

H.264 Internet Camera

ICA-HM230 / ICA-H312 / ICA-H651 / ICA-HM130 /

ICA-HM135 / ICA-HM350

Quick Installation Guide

Version 1.0

Table of Contents

Chapter 1. Introduction	3
1.1 Before Installation.....	3
1.2 System Requirements	3
Chapter 2. Physical Description and Installation.....	4
2.1 ICA-HM230 H.264 Mega-Pixel CMOS Pan/Tilt Internet Camera.....	4
2.1.1 ICA-HM230 Package Content.....	4
2.1.2 ICA-HM230 Physical Details.....	4
2.1.3 ICA-HM230 Installation	5
2.2 ICA-H312 H.264 25-Meter IR Internet Camera.....	6
2.2.1 ICA-H312 Package Content	6
2.2.2 ICA-H312 Physical Details.....	7
2.2.3 ICA-H312 Installation	8
2.3 ICA-H651 H.264 Outdoor Speed Dome Internet Camera	9
2.3.1 ICA-H651 Package Content	9
2.3.2 ICA-H651 Physical Details	9
2.3.3 ICA-H651 Installation	10
2.4 ICA-HM130 H.264 Mega-Pixel Dome Internet Camera	12
2.4.1 ICA-HM130 Package Content.....	12
2.4.2 ICA-HM130 Physical Details.....	12
2.4.3 ICA-HM130 Installation	14
2.5 ICA-HM135 H.264 Mega-Pixel 20M IR Vandal Proof IP Dome	15
2.5.1 ICA-HM135 Package Content.....	15
2.5.2 ICA-HM135 Physical Details.....	15
2.5.3 ICA-HM135 Installation	17
2.6 ICA-HM350 H.264 Mega-Pixel 30M Outdoor IR Internet Camera	19
2.6.1 ICA-HM350 Package Content.....	19
2.6.2 ICA-HM350 Physical Details.....	19
2.6.3 ICA-HM350 Installation	21
Chapter 3. Camera Windows Utility	22
Further Information	24

Chapter 1. Introduction

Thank you for purchasing the PLANET H.264 IP Camera. It is versatile and high image solution of surveillance application for day and night. The Pan/Tilt IP Camera is also a stand-alone camera system with a built-in processor and web server that provides highest quality video and system performance.

The PLANET IP Camera support Multi-Profile function can stands for simultaneously video streams. These Network Cameras can generate H.264, MPEG-4 and M-JPEG streaming simultaneously to different clients. Moreover, the resolution can be different from one client to another. This 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 guide shows how to quick set up the three cameras, unless model name specified terms "IP Camera" will be used for these three models.

1.2 System Requirements

CPU	Intel® Pentium 4 3.0GHz with Hyper-threading
RAM	1GB
Video RAM	128MB
Display Chip (recommanded)	nVIDIA GeForce 8500GT ATI Radeon HD 4350
Display Resolution	1024 x 768 24bits
Operating System	Windows 2000 SP4 / Windows XP Pro SP2 / Windows 2003 / Vista
DirectX	9.0c or above
Required space for installation	100MB
Recommended HD free space	160GB
Network	Wired Ethernet 100Base-TX

