

HYUNDAI

Network Camera

Quick Start Guide

UD.7L0201B1462B01

Thank you for purchasing our product. If there are any questions, or requests, please do not hesitate to contact the dealer.

About This Document

This manual may contain several technical incorrect places or printing errors, and the content is subject to change without notice. The updates will be added to the new version of this manual. We will readily improve or update the products or procedures described in the manual.

DISCLAIMER STATEMENT

“Underwriters Laboratories Inc. (“UL”) has not tested the performance or reliability of the security or signaling aspects of this product. UL has only tested for fire, shock or casualty hazards as outlined in UL’s Standard(s) for Safety, UL60950-1. UL Certification does not cover the performance or reliability of the security or signaling aspects of this product. UL MAKES NO REPRESENTATIONS, WARRANTIES OR CERTIFICATIONS WHATSOEVER REGARDING THE PERFORMANCE OR RELIABILITY OF ANY SECURITY OR SIGNALING RELATED FUNCTIONS OF THIS PRODUCT.

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Regulatory Information

FCC Information

FCC compliance: This equipment has been tested and found to comply with the limits for a 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.

FCC Conditions

This device 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.

EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info



Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into “Warnings” and “Cautions”

Warnings: Serious injury or death may occur if any of the warnings are neglected.

Cautions: Injury or equipment damage may occur if any of the cautions are neglected.

	
<p>Warnings Follow these safeguards to prevent serious injury or death.</p>	<p>Cautions Follow these precautions to prevent potential injury or material damage.</p>



Warnings

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 24 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.

Network Camera Quick Start Guide

- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket. When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.



Cautions

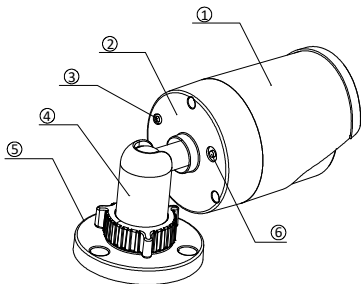
- Make sure the power supply voltage is correct before using the camera.
- Do not drop the camera or subject it to physical shock.
- Do not touch sensor modules with fingers. If cleaning is necessary, use clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period, please replace the lens cap to protect the sensor from dirt.
- Do not aim the camera at the sun or extra bright places. Blooming or smearing may occur otherwise (which is not a malfunction), and affect the endurance of sensor at the same time.
- The sensor may be burned out by a laser beam, so when any laser equipment is in using, make sure that the surface of sensor will not be exposed to the laser beam.

- Do not place the camera in extremely hot, cold (the operating temperature shall be $-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$, or $-40^{\circ}\text{C} \sim 60^{\circ}\text{C}$ if the camera model has an "H" in its suffix), dusty or damp locations, and do not expose it to high electromagnetic radiation.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Keep the camera away from liquid while in use.
- While in delivery, the camera shall be packed in its original packing, or packing of the same texture.
- Regular part replacement: a few parts (e.g. electrolytic capacitor) of the equipment shall be replaced regularly according to their average enduring time. The average time varies because of differences between operating environment and using history, so regular checking is recommended for all the users. Please contact with your dealer for more details.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
- 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.)

Table of Contents

1 Appearance Description 1	8
Installation	9
2 Appearance Description 2	12
Installation	15
Ceiling Mounting	16
Micro SD Card Installation	20
3 Appearance Description 3	22
Installation	11
4 Appearance Description 4	18
Installation	24
Stand Mounting	25
Ceiling Mounting	26
5 Appearance Description 5	29
Installation	31
SD Card Installation	32
Mounting	34
Wall Mounting	34
Wall Mounting with a Junction Box	37
Wall Mounting with a Gang Box	38
View Angle Adjusting	39
Zoom and Focus Adjusting	40
6 Appearance Description 6	42
Installation	45
Disassembling	46
Mounting	47
Ceiling Mounting.....	47
Conduit Installation on the Side	49
Ceiling Mounting with Gang Box	51
Wall Mounting	54
Image and Focus Adjusting:	57
7 Setting Network Camera over the LAN	59
8 Accessing via Web Browser	62

1 Appearance Description 1



Bullet Camera Overview

Table 1-1 Description

No.	Description
1	Sun Shield
2	Back Box
3	Grounding Screw
4	Adjustable Bracket
5	Mounting Base
6	Reset

Installation

Before you start:

Make sure the device in the package is in good condition and all the assembly parts are included.

Make sure all the related equipment is power-off during the installation.

Check the specification of the products for the installation environment.

Make sure the power supply is matched with your required voltage to avoid damage.

If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.

Make sure that the wall is strong enough to withstand three times the weight of the camera.



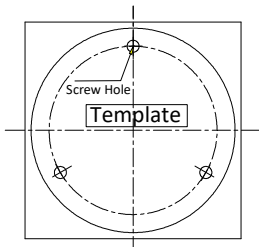
For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.

- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.
- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDs. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

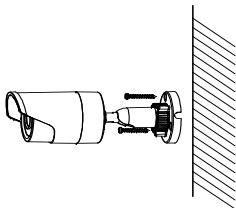
Steps:

1. Attach the drill template on the wall.



Attach the template

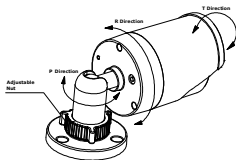
2. Secure the camera to the ceiling with the supplied expansion screws.



Secure the Camera to the Ceiling

3. Adjust the Lens.

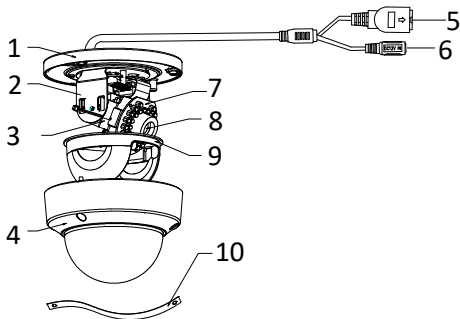
- 1). Loosen the adjustable nut on the bracket.
- 2). Adjust the panning angle [0~360°] of the camera.
- 3). Adjust the tilting angle [0~90°] of the camera.
- 4). Rotate 0~360° to adjust azimuth angle of the image.
- 5). Tighten the adjustable nut to complete the installation.



