IPC540 Series

Box IP Cameras

Quick Guide

Manual Version: P101 -20140313

Notice

The information in this manual is subject to change without notice. Every effort has been made in the preparation of this manual to ensure accuracy of the contents, but all statements, information, and recommendations in this manual do not constitute the warranty of any kind, express or implied.

Technical Support

globalsupport@uniview.com

http://www.uniview.com/en/

Environmental Protection

This product has been designed to comply with the requirements on environmental protection. For the proper storage, use and disposal of this product, national laws and regulations must be observed.

Safety and Compliance Information

Conventions Used Symbol

The symbols in this chapter are shown in the following table. They are used to remind the reader of the safety precautions during equipment installation and maintenance.

Safety Symbol	Description
	Generic alarm symbol: To suggest a general safety concern.
	ESD protection symbol: To suggest electrostatic-sensitive equipment.
	Electric shock symbol: To suggest a danger of high voltage.

Safety Information

WARNING!

Installation and removal of the unit and its accessories must be carried out by qualified personnel. You must read all of the Safety Instructions supplied with your equipment before installation and operation.

Warnings:

- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)
- This installation should be made by a qualified service person and should conform to all the local codes.
- Make sure the power supply voltage is correct before using the camera.
- Do not drop the camera or subject it to physical shock.
- Do not touch sensor modules with fingers. If cleaning is necessary, use a clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period of time, put on the lens cap to protect the sensor from dirt.
- Do not aim the camera lens at the strong light such as sun or incandescent lamp. The strong light can cause fatal damage to the camera.
- The sensor may be burned out by a laser beam, so when any laser equipment is being used, make sure that the surface of the sensor not be exposed to the laser beam.
- While shipping, the camera should be packed in its original packing.

Caution: Fiber optic ports – optical safety.

Never look at the transmit laser while the power is on. Never look directly at the fiber ports and the fiber cable ends when they are powered on.

***Caution**: Use of controls or adjustments to the performance or procedures other than those specified herein may result in hazardous laser emissions.*

Regulatory Compliance

FCC Part 15

This equipment has been tested and found to comply with the limits for digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful

interference in which case the user will be required to correct the interference at his own expense.

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

LVD/EMC Directive

This product complies with the European Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC.

WEEE Directive–2002/96/EC

The product this manual refers to is covered by the Waste Electrical & Electronic Equipment (WEEE) Directive and must be disposed of in a responsible manner.

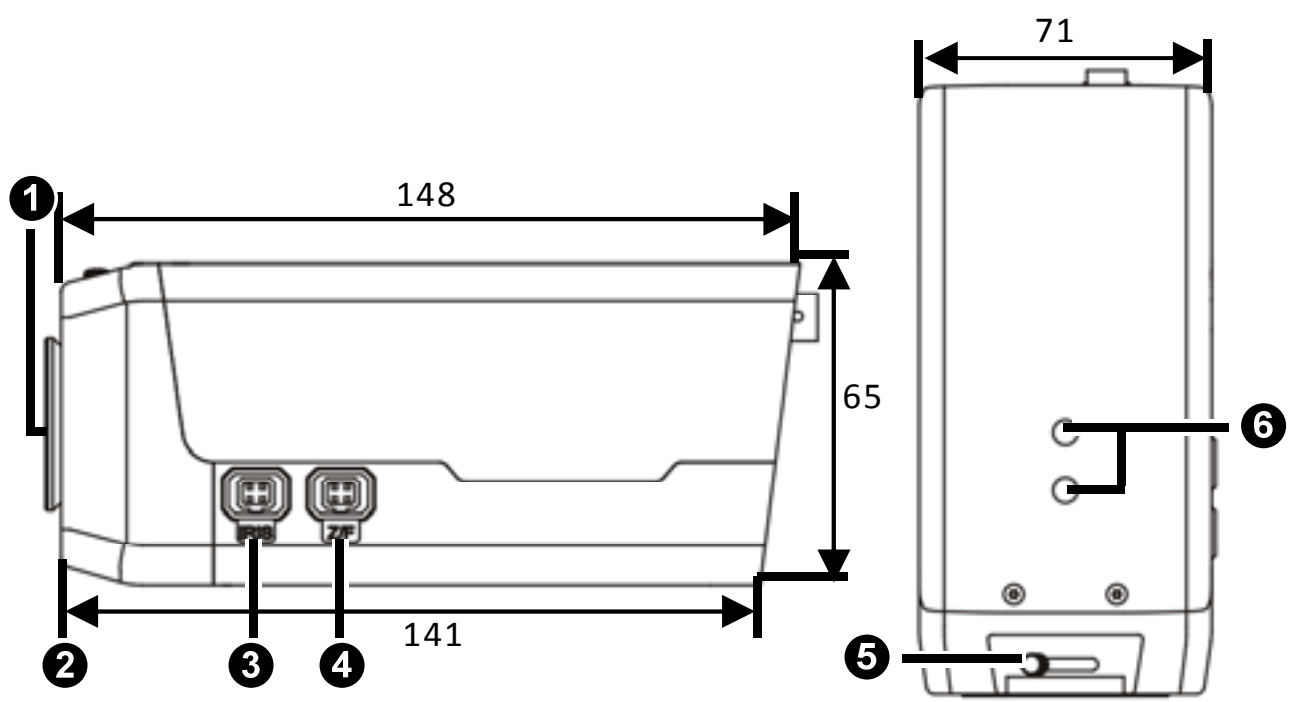
Contents

1 Appearance Description

Overview

For the appearance of each product model, refer to the actual product.

