

IP Surveillance Products

IVS-110 / ICA-310 / ICA-312 / ICA-350 / ICA-525 /

ICA-530 / ICA-601 / ICA-651

Quick Installation Guide

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Chapter 1. Introduction

Thank you for purchasing the IP surveillance product. It is versatile and high image solution of the perfect indoor / outdoor surveillance application. The IP surveillance state-of-art design is considerable to fit in various network environments.

1.1 Before Installation

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

This QIG includes the following chapter:

- Chapter2. IVS-110 – 1-Channel Internet Video Server
- Chapter3. ICA-310 – 30M Infrared Internet Camera
- Chapter4. ICA-312 – 25M Infrared Internet Camera
- Chapter5. ICA-350 – 30M Infrared Internet Camera
- Chapter6. ICA-525 – 20M IR Vandal Proof Dome Internet Camera
- Chapter7. ICA-530 – 15M IR Dome Internet Camera
- Chapter8. Initial Utility Installation and operation
- Chapter9. Cam Viewer Installation
- Appendix A: Feature Listing for Cam Viewer
- Appendix B: Suggest Hardware / System Requirement

1.2 System Requirements for Viewer

Network Interface	10/100MBase-TX Ethernet
Monitoring System	Recommended for Internet Explorer 6.0 or later
System Hardware	<ul style="list-style-type: none">• CPU: Pentium 4, 1.5GHz or above• Memory Size: 512 MB (512 MB or above Recommended)• VGA card resolution: 1024 x 768 or above• Sound Card: Necessary• Network bandwidth: In VGA resolution mode, minimum upload bandwidth is 1Mbps.

Chapter 2. IVS-110 – 1-Channel Internet Video Server

2.1 Package Content

IVS-110 x 1

Power Adapter x 1

Power Cable x 1

CD Disk x 1

Quick Installation Guide x 1

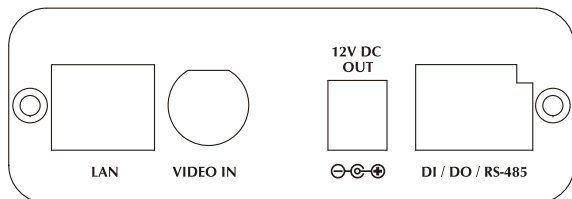


Note

1. If any of the above items are missing, please contact your dealer immediately.
2. Using a power supply with a different voltage than the one included with the IVS-110 will cause damage and void the warranty for IVS-110.

2.2 Physical Installation

2.2.1 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 “straight through” cable to connect the IVS-110 to a 100Mbps Fast Ethernet network switch or hub. The LAN socket is compliant with IEEE802.3af standard PoE interface.



Note

1. If you need to connect the IVS-110 to PC or notebook directly, you should use cross over cable instead.
2. PoE and DC adapter only can select one of them

Video-in Jack

You can install an analog camera and connect it to video-in jack.

12V DC-Out Jack

The output power is 12V DC. This is used to supply 12V DC power to one external camera. The output power is 12V DC, 400mA maximum. The output power still supplies 12 V DC, 400mA power to one external, when the IVS-110 obtains power from PoE switch.

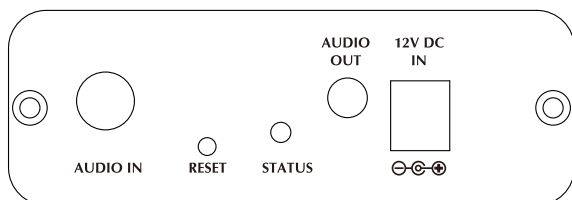
DI/DO/RS-485 Connector

This IVS-110 provides a general I/O terminal block with one digital input and one output for device control. It has 6 Pins that from left to right that are 12V DC power supply (50mA maximum), Alarm Input, GND, Alarm Output, D+ terminal of RS-485 and D- terminal of RS-485.



The RS-485 of IVS-110 is master that can control external scanner or PT camera.

2.2.2 Back Panel



Audio-in Jack

Audio-in (line level) jack allows any device that could input audio.

Reset Button

This button is hidden in the pinhole. Please refer to the Appendix A in manual for more information.

Status LED

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 on access the IVS-110.

Audio-Out Jack

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

12V DC-in Jack

The input power is 12V DC.



Note

Only use the power adapter supplied with IVS-110. Otherwise, the product may be damaged.

2.2.3 Installation Steps

1. Attach video source to IVS-110

To use IVS-110, user must supply video source to IVS-110. Connect the BNC terminal of camera to the IVS-110's video input and make sure to power on camera first.

2. Attach Audio source to IVS-110 (option)

If user needs not only video stream but also audio stream, then the audio source should be attached to IVS-110. Connect the RCA terminal of audio device's line output to the IVS-110's RCA input and make sure to power on your camera or audio device first.