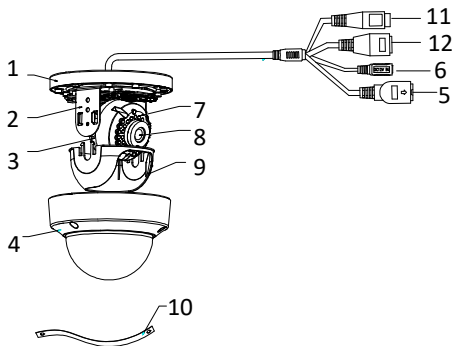
3-axis Adjustment

2 Appearance Description 2

There are two types of camera appearance for this series of camera according to the different models.



Overview of Type I Camera



Overview Of Type II Camera



Press RESET about 10s when the camera is powering on or rebooting to restore the default settings, including the user name, password, IP address, port No., etc.

Description of Type I/II Camera

No.	Description
1	Mounting Base
2	Horizontal Stand
3	Vertical Stand
4	Bubble
5	Network Interface
6	Power Interface
No.	Description
7	IR LED
8	Lens
9	Black Liner
10	Safety Rope
11	Audio Interface (Only supported by the camera with "-S" in its model)
12	Alarm Interface (Only supported by the camera with "-S" in its model)

Installation

Before you start:

Make sure the device in the package is in good condition and all the assembly parts are included.

Make sure all the related equipment is power-off during the installation.

Check the specification of the products for the installation environment.

Make sure the power supply is matched with your required voltage to avoid damage.

If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.

Make sure that the wall is strong enough to withstand three times the weight of the camera.



For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

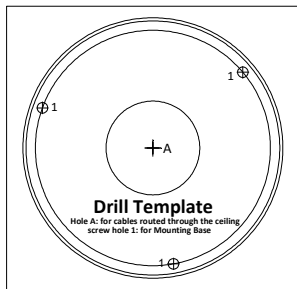
- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.

- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDs. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

Ceiling Mounting

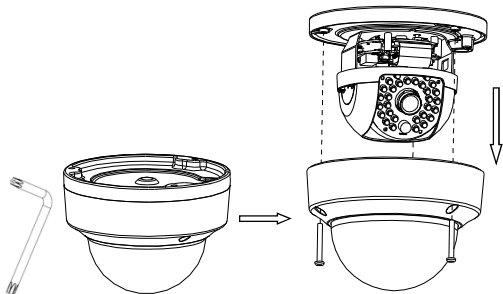
Steps:

1. Drill the screw holes on the ceiling according to the drill template.



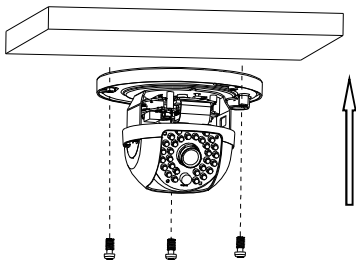
Drilling Template

2. Loosen the set screws with a hex key (supplied) to remove the bubble.



Remove the Bubble

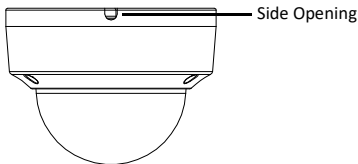
3. Fix the mounting base on the ceiling with screws.



Fix the Mounting Base

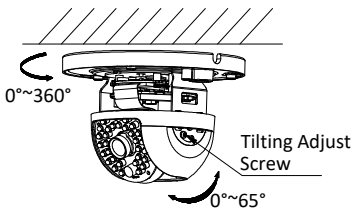


If required, you can route cables through the side opening on the side of the mounting base.



Side Opening

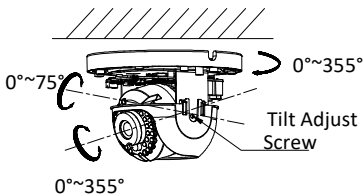
- Loosen the tilt lock screws, adjust the tilting position in a range of 65 degrees, and tighten the tilt lock screws.
- For type I camera--Rotate the black liner to adjust the pan angle [0°~360°] and tilt angle [0°~65°].



Type I Camera Angle Adjustment

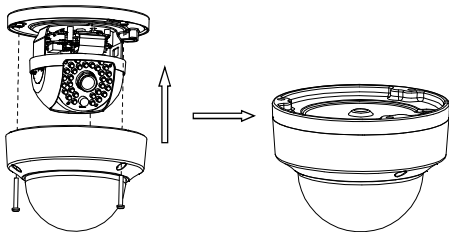


Type II camera supports 3-axis adjustment. Loosen the tilt adjust screw to adjust the tilt angle [0°~75°], hold the black liner to adjust the pan angle [0°~355°], and hold the lens to rotate the camera [0°~355°]. See figure below.



3-axis Adjustment of Type II Camera

- Reinstall the bubble and tighten the screws.

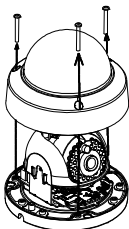


Bubble Reinstallation

Micro SD Card Installation

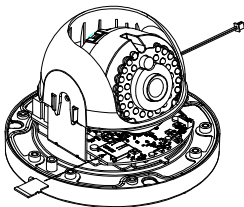
Steps:

1. Loosen the lock screws on the bubble to disassemble the camera.



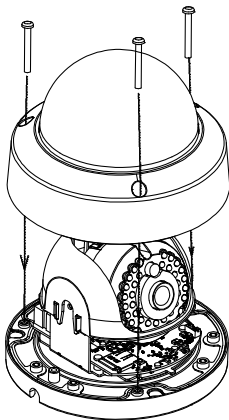
Disassemble the Camera

2. Insert the micro SD card to the card slot.
3. (Optional) Push the inserted micro SD card inside, and the micro SD card will be sprung out.



