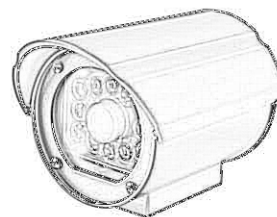
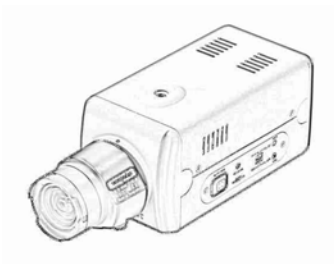
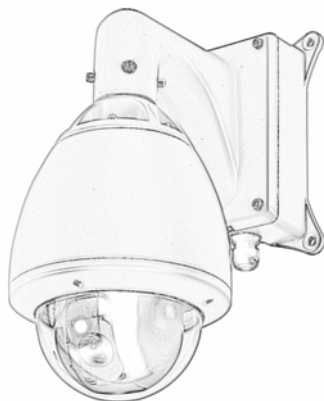


# H.264 Multi-Profile CCD Network Cameras and Video Server



**Quick Start Guide  
2009 Nov.**

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### **About multi-profile**

Multi-profile stands for simultaneously video stream. The Network Camera and Video Server can generate H.264, MPEG4 and MJPEG streaming simultaneously to different users. Moreover, the resolution can be different from one user to another. This state-of-art design is considerable to fit in various network environments.

### **Before Installation**

Before installation, please be sure to read this quick installation guide and user's manual carefully to complete machine installation.

## **1. System Requirements**

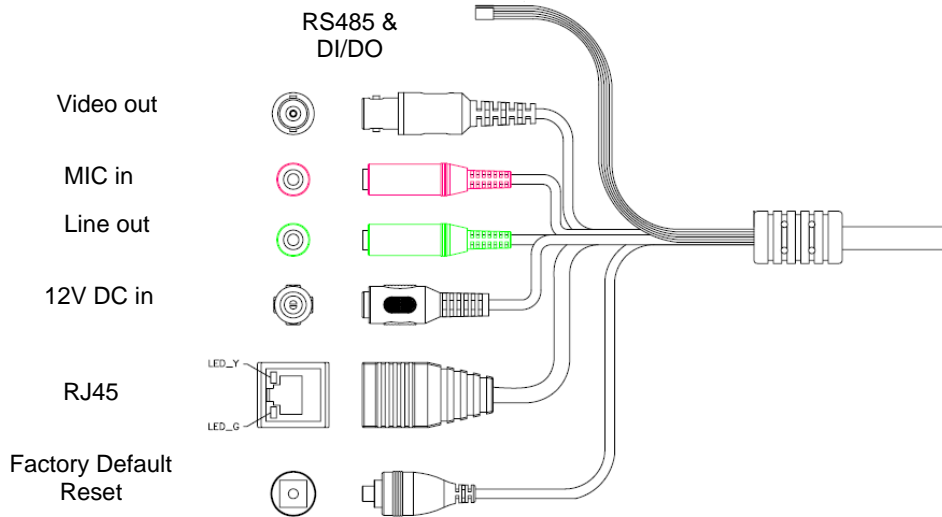
<b>Multi-Profile Network Camera and Video Server</b>	
<b>Network Environment</b>	
Network Interface	10/100MBase-TX Ethernet
Monitoring System	Recommended for Internet Explorer 6.0 or later
System Hardware	<ul style="list-style-type: none"><li>· CPU: Pentium 4, 2GHz or above</li><li>· Memory Size : 512 MB or above</li><li>· VGA card resolution : 1024 x 768 or above</li></ul>
<b>System Requirement for Viewer &amp; Recorder Application</b>	
Support OS	Win XP, Win Vista
System Hardware	<ul style="list-style-type: none"><li>· 16 cameras surveillance application</li><li>· CPU: Pentium Duo, 2.8GHz or faster</li><li>· Memory Size : 1GB or above</li><li>· VGA card resolution : 1024 x 768 or above</li></ul>