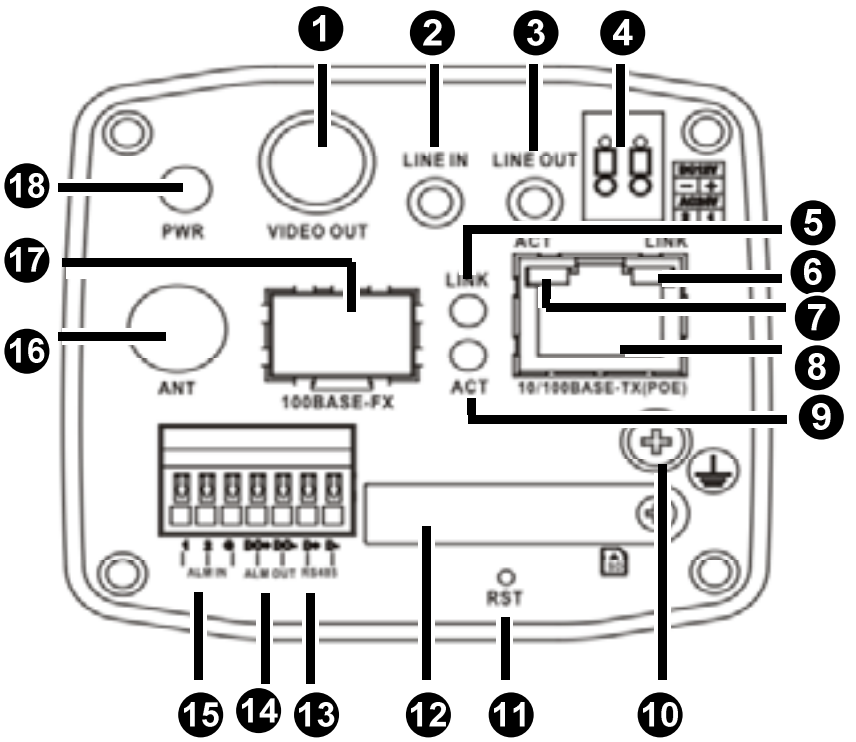
Figure 1 Size and Appearance(unit: mm; using the –NL model as an example)



1: Dustproof cover for lens interface
2: Lens mounting interface (CS mount)
3: DC-Iris control interface

4: Zoom/focus control interface (Connect to lens via Z/F connector)
5: Back focus puller
6: Mounting interface (for connecting a bracket)

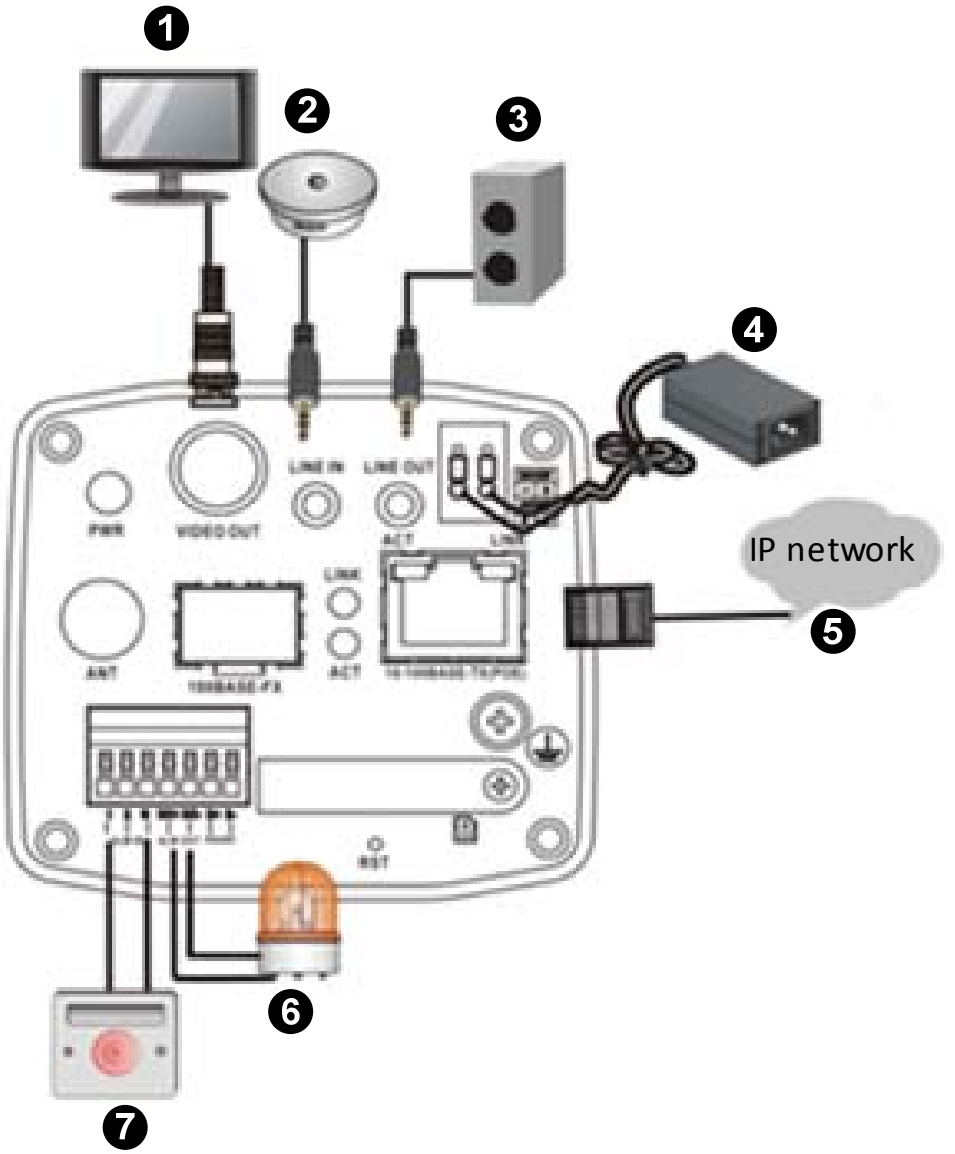
Figure 2 Rear view (using the -NL model as an example)