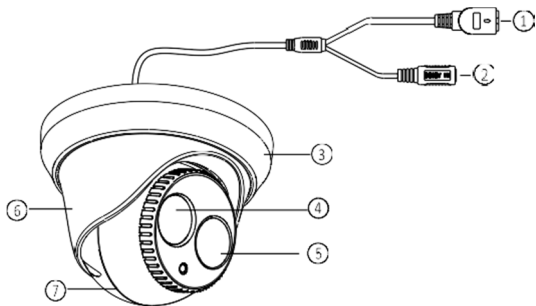
Insert the Micro SD Card

4. Install the bubble back, and tighten the lock screws on it.



Install the Bubble

3 Appearance Description 3



1-1 Overview



Please make sure that the power adapter is compatible with the camera. This series of camera supports Power over Ethernet (PoE), and the standard power supply is 12V DC.

Description

NO.	Description
1	10M/100M self-adaptive Ethernet interface
2	Power Cable
3	Trim Ring
4	Lens
5	IR LED
6	Enclosure
7	Dome Driver

Installation

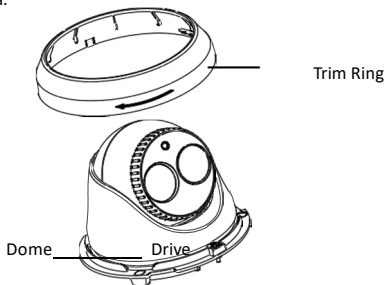
Before you start:

- Make sure the device in the package is in good condition and all the assembly parts are included.
- The standard power supply is 12V DC or 24V AC, please make sure your power supply matches with your camera.
- Make sure all the related equipment is power-off during the installation.
- Check the specification of the products for the installation environment.
- Make sure that the wall is strong enough to withstand four times the weight of the camera and the bracket.

For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.
- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDs. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

1. Rotate the trim ring counterclockwise to remove it from the camera.



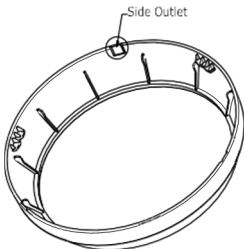
Disassemble the Camera

2. Drill the screw holes and the cable hole on the ceiling according to the drill template.



The Drill Template

There are two cable outlet methods. One is to route the cables through the cable hole, and the other is to route the cables through the side outlet shown below.



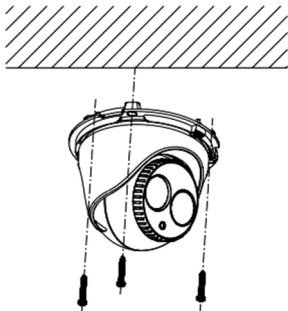
Side Outlet

NOTE

Three side outlets on the enclosure are selectable, which makes routing the cables easier instead of drilling a cable hole on the ceiling. Use a plier to remove the plastic and route the cables through the hole.

3. Connect the corresponding power/network cable.

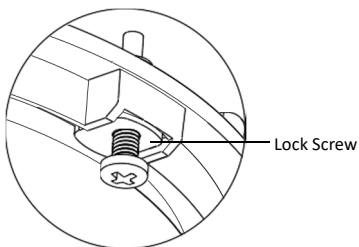
4. Fix the camera to the ceiling with the supplied expansion screws.



Secure the Camera to the Ceiling

5. Adjust the Lens.
 - 1). Loosen the lock screw.
 - 2). Rotate the enclosure to adjust the pan angle; rotate the camera to adjust the tilt angle.

- 3). Tighten the lock screw to fix the optimum surveillance angle.

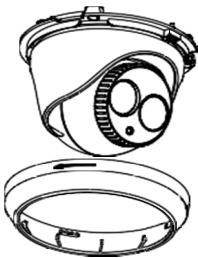


Lock Screw

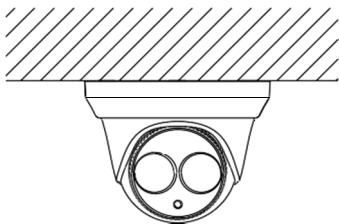


Adjust the Lens

6. Attach the trim ring to the camera and rotate the trim ring clockwise to get it secured.



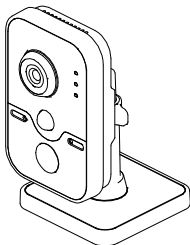
Install the Trim Ring



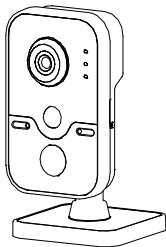
Complete the Installation

4 Appearance Description 4

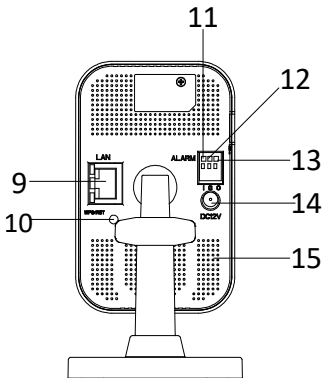
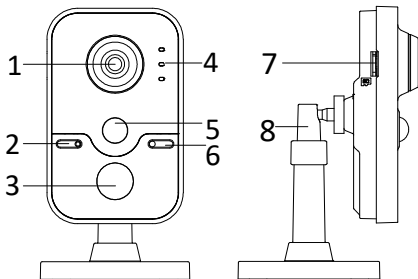
There are two types of appearances for this series camera. Please refer to the figure below. And one appearance will be taken as an example in the chapter below.



Type I Appearance



Type II Appearance



Overview

Description

No.	Description	
1	Lens	
2	Microphone	
3	IR LED	
4	Indicator	Alarm: Solid red when the camera is armed; Solid blue when the camera is unarmed.
		Status: Reserved
		Link: Flashing amber when network is connected; Unlit when network is disconnected
4	PIR(Passive Infrared) sensor	
5	Light Sensing	
6	SD Card Slot	
7	3-axis Bracket	
8	10M / 100M self-adaptive Ethernet interface & PoE	
9	WPS (Wi-Fi Protected Setup)/Reset Button	
10	I: Alarm Input Interface	
11	G: Grounding	
12	O: Alarm Output Interface	

Network Camera Quick Start Guide

No.	Description
13	Power supply interface (12 VDC)
14	Speaker



- ❖ Press RESET about 10s when the camera is power on or rebooting to restore the default settings, including the user name, password, IP address, port No., etc.
- ❖ A wireless router with the WPS function is required to enable the WPS function of the camera. Refer the steps below.

Steps:

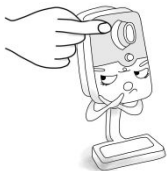
4. Press the WPS button on the router.
5. Press the WPS button (about 2s) on the camera within 120s you enable the WPS of the router to join in the wireless network.



