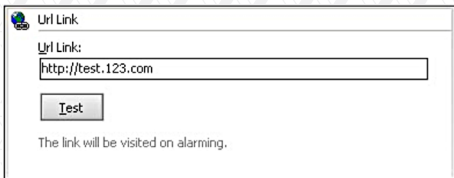
Run Params:

Run Once

The Application will be invoked on alarming.



**URL Link:** When the alarm is triggered, the program will open the assigned URL. Usually, this is used to inform other systems about the alert.

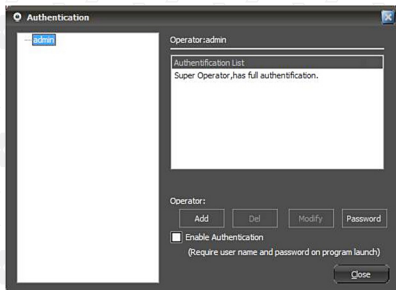


## IP Camera Super Client

### User Account Administration

The Client supports a multi-level management system, whereby different users are granted specific privileges and passwords for controlled access.

This function is not enabled by default. Please click the Setup menu button on the lower right side of the dialog window and choose User Account Setup to continue.



When this feature is enabled, the program will always request authentication from users.

By default, the **admin** account enjoys full administrator privileges. This account can never be deleted; however, its password can be changed.

**Add operator:** click the **Add** button and the dialogue box below will appear

**Add Operator**

General Information:

Account:

Password:  Confirm Password:

Name:  Tel:

E-Mail:

Add/remove cameras

Add/remove user accounts

View cameras

Edit camera options

View recordings

View alarm recordings

Edit system options

View log

Manage log

Close program (cancels all recordings)

Delete recordings

Delete alarm files

Devices:

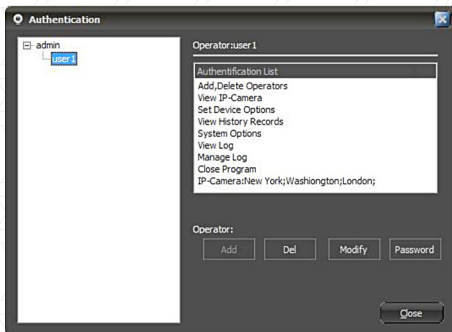
New York

London

OK Cancel

Once you type in the account information and assign the corresponding permissions, click **OK** to save it.

Privileges to add or remove accounts mean that the account operator can include or delete its dependant users. This takes effect only after logging in with this account



**Delete:** the currently selected operator will be erased.

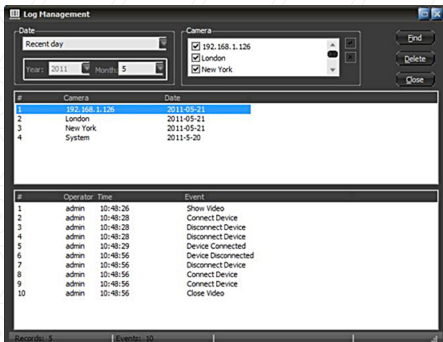
**Modify authority:** it changes the permission level assigned to this operator.

**Change password:** it allows the user to modify the existing password.

## IP Camera Super Client

### Log manager

The client software has log management function. It will keep records of user operation and device connection information. Click the **Setup** menu button on the bottom right corner of the dialog box, and then choose **Log Management** to open the window.



After selecting the desired device and date, click the **Find** button.



## IP Camera Super Client

### Records publisher

Users can remotely view videos and alarm logs using the records publishing tool from the client.

Click the **Setup** menu on the bottom right corner of the dialog box, and choose **Record History Web Publisher**. The following window will be displayed, as shown below.

By default, this function is not enabled. You must first select the **Enable History Publisher** option and click the **Apply** button to enable this feature. The LAN IP address will be displayed at this point. Users can directly view records in the LAN if the PC has a fixed IP address. Records can also be accessed by entering the IP address and adding the port number. If using a dynamic IP, then the DDNS feature must be active to be able to view this information remotely. This tool should allow users to register a DDNS account for free. The account name needs to be longer than 5 characters.

Click on the **free account registration** option. The DDNS registration box will appear, as shown below. Fill the form and click the **Submit** button to save your settings. Once completed, it will exhibit the remote access URL. Please note that port forwarding needs to be set up directly on your router.

**DDNS Account Registration**

Account:  (Must)

Password:

Password Confirm:

Your Name:  (Must)

Sex:  Male  Female

Email:  (Must)

Users can set a password for controlled access permissions.

The Web server port is the port provided for remote visit. Normally, this value does not need to be changed, but if that port is being occupied by other devices, users can assign a different port number within the 1 ~ 65535 range.

When entering the URL in IE address box, a page like the one below this will be displayed.