1: BNC Output for locally outputting compound video signals, 75 ohm, 1 V (P-P)
2: Audio input, 3.5 mm audio interface, 35 k ohm, 2 V (P-P) ***Note:*** *Please use audio connecters with dual channels*

3: Audio output, 3.5 mm audio interface, 600 ohm, 2 V (P-P) ***Note:*** *Please use audio connectors of dual audio channels.*
4: Power connector (2-pin), DC 12 V or AC 24 V
5: Ethernet optical interface network connection indicator
6: Ethernet interface network connection indicator
7: Ethernet interface data transmission indicator
8: Ethernet interface, with some models supporting PoE (conforming to IEEE802.3af)
9: Ethernet optical interface data transmission indicator
10: Grounding terminal
11: System reset button ***Note****: Press RST for three to ten seconds to enter or exit the focus assisting mode; press RST for more than ten seconds to restore factory settings.*
12: SD card slot (with a dustproof cover)
13: RS-485
14: Alarm output (1-channel), relay output
15: Alarm input (2-channel), relay input
16: Antenna interface for connecting the Wi-Fi antenna to receive wireless signals
17: SFP optical module slot (with dustproof cover)
18: System status indicator

Figure 3 Cable Connection



1: Display device	2: Audio input(sound pickup)
3: Audio output(sound box)	4: Power adapter
5: Network	6: Alarm output(alarm indicator)
7: Alarm input device(voice activated switch)	

Status Indicators

Indicator	Abbreviation	Color & Description
System status indicator	PWR	Yellow: Device startup Green: Operating Red: Alarm
Network connection indicator	LINK	Green on: Network connected Green off: No connection
Data transmission indicator	ACT	Blinking yellow: Data Transmitting Yellow off: No data

2 Precautions

- Some brackets such as a wall mount bracket and pendant mount bracket are needed during mounting. Keep away from vibration sources as much as possible during mounting. To enhance protection, you can mount the camera in a housing. Select a proper bracket and housing by referring to the list of accessories recommended by our company.

- Use a proper power adapter (DC12V 2A / AC24V 1A) or PoE power supply device. Improper power adapters may damage the camera.
- Before connecting the power adapter and the camera, confirm that the power supply is off. Never power on the power adapter before connecting the camera, or remove the power cable from the device when the power adapter is powered on.
- Ensure that the high level signal of alarm input is not higher than 5V DC when connecting to the alarm input interface.
- When connecting to an external interface, use an existing connection terminal, and ensure that the cable terminal (latch or clamp) is in good condition and properly fastened. Ensure that the cable is not tense during mounting, with a proper margin reserved to avoid poor port contact or loosening caused by shock or shake.

- The Ethernet optical interface and electrical interface cannot work simultaneously. To switch to the electrical interface, power off the camera at first, then remove the optical module, and finally restart the camera after inserting the cable into the electrical interface. To switch to the optical interface, power off the camera at first, then insert the optical module, and finally restart the camera (you do not need to remove the electrical interface, because the optical port takes precedence in this case).

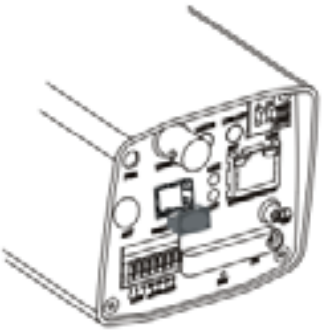
3 Installation

Mounting the SFP/EPON Optical Module (Optional)

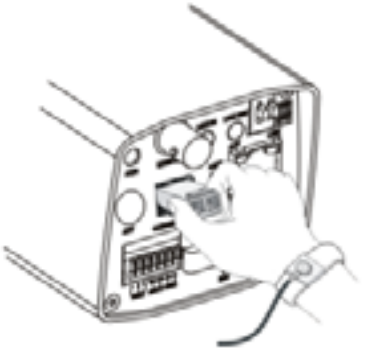
- *The EPON optical module is supported by some models of the product. It comes with delivery.*
- *The SFP optical module is supported by some models of the product. It does not come with delivery, and you need to purchase it separately.*
- *Select a proper optical module according to the environment temperature. The temperature upper limit of the optical module must be able to resist at least 85°C at least, when the Ethernet optical interface is used outdoors.*
- *When connecting a fiber, avoid bending the fiber to a large angle; otherwise, the fiber would be damaged.*

To mount the SFP optical module (for example: two-fiber bidirectional), perform the following steps:

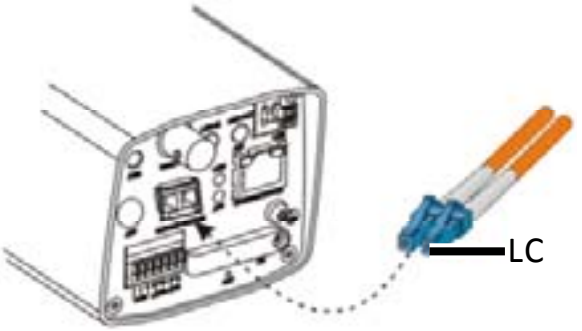
1. Remove the slot dustproof cover.