3. Plug an Ethernet cable into IVS-110

Connect an Ethernet cable to the LAN socket located on the IVS-110's panel and attach it to the network. If there has a PoE switch in your network, you can connect the IVS-110 LAN cable to this PoE switch to obtain power. The power adapter is unnecessary when IVS-110 is connected to a PoE switch.

4. Connect RS-485 (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 RS-485. After RS-485 was correctly connected to D+ and D-, the remote users could control the camera movement through internet.

5. Connect the external power supply to IVS-110

Plug in power adapter and connect to power source. If there has a PoE switch in your network, you can connect the IVS-110 LAN cable to this PoE switch to obtain power. The power adapter is unnecessary when IVS-110 is connected to a PoE switch. After power on, IVS-110 will start to operate. Once you have installed the IVS-110 well, the status LED will turn green. It means the system is booting up successfully. Furthermore, if you have a proper network connection, and access to the IVS-110, the LED will flash green.

6. Connect the power supply to one external camera (option)

The IVS-110 can provide 12V DC out to supply one external camera. The output current is 400mA maximum.

Chapter 3. ICA-310 – 30M Infrared Internet Camera

3.1 Package Content

ICA-310 x 1

Power Adapter x 1

Wall Mount Accessories x 1

CD Disk x 1

Quick Installation Guide x 1



Note

1. if any of the above items are missing, please contact your dealer immediately.
2. Using a power supply with a different voltage than the one included with the ICA-310 will cause damage and void the warranty for ICA-310.

3.2 Physical Installation

1. Connect an Ethernet cable

Connect the LAN cable on the ICA-310 to the network device (hub or switch).



Note

In case you need to connect the device to PC or notebook directly, you should use cross over cable instead.

2. Connect the power source

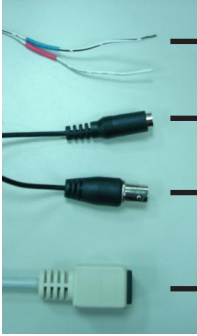
Please connect the provided power adapter to ICA-310 power connector and connect the power plug to power outlet. If there is 802.3af PoE switch in your network, you can connect the ICA-310 LAN cable to this PoE switch to obtain power. The power adapter is unnecessary when ICA-310 is connected to a PoE switch.



Note

PoE and DC adapter only can select one of them

3. Identification of ICA-310 cables



- RS485 cables (Blue: D+ / Red: D-) - To connect to P/T scanner.
- Power Connector – Connect to DC 12V power adapter.
- BNC connector – For analog video output.
- RJ-45 Connector – For connect a CAT5 cable to hub or switch.



Note

The RS-485 of ICA-310 is master that can control external scanner.

Chapter 4. ICA-312 – 25M Infrared Internet Camera

4.1 Package Content

ICA-312 x 1

Power Adapter x 1

Wall Mount Accessories x 1

CD Disk x 1

Quick Installation Guide x 1

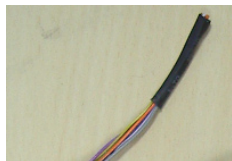


Note

1. if any of the above items are missing, please contact your dealer immediately.
2. Using a power supply with a different voltage than the one included with the ICA-312 will cause damage and void the warranty for ICA-312.

4.2 Physical Details

Identification of ICA-312 cables



RS-485 & DI/DO:

Connect RS-485 to external scanner and connect to sensor in and alarm out devices.

NOTE: The RS-485 of ICA-312 is master that can control external scanner.

Cable for I/O connectors:

Name	Cable Color	Function
12VDC	Gray	DC 12V (50mA maximum)
GND	Light purple	GND
D+	Yellow	RS485 data +
D-	Orange	RS485 data -
DI	Stripe purple	Digital signal input
DO	Dark purple	Digital signal output



Local Video output (BNC port):

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.

**DC-in Jack:**

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

**RJ45 LAN socket:**

Connect to PC or Hub/Switch. For connect 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 "straight through" cable to connect the ICA-312 to a 100Mbps Fast Ethernet network switch or hub.

**Line out (audio out):**

Connect a loud speaker to the ICA-312. This function is for voice alerting and two-way audio.

**Line in (audio in):**

Connect an audio input source to the ICA-312.

4.3 Hardware Installation

1. Fix ICA-312 to the location with wall mount fixture.
2. Plug-in Ethernet Cable into RJ-45 LAN port. Connect an Ethernet cable to the LAN port on the ICA-312 and connect the other side of the Ethernet cable to a hub/switch.
3. Connect the attached two power adapters to camera and plug-in this two adapters into power outlet.
4. Connect Video BNC connector to a local TV monitor or DVR if necessary.
5. Done.