Chapter 2. Physical Description and Installation

2.1 ICA-HM230 H.264 Mega-Pixel CMOS Pan/Tilt Internet Camera

2.1.1 ICA-HM230 Package Content

IP Camera Unit x 1

Power Adapter x 1

Camera Mount Kit x 1

User's Manual CD-ROM x 1

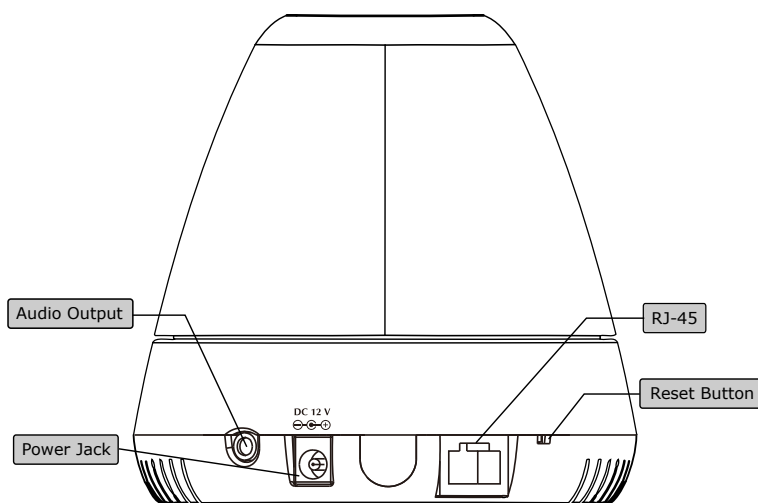
Quick Installation Guide x 1



Note

If any of the above items are missing, please contact your dealer immediately.

2.1.2 ICA-HM230 Physical Details



1. Audio Output

It allows this device to output audio or alerting sound. Connect with a 3.5Ø phone jack speaker (external adaptor).

2. Power Jack

The input power is DC 12V.



1. Only use the power adapter supplied with internet camera. Otherwise, the product may be damaged.
2. The power adapter is unnecessary when internet camera is connected to a PoE switch. Otherwise, the product may be damaged when internet camera is connected to a PoE switch and power adapter simultaneously.

3. RJ-45 LAN Socket

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

4 Factory Default Reset

This button is hidden in the pinhole. Please refer to the user's manual for more information.

2.1.3 ICA-HM230 Installation

Ceiling Mount

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



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



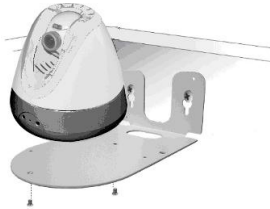
3. Connect the LAN cable to a switch or hub. When this switch/hub is a PoE device, you can ignore the next step.
4. Connect DC-Jack to the with the bundle power adapter power source.
5. Done.

Wall Mount

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



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



3. Connect the LAN cable to a switch or hub. When this switch/hub is a PoE device, you can ignore the next step.
4. Connect DC-Jack to the with the bundle power adapter power source.
5. Done.

2.2 ICA-H312 H.264 25-Meter IR Internet Camera

2.2.1 ICA-H312 Package Content

- IP Camera Unit x 1
- Power Adapter x 1
- Camera Mount Kit x 1
- User's Manual CD-ROM x 1
- Quick Installation Guide x 1

2.2.2 ICA-H312 Physical Details

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 CAT-5 cable to connect the IP camera to a 100Mbps Fast Ethernet network switch or hub.

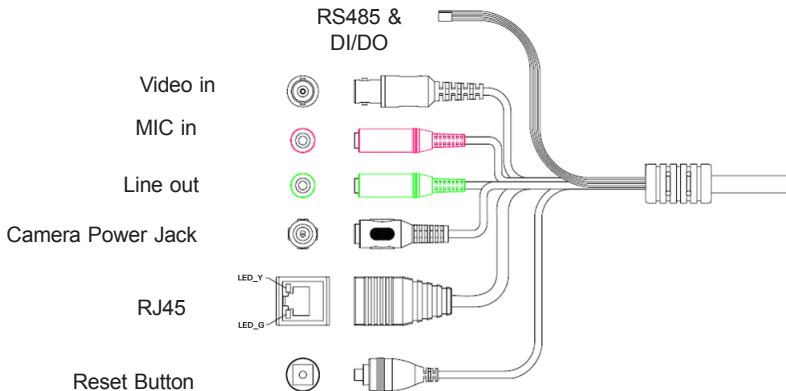
In the LAN socket, there are two LEDs embedded:

LAN LED (green color)

This LED will be flashing while network accessing via Ethernet.

Power LED (orange color)

This LED is used to indicate whether DC power is on or not.



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
DC 12V	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 output

3. Reset Button

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:

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

4. Power Jack

The input power is DC 12V.



1. Only use the power adapter supplied with internet camera. Otherwise, the product may be damaged.
2. The power adapter is unnecessary when internet camera is connected to a PoE switch. Otherwise, the product may be damaged when internet camera is connected to a PoE switch and power adapter simultaneously.