<b>System Requirement for Viewer &amp; Recorder Application</b>					
Support OS	Win XP, Win Vista				
FPS (QVGA)	~120	120~360	360~540	540~960	960~
CPU	Intel P4 2.4GHz	Intel P4 3.2GHz	Intel Pentium D 950 3.4GHZ	Intel core 2 Duo E8600 3.3GHZ	Intel core 2 Quad Q9650 3.0GHZ
RAM	512MB	512MB	1GB	2GB	2GB
Display	support1024x768 resolution or above Support DirectX 9.0c or above Intel 945G or Intel 965G or above				
OS	Windows XP · Vista				
Hard disk	60GB				
Ethernet	100Mbps			1Gbps	
Chipset	Intel 945 or Intel 965 or above				

# 2. Physical Installation

## 2.1 Infra Red IP Camera Installation

### Connections:



1. RJ45 LAN socket: Connect to PC or Hub/Switch. Connects to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-Way protocol can detect or negotiate the transmission speed of the network automatically. Please use Category 5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub.

In the LAN socket, there are two LEDs embedded:

#### LAN LED (green color)

This LED will be flashing while network accessing via Ethernet.

#### Power or Wireless LED (orange color)

This LED is used to indicate whether DC power is on or not. In addition, this LED will be flashing while the wireless accessing of the Camera.

- 2. RS-485: Connect to a local keyboard controller.  
DI/ DO: Connect to sensor in and alarm out devices

Cable for I/O connectors:

Name	Cable Color	Function
12VDC	Brown/White	DC 12V (50mA maximum)
GND	Blue/White	GND
D+	Purple/White	RS485 data +
D-	Gray	RS485 data -
DI	Green/White	Digital signal input
DO	Orange/White	Digital signal (alarm) output

- 3. Factory Default Reset

This button is used to restore the all factory default settings. Sometimes restarting the device will make the system back to a normal state. However, if the system still got

problems after restart, user can restore the factory default settings and install it again.

#### **Restore the device:**

- (i) Press the button down continuously.
- (ii) Hold the button at least 5 seconds and release it. Then the device has been restored to default settings and reboot again.

**Note:** Restoring the factory default setting will lose the all previous settings included IP address forever. User needs to run the IPWizard II program to search the device and configure it to let the device work properly again.

#### 4. DC-in Jack

The input power is 12VDC. **Note** that supply the power to the Network Camera with the power adapter included in package.

#### 5. MIC in (audio in)

Connect a microphone to the network camera.

#### 6. Line out (audio out)

Connect a loud speaker to the network camera. This function is for voice alerting and two-way audio.

#### 7. Video out (BNC connector)

The Network Camera also provides composite video output. User can use BNC video cable to connect the Network Camera with a TV monitor or VCR.

