



iDS-2CD7046G0-AP

Network Box Camera

Quick Start Guide

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About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision Website (<http://www.hikvision.com/>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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Regulatory Information FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection

against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Conditions

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

- This device may not cause harmful interference.
- 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 EMC Directive 2014/30/EU, 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.

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

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.

 Warnings	 Cautions
<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**

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- 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.
- The power source should meet limited power source or PS2 requirements according to IEC 60950-1 or IEC 62368-1 standard. Refer to the appropriate documentation for detailed information.
- 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 contact the service center.

 **Cautions**

-  **CAUTION:** Hot parts! Burned fingers are possible when handling the parts. Wait one-half hour after switching off before handling parts. This sticker indicates that the marked item can be hot and should not be touched without taking care. For devices with this sticker, device is intended for installation in a restricted access location, where access can be gained only by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.
- 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 sensor endurance at the same time.

- The sensor may be burned out by a laser beam, so when any laser equipment is in use, make sure that the sensor surface will not be exposed to the laser beam.
- Do not place the camera in extremely hot, cold (the operating temperature shall be -30° to +60°C (-22° to 140° F)), 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 equipment parts (e.g., electrolytic capacitor) shall be replaced regularly according to their average enduring time. The average time varies because of differences between operating environment and usage history, so regular checking is recommended for all users. Please contact your dealer for more details.
- This equipment is not suitable for use in locations where children are likely to be present.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions

ATTENTION: IL Y A RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UNE BATTERIE DE TYPE INCORRECT. METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS

- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- If the product does not work properly, 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.)

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1 Appearance Description

The box camera overview is shown below:

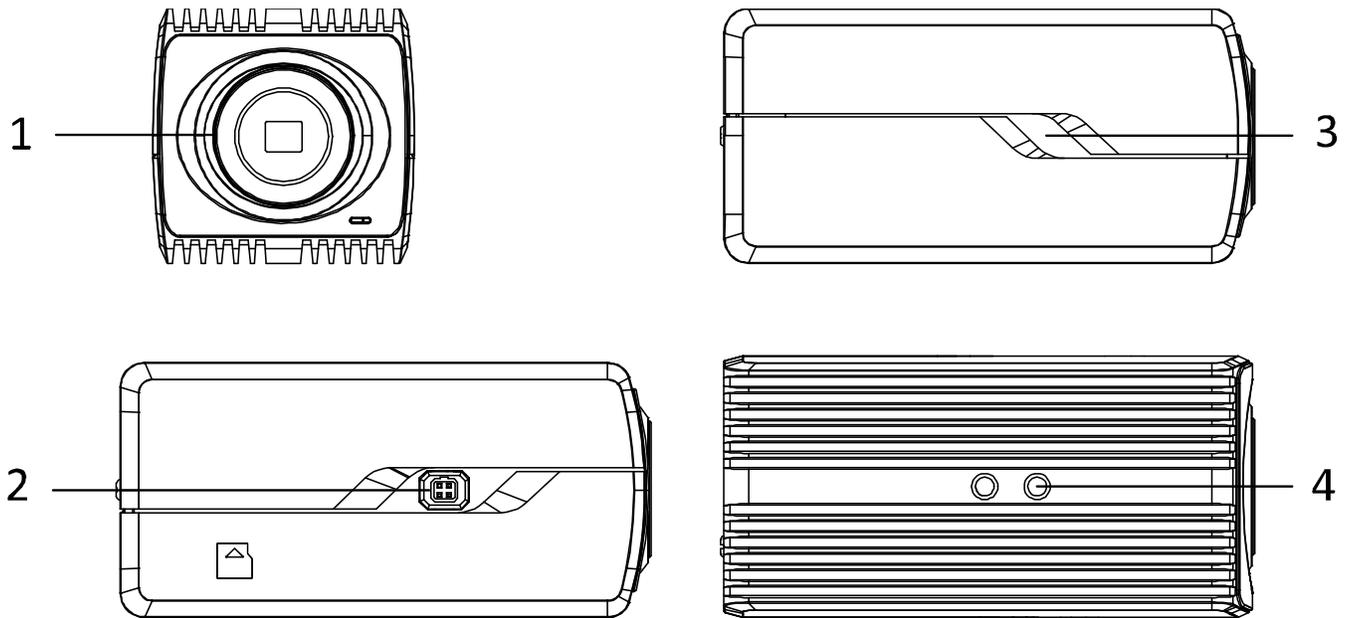


Figure 1, Overview

Description

No.	Description	No.	Description
1	Lens mount	2	Auto-iris interface
3	Power indicator	4	¼-20 UNC screw hole