2. Insert the SFP optical module recommended by our company.

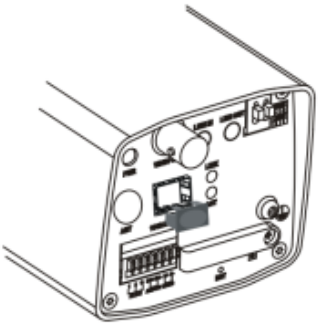


3. Connect the optical fiber plug and the optical module.



To mount the EPON optical module, perform the following steps:

1. Remove the slot dustproof cover.



2. Insert the EPON optical module recommended by our company.

3. Connect the optical fiber plug and the optical module.

Mounting the Wi-Fi Antenna

Only some models of the product support data transmission through Wi-Fi.

1. Mount the Wi-Fi antenna, and confirm that the antenna is in position. Aim the thread end of the Wi-Fi antenna at the bolt of the antenna port.

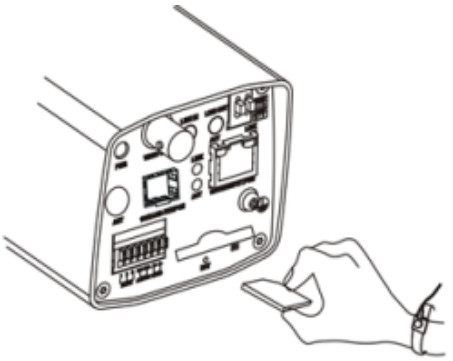
2. Adjust the direction of the Wi-Fi antenna as required.

Mounting the SD Card (Optional)

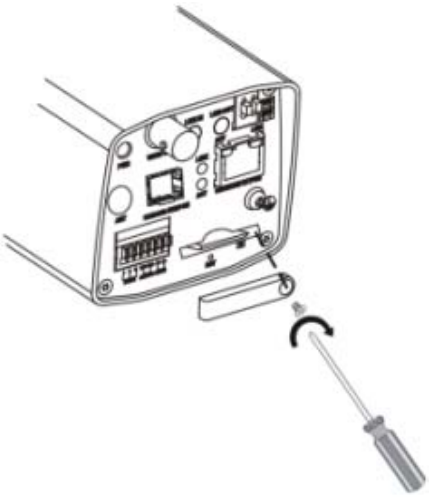
For details about recommended SD card specifications, contact sales or technical support personnel. The SD card uses the FAT32 file system, and supports only one partition.

1. Loosen the screws of the dustproof cover, and remove the slot dustproof cover.

2. Insert the SD card as instructed.



3. Reinstall the dustproof cover.



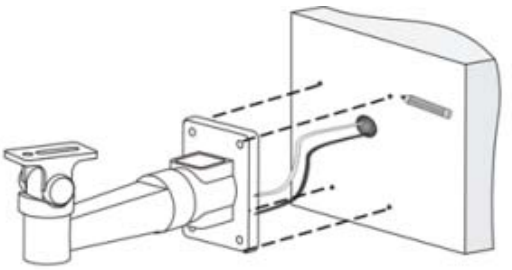
Wall Mount (Optional Bracket, and No Housing)

Wall mount is applicable to indoors installation, and you need to purchase the required hardware components. Pendant mount is similar to wall mount; therefore, pendant mount will not be described in a separate section.

1. Locate holes.

a. Locate holes on the wall by referring to the bracket mount points.

b. Lead cables across the corresponding hole on the wall.



2. Drill holes on the wall

Select a drill bit matching the outer diameter of the expansion bolts. Refer to the length of the bolts for the hole depth.

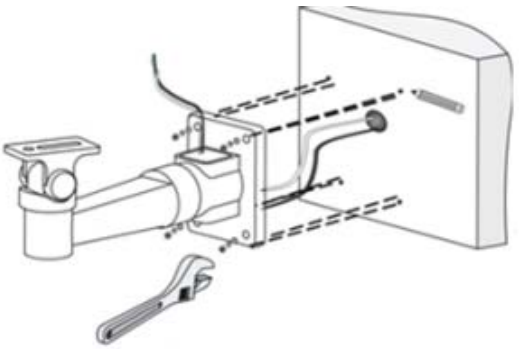
3. Install the expansions bolts

Knock the expansions bolts, making sure that they are firm.

4. Mount the bracket onto the wall

a. Lead cables out of the leading-out hole of the bracket.

b. Fix the bracket to the expansion bolts, and lock the bracket by using flat washers, spring washers, and nuts.

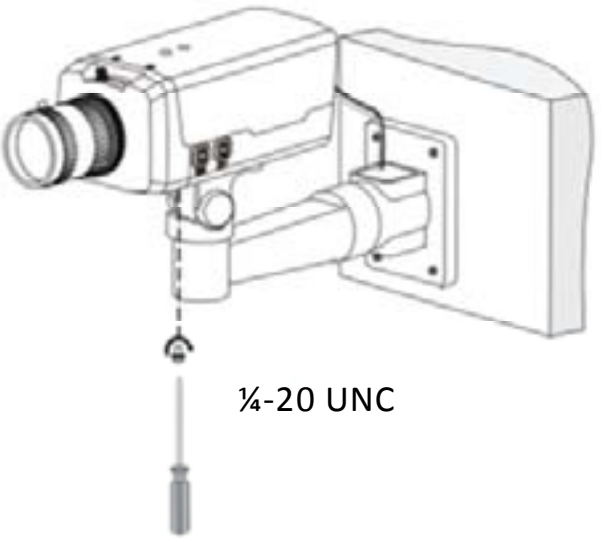


5. Mount the lens and pre-adjust images

a. Remove the dustproof cover and mount the lens.

b. Connect the power and network cable, power on the camera, and log in to the camera.