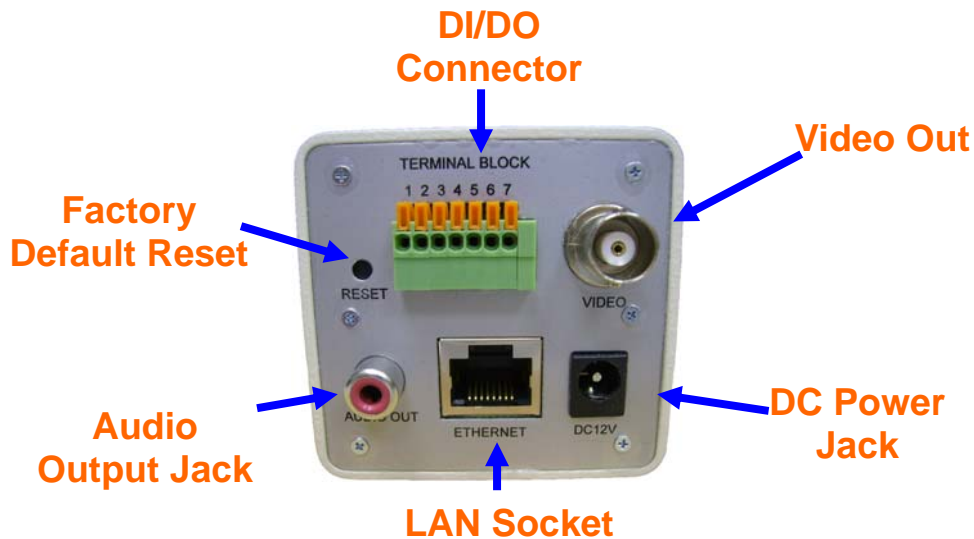
## **Installation:**

1. Fix IR camera to desired location with wall mount fixture
2. Plug-in Ethernet Cable into LAN port  
Connect an Ethernet cable to the LAN socket located on the Network Camera's back panel and attach it to the network.
3. Connect RS485 two wires to RS485 D+ and D- (if you need to control PT scanner)
4. Connect the attached power adapter to camera and plug-in this adapter into power outlet
5. Connect Video BNC connector to a local TV if necessary (to check camera viewing angle)
6. Done

**Note:** If you choose Power over Ethernet model, you can ignore step 4. The IR network camera built in power device (splitter) inside. You will need a PoE injector for the other side.

## **2.2 Box IP Camera Installation**

### **Connections:**



**1. Ethernet socket:** Connect to PC or Hub/Switch. Connects to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-Way protocol can detect or negotiate the transmission speed of the network automatically. Please use Category 5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub.

**2. Terminal Block:** includes RS-485 and DI/DO terminal.

**RS-485:** Connect to a local keyboard controller.

**DI/ DO:** Connect to sensor in and alarm out devices

Pin	Name	Function
1	DI	Digital signal input
2	DO	Digital signal (alarm) output
3	GND	Ground
4	485 D+	RS485 data +
5	485 D-	RS485 data -
6	GND	Ground
7	+12VDC	DC 12V (50mA maximum)

### 3. Factory Default Reset

This button is used to restore the all factory default settings. Sometimes restarting the device will make the system back to a normal state. However, if the system still got problems after restart, user can restore the factory default settings and install it again.

#### Restore the device:

(iii) Press the button down continuously.

(iv) Hold the button at least 5 seconds and release it. Then the device has been restored to default settings and reboot again.

**Note:** Restoring the factory default setting will lose the all previous settings included IP address forever. User needs to run the IPWizard II program to search the device and configure it to let the device work properly again.

### 4. DC-in Jack

The input power is 12VDC. **Note** that supply the power to the Network Camera with the power adapter included in package.

### 5. Line out (audio out)

Connect a loud speaker to the network camera. This function is for voice alerting and two-way audio.

### 6. Video out (BNC connector)

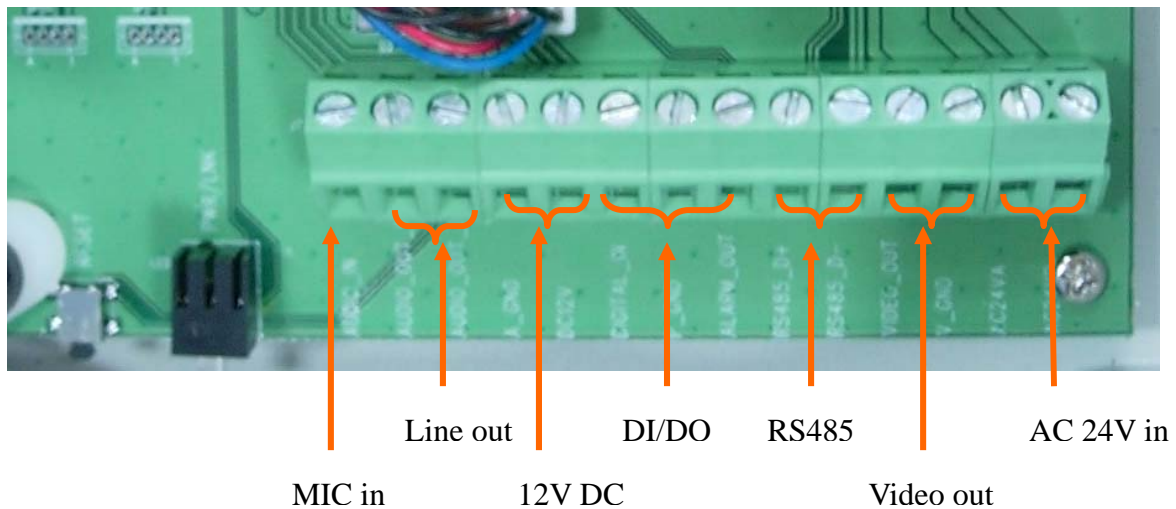
The Camera also provides composite video output. User can use cable to connect the Camera with a TV monitor or VCR.