**IP Camera Super-Client**

Manager navigate

- Alarm Record
- Video Record

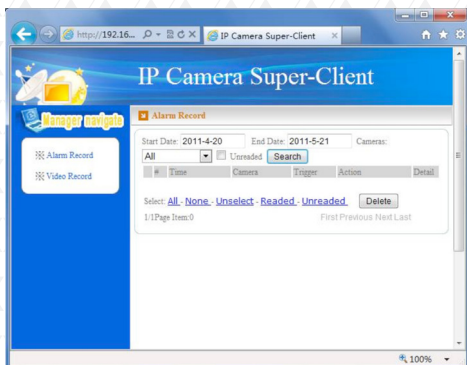
**Video Record**

Start Date: 2011-4-20 End Date: 2011-5-21 Cameras:

All

#	Time	Camera	File Size	Play
Select: All - None - Unselect - Readed - Unreaded <input type="button" value="Delete"/>				
1/1 Page Item 0 <span style="float: right;">First Previous Next Last</span>				

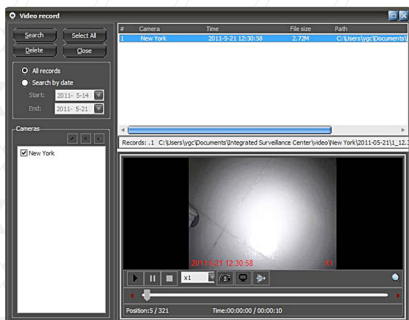
100%



A list containing all the devices with recorded video files will appear. Next, click on any specific device, and a list of recordings identified with the date will be displayed at this stage.

When the operator chooses a certain date, the page below will pop up on the screen.

The list contains the files recorded that day. When you click on a specific file, it will play the video.



During playback, the user can rewind or forward the video, take a snapshot or invert the recorded images.

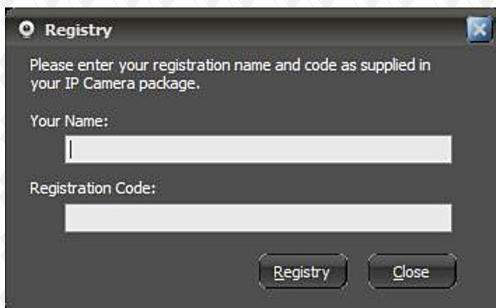
The process to remotely access alarm records is the same as with video records.



## Registration

Go to the **Setup** menu and select **Registration**. Enter the registration name and code, and click **Register** to complete the process.

The registration name and code can be found on the supplied CD-ROM.



## Web browser

If you access the camera through the Internet Explorer browser directly, type the camera's IP address.

1. To do so, follow the format `http://XXX.XXX.XXX.XXX:81`, ("X" represents the IP address and the ":81" represents the default port number).



When done, the camera login page will be displayed on the screen.

2. Click “**sign in**” to enter your account and password on the camera login page, as shown below.



By default, the administrator’s username is “**admin**” and the password is left blank. You can log on to this page as an Administrator, Operator or Visitor. Access privileges will be assigned on the web browser interface based on the user. Details regarding access rights and user interface are included below.

**Visitor:** when logged in as visitor, the user will be able to view the main monitoring page for all the enabled cameras on the network.

**Operator:** when logged in as an operator, the user will have access to controls and to certain parameters associated with the operation of the camera.

**Administrator:** when logged in as an administrator, the user will have full access to controls, critical

functions and to the advanced configuration of the camera.

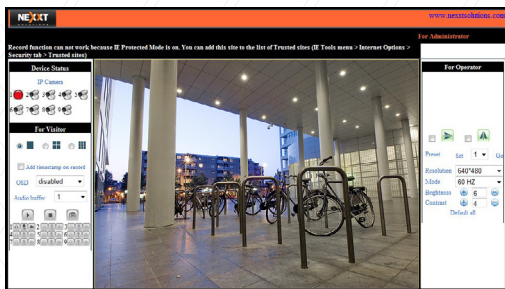
3. If you are using a PC, follow the top link for IE Browsers. This will activate ActiveX which allows access to additional features of the user interface. If you are a Mac user, you can view the camera via a second link, Server Push Mode. This web browser mode features limited functionality; however, it allows you to view live video and take snapshot pictures using the XPY 300.

### Upgrade firmware

Enter the correct User Name and Password to upgrade the system firmware and Web user interface.



**Main User Interface (as seen in Internet Explorer)  
Device Status**



Indicates the number of cameras connected on the network.

### For Viewer

When logged in as visitor, the user will be able to view the main monitoring page for all the enabled cameras on the network. This window allows you to choose between Full View or Split Screen configurations. Select the icons according to the view preferred.

For example: select   for Full Screen,  for Quad view or  for Multi Split Screen.



### Add timestamp on record

When checked, a timestamp will be added in the bottom right corner of recorded videos.