The interfaces on the rear panel are described as follows. The actual interfaces may vary by model.

Rear Panel Interface Description

Item	Description	Item	Description
VIDEO OUT/CVBS	Analog video output interface	RS-485	D+ or D- connect to 485
AUDIO IN	Audio interface input	AUDIO OUT	Audio interface output
ALARM IN	Alarm interface, Input IN1 and GND1, IN2 and GND2 are two pairs of alarm inputs	ALARM OUT	Alarm interface, output 1A and 1B, 2A and 2B, 3A and 3B are three pairs of alarm outputs
SFP	Optical interface	LAN (PoE)	Network interface, PoE supported
RESET	One-key button reset	ABF	Auto back focus adjusting knob
DC 12V, AC24V	Power input	DC12V, GND/DC 12V_OUT	Power output interface
	Grounding	MicroSD SD	Memory card slot Insert the memory card for local storage
DEBUG	Debugging interface		

NOTE: Power indicator: red stands for starting and blue for working.

To reset the camera default parameters, press and hold the RESET button and power on the camera. After the camera powers on, continue to press and hold the Reset button for 10 seconds.

ABF is supported by certain camera models.

2 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 12 VDC, 24 VAC, or PoE. Make sure power supply matches camera.
- Make sure all related equipment is powered off during the installation.
- Check the product specifications for the installation environment.
- Make sure that the wall can withstand four times the weight of the camera and the bracket.

For cameras that support IR, you must pay attention to the following precautions to prevent IR reflection:

- 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.

2.1 Memory Card Installation

Only certain camera models support memory card installation. The actual device appearance may vary by model. The following takes a model as an example to illustrate the installation steps.

Steps

1. Insert the memory card to the memory card slot on the camera's rear panel.
2. (Optional) To unmount the memory card, push it in to eject it.

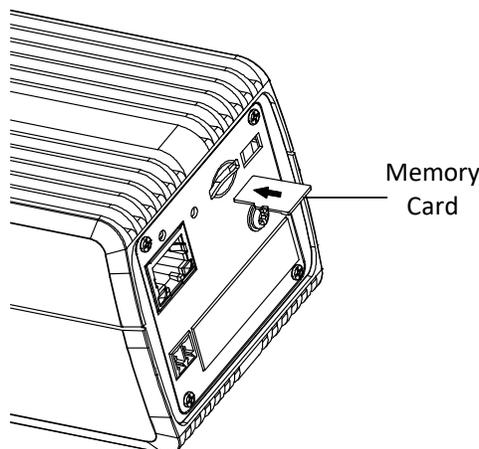


Figure 2, Memory Card Installation

2.2 Lens Installation

The actual device appearance may vary by model. The following takes a model as an example to illustrate the installation steps.

Before You Start

The lens shown below is for example only.