## Installation:

1. Fix box camera to desired location with proper stand
2. Plug-in Ethernet Cable into RJ45 connector (LAN port)
3. Connect the attached power adapter to camera and plug-in this adapter into power outlet
4. Connect Video BNC connector to a TV set if necessary (to check camera viewing angle and focus)
5. Done

## 2.3 Outdoor Speed Dome IP Camera Installation

### Connections:



1. RJ45 LAN socket: Connect to PC or Hub/Switch.  
For connections to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-Way protocol can detect or negotiate the transmission speed of the network automatically. Please use Category 5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub. The LAN cable is wired well for user's easy installation.
3. RS-485: Connect to a local keyboard controller.  
DI/DO: Connect to sensor in and alarm out devices

Name	Function
12VDC	DC 12V (50mA maximum)
GND	GND
D+	RS485 data +

D-	RS485 data -
DI	Digital signal input
DO	Digital signal (alarm) output

3. Local Video output

The Network Camera also provides composite video output. User can use BNC video cable to connect the Network Camera with a TV monitor or VCR.

4. AC 24V in

The input power is 24VAC. **Note** that supply the power to the Network Camera with the power adapter included in package.

5. MIC in (audio in)

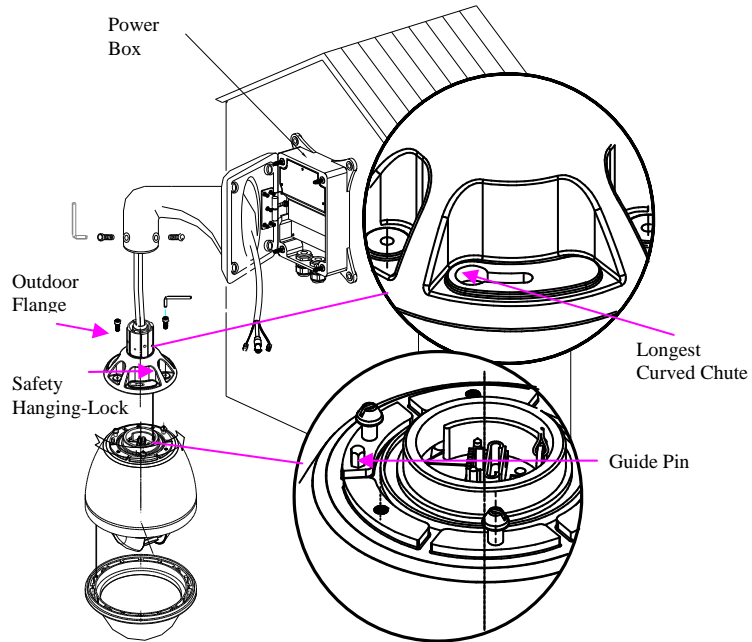
Connect a microphone input source to the network camera.

6. Line out (audio out)

Connect a loud speaker to the network camera. This function is for voice alerting and two-way audio.

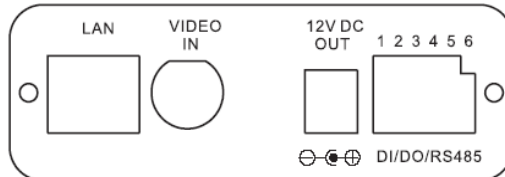
# Installation: Outdoor wall mount

- ① Disassemble the Outdoor Flange and dome housing with wrench. Mount the dome housing as figure.
- ② Mount the power box on a solid wall. Mount the wall bracket on the power box.
- ③ Fix the wall bracket to the outdoor flange with screws and wrench. Tighten the screws as figure.
- ④ Connect all the cables as required.
- ⑤ Mount the Safety Hanging-Lock of the outdoor flange on the outdoor speed dome. Aim the guide pin of mounting base at the longest curved chute of outdoor flange. Fix the speed dome on the outdoor flange. Tighten the screw as figure.