6. Mount the camera onto the bracket.



7. Perform accurate adjusting after power-on.

- *If you use a C interface lens, you need to connect the lens to the C/CS adapter and then fix the lens to the camera.*
- *If you use motorized zoom lens, you can remotely control the zoom and focus after connecting the zoom/focus control cable to the Z/F interface (using a 4-pin Z/F connector) of the camera. To automatically adjust the aperture, you should connect the aperture control cable to the IRIS interface of the camera.*

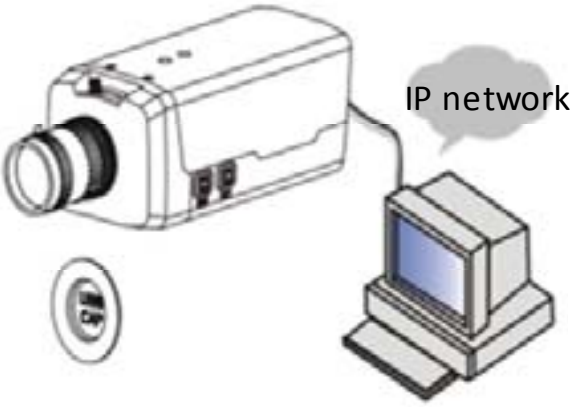
Housing Mount (Housing and Bracket are Optional)

Housing mounting is applicable outdoors and you need to purchase the required hardware components. Pole mount is used as an example. Other mount modes are similar; therefore, they will not be described in separate sections. For the description about other modes, you can refer to pole mount.

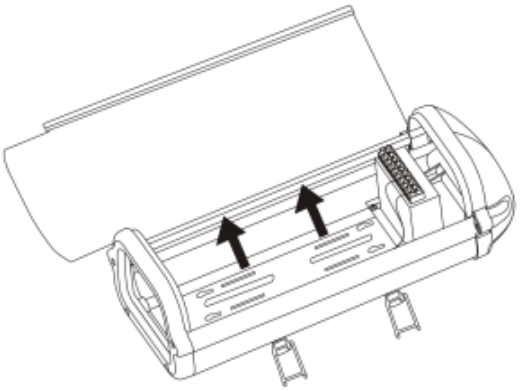
1. Before mounting the housing, pre-adjust images.

a. Remove the dustproof cover and mount the lens.

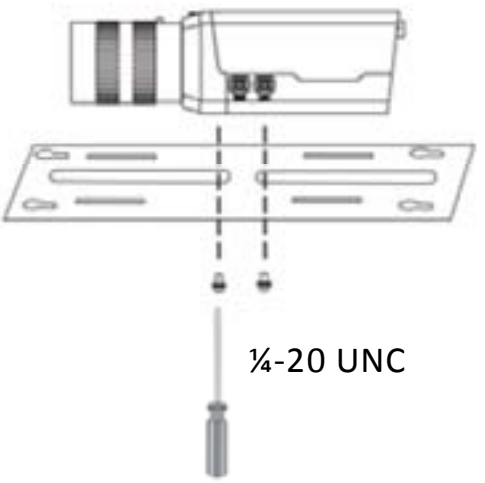
b. Connect the power and network cable, power on the camera, and log in to the camera.



2. Select a proper housing, and remove the bottom plate.

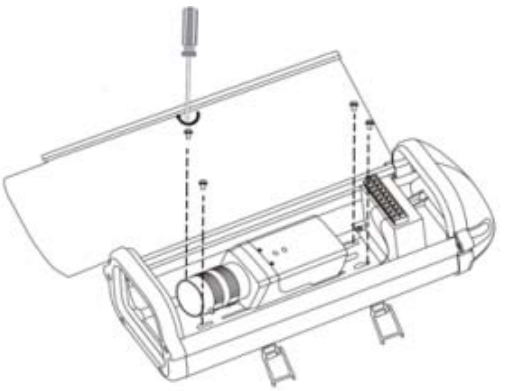


3. Fix the camera onto the bottom plate.



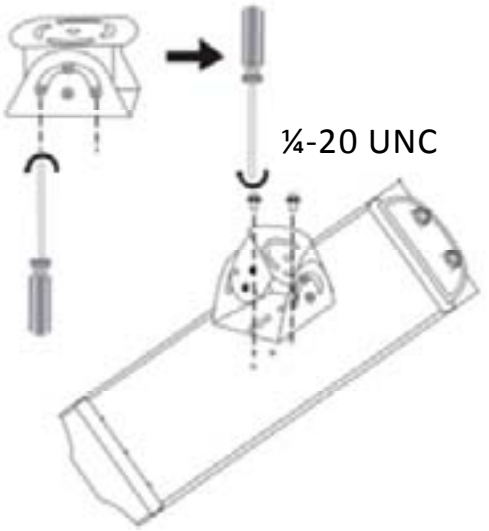
4. Fix the bottom plate and the housing.

Tighten 4 self-tapping screws through hardy holes.



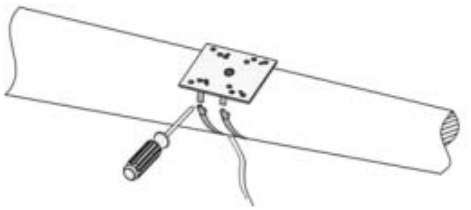
5. Fix the universal joint onto the back panel of the housing.

Loosen 2 screws on the universal joint so as to fix it to the housing.



6. Encircle and fasten the bar with steel straps.

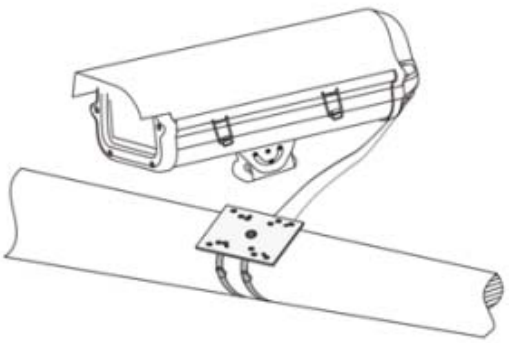
Lead cables through the pole and out of the cross arm, waiting to be connected.