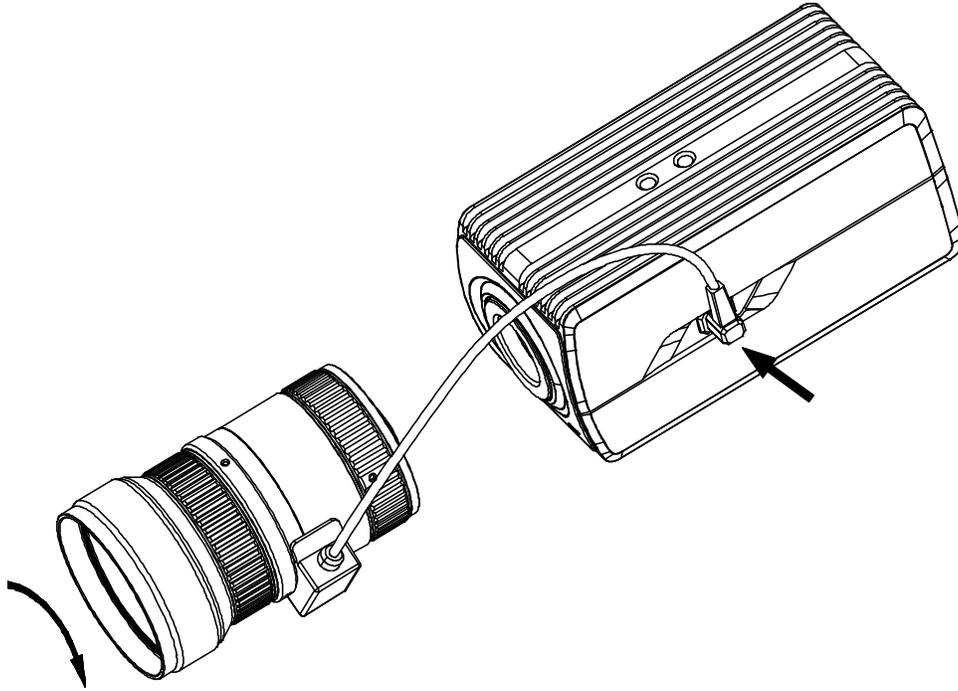


Figure 3, Lens Installation

Steps:

1. Fit the lens (not supplied) to the camera, and rotate it to tighten.

NOTES:

- Install the adapter ring to the lens interface if a C-mount lens is used.
 - A manual-iris lens can be directly installed to the camera without plugging the power cable of the auto-iris to the auto-iris interface.
2. Plug the auto-iris cable to the auto-iris interface.

2.3 Camera Mounting

The actual device appearance may vary by model. The following takes a model as an example to illustrate the installation steps.

2.3.1 Pendent Mounting

Before You Start

Pendent mount is not included in package. If you adopt this mounting style, you need to prepare a mounting bracket in advance. The shown pendent mount is for example.