Chapter 5. ICA-350 – 30M Infrared Internet Camera

5.1 Package Content

ICA-350 x 1

Power Adapter x 2 (one for ICA-350, another for heater)

Wall Mount Accessories x 1

CD Disk x 1

Quick Installation Guide x 1



Note

1. if any of the above items are missing, please contact your dealer immediately.
2. Using a power supply with a different voltage than the one included with the ICA-350 will cause damage and void the warranty for ICA-350.

5.2 Physical Details

Identification of ICA-350 cables



Video Output Connector (BNC port)

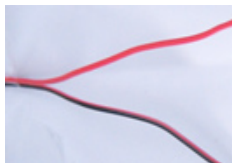
The ICA-350 also provides composite video output. User can use BNC video cable to connect the ICA-350 with a TV monitor or DVR.



Power Connector (for ICA-350)

The input power is 12VDC. It supply two adapters that one for heater and the other for camera.

NOTE: Supplies the power to the ICA-350 with the power adapter included in package.



RS-485 (Black: D- / Red: D+)

Connect to a Pan/Tilt scanner unit.

This connector is built inside the ICA-350 housing.

NOTE: The RS-485 of ICA-350 is master that can control external scanner.



Line in (audio in) *hardware version 2

Connect an audio input source to the ICA-350.



RJ-45 LAN Connector

For connect a LAN cable to your Hub/Switch.

The LAN port 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 "straight" cable to connect the ICA-350 to a 100Mbps Fast Ethernet network switch or hub.

NOTE: In case you need to connect the device to PC or notebook directly, you should use a cross-over cable instead.



Power Connector (for heater)

Connect to DC 12V power adapter.



Line out (audio out) *hardware version 2

Connect a loud speaker to the ICA-350. This function is for voice alerting and two-way audio.

5.3 Hardware Installation

1. Fix ICA-350 to the location with wall mount fixture.
2. Plug-in Ethernet Cable into RJ-45 LAN port. Connect an Ethernet cable to the LAN port on the ICA-350 and connect the other side of the Ethernet cable to a hub/switch.
3. Connect the attached two power adapters to camera and plug-in this two adapters into power outlet.
4. Connect Video BNC connector to a local TV monitor or DVR if necessary.
5. Done.

Chapter 6. ICA-525 – 20M IR Vandal Proof Dome Internet Camera

6.1 Package Content

ICA-525 x 1

Power Adapter x 1

Screws x 4

Telephone box x 1

L-Wrench x 1

CD Disk x 1

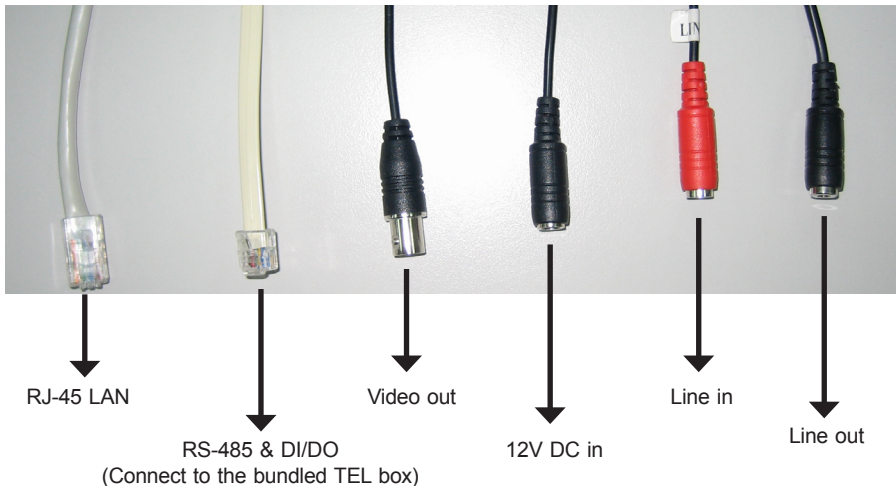
Quick Installation Guide x 1



Note

1. if any of the above items are missing, please contact your dealer immediately.
2. Using a power supply with a different voltage than the one included with the ICA-525 will cause damage and void the warranty for ICA-525.

6.2 Identification of Cables



1. **RJ-45 LAN socket:** Connect to PC or Hub/Switch. For connect 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 "straight through" cable to connect the ICA-525 to a 100Mbps Fast Ethernet network switch or hub.

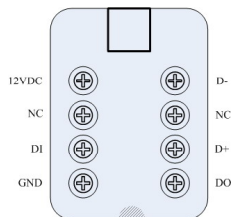


In case you need to connect the device to PC or notebook directly, you should use cross over cable instead.