## 2.4 Video Server Installation

### Front Panel



#### **LAN Socket**

The LAN socket is a RJ-45 connector for connections to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-Way protocol can detect or negotiate the transmission speed of the network automatically. Please use Category 5 cable to connect the Video Server to a 100Mbps Fast Ethernet network switch or hub.

#### **Video-in Jack**

You can Install 1 video camera and connect it to video-in jack.

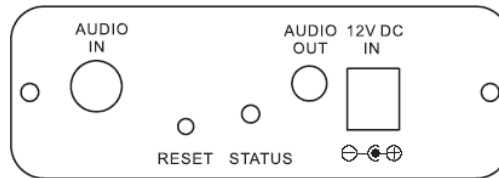
#### **12VDC-Out Jack**

The output power is 12VDC. This is used to supply 12VDC power to one external camera. The output power is 12VDC/400mA maximum.

#### **DI/DO/RS485 Connector**

The Video Server provides a terminal block with 6 pins of connectors for DIDO and RS485.

### Back Panel



**Audio-in Jack**

Audio-in (MIC) jack is connected to an external microphone.

**Factory Default Reset**

This button is hidden in the pinhole.

**Status LEDs**

The Status LED will turn green while system is booting up successfully. This LED is also used to indicate the status of Network connection. The LED will flash green while some one accesses this Video Server.

**Audio-Out Jack**

Audio-out Jack allows this device to output audio or alerting sound.

**12VDC-in Jack**

The input power is 12VDC. Note that supply the power to the Video Server with standard power adapter included in package.

**Installation:**

**1. Attach video source to Video Server**

To use this device, user must supply video source to this device first. Typical, user may utilize box camera, doom camera, bullet camera, P/T/Z camera, Speed doom camera, or others as the video source. Connect the BNC terminal of camera to the device's video input and make sure to power on these cameras first. Otherwise, the operation may be incorrect.



**2. Attach external microphone to Video Server (option)**

If user needs not only video stream but also audio stream, then an external microphone should be attached to Video Server. Connect an external microphone to the Video Server's audio input.



### 3. Plug an Ethernet cable into Video Server

Connect an Ethernet cable to the LAN socket located on the device's panel and attach it to the network.



### 4. Connect RS485 (option)

When users would like to apply a camera with P/T/Z function, they usually need to connect their communication port (for camera control) through RS485. After RS-485 was correctly connected to D+ and D-, the remote users could control the camera movement through Internet.

### 5. Connect an external power supply to Video Server

Connect an external power supply to the 12VDC power in connector of the Video Server. Note: Use the power adapter, 12VDC, included in the package and connect the other end to wall outlet for AC power.

Once you have installed the Video Server well, the status LED will turn orange. It means the system is booting up successfully. Furthermore, if you have a proper network connection, and access to the Video Server, the LED will flash green