7. Fix the housing on the steel straps.

a. Adjust the universal joint and the housing until the monitoring direction is proper.

b. Lead the power cable and the network cable through the cabling hole of the housing, and connect the camera.



8. Perform accurate adjusting after power-on. For details, see the section "Login and Commissioning".

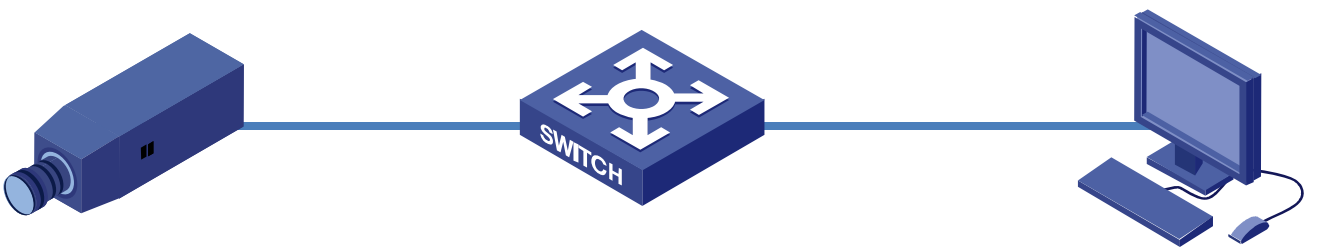
Connect the power adapter to the AC 220V mains, and the plug to the jack identified DC 12V/AC 24V. During the startup, the system status indicator on the panel of the camera is yellow. Indicator turning green means it has started successfully.

4 Setting the Camera over the LAN

To view and configure the camera via LAN (Local Area Network), you need to connect the network camera in the same subnet with that of your PC. Then, install the EZStation software to search and change the IP address of network camera.

- *Please contact our company to get the EZStation software.*
- *Please refer to the user manual of EZStation software for detailed information.*

1. Connection of network camera and PC.



2. Obtain the IP address of the camera for accessing via LAN.

To get the IP address, you can choose either of the following methods:

- Use EZStation as a DHCP server that automatically assigns an IP address to the connected camera.
- Automatic detection：Use EZStation software to search online devices automatically.

3. Modify the camera information. Change the IP address and subnet mask to the same subnet as that of your PC.

4. Enter the IP address of camera in the address field of the web browser to view the live video.

- *The default IP address is "192.168.0.13". The default user name is "admin", and password is "admin".*
- *For accessing the camera from different subnets, please set the gateway for the camera after you log in.*

5 Accessing the Camera

System Requirement

Item	Requirements
Operation System	Microsoft Windows8/Windows7/Windows XP (32-bit or 64-bit). Microsoft Windows7 is recommended.

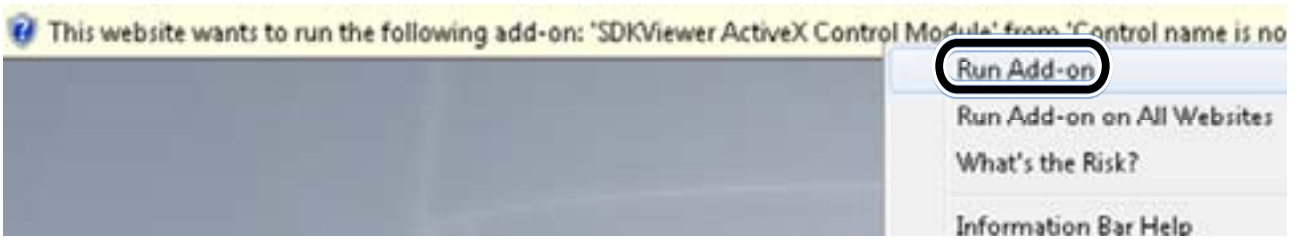
Item	Requirements
CPU	2.0GHz or higher, dual-core. Intel i3 CPU or above are recommended.
Memory	At least 1GB. 2GB (or higher) is recommended.
Graphic card	At least 128MB display memory. Mainstream discrete graphics with more than 1GB display memory are recommended. The hardware should support DirectX9.0c. ***Note:*** *make sure that the latest driver is installed on graphic card.*
Sound card	Essential. ***Note:*** *the intercom and voice broadcast require the latest driver on sound card.*
Network card	Gigabit Ethernet network cards (or higher) are recommended.
Display definition	● Least: 1024*768 ● Ideal: 1440*900