5. MIC in (audio in)

Connect a microphone to the IP camera.

6. Line out (audio out)

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

2.2.3 ICA-H312 Installation

1. Fix IP camera to desired location with stand.
2. Plug-in Ethernet Cable into RJ45 connector (LAN port).
3. Connect the attached power adapter to IP 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 ICA-H651 H.264 Outdoor Speed Dome Internet Camera

2.3.1 ICA-H651 Package Content

IP Camera Unit x 1

Power Adapter x 1

Power Box Wall Mount Kit x 1

Power Box Electric Wire Kit x 1

Camera Bracket Screws Kit x 1

Waterproof Strip x 1

Terminal Block x 2

Video and Audio Cable x 3

Zoom Cable x 1

User's Manual CD-ROM x 1

Quick Installation Guide x 1



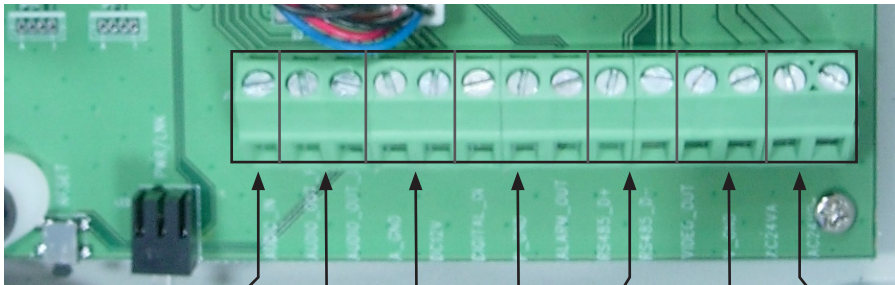
Note

If any of the above items are missing, please contact your dealer immediately.

2.3.2 ICA-H651 Physical Details

1. RJ45 LAN socket: Connect to PC or Hub/Switch.

For 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 CAT-5 cable to connect the IP camera to a 100Mbps Fast Ethernet network switch or hub. The LAN cable is wired well for user's easy installation.



MIC in Line out 12VDC DI / DO RS485 Video Out AC 24V in

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

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

Name	Function
DC 12V	DC 12V (60mA maximum)
GND	GND
D+	RS485 data +
D-	RS485 data -
DI	Digital signal input (Digital In)
DO	Digital signal output (Alarm Out)

3. Local Video output

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

4. AC 24V in

The input power is AC 24V.

5. MIC in (audio in)

Connect a microphone input source to the IP camera.

6. Line out (audio out)

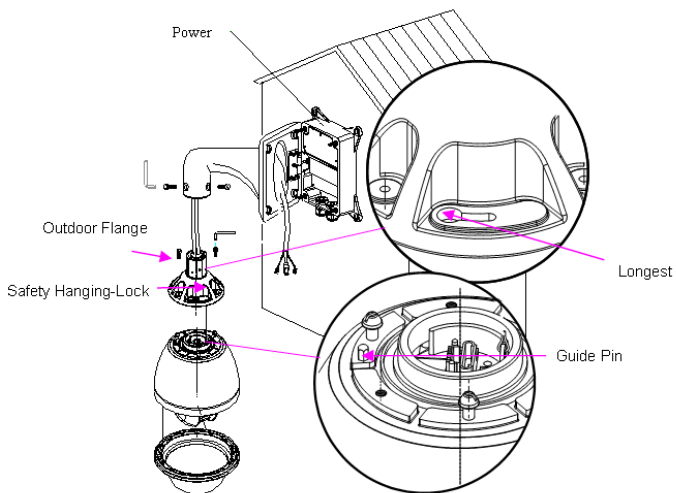
Connect a loud speaker to the IP camera. This function is for voice alerting and two-way audio.

2.3.3 ICA-H651 Installation

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.