### OSD (On Screen Display) for multi-device settings


The On Screen Display allows you to see the date and time on the video. Use this option to select the color of the timestamp or to disable the OSD feature.

### Audio switch

Click  to enable the audio stream from the camera. The icon will change to . In order to be able to listen to the sound around the camera, you need to have an earphone or speaker connected to the computer, and the microphone function enabled. Click this icon once again when you want to disable this feature.

### Record

Click on the  icon to begin video recording. The camera will create an AVI file and save it in the folder you specified. Click on this button again when you wish to stop the recording. The audio will be stored provided that the microphone function has been previously enabled.

**Snapshot:** Click on the  icon to take a snapshot image. This button provides users a fast way to capture a single image of the video from the camera.

**Note:** the video file would be assigned a name according to the following format:

*Alias\_actual date.avi*

**For example:** if the name of the file containing the video is XPY300K\_20101211124441.avi, it means this recording belongs to the device having 'XPY300K' as its alias, and that the video was recorded at 12:44:41 on December 11, 2010.



### **For operator**

When logged in as an operator, the user will have access to the Operator Page, and to certain parameters associated with the operation of the camera.

### **Pan/Tilt**

This function is not available for this model.

### **Mirror**

Click the icons to see the horizontal  or vertical  mirror image. Video rotation options allow you to adjust the image if you set up the camera upside down or in a special position.

### **Resolution**

Select either VGA (640x480) or QVGA (320x240).

### **Operating mode**

Select 50Hz or 60Hz frequency, or Outdoor mode.

**Color parameters:** click **Brightness** and **Contrast** to adjust the quality of the video.

**Default All:** click to return the settings to their factory default values.

### **For Administrator**

When logged in as an administrator, the user will have full access to controls, critical functions and to the advanced configuration of the system.

**Device Status:** it displays the device ID, firmware and embedded Web UI version of the device, along

with other basic information pertaining to the camera.

**Alias Settings:** allow the administrator to set a name to easily identify the IP camera. *Anonymous* is the default alias for the XPY300.

**Date & Time Settings:** these are used to determine the time zone for your country. You can choose **Sync with NTP Server** or **Sync with PC Time**.

**User Settings:** the administrator can set up a maximum of eight (8) user accounts. New users can be added as an administrator, operator or visitor, each with their own username and password.

The screenshot shows the 'Users Settings' page in the Next Solutions web interface. The page features a navigation menu on the left with various settings options. The main content area displays a table with the following data:

User	Password	Group
admin	*****	Administrator
visitor	*****	Visitor
operator	*****	Operator
		Visitor
		Visitor
		Visitor
		Visitor
		Visitor

At the bottom of the table, there are 'Submit' and 'Refresh' buttons.

**UPnP Settings** - Access this page to find out if the UPnP (Universal Plug and Play) is working correctly on your computer.

**Upgrade Device Firmware** - Upgrade the camera's Firmware and device embedded web UI software on this page.

**Restore Factory Settings** - Restores the original settings of the device.

**Reboot Device** - Reboots the device.

## Multi-Device Settings

In the Multi Device Settings page, the user can visualize all devices detected in the LAN. The firmware inside the camera supports up to 9 cameras monitoring at the same time. You may view either 9 or 4 cameras at once in a grid on one screen, or choose to view a single camera at a time.

The **'1st device'** is the default IP camera. You can add more cameras to the list in the network for monitoring different areas.

The screenshot shows the 'Multi-Device Settings' page. On the left is a sidebar with a menu including: Device Info, Alias Settings, Date&Time Settings, Users Settings, Multi Device Settings, Basic Network Settings, Wireless Lan Settings, ADSL Settings, UPnP Settings, DDNS Service Settings, Mail Service Settings, Ftp Service Settings, MSN Settings, Alarm Service Settings, P2P Settings, Decoder Settings, Upgrade Device Firmware, Backup & Restore, Restore Factory, Reboot Device, Log, and Back. The main content area is titled 'Multi-Device Settings' and shows 'IP Camera(192.168.0.239)'. Below this is a 'Device List in Lan' table with a 'Refresh' button. The table lists devices from 'The 1st Device' to 'The 7th Device'. The 'The 2nd Device' is selected, and its details are shown in a form below the table: Alias (Office), Host (192.168.0.107), Http Port (81), User (admin), and Password (\*\*\*\*\*). There are 'Add' and 'Remove' buttons for the selected device.