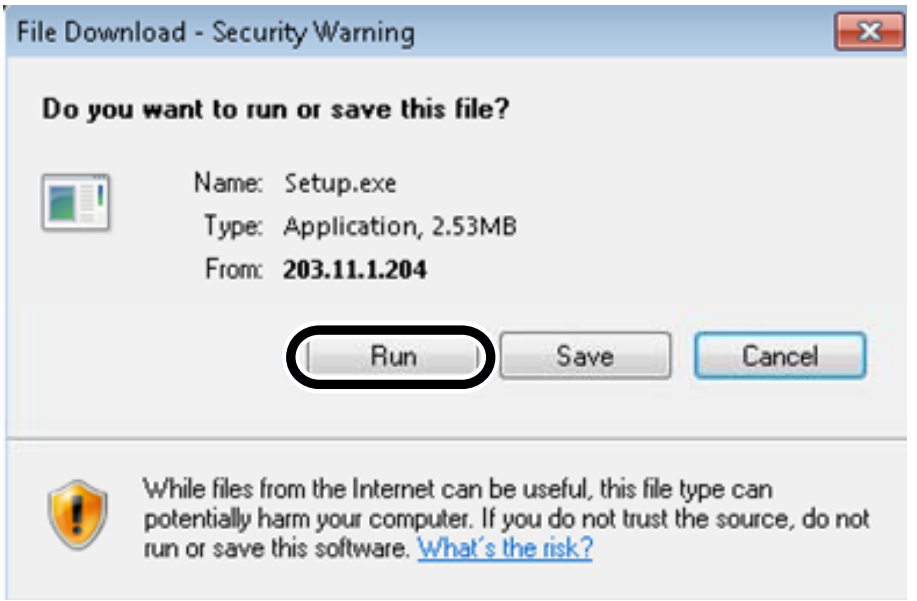
Steps

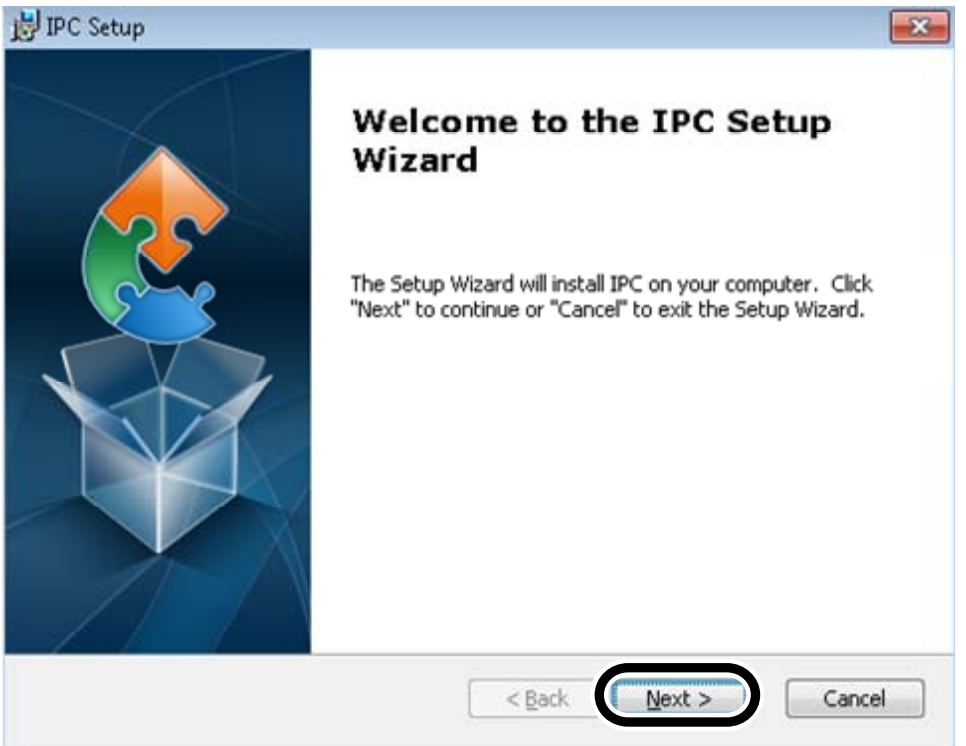
1. Open the web browser.

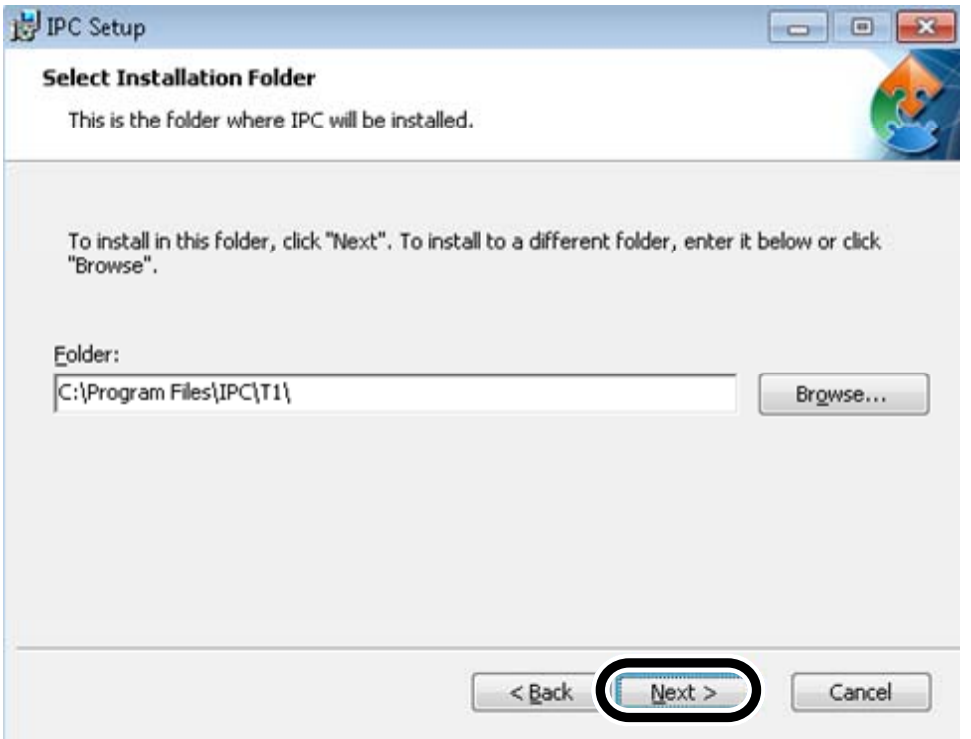
2. In the browser address bar, input the IP address of the network camera, e.g., 192.168.0.13 and press the **Enter** key to enter the login interface.