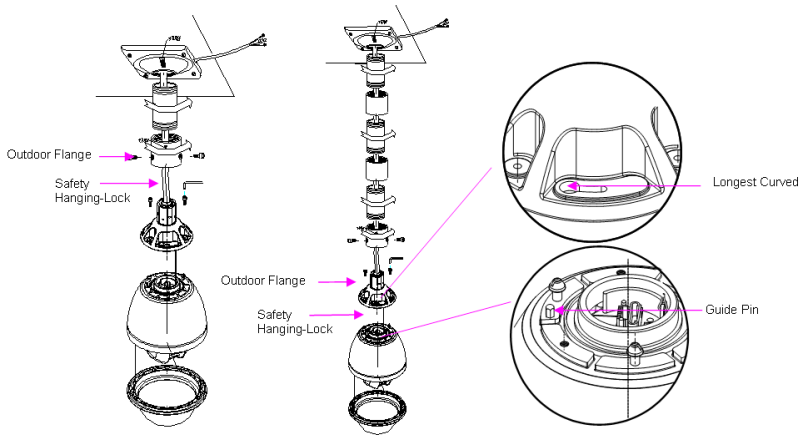
Note

Due to the IP camera is heavy, while installing, be ware of object falling that could injure workers below or damage the IP camera permanently.

Ceiling Mount

1. Disassemble the Outdoor Flange and dome housing with wrench. Mount the dome housing as following.
2. Fix the ceiling bracket and connect it with outdoor flange with screws and wrench. Tighten the screws as following.
3. Connect all the cables as required.

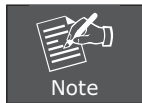
4. Mount the Safety Hanging-Lock of the outdoor flange on the outdoor speed dome. Aim the guide pin of mounting base at the longest curved chute of outdoor flange. Fix the speed dome on the outdoor flange. Tighten the screw as following.



2.4 ICA-HM130 H.264 Mega-Pixel Dome Internet Camera

2.4.1 ICA-HM130 Package Content

- IP Camera Unit x 1
- Power Adapter x 1
- Mount Screw x 4
- User's Manual CD-ROM x 1
- Quick Installation Guide x 1



If any of the above items are missing, please contact your dealer immediately.

2.4.2 ICA-HM130 Physical Details

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 CAT-5 cable to connect the IP camera to a 100Mbps Fast Ethernet network switch or hub.

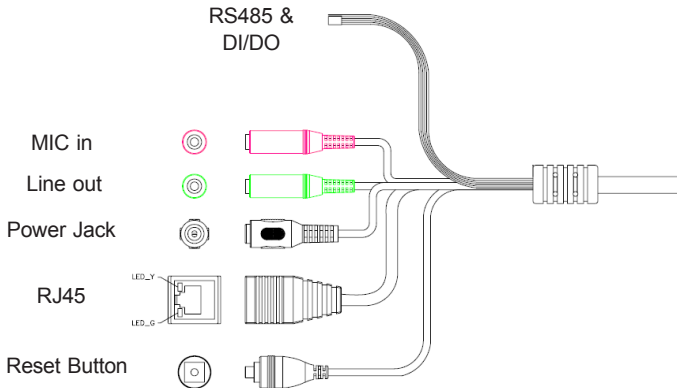
In the LAN socket, there are two LEDs embedded:

LAN LED (green color)

This LED will be flashing while network accessing via Ethernet.

Power LED (orange color)

This LED is used to indicate whether DC power is on or not.



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
DC 12V	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 output

3. Reset Button

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:

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

4. Power Jack

The input power is DC 12V.



Note

1. Only use the power adapter supplied with internet camera. Otherwise, the product may be damaged.
2. The power adapter is unnecessary when internet camera is connected to a PoE switch. Otherwise, the product may be damaged when internet camera is connected to a PoE switch and power adapter simultaneously.

5. MIC in (audio in)

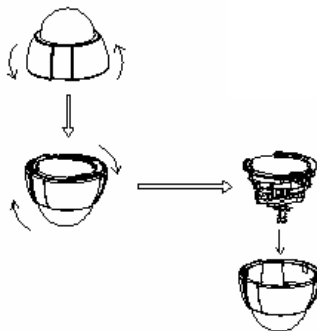
Connect a microphone to the IP camera.