Multi-Device Settings	
IP Camera(192.168.0.239)	
[Refresh]	
The 1st Device	This Device
The 2nd Device	None
	Alias: Office
	Host: 192.168.0.107
	Http Port: 81
	User: admin
	Password: *****
	[Add] [Remove]
The 3rd Device	None
The 4th Device	None
The 5th Device	None
The 6th Device	None
The 7th Device	None

## To add cameras to the LAN

Click **'The 2nd Device'** and double click the IP camera from the **'Device List in LAN'**. The Alias, Host and HTTP Port will fill in automatically. Enter the correct User Name and Password then click

**'Add'**. Repeat the same procedure to add additional cameras.

### **To add cameras to the Internet**

First make sure the camera added can be accessed on the Internet with the IP address or DDNS domain. (for example: `http://XXX.XXX.XXX.XXX:81` or `http://ipcamera.dyndns.org:81`). Enter the Host in the format: `XXX.XXX.XXX.XXX` port: `81` or Host: `ipcamera.dyndns.org` port: `81`. Enter the correct User Name and Password followed by **'Add'**. Repeat the same procedure to add more cameras.

### **Basic Network Settings**

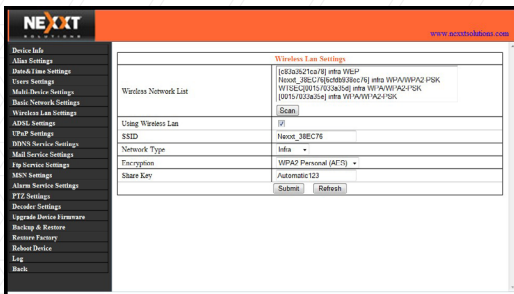
If the router that the IP camera connects to has a DHCP function, you can choose 'Obtain IP from DHCP Server' or you may fill in the network parameters manually.

**HTTP Port** - In most cases, you can leave this value as 80; however, if your Internet Service Provider blocks this port, you may have to switch to another port number, such as 8005.

### **Wireless LAN Settings**

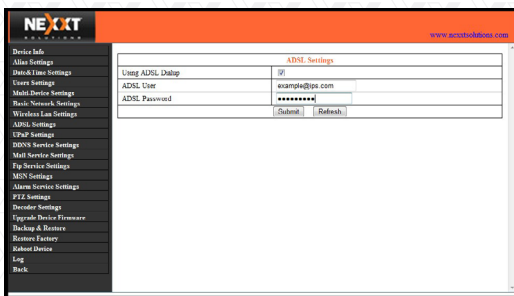
Enter the wireless settings page of the Wireless Router to find out the SSID, Channel, Encryption and Authentication details. This product supports WEP and WAP security encryption methods.





## ADSL Settings

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



## DDNS Service Settings

The system supports protocols from some DDNS providers such as dyndns.org. Fill in the following fields once the DDNS service has been setup.

**User and Password:** the User Name and Password used when applying for the domain name.

**DDNS Host:** the domain name.

**DDNS or Proxy Server:** if you access the DDNS host through a proxy, you should enter the Proxy IP here.

**DDNS or Proxy Port:** the Proxy Port.

DDNS Service Settings	
DDNS Service	DynDns.org(dyndns) ▾
DDNS User	testing01
DDNS Password	*****
DDNS Hostname	testing01.dyndns.info
Re Update Ignoring All Errors	<input type="checkbox"/>
<input type="button" value="Submit"/> <input type="button" value="Refresh"/>	

## Mail Service Settings

Configure the email addresses that will receive and send mails after an alarm is triggered.

**Sender** - This device uses the sender mailbox to send mails.

**Receiver** – The account used to receive mails from the Sender. You can set up to 4 receiver mailboxes.

**SMTP Server** - The SMTP server for the sender mailbox.

**Need Authentication** - Check the box if the email needs authentication. If so, please enter the SMTP User Name & Password.

**Mail test:** Set the Mail parameters and click '**Submit**' before attempting to send a test email.

www.nextsolutions.com

**Mail Service Settings**

Sender	info@nextsolutions.com
Receiver 1	user@gmail.com
Receiver 2	
Receiver 3	
Receiver 4	
SMTP Server	smtp.nextsolutions.com
SMTP Port	25
Transport Layer Security Protocol	TLS
Gmail only support TLS at 465 port and STARTTLS at 25:587 port.	
Need Authentication	<input checked="" type="checkbox"/>
SMTP User	info
SMTP Password	*****
	[test]
Report Internet IP by Mail	<input type="checkbox"/>
<input type="button" value="Submit"/> <input type="button" value="Refresh"/>	

There are 8 possible Mail Test errors:

1. Cannot connect to the server.
2. Network Error. Please try later.
3. Server Error.
4. Incorrect username or password.
5. The Sender is denied by the server - The server needs to authenticate the user; check settings and try again.
6. The Receiver is denied by the server - Could be caused by the anti-spam privacy settings of the server.
7. The message is denied by the server - Could be caused by the anti-spam privacy settings of the server.
8. The server does not support the authentication mode used by the device.

Report Internet IP by Mail - Check the box so when the IP camera is powered on or the Internet IP address changes, an email will be sent. (For example: XPY 300's address is http://119.123.207.96:9002). Make sure the port is mapped to the router correctly by UPnP or Virtual Map function.