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

Inside the TEL box:

Name	Function
12VDC	DC 12V output (50mA maximum)
GND	GND
D+	RS485 data +
D-	RS485 data -
DI	Digital signal input
DO	Digital signal output



The RS-485 of ICA-525 is master that can control external scanner.

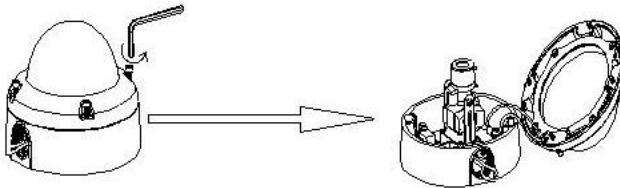
3. **Local Video output (BNC port):** The Network Camera also provides composite video output. User can use BNC video cable to connect the Network Camera with a TV monitor or VCR.
4. **DC-in Jack:** The input power is 12VDC. Note that supply the power to the Network Camera with standard power adapter included in package. Otherwise, the improper power adapter may damage the unit and result in danger.
5. **Line in (audio in):** Connect an audio input source to the ICA-525.
6. **Line out (audio out):** Connect a loud speaker to the ICA-525. This function is for voice alerting and two-way audio.

6.3 Physical Installation

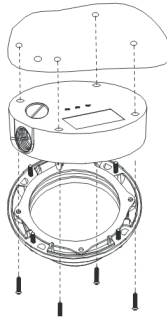
1. Use the provided L-wrench, loosen the tamper-resistant housing cover (with screws still attached on the cover). The unit has factory installed side conduit entry and one may adjust the cables to back conduit entry according to installation requirement.



During the installation, please take care and avoid crash. That may cause people hurt and this device damage.



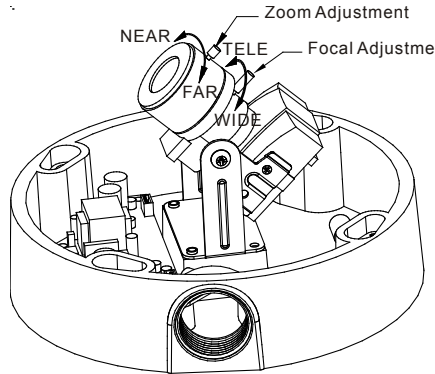
2. Set the mounting base onto the wall or ceiling and center it over the mounting hole, using the supplied four retaining screws to secure the main body.



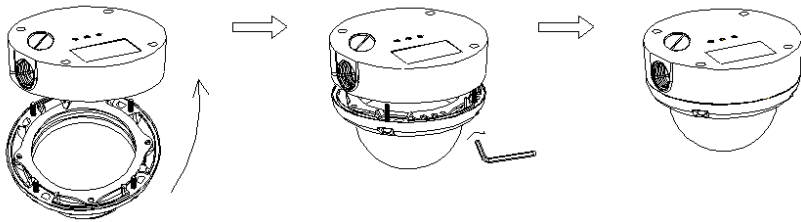
3. Set the proper image by moving the camera body and set the focus by turning the lens to left or right direction.



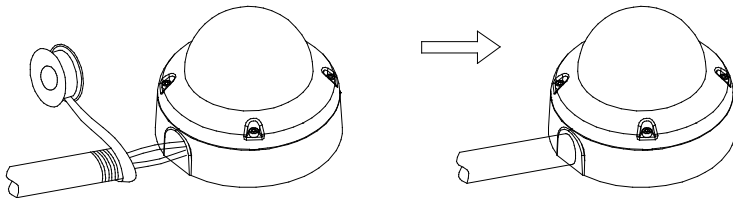
1. Vari-Focal Dome Operation Guide: Once the picture appears on the monitor, open the cover and adjust the lens wrench to "NEAR ↔ FAR", get the view zoom that you desire, and then adjust the focus wrench of the lens to obtain the best picture. After adjustment, tighten both wrenches.
2. You may power on the ICA-525 and connect it to a monitor template for adjust the image.
3. During adjust focus, please take cares that don't touch, collision and knock sensor.



4. When the ICA-525 focus adjustment has been completed, use the provided L-wrench to fasten the tamper-resistant housing to the main body.



5. When using the side conduit cabling, it is suggested to cover the cables using metal covers (to prevent external damage and for waterproof prevention), and wined the waterproof adhesive type onto the metal cover before installation.



6. Connect the LAN cable to Ethernet's switch or hub and the DC-Jack to the power source. The video output to monitor or other video through a 75 Ohms type coaxial cable if you will use BNC cable.