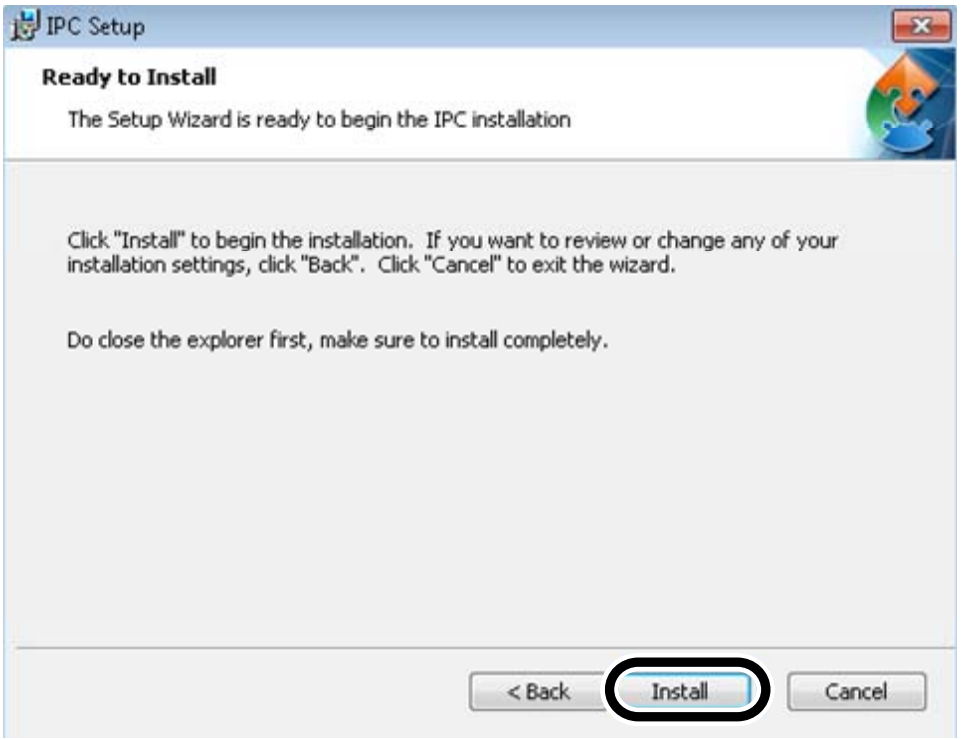
3. Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in, as shown in the figures.

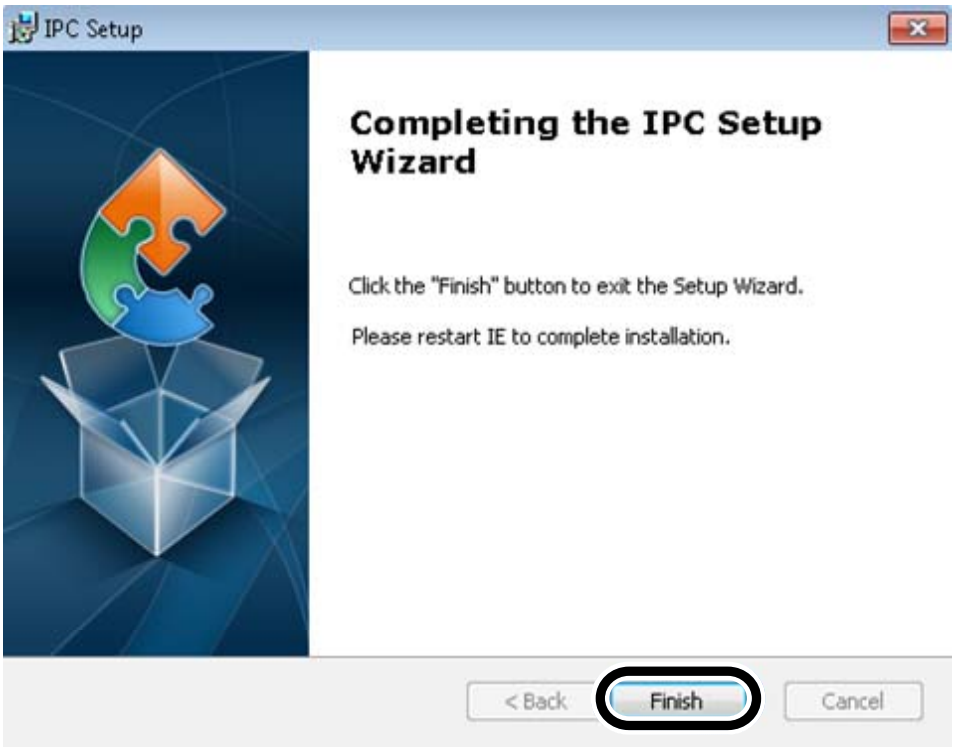



File Download - Security Warning
Do you want to run or save this file?
Name: Setup.exe
Type: Application, 2.53MB
From: 203.11.1.204
Run
Save
Cancel
While files from the Internet can be useful, this file type can potentially harm your computer. If you do not trust the source, do not run or save this software. What's the risk?


IPC Setup
Welcome to the IPC Setup Wizard
The Setup Wizard will install IPC on your computer. Click "Next" to continue or "Cancel" to exit the Setup Wizard.
< Back
Next >
Cancel


IPC Setup
Select Installation Folder
This is the folder where IPC will be installed.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\IPC\T1\
Browse...
< Back
Next >
Cancel


IPC Setup
Ready to Install
The Setup Wizard is ready to begin the IPC installation
Click "Install" to begin the installation. If you want to review or change any of your installation settings, click "Back". Click "Cancel" to exit the wizard.
Do close the explorer first, make sure to install completely.
< Back
Install
Cancel



You may have to close the web browser to finish the installation of the plug-in.

4. Reopen the web browser after the installation of the plug-in and repeat the above steps 1-2 to login.
5. Input the user name and password.
6. Click **Login**

7. View the live video and manage the camera. For detailed instructions of further configuration, please refer to the user manual of network camera.

BOM: 3101C03C