**Report Internet IP by Mail** - Check the box so when the IP camera is powered on or the Internet IP address changes, an email will be sent. (For example: XPY 300's address is http://119.123.207.96:9002). Make sure the port is mapped to the router correctly by UPnP or Virtual Map function.

## FTP Service Settings

**Note:** When under Alarm Service Settings the option **"Upload Image on Alarm"** is checked, the FTP Service takes effect.

FTP Service Settings	
FTP Server	nexttsolutions.com
FTP Port	21
FTP User	admin
FTP Password	*****
FTP Upload Folder	selected
FTP Mode	PORT
Upload Image Now	<input checked="" type="checkbox"/>
Upload Interval (Seconds)	0
Specify Filename (include .jpg)	<input checked="" type="checkbox"/>
Specify the Max Number of Files	<input checked="" type="checkbox"/> 0
<input type="Submit"/> <input type="Refresh"/>	

**FTP Server** - The FTP server address.

**FTP port** - The port usually is 21.

**FTP Mode** - Supports standard (PORT) mode and passive (PASV) mode.

**Upload Image Now** - Check the box to upload an image. When checked, you can input the upload interval time in seconds.

**FTP Test** - Set the FTP parameters and then click 'Submit' before testing the FTP settings. If successful, the user will be prompted accordingly. Otherwise, an error message will be displayed.

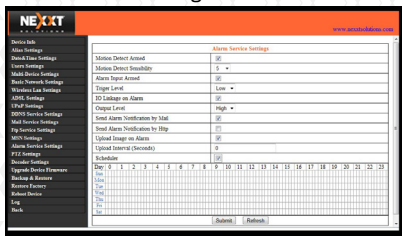
There are 8 possible FTP test errors:

1. Cannot connect to the server - Please check FTP Server settings.
2. Network Error. Please try later.
3. Server Error.
4. Incorrect username or password - Check the username and password.
5. Cannot access the folder - Ensure the folder exists and your account is authorized.
6. Error in PASV mode - Ensure 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 - Ensure your account is authorized.

## Alarm Service Settings (Motion Detection)

Enter the Alarm Service Settings page to configure the Motion Detection function. When motion detection is enabled, the camera can be triggered to send email alerts and upload images. In the camera monitoring page, the green icons will turn to red and you will hear an alert sound if motion is detected.

**Note:** The default path for saving recorded files is C:\Documents and Settings\All Users\Documents.



**Motion Detection Sensitivity** - Sensitivity can be determined in a scale from 1 to 10, 1 being the setting with the highest motion detection sensitivity, while 10 represents the lowest sensitivity available you can preset.

**Send Mail on Alarm** - Sends picture & mail information to the set email address after the alarm is triggered.

**Upload Image on Alarm** - Enable this function to upload an image after the alarm is triggered.

**REC on schedule and save to PC** - Enable this function for automatic recording to start on the scheduled time for several seconds, and save the video in the PC when an alarm has been triggered.

## **ACCESSING THE IP CAMERA**

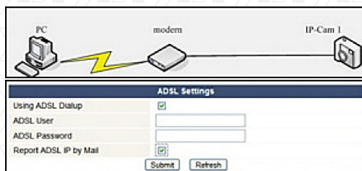
### **Using the WiFi capability**

To use the wireless feature of the IP Camera, a wireless router is required. Follow the instructions below to get started after the camera has been mounted properly.

1. Use the Network cable to connect the IP Camera to the LAN.
2. Enter IP Camera Tool to search for the camera.
3. When IP address of the camera is listed in the Result Field of the IP Camera Tool, it means the basic configuration is completed.
4. Set the security settings in Internet Explorer on the PC when you view it for the first time.

5. Log in to the web browser of the IP camera.
6. Now you can use the IP Camera as a Visitor, Operator or Administration in the LAN.
7. Open the wireless router setup page and enter the **SSID, Channel, Security Method (NONE, WEP), Authentication Type and Encryption**. NOTE: This product supports WEP and WAP security encryption methods.
8. Click "**Submit**" to reboot the device.
9. Wait at least 30 seconds, then unplug the ethernet cable followed by the power supply. Power on the camera once again, making sure only the power supply is connected. After 30 seconds, if the LED blinks, it indicates the IP camera has started working on WiFi mode.

### Connect to the Internet through ADSL directly



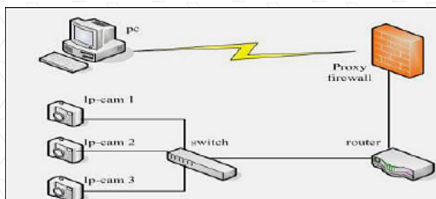
1. Use the Network cable to connect the IP Camera to PC.
2. Enter IP Camera Tool to search for the camera.
3. Log in to the IP camera web browser page as an Administrator.
4. Enter the ADSL Settings page to input ADSL User Name and password.
5. Enter DDNS Settings Page and enable the DDNS service. Next, click '**Submit**' to reboot the camera.