7. Done

Chapter 7. ICA-530 – 15M IR Dome Internet Camera

7.1 Package Content

ICA-530 x 1

Power Adapter x 1

Wrench x 1

Telephone box x 1

CD Disk x 1

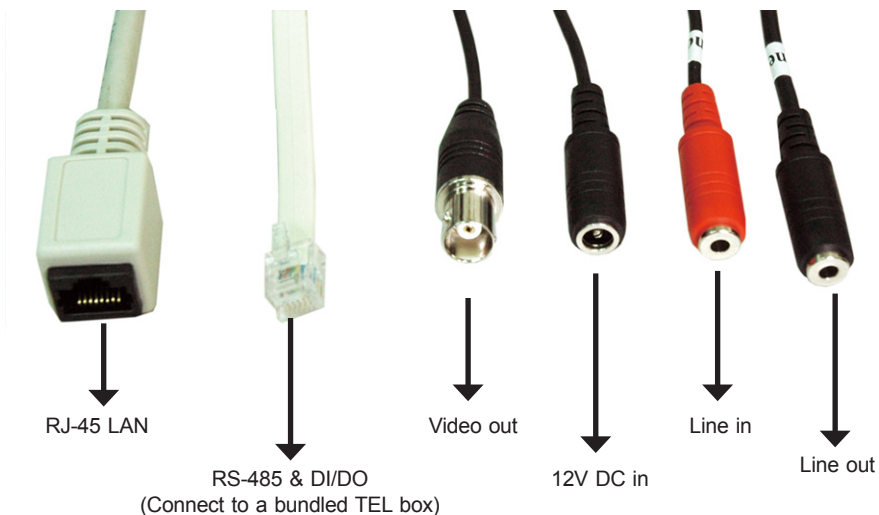
Quick Installation Guide x 1



Note

1. if any of the above items are missing, please contact your dealer immediately.
2. Using a power supply with a different voltage than the one included with the ICA-530 will cause damage and void the warranty for ICA-530.

7.2 Identification of Cables



1. **RJ45 LAN socket:** Connect to PC or Hub/Switch. For connect 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 "straight through" cable to connect the ICA-530 to a 100Mbps Fast Ethernet network switch or hub.



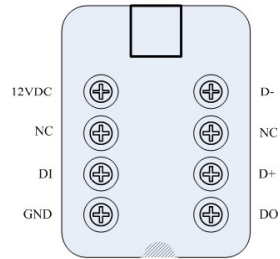
Note

In case you need to connect the device to PC or notebook directly, you should use cross over cable instead.

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

Inside the TEL box:

Name	Function
12VDC	DC 12V output (50mA maximum)
GND	GND
D+	RS485 data +
D-	RS485 data -
DI	Digital signal input
DO	Digital signal output



Note

The RS-485 of ICA-530 is master that can control external scanner




- 3. Local Video output (BNC port):** 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. DC-in Jack:** The input power is 12VDC. Note that supply the power to the Network Camera with standard power adapter included in package. Otherwise, the improper power adapter may damage the unit and result in danger.
- 5. Line in (audio in):** Connect an audio input source to the ICA-530.
- 6. Line out (audio out):** Connect a loud speaker to the ICA-530. This function is for voice alerting and two-way audio.

7.3 Physical Installation

1. Drill 20mm (3/4") holes in the ceiling or wall and then align the mounting plate to the holes you have made as below.

Ceiling Top Plate	Directly install on any horizontal or vertical surface
	

2. Camera Adjustment:

Tilting View	Rotating View	Panning View
Angle range is 0°~90°	Angle range is 0°~180°	Angle range is 0°~180°
		

3. Connect the necessary cables and connectors, for examples, Ethernet cable and power jack.

4. Done.

Chapter 8. IP Wizard Installation and operation

This chapter shows how to quick set up your IP surveillance product. The IP surveillance product is with the default settings. However to help you find the networked camera quickly the windows utility-IP Wizard can search the cameras in the network that shall help you to configure some basic setting before you started advanced management and monitoring.

8.1 IP Wizard Installation



Note

In the installation steps below, this guide use ICA-310 as the example. However, the steps for ICA-312/350/525/530 & IVS-110 are similar.

1. Insert the bundled CD into the CD-ROM drive to launch the autorun program. Once completed, a welcome menu screen will appear.
2. Click the "IPwizard Utility" hyperlink; you will see the InstallShield Wizard dialog box as below.



Note

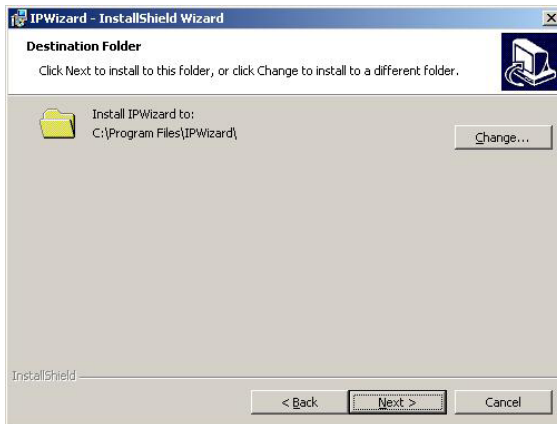
If the welcome screen does not appear, click "Start" at the taskbar. Then, select "Run" and type "D:\Utility\setup.exe", assume D is your CD-ROM drive.