- The WPS button works as a reset button only when you press it when the camera is powering on.
- Press the WPS button on the camera, and then press the WPS button on the router will work as well, and the expire time of WPS connection on the camera is 120s.
- The link indicator blinks if the wireless connection succeeded.

Notice

- Do not install the camera in the extreme whether condition.
- Do not touch the lens with your finger.



- Do not install the camera towards the strong light or in the unstable lightening condition.
- Do not subject the camera to vibration, shock or heavy pressure.



Network Camera Quick Start Guide

- High humidity may damage the camera hardware; put it in dry and well-ventilated place.
- Under no circumstances should you submerge the camera in any type of liquid.



- Electromagnetic radiation may affect the video data transmission and the image quality. Do not install the camera near



Installation

Before you start:

Make sure the device in the package is in good condition and all the assembly parts are included.

Make sure all the related equipment is power-off during the installation.

Check the specification of the products for the installation environment.

Make sure the power supply is matched with your required voltage to avoid damage.

If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.

Make sure that the wall is strong enough to withstand three times the weight of the camera.



For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

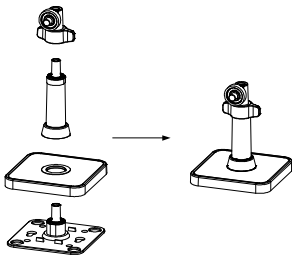
- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.

- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDs. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

Stand Mounting

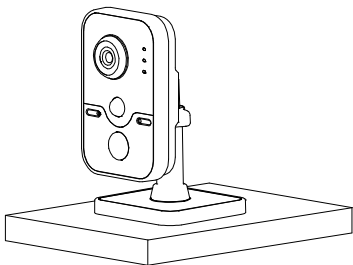
Steps:

1. Assemble the 3-axis bracket.



Assemble the Bracket

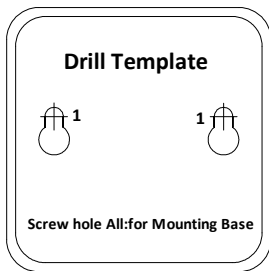
2. Align the camera body to the bracket, and rotate the camera body to fix it with the bracket.



Install the Camera Body

Ceiling Mounting

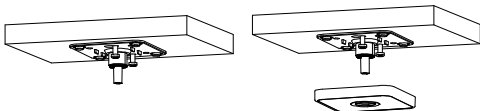
1. Drill the screw holes according to the drill template.



Drill Template

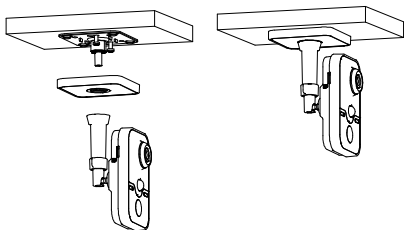
Network Camera Quick Start Guide

2. Install the fixed plate to the ceiling with the supplied screws.
3. Install the mounting base to the fixed plate.



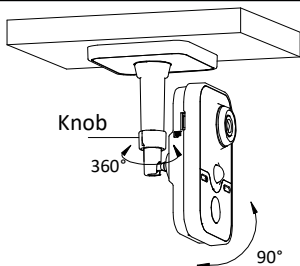
Install the Fixed Plate and Mounting Base

4. Install the camera to the bracket.



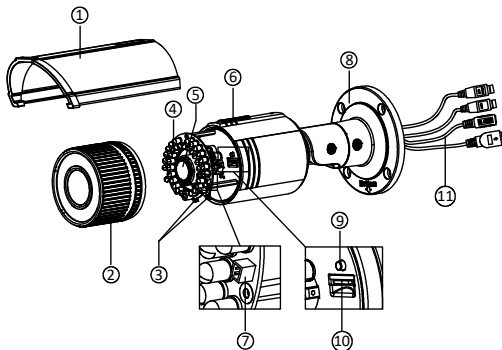
Install the Camera

5. Adjust surveillance angel
 - 1). Loosen the knob to adjust the panning position and tilting position.
 - 2). After adjusting the angle of the camera to the desired position, fasten the knob.



5 Appearance Description 5

The overview of the network bullet camera is shown below.



Overview

No.	Description
1	Sun Shield
2	Front Cover
3	Zoom and Focus Lever
4	IR LED
5	Lens

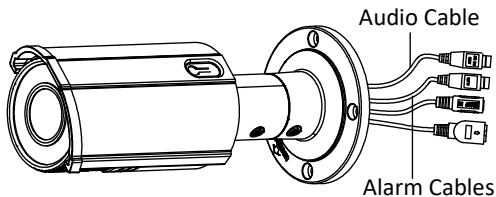
Network Camera Quick Start Guide

No.	Description
6	Air Vent
7	Video Output Interface
8	Integrated Bracket
9	Reset Button
10	SD Card Slot
11	Power Interface
12	Network Interface



Press RESET about 10s when the camera is powering on or rebooting to restore the default settings, including the user name, password, IP address, port No., etc.

Some of the models support audio and alarm functions. The interfaces are shown as follows.



Audio and Alarm Interfaces

Installation

Before you start:

Make sure the device in the package is in good condition and all the assembly parts are included.

Make sure all the related equipment is power-off during the installation.

Check the specification of the products for the installation environment.

Make sure the power supply is matched with your required voltage to avoid damage.

If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.

Make sure that the wall is strong enough to withstand three times the weight of the camera.



For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

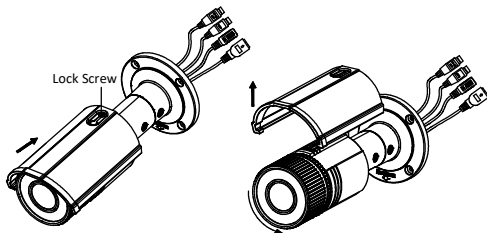
- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.

- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDs. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

SD Card Installation

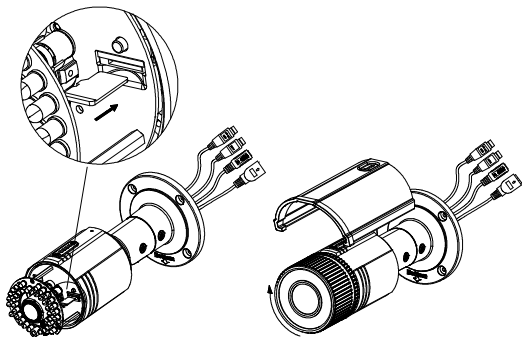
Steps:

1. Rotate the lock screw counterclockwise to loosen it. Slide the sun shield according to the arrow direction as shown in 0(left).
2. Remove the sun shield as shown in 0(right).
3. Remove the front cover by rotating it counterclockwise as shown in 0(right).



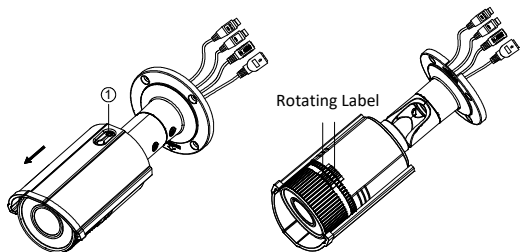
Disassemble the Camera

4. Insert the SD card to the SD card slot.
5. Rotate the front cover clockwise back to the camera and install the sun shield according to the arrow direction as shown in 0(right).



Install the SD Card

6. Slide the sun shield according to the arrow direction
7. Rotate the lock screw clockwise to tighten the sun shield.



Assemble the Camera



For water-proof, please align the rotating label on the front cover with that on the camera when you rotate the front cover clockwise. Refer to 0(right).

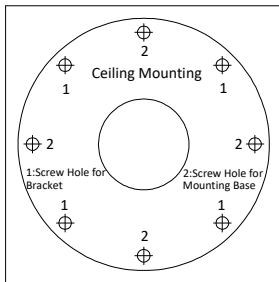
Mounting

This camera is equipped with a bracket on the bottom. It can be mounted to a wall directly and can also be mounted to a wall with a junction box or a gang box.

Wall Mounting

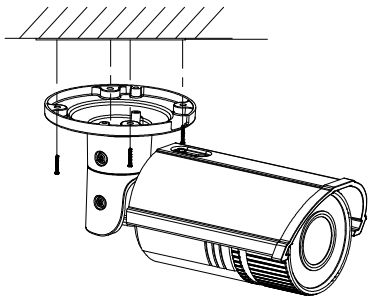
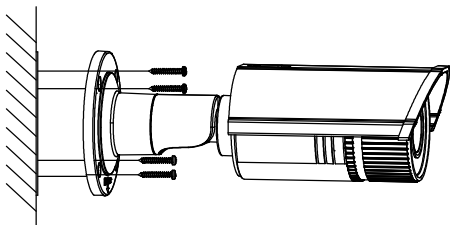
Steps:

1. Attach the drill template (supplied) to the wall where the camera is to be mounted.
2. Drill screw holes in the wall according to the number one holes of the drill template. Refer to the 0.



Drilling Holes in the Wall

3. If you need to route cables through the wall (or ceiling), cut a cable hole according to the drill template. Skip this step, if you want to route the cables on the surface of the ceiling.
4. Route the cables of the camera.
5. Secure the camera to the wall (or ceiling) with expansion screws. Refer to the 0.



Secure the Camera

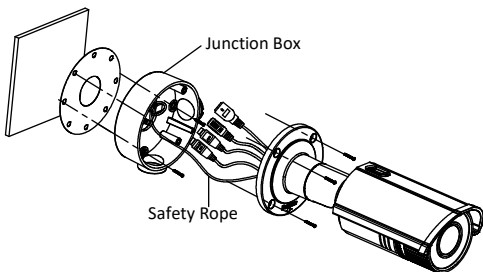
Wall Mounting with a Junction Box

Before you start:

For mounting with a junction box, you have to purchase a junction box.

Steps:

1. Attach the drill template (supplied) to the wall where the camera is to be mounted.
2. Drill holes in the wall according to the number two holes of the drill template. Refer to the 0.
3. If you need to route cables through the wall (or ceiling), cut a cable hole according to the drill template. Skip this step, if you want to route the cables on the surface of the ceiling.
4. Secure the junction box to the wall with expansion screws.
5. Route the cables of the camera.
6. Connect the video output connector to the monitor. Connect the power connector to the power supply.
7. Adjust the image and focus. Please refer to the section 2.3 and 2.4 for more detailed information.
8. Hook the camera to the junction box with the safety rope. Refer to the 0.
9. Secure the camera to the junction box with screws.



Secure the Camera

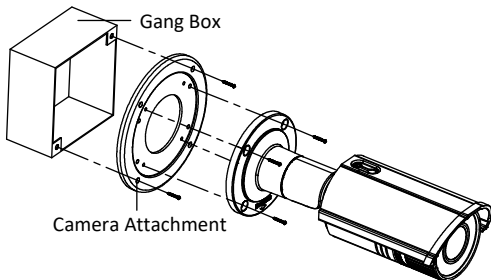
Wall Mounting with a Gang Box

Before you start:

For mounting with a gang box, you have to purchase a gang box.

Steps:

1. Secure the camera attachment to a gang box with screws.
2. Route the cables of the camera.
3. Secure the camera to the camera attachment with screws. Refer to the 0.



Secure the Camera

View Angle Adjusting

Purpose:

3-axis (pan/tilt/rotation) adjusting allows adjustment for optimum camera rotation and placement. You can use this function to get the angle of view that you want.

Pan Adjustment

Steps:

1. Loosen the lock screw-1.
2. Adjust the panning position of the camera. The adjusting range is from 0 degrees to 360 degrees.
3. Tighten the lock screw-1.

Tilt Adjustment

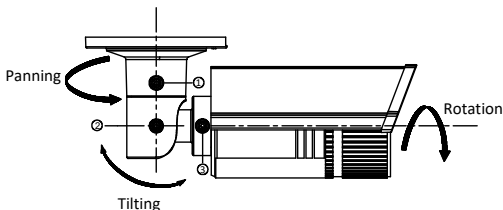
Steps:

1. Loosen the lock screw-2.
2. Adjust the tilting position of the camera. The adjusting range is from 0 degrees to 90 degrees.
3. Tighten the lock screw-2.