6. By connecting the IP Camera to the ADSL directly, you can access the Camera through the Internet using the domain name.

NOTE: Choose the option 'Report ADSL IP by Mail', for the ADSL IP address to be sent via email.

### **Connect to the Internet using a router**

Follow the steps below to use a router to access the Internet by shared ADSL. If a router is set for dial-up Internet access, setting an ADSL dial-up account and password on the IP Camera is not required.



1. Use the Network cable to connect the IP Camera to the LAN.
2. Open the IP Camera Tool in order to search for the camera.
3. Log in to the IP camera web browser page as an Administrator.
4. Enter the DDNS Settings Page to enable the DDNS service. Next, click 'Submit' to reboot the camera.
5. Now access the Camera directly through the Internet using the domain name.

### **Static IP address users**

Static IP address users do not need to use DDNS



for remote access. When the settings of the IP camera in LAN mode are complete, you can access the Camera directly through the Internet using the WAN IP.

Two methods are available to obtain the WAN IP address.



## 1. Obtain the WAN IP from a Website

You can discover this easily by turning on a computer using the same connection as the IP camera and entering this address: <http://www.whatismyip.com>. The page at this address will show you the current WAN IP.

## 2. Obtain the WAN IP address from the router

1. Obtain the IP address of the router (LAN Gateway address), User Name and Password for logging into the router.
2. Enter the LAN IP address of the router (ie: 192.168.1.1) in the address bar of your PC browser to log on to the router.
3. Open the Status page to find out the WAN address of the router. In this example, the address is 116.25.51.115.

## Accessing the IP Camera over the Internet

Users can access the IP Camera from the Internet. Enter the WAN IP address and port number into the browser. For example, <http://116.25.51.115:85>.

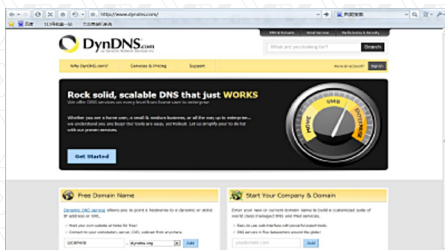
**Note:** Make sure Port mapping is successful. Port mapping can be configured in two ways:

- Enter the setting page of the router which the IP camera connects with to enable the UPNP function. To do so, open the the IP camera “**Upnp Settings**” dialog box, and make sure the status for “Upnp is successful”.
- If your router has the Virtual Map function, enter the router settings page, add the IP camera’s IP address and port number to the Virtual map list.

## How to use DDNS

When using ADSL, the IP Camera will connect to the Internet through ADSL automatically. For each ADSL reconnection, your Internet Service Provider will re-assign a new IP address for the IP Camera to facilitate the access. DDNS (Dynamic Domain Name Server) can map the dynamic IP address of an IP Camera to a fixed domain name. Therefore, we can access the IP Camera by the fixed domain name whether the IP address changes or not. The IP address is not necessary when using the DDNS via the domain name to find your network.

1. Go to the website that provides free domain names, such as <http://www.dyndns.com>. Register to apply for a free domain name.



2. Enter DDNS Settings Page to enable the DDNS service, and click '**Submit**' to reboot the camera.
3. Re-log in to the Camera web browser as Administrator and enter the "**DDNS Service Settings**" page to check if the DDNS Status has been successfully changed to **DynDNS**.
4. Enter the '**UPnP Settings**' page, the UPnP Status should be '**Successful UPnP Session**'. If not, you may enter the "**Basic Network Settings**" page to change the Http Port. Then click "**Submit**" and reboot device.
5. Re-log in to the Camera homepage to check and make sure the **DDNS Status** and **UPnP Status** have been successfully configured.
6. You only need to enter the domain name (Domain name+Port number http://ipcam.domain.net:81) in the IE address bar, and the browser will visit the IP Camera. Wait for several minutes and the IP Camera will access the Internet automatically.

Another way the user can access the IP camera from a WAN is by using the DDNS domain name.

If the gateway settings and DDNS settings have been completed, enter the DDNS dynamic domain name (for example, <http://ipcam.vicp.net>, do not add www.) in the address bar of IE to access the IP Camera. If multiple IP Cameras are connected to the same router, enter DDNS dynamic domain with the port number (for example, <http://ipcam.vicp.net:85>) in the address bar of IE to access different IP cameras.

### **Accessing the IP Camera from your mobile phone**

Compatibility with mobile phones using 3G technology enables you to view real-time videos and change configuration settings over the internet using any supported browser (Google Browser or FireFox). Using other web browsers, you may have limited functionality, for instance when viewing or streaming live video.

An IP camera can send a snapshot picture to an email account accessible via a cell phone. Cell phone surveillance also allows the user to adjust camera settings and video resolution for a mobile feed where video could then be accessible on a cell phone. There are applications that allow for advanced PT control at your fingertips, access to multiple cameras from different locations and even remote video playback.