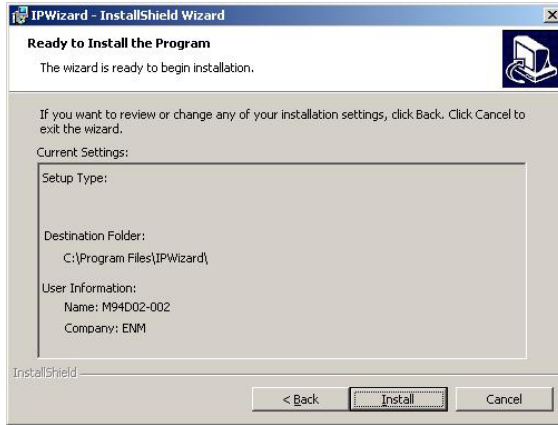
3. The "Welcome to the InstallShield Wizard for IPWizard" will display on the screen and click "Next" to continue.



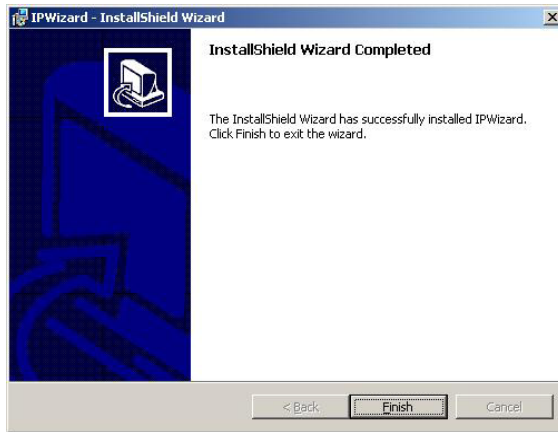
4. Please click "Next" to install with original settings, or you may click "Change..." button to modify the install folder then press "Next" to continue.



5. Please click "Install" to start the installation



6. Please click "Finish" to complete the installation



7. Please double-click the utility icon  on the desktop then you will see the utility.

8. Press "Search" button. IP Wizard will list all IP Cameras in your LAN environment:

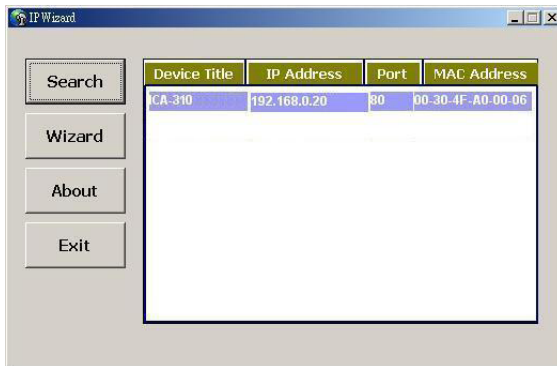


Note

Please connect your camera or video server to PC directly, and use IP Wizard to search IP address of device, when you use device at first time or forget IP address.

8.2 Wizard function

Please select your device and press "Wizard". The utility featured of "Wizard" function to help user to initial device. User can setup IP address, username and password step by step.



Please enter User Name and Password. Default Username is: **admin**, leave password blank. Then click "Submit".



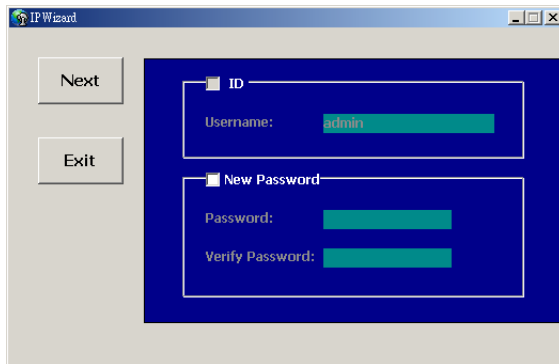
8.3 Username and Password

You may change the ID and assign a new password to your device or keep the original and press "Next" to continue.

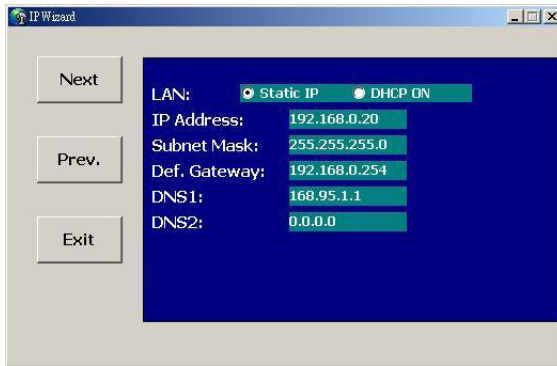


Note

If you assign new password to your device, please write down and avoid forgetting it.