Rotation Adjustment

Steps:

1. Loosen the lock screw-3.
2. Rotate the rotation position to adjust the azimuth angle of the image. The adjusting range is from 0 degrees to 360 degrees.
3. Tighten the lock screw-3.



Lens Adjustment

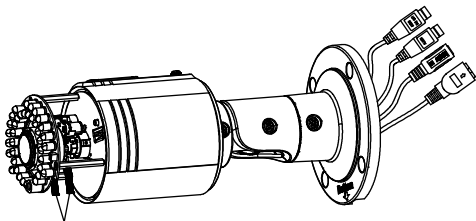
Zoom and Focus Adjusting

Purpose:

You can use the zoom lever and focus lever to adjust the zoom value and focus value.

Steps:

1. Disassemble the camera. Refer to section 2.1.
2. View the camera image using the monitor.
3. Loosen the zoom lever and move the lever between T(Tele) and W(Wide) to obtain the appropriate angle of view.
4. Tighten the zoom lever.
5. Loosen the focus lever and move the screw between F(Far) and N(Near) to obtain the optimum focus.
6. Tighten the focus lever.
7. Assemble the camera. Refer to section 2.1.

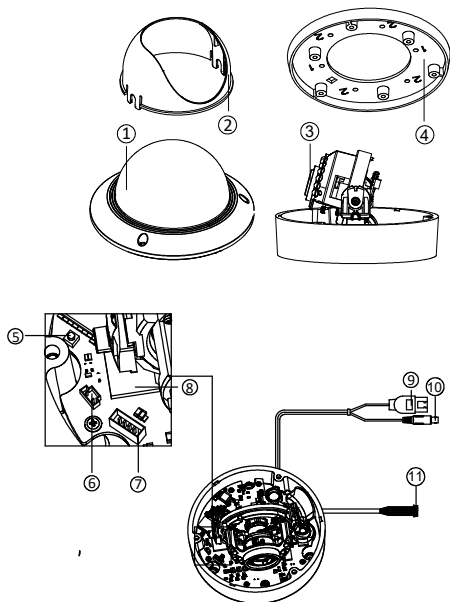


Zoom/Focus Lever

Zoom and Focus Adjustment

6 Appearance Description 6

The overview of the network dome camera is shown below.



Overview

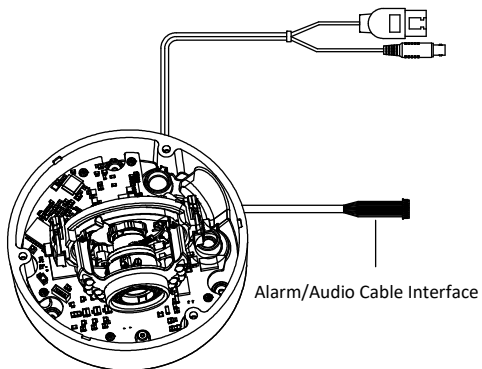
Network Camera Quick Start Guide

No.	Description
1	Bubble
2	Black Liner
3	Lens
4	Mounting Base
5	Reset
6	Auxiliary Video Output
7	Serial Port
8	Micro SD Card Slot
9	Network Cable
10	Power Cable
11	Audio/Alarm Interface



Press RESET about 10s when the camera is powering on or rebooting to restore the default settings, including the user name, password, IP address, and port No., etc.

The DS-2CD2712F-IS and DS-2CD2732F-IS models support audio and alarm functions. The interfaces are shown as follows.



Alarm/Audio Cable Interface

Audio and Alarm Interfaces

Installation

Before you start:

Make sure the device in the package is in good condition and all the assembly parts are included.

Make sure all the related equipment is power-off during the installation.

Check the specification of the products for the installation environment.

Make sure the power supply is matched with your required voltage to avoid damage.

If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.

Make sure that the wall is strong enough to withstand three times the weight of the camera.



For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

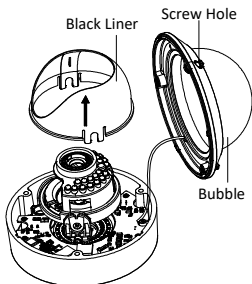
- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
- Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.

- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDs. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

Disassembling

Steps:

1. Loosen the three screws on the edge of the bubble with the screw driver.
2. Open the bubble and remove the inner black liner as shown in 0.



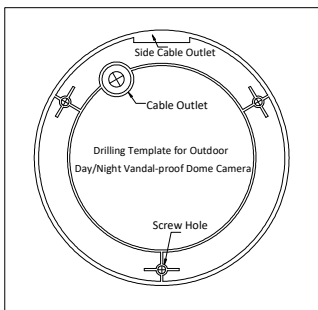
Remove the Bubble and Black Liner

Mounting

Ceiling Mounting

Steps:

1. Disassemble the camera. Refer to the section 2.1.
2. Attach the drill template (supplied) to the place where you want to fix the camera.
3. According to the drill template as shown in 0, drill three screw holes in the ceiling.

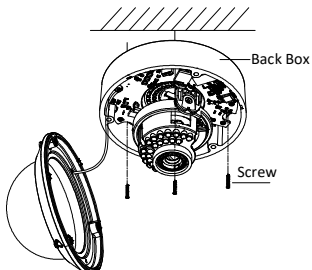


The Drill Template

4. If you want to route the cables inside the ceiling, drill a cable hole in the ceiling according to the drill template. Skip this step if you

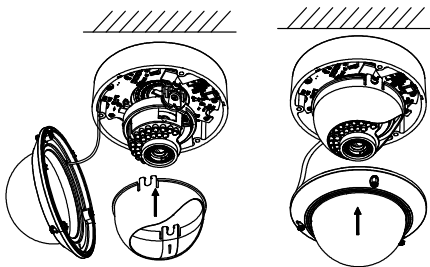
want to route the cables on the surface of the ceiling. Refer to **Conduit Installation on the Side** for side cable routing.

5. Attach the camera to the ceiling by aligning the holes of the back box with the holes on the ceiling.
6. Secure the camera with the supplied screws as shown in 0.