Follow the steps below to gain access to the IP Camera from your mobile phone:

1. Go to mobile internet browser
2. Enter <http://the external IP address of your IP>

Camera: port number

3. Demo example: <http://y-cam.dtns.net:8152>.
4. This will bring up the authentication window to enter your user security settings.
5. Next, a window with 2 different option will pop up.
6. Select the best option based on the web browser supported by your particular phone.
7. Click on 'Live Video' to see real time video footage captured by the camera.

### Frequently Asked Questions

**Note:** Please check network connections first to troubleshoot any potential problems. Check if any LED on the network, server, hub, exchange or network card is showing signs of malfunction. In case of abnormal operation, verify that all connections on the network have been done correctly. In addition, you can see the list of problems below, as it contains the solution to the most common problems encountered while setting up the camera:

### What do I do if I have forgotten the administrator User Name and/or password?

To reset the administrator User Name and password, press and hold down the RESET button for 5 seconds. Release the power button and the User Name and password will be reset back to their factory default configuration.

Default administrator User Name: **admin**

Default administrator password: **no password**

## **IP Address configuration**

Check whether the IP address of the IP Camera server shares the same subnet as your work station: Click My Computer > Control Panel > Network & Dial-up Connections > LAN > Attributes > Internet Protocols (TCP/IP). Make sure they are in the same subnet when configuring the camera's IP address manually if you are unable to access IP Camera via a web browser.

## **Network Configuration**

Double check to ensure that your HTTP server software is configured and running properly. If you are running any firewall software, make sure it is allowing inbound connections to port 80. Also, if you happen to be using a cable/DSL router, verify that you have set up the port forwarding feature properly (consult your router's documentation for more information).

If none of these seem to be the problem, it is also possible that your ISP is blocking inbound connections to port 80 - many ISPs have done this because of internet worms, such as Code Red. If this is the case, you will have to setup your HTTP server on an alternate port (such as 8080).

## **Picture Problems**

Video streaming is transmitted by the ActiveX controller. If the ActiveX controller is not installed correctly, no video image will be seen.

There are two ways to solve this problem:

1. Install the **'IP Camera Tool'**. ActiveX controller will be installed simultaneously (recommended).
2. Download ActiveX controller and set the Security Properties of IE on the PC when you view it for the first time: Go to Tools > Internet Properties > Security > Custom Level > ActiveX control and Plug-ins. All 3 options need to be set to 'Enable'.
  - Enable: Download unsigned ActiveX controls.
  - Enable: Initialize and script ActiveX controls not marked as safe.
  - Enable: Run ActiveX controls and plug-ins.


### **Problems with network bandwidth**

The image frame rate depends on 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 cameras rather than a hub).

### **Pop up appears saying 'Fail to connect to the device'**

This prompt will only appear when using multiple cameras. Enter the Multi-Device Settings page (log in as an Administrator) to check whether the Device settings are correct.

When one of the multiple cameras disconnects, the icon  changes color to yellow and the pop-up prompt **"Failed to connect to the device"** is displayed.

## Can't access the IP camera on the internet?

There could be a number of reasons:

1. ActiveX controller is not installed correctly.
2. The port IP camera being used is blocked by Firewall or an anti-virus software. Use a different port number and try again.
3. Port mapping failed. There are two ways available for configuring port mapping:

Open the setting page of the router which the IP camera connects with to allow the UPnP function. Go to the IP camera's **'UPnP Settings'** to enable UPnP, making sure the **"UPnP"** configuration is successful.

If your router has the Virtual Map function, enter the router setting page, and add the IP camera's IP address and port number to the Virtual map list.

## Problems with using the Firefox browser - monitoring pages are not displayed normally

Due to security issues, the Firefox browser does not support ActiveX controls, but it provides a plug-in named **IE-Tab** which enables Firefox to support ActiveX controls. Using the Firefox browser, you can access the website as follows:

<https://addons.mozilla.org/en-US/firefox/addon/1419>.

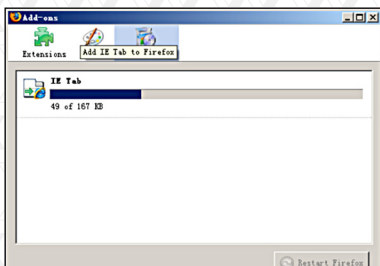
On the download page, select the right version for your browser, download it, and start installing the plug in. The installation steps for the Firefox browser (version 2.0.0.18) plug-in are detailed as follows:

1. Select the right version, as shown in the figure below.

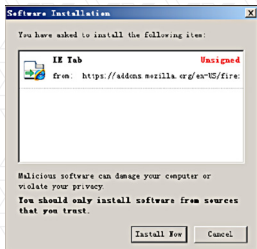




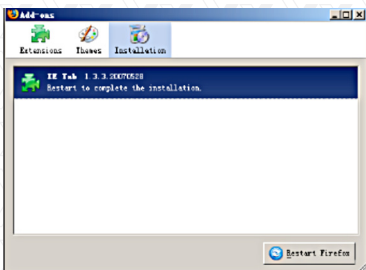
2. Click '**Add to Firefox (in Windows)**' to start the download.