6. Line out (audio out)

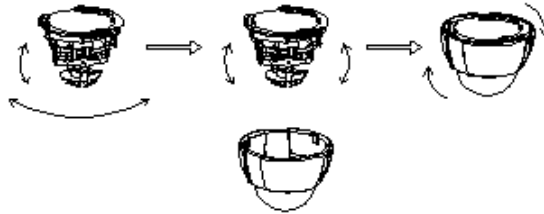
Connect a loud speaker to the IP camera. This is for voice alerting and two-way audio.

2.4.3 ICA-HM130 Installation

1. Please select the most suitable position on the wall or ceiling to install the IP camera.
2. Rotate the dome housing counterclockwise to remove it from the mounting base.
3. Set the mounting base onto the wall or ceiling and center it over the mounting hole, using the two retaining screws for the main body, supplied by the appearance bag.



4. For lens adjustment, move the IP camera body (some model type's limits the PCB board to 180° rotational adjustment) and set the focus by turning the lens to the left or right direction. When the IP camera focus adjustment has been completed, rotate the dome housing clockwise to secure it to the mounting base.



5. Connect the LAN cable to a switch or hub. When this switch/hub is a PoE device, you can ignore the next step.
6. Connect Power Jack to the bundled power adapter.
7. Done.

2.5 ICA-HM135 H.264 Mega-Pixel 20M IR Vandal-Proof IP Dome

2.5.1 ICA-HM135 Package Content

IP Camera Unit x 1

Power Adapter x 1

Mount Screw x 4

User's Manual CD-ROM x 1

Quick Installation Guide x 1



Note

If any of the above items are missing, please contact your dealer immediately.

2.5.2 ICA-HM135 Physical Details

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 CAT-5 cable to connect the IP camera to a 100Mbps Fast Ethernet network switch or hub.

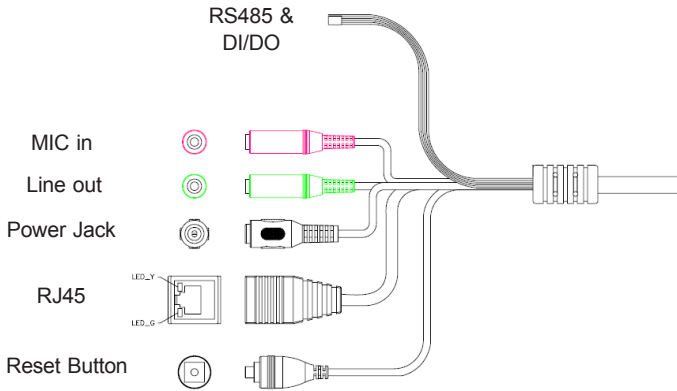
In the LAN socket, there are two LEDs embedded:

LAN LED (green color)

This LED will be flashing while network accessing via Ethernet.

Power LED (orange color)

This LED is used to indicate whether DC power is on or not.



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
DC 12V	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 output

3. Reset Button

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:

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

4. Power Jack

The input power is DC 12V.



1. ONLY use package power adapter supplied with the internet. Otherwise, the product may be damaged.
2. The power adapter is unnecessary when internet camera is connected to a PoE switch. Otherwise, the product may be damaged when internet camera is connected to a PoE switch and power adapter simultaneously.

5. MIC in (audio in)

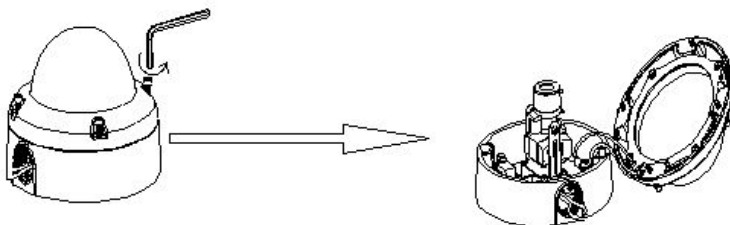
Connect a microphone to the IP camera.

6. Line out (audio out)

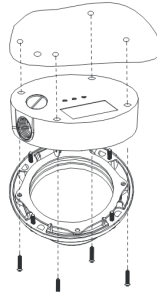
Connect a loud speaker to the IP camera. This is for voice alerting and two-way audio.