Secure the Camera

7. Route the cables through the cable hole.
8. Connect the video output connector to the monitor. Connect the power connector to the power supply.
9. Adjust the image and focus. Please refer to the section for more detailed information.
10. Install the inner black liner back to the camera.
11. Install the bubble back to the camera and secure it with screws

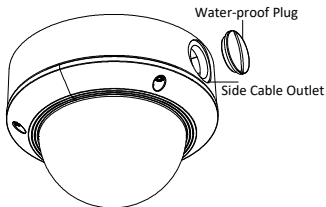


Secure Black Liner and Bubble

Conduit Installation on the Side

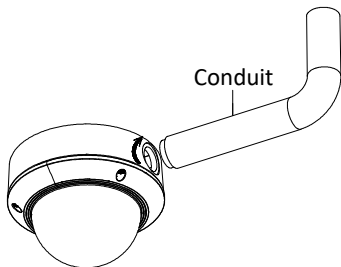
If you want to route the cables from side of the camera, you need to follow the steps below to install a conduit for cable routing.

1. Rotate the water-proof plug counterclockwise to remove it from the camera.



Remove the water-proof plug

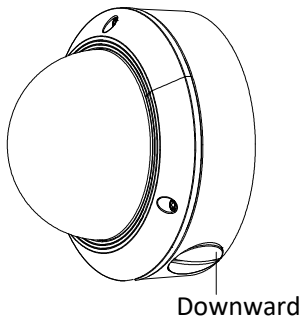
2. Route the power cable and network cable through the side outlet to the conduit.
3. Align and rotate clockwise the conduit to the side outlet tightly.



Install the Conduit to the Camera



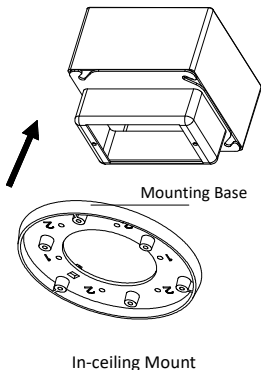
For wall mounting, position the side outlet directly downward for water-proof.



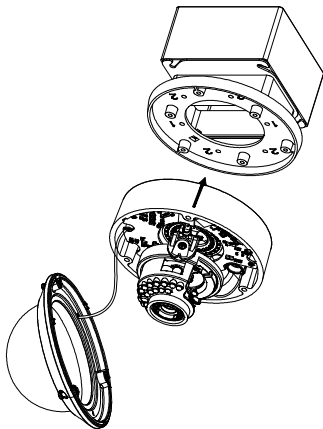
Side Outlet Direction

Ceiling Mounting with Gang Box

1. Disassemble the camera. Refer to the section
2. Install the gang box in the ceiling.
3. Attach the mounting base to the gang box with two screws.

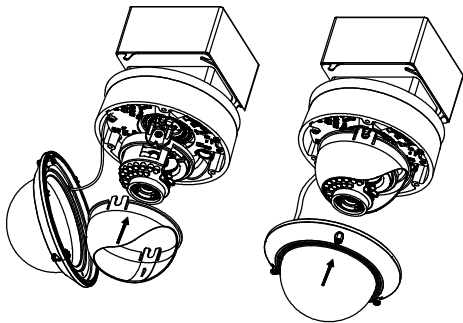


4. Route the cables through the hole in the center of the mounting base.
5. Align the camera with the mounting base.
6. Tighten the screws to secure the camera with the mounting base.
7. Connect the video output connector to the monitor. Connect the power connector to the power supply.
8. Adjust the image and focus. Please refer to the section 2.3 for more detailed information.



Secure Camera

9. Install the inner black liner back to the camera.
10. Align the bubble with the camera.
11. Tighten the screws to secure the bubble with the camera as shown

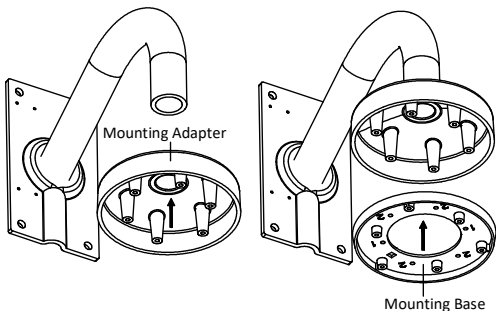


Secure the Bubble

Wall Mounting

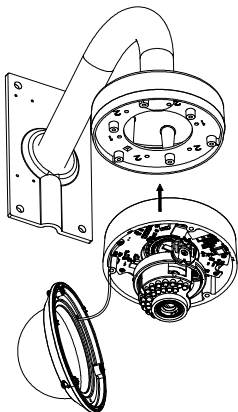
For the wall mounting, you have to purchase a wall mount.

1. Disassemble the camera. Refer to the section
2. Install the wall mount and mounting adapter as shown
3. Align the screw holes of the mounting base with the corresponding screw holes of the mounting adapter.
4. Secure the mounting base to the mounting adapter with four screws.



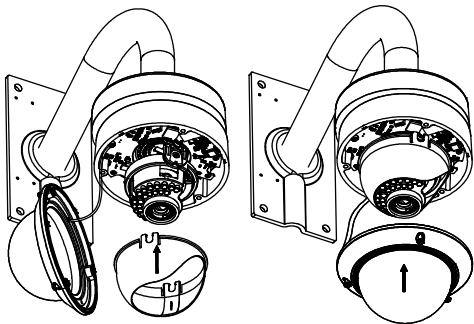
Install the Mounting Base

5. Route the cables through the hole in the center of the wall mount.
6. Align the camera with the mounting base.
7. Tighten the set screws to secure the camera with the mounting base.
8. Connect the video output connector to the monitor. Connect the power connector to the power supply.
9. Adjust the image and focus. Please refer to the section for more detailed information.



Secure Camera

10. Install the inner black liner back to the camera.
11. Align the bubble with the camera.
12. Tighten the screws to secure the bubble with the camera.

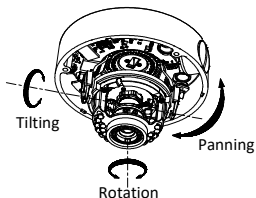


Secure Black Liner and Bubble

Image and Focus Adjusting:

1. 3-axis adjustment.