You can select "Static IP" and enter the IP settings. Or select "DHCP ON" when there is a DHCP server in your network.



Note

If no IP address is assigned after 30 seconds, Internet Camera will use its default address 192.168.0.20.

User may open the web browser, and key in the IP address (for example: <http://192.168.0.20>, the default IP address) in the address field to login web configuration page and refer to the User's manual in the bundled CD disk for more configuration.

Chapter 9. Cam Viewer Installation



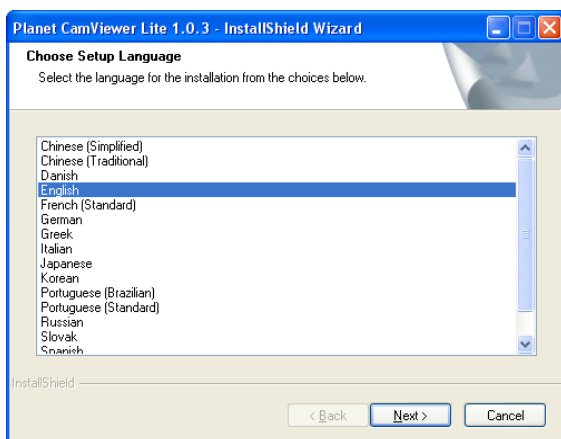
The Cam Viewer Pro 30 days trial version installation steps are similar. Below is the installation of Cam Viewer Lite.

1. Insert the bundled Cam Viewer CD disk into the CD-ROM drive to launch the autorun program. Once completed, a welcome menu screen will appear. Click the "Cam Viewer Lite" hyperlink, the below InstallShield Wizard dialog box will appear.

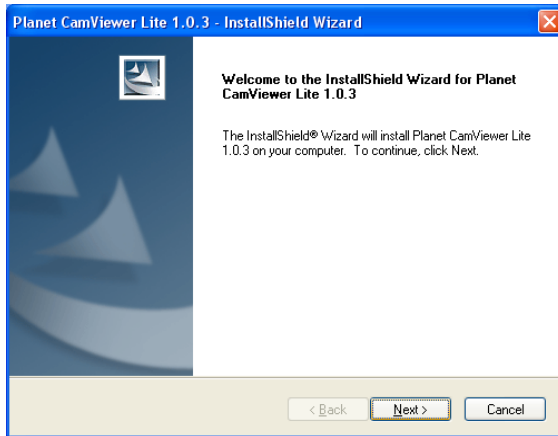


If the welcome screen does not appear, click "Start" at the taskbar. Then, select "Run" and type "D:\Cam Viewer Lite\setup.exe", assume "D" is your CD-ROM drive.

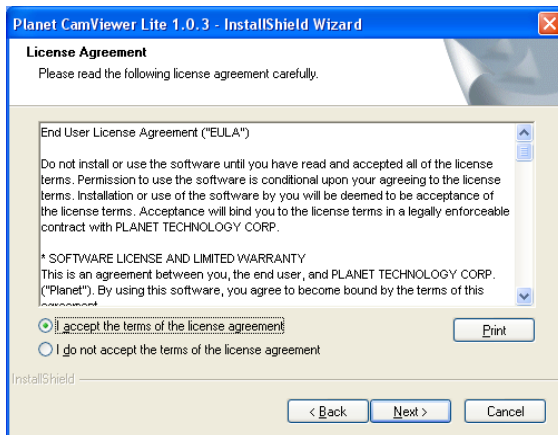
2. Selects the language which you want, Cam Viewer is current including fifteen languages. Please select one of the languages and click "Next" to continue.



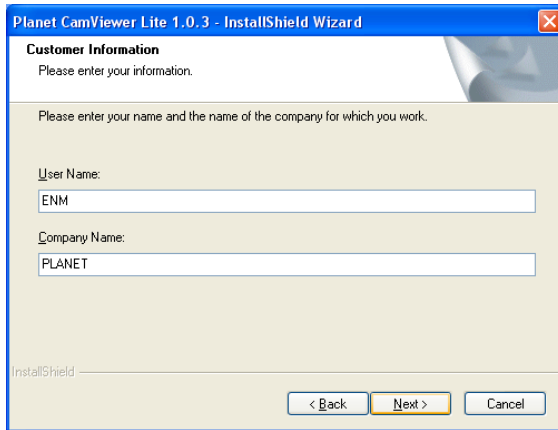
3. The "Welcome to the InstallShield Wizard for Planet Cam Viewer Lite 1.0.3" will display on the screen, please click "Next".