2.5.3 ICA-HM135 Installation

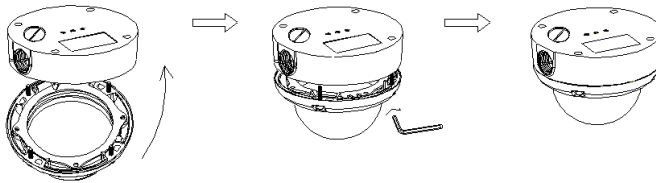
1. Use provided L-wrench loosen the tamper-resistant housing cover (with screws still attached on the cover). The unit has a factory installed side conduit entry and one may adjust the cables to back conduit entry according to installation requirement.



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.

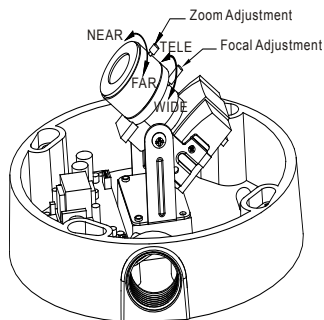


3. Set the proper image by moving the IP camera body (some model may limit the PCB board to 180° rotational adjustment) and set the focus by turning the lens to the left or right direction.
4. When the IP camera focus adjustment has been completed, use the provided L-wrench to fasten the tamper-resistant housing to the main body.



5. Vari-Focal 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.



-
6. Connect the LAN cable to a switch or hub. When this switch/hub is a PoE device, you can ignore the next step.
 7. Connect DC-Jack to the with the bundle power adapter power source.
 8. Done.

2.6 ICA-HM350 H.264 Mega-Pixel 30M Outdoor IR Internet Camera

2.6.1 ICA-HM350 Package Content

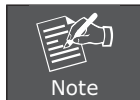
IP Camera Unit x 1

Power Adapter x 2

Mount Kit x 1

User's Manual CD-ROM x 1

Quick Installation Guide x 1



If any of the above items are missing, please contact your dealer immediately.

2.6.2 ICA-HM350 Physical Details

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 CAT-5 cable to connect the IP camera to a 100Mbps Fast Ethernet network switch or hub.

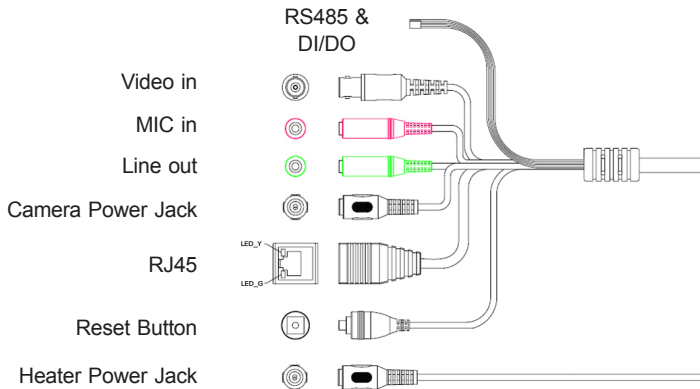
In the LAN socket, there are two LEDs embedded:

LAN LED (green color)

This LED will be flashing while network accessing via Ethernet.

Power LED (orange color)

This LED is used to indicate whether DC power is on or not.



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
DC 12V	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 output

3. Reset Button

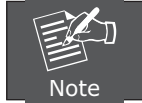
This button is used to restore the all factory default settings. Sometimes restarting the device will make the system back to a normal state. However, if the system still got problems after restart, user can restore the factory default settings and install it again.

Restore the device:

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

4. Power Jack

The input power is DC 12V.



ONLY use package power adapter supplied with the internet. Otherwise, the product may be damaged.

5. MIC in (audio in)

Connect a microphone to the IP camera.