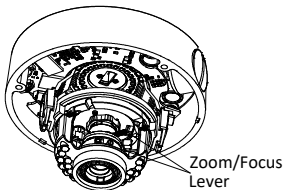
- 1). View the camera image using the monitor.
- 2). Rotate the panning table to adjust the panning position of the camera.
- 3). Rotate the tilting axes to adjust the tilting position of the camera.
- 4). Rotate the lens table to adjust the azimuth angle of the image.



3-axis Adjustment

2. Zoom and focus adjustment.

- 1). View the camera image using the monitor.
- 2). Loosen the zoom lever and move the lever between T (Tele) and W (Wide) to obtain the appropriate angle of view.
- 3). Tighten the zoom lever.
- 4). Loosen the focus lever and move the lever between F (Far) and N (Near) to obtain the optimum focus.
- 5). Tighten the focus lever.



Lens Adjustment

7 Setting Network Camera over the LAN

Purpose:

To view and configure the camera via LAN (Local Area Network), you need to connect the network camera in the same subnet with your PC. Then, install iVMS-4200 client software to search and change the IP address of network camera.

The following figure shows the cable connection of network camera and PC:

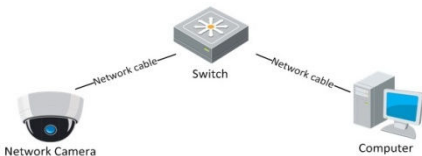


Figure 7-1 Wiring over LAN

Set the IP address of the camera for accessing via LAN.

Steps:

1. Use HYU-Vms client software to detect the online devices. Please refer to the user manual of HYU-Vms client software for detailed information.

➤ **Search online devices automatically**

After launch HYU-Vms software, it automatically searches the online devices every 15 seconds from the subnet where your

Network Camera Quick Start Guide

computer locates. It displays the total number and information of the searched devices in the Online Devices interface.

Go to **Device Management**, and click **Server** tab on the left-top of the window, and you can see the online devices listed on the right bottom of the window.



Figure 7-2 Search Online Devices



Device can be searched and displayed in the list in 15 seconds after it went online; it will be removed from the list in 45 seconds after it went offline.

➤ Search online devices manually

You can also click **Refresh Every 15s** to refresh the online device list manually. The newly searched devices will be added to the online list.

2. Change the IP address and subnet mask to the same subnet as of your PC.

Steps:

- 1). Click the device to be modified in the device list and click **Modify Netinfo** to modify the network parameters.

Network Camera Quick Start Guide

- 2). Edit the modifiable network parameters, e.g. IP address and port number.
- 3). Enter the admin password in the Manager Password field and click **OK** to save the changes.

Modify the Selected Device ✕

Device Information:

MAC Address:	44-19-b7-01-2f-be	Copy
Software Version:	V5.1.0build 140122	Copy
Device Serial No.:	XXXXXXXXXXXXXXXXXXXX	Copy

Network Information:

IP address:	<input type="text" value="172.6.23.22"/>
Port:	<input type="text" value="8000"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
Gateway:	<input type="text" value="172.6.23.1"/>
Manager Password:	<input type="password"/>

OK
Cancel

Figure 7-3 Modify Network Parameters



- The default IP address is “192.0.0.64”. The default user name is “admin”, and the password is “12345”. It is highly recommended you change the initial password after your first login to avoid security problems.
- For accessing the network camera from different subnets, please set the gateway for the network camera after you log in.

8 Accessing via Web Browser

System Requirement:

Operating System: Microsoft Windows XP SP1 and above version / Vista / Win7 / Server 2003 / Server 2008 32bits

CPU: Intel Pentium IV 3.0 GHz or higher

RAM: 1G or higher

Display: 1024×768 resolution or higher

Web Browser: Internet Explorer 6.0 and above version, Apple Safari 5.02 and above version, Mozilla Firefox 3.5 and above version and Google Chrome8 and above version

Steps:

1. Open the web browser.
2. In the browser address bar, input the IP address of the network camera, e.g., 192.0.0.64 and press the **Enter** key to enter the login interface.
3. Input the user name and password.
4. Click **Login**.

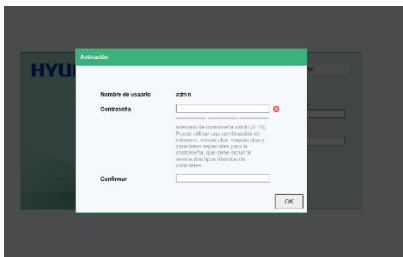


Figure 8-1 Login Interface device First Connection



Figure 8-2 Normal Login Interface

5. Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in.



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

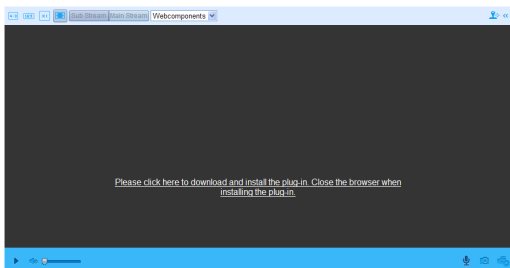


Figure 8-3 Download Plug-in

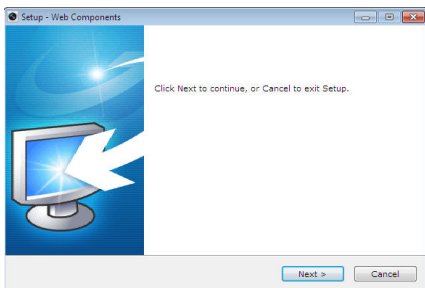


Figure 8-4 Install Plug-in (1)

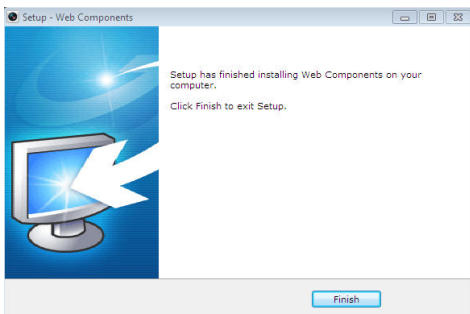


Figure 8-5 Install Plug-in (2)

6. Reopen the web browser after the installation of the plug-in and repeat steps 2-4 to login.



For detailed instructions of further configuration, please refer to the user manual of network camera.

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