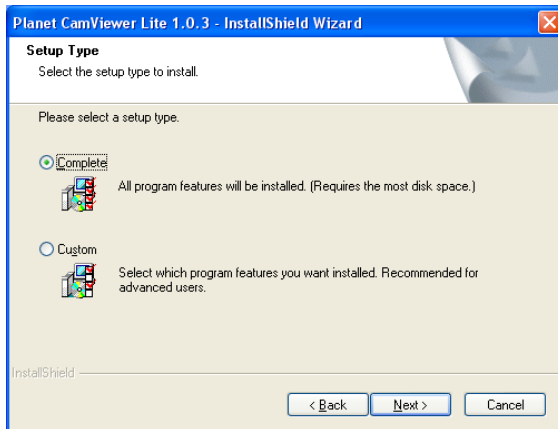
4. Please read the license agreement and then check "I accept the terms of the license agreement" if you are agreed and click "Next" to continue the installation



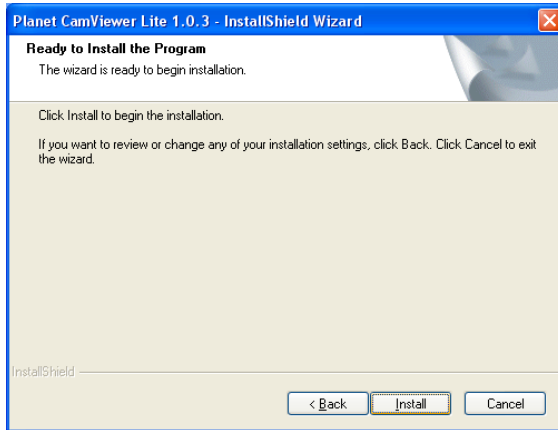
5. Please key in user name and company name for which you want and click "Next" to continue installation.



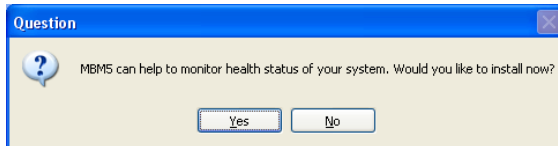
6. Check the option "Complete" – all program features will be installed (Requires the most disk space) and click "Next" to continue installation



7. "Ready to Install the Program" will appear to prompt you to start the installation. Please click "Install" to start.



8. Please click "No" to finish the Cam Viewer Lite installation.



Note

In above step, when Cam Viewer works with MBM5 (Motherboard Monitor 5), Cam Viewer will display CPU temperature and fan speed. Please click "Yes" if you need this function and refer to the manual of Cam Viewer CD disk for complete installation.

Appendix A: Feature Listing for Cam Viewer

Software Version	Cam Viewer Lite	Cam Viewer Pro
IP Camera Input	32	4 / 8 / 16 / 32 / 64
Dual Monitor	-	√
Smart Guard	-	√
I/O Device	√	√
Hotline	-	√
Address Book	-	√
Log Viewer	Unusual event System log	Unusual event System log Counting application
Counting Application	-	2 way counting
Remote Playback Server	-	Unlimited
Concurrent Playback	1 Channel	16 Channels
Counting Function	-	√
Smart Search	General Motion	General Motion Missing Object Foreign Object Lose Focus Camera Occlusion
Remote Live Viewer	1 Channel	16 Channel

Appendix B: Suggest Hardware / System Requirement

Total FPS	~600	600~480	480~240	240~120	120~
CPU	Intel Core 2 Duo QX6800	Intel Core 2 Duo E6600	Intel Pentium D 930	Intel P4 3.0 GHz	Intel P4 2.8 GHz
RAM	4 GB	2 GB	2 GB	1 GB	1 GB
Chipset of Motherboard	Intel 946 or 965 chip, Intel Chipset recommended				
VGA Card	ATI Radeon 9200, nVIDIA GeForce FX-5200, Intel 945/965 or above (ATI recommended)				
Ethernet	100 Base-TX or Above, Gigabit LAN recommended				
Hard Disk	160 GB or above				
O.S.	Windows 2000 / XP / 2003				

Total FPS: Means all the cameras will spend how many frames when this software works. Suppose there are 10 cameras, each one will work with 30fps; the total fps should be 300fps.

Ordering Information for Cam Viewer Pro

Model	Description
CVP-4	4-Channel Cam Viewer Professional
CVP-8	8-Channel Cam Viewer Professional
CVP-16	16-Channel Cam Viewer Professional
CVP-32	32-Channel Cam Viewer Professional
CVP-64	64-Channel Cam Viewer Professional

Further Configuration

If you want to configure more detail settings of ICA-310, ICA-312, ICA-350, ICA525, ICA-530 and IVS-110, please refer to the user manual in the CD disk.