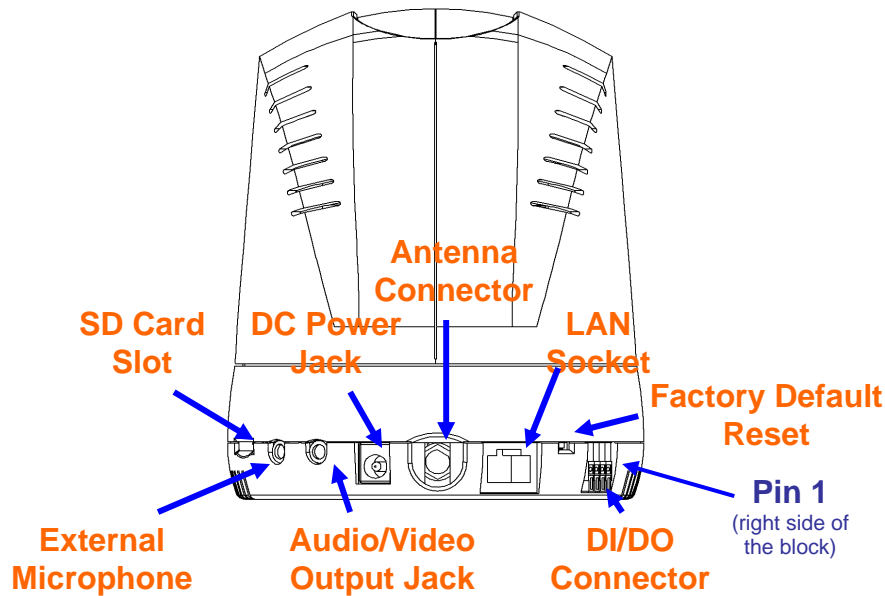
### 6. Connect the DC power to one external camera from Video Server (option)

The Video Server can provide 12VDC out to supply one external camera. **Note** that the output current is 400mA maximum.

7. Done



## 2.5 PTZ Camera



### SD Card Slot

User can insert a micro-SD card into this slot for event recording.

### External Microphone

External MIC can attach into audio-in Jack.

### Audio/Video Output Jack

Audio/Video-out Jack allows this device to output audio and video signal. Use the attached A/V cable to connect A/V device where white cable is for audio and yellow cable is for video.

### DC Power Jack

The input power is 12VDC. **Note** that supply the power to the Camera with the power adapter included in package. Otherwise, the improper power adapter may damage the unit and result in danger.

### Antenna Connector (for wireless model only)

User can attach the included antenna to this connector (SMA type) or use another high-gain antenna to get higher performance.

### LAN Socket

The LAN socket is a RJ-45 connector for connections to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-Way protocol can detect or negotiate the transmission speed of the network automatically. Please use Category 5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub.

### Factory Default Reset

This button is hidden in the pinhole. It is used to restore the all factory default settings. Sometimes restarting the device will make the system back to a normal state. However, if the system still got problems after restart, user can restore the factory default settings and install it again.

**Restore the device:**

1. Insert the paper clip or other suitable tool to press and hold the button down continuously.
2. Hold it at least 5 seconds and release the tool. Then the device has been restored to default settings and reboot again.

**Note:** Restoring the factory default setting will lose the all previous settings included IP address forever. User needs to run the IPWizard II program to search the device and configure it to let the device work properly again.

### **DI/DO Connector**

The Camera provides a terminal block with 4 pins of connectors for DI and DO. Please refer to the Appendix A in this manual for more information. The pin 1 is located at the right side of terminal block from rear view.

## **Installation: Ceiling Mount**

1. Fix the camera to L-type bracket with the two supplied screws



2. Fix the bracket and camera to the ceiling using two holly wall anchors and screws

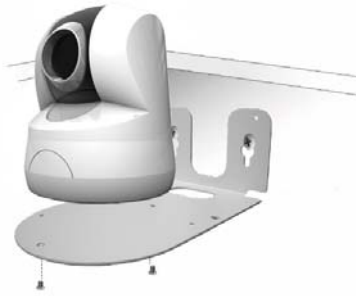


## **Wall Mount**

1. Fix the L-type bracket to the wall using two holly wall anchors and screws



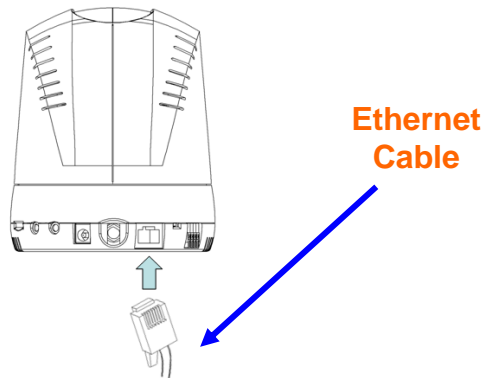
## 2. Fix the camera to L-type bracket with the two supplied screws