6. Line out (audio out)

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

2.6.3 ICA-HM350 Installation

1. Fix IP camera to desired location with wall mount fixture.
2. Plug-in Ethernet Cable into RJ-45 connector Connect an Ethernet cable to the LAN socket located on the IP Camera's back panel and attach it to the network.
3. Connect RS485 D+ and D- (if you need to control PT scanner).
4. Connect the attached power adapters to IP camera and heater/fan and plug-in these adapters into power outlet.
 - a. If you don't need the heater/fan function, you don't need to connect the power adapter to heater/fan.
 - b. The power adapter is unnecessary when internet camera is connected to a PoE switch. Otherwise, the product may be damaged when internet camera is connected to a PoE switch and power adapter simultaneously.
5. Done.

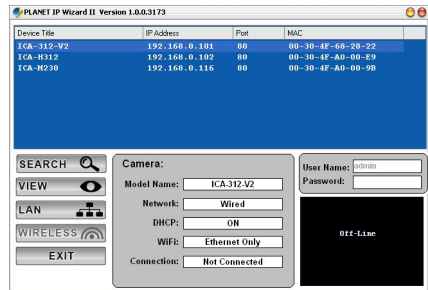
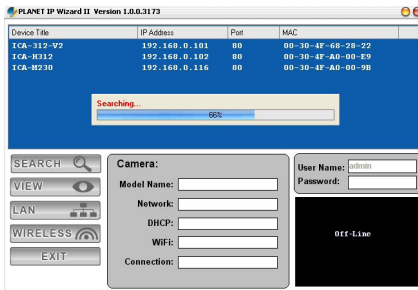
Chapter 3. Camera Windows Utility

This chapter shows how to quick set up your H.264 IP Camera. The H.264 IP Camera is with the default settings. However to help you find the networked camera quickly the windows utility (PLANET IPWizard II) can search the IP cameras in the network that shall help you to configure some basic setting before you started advanced management and monitoring.

Please insert the bundle CD disk into your CD/DVD-ROM drive. When the welcome web page appear, please click your IP camera name on the IP camera list. Then click the PLANET IPWizard II hyperlink to start the PLANET IPWizard II.

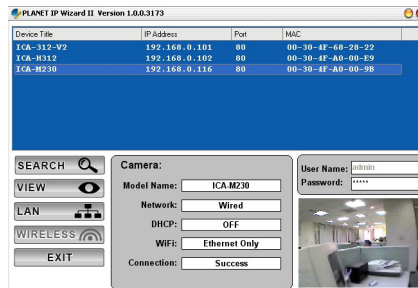
Search function:

Press **"Search"** button. PLANET IPWizard II will list all networked devices in the LAN. If the IP camera doesn't be found, you may check this IP camera is connect to network properly and press the search button again.



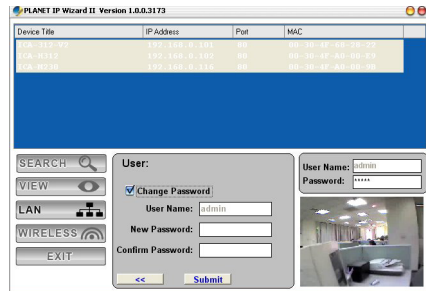
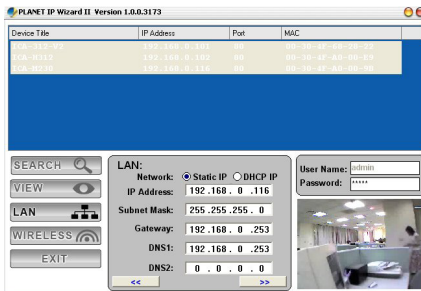
View function:

If PLANET IPWizard 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:

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 192.168.0.20. User may now open your web browser, and key in **http://192.168.0.20** in the address bar of you web browser to logon IP Camera's web configuration page.
2. Power Line Frequency
 - If you found the video image is flash, you may need to choose 50 or 60 Hz frequency (depends on different country).
 - World wide power line frequency table is inside user's manual, Appendix.

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 (192.168.0.20) is already used by another device, the other device must be turned OFF until the device is allocated a new IP Address during configuration.

Further Information

This guide is used to help you startup your IP Camera settings. It is also recommended to check the user manual in CD disk for more details of the system and user configuration.