3. Wait for the download to complete. A dialog box will pop-up as shown as in the chart below.

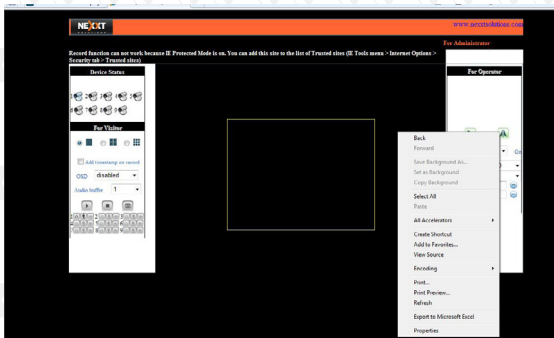


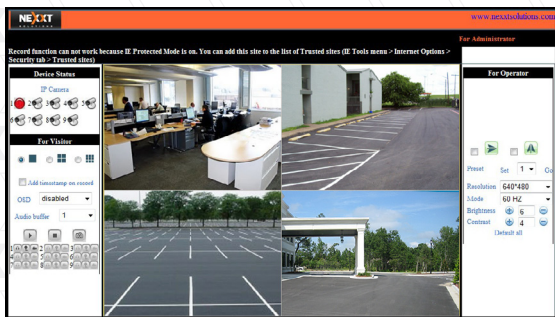
1. Click the '**Install Now**' button to start installation.



5. When installation is complete, click '**Restart Firefox**' to initialize the browser.

6. Log in to your device and locate the monitoring page, right click on the web browser page and click the new menu item named '**View page in IE-Tab**' to log in to the IP camera again.





## Default Parameters

### Default network parameters

IP address: Automatically obtained

Subnet mask: 255.255.255.0

Gateway: Automatically obtained

DHCP: Disabled

DDNS: Disabled

### Username and password

Default Administrator User Name: **admin**

Default Administrator Password: **no password**

## SPECIFICATIONS

Specifications	Model	
		<b>AILR6324U1</b>
<b>Camera</b>	<b>Image sensor</b>	1/4 color CMOS
	<b>Lens</b>	4 mm
	<b>Infrared LED</b>	21 pcs
	<b>Pixels</b>	300,000
	<b>Night vision range</b>	15 m
	<b>AWS/AGC/AES</b>	Auto
	<b>Compression format</b>	MJPEG
	<b>Minimum Illumination</b>	0.1 Lux
	<b>Viewing angle</b>	Horizontal 57° – Vertical 49.5°
<b>Audio</b>	<b>Audio</b>	2 way audio
	<b>Input</b>	Built in microphone
	<b>Output</b>	Built in speaker
<b>Video</b>	<b>Image format</b>	PAL/NTSC
	<b>Max. frame rate</b>	25 fps
	<b>Resolution</b>	Resolution 640×480 (VGA), 320×240 (QVGA)
<b>Network</b>	<b>Network interface</b>	RJ-45 (10BASE-T/100BASE-TX)
	<b>Supported protocols</b>	TCP/UDP/IP/ARP/ICMP/DHCP/DNS/HTTP/FTP/SMTP/NTP/PPPOE/UPNP/DDNS
	<b>Wi-Fi</b>	IEEE802.11 b/g
<b>Alarm</b>	<b>Motion detection</b>	Motion detection and video recording to local storage
	<b>Alarm events</b>	Notification via email, FTP
	<b>Periodic sending</b>	Send pictures to Email/FTP within the time specified
<b>General</b>	<b>User authentication</b>	User/password; administrator/operator/general user
	<b>Web browser</b>	IE 6.0 or above version, Mozilla Firefox, Safari, Opera, Chrome ,etc
	<b>Simultaneous viewers</b>	10 viewers@320x240 4 viewers@640x480
	<b>Mobile compatibility</b>	Supports Nokia, Android, Windows mobile phone, Iphone and other smart cellular phones
	<b>Power</b>	DC 5V 1.5 A
	<b>Power consumption</b>	4W/6W (Infrared off/on)
	<b>Operating temperature</b>	-10 to+55 °C
	<b>Storage temperature</b>	-20 to+60 °C
	<b>Operating humidity</b>	20- 80% RH
	<b>Storage humidity</b>	20- 95%RH
	<b>Gross weight</b>	600 g (including accessories)
	<b>Certifications</b>	CE; FCC; RoHS
	<b>Warranty</b>	Limited one year warranty