## Cabling

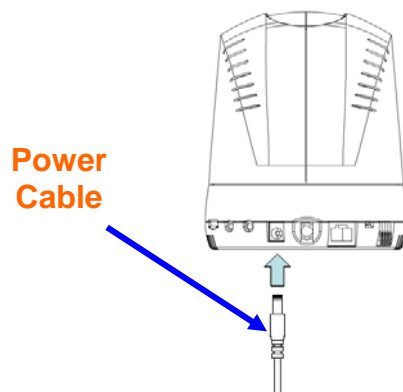
### 1. Plug an Ethernet cable into the Camera

Connect an Ethernet cable to the LAN socket located on the camera's rear side and attach it to the network.



### 2. Connect the external power supply to Camera

Connect the attached power adapter to the DC power jack of the camera. **Note:** Use the power adapter, 12VDC, included in the package and connect it to wall outlet for AC power.



Once you have installed the camera well and powered it on, the power LED will turn on later. The power LED (orange color) turned on, it means the system is booting up successfully. Furthermore, if you have a proper network connection, and access to the camera, the LED will flash blue under wired mode.

### 3. Camera administration

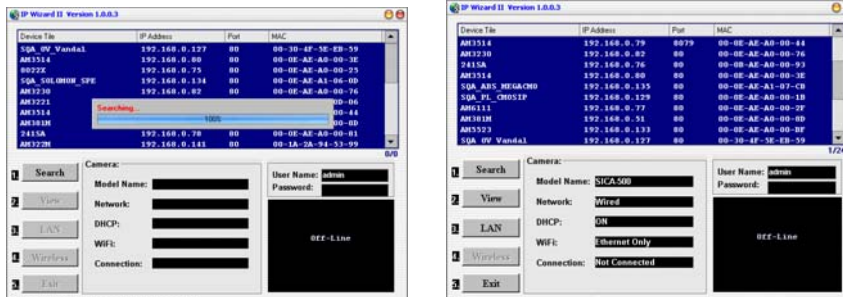
When you installed your networked device over your network environment, to start Network Camera web configuration, you must have the web browsers installed on computer for web management.

- Microsoft internet Explorer 6.0 or higher

At first, user may use “IP Wizard II” utility to search all networked devices in the LAN.

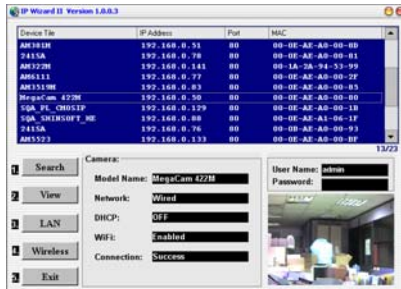
#### Use “IP Wizard II” to locate IP address

Press “**Search**” button. IP Wizard II will list all networked devices in the LAN:



#### View function:

If IP Wizard II finds network devices, **View** button will be available. Please select the device you want to view and click the **View** button. Furthermore you could double click the left button of mouse to link to the network device by browser.



#### LAN setting function:

The utility featured with “**LAN**” setting function to help user to modify the IP parameters of the installed network devices. User can step by step to setup IP address, username and password.



**Note 1:** If no IP address is assigned within 30 seconds, the networked device will automatically assign 192.168.0.100. User may now open your web browser, and key in <http://192.168.0.100> in the address bar of you web browser to logon Network Camera's web configuration page.

**Note 2:** Power Line Frequency

- If you found the video image is flash, you may need to choose 50 or 60 Hz frequency (depends on country).
- World wide power line frequency table is inside user's manual, Appendix

**Note 3:** If you have problem when connecting the network camera to a router, please read user's manual inside CD, the section "Installation to a router".

After connected to networked device, the device will prompt for User name and Password. For the first time, please enter: **admin** as username and no password to continue Web Management.



If difficulty is met, please refer to the following steps to establish the connection:

- The networked device must be installed and powered ON.
- If the networked device's default IP Address (**192.168.0.100**) is already used by another device, the other device must be turned OFF until the device is allocated a new IP Address during configuration.

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