Steps

1. Install the pendent mount to the ceiling with the supplied screws.

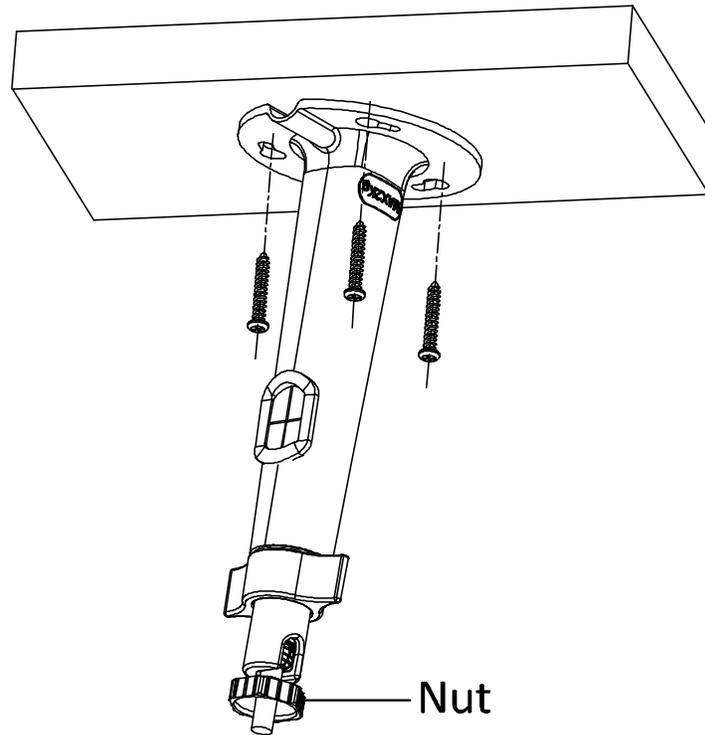


Figure 4, Install the Mount

2. Screw the camera to the pendent mount and tighten the nut.
3. Adjust surveillance angle

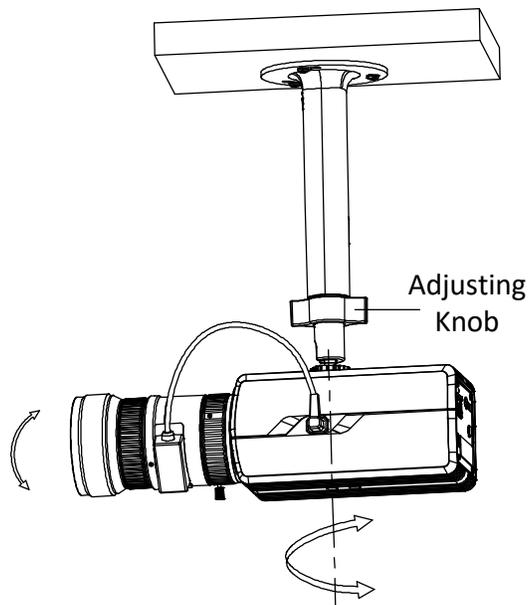


Figure 5, Adjust Surveillance Angle

- 1) Loosen the adjusting knob.

- 2) Hold the camera body to adjust panning and tilting position.
 - 3) Tighten the knob after adjustment.
4. Adjust zoom and focus level. Refer to **Section 2.5**.

2.3.2 Wall Mounting

Before You Start

Wall mount is not included in package. If you adopt this mounting style, you need to prepare a mounting bracket in advance. The shown wall mount is for example.

Steps

1. Separate the pedestal from the wall mount.

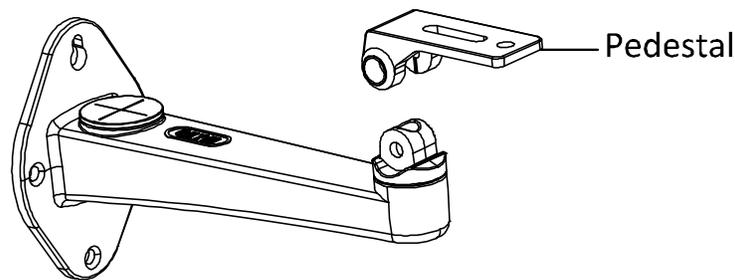


Figure 6, Separate Pedestal

2. Fix the pedestal to camera body.

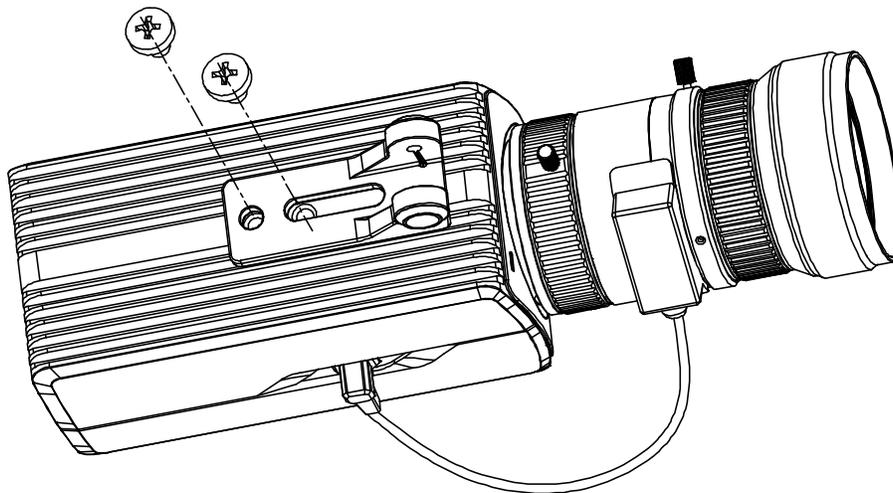


Figure 7, Fix Pedestal to Camera

3. Install the wall mount to wall.
4. Install the pedestal together with the camera back to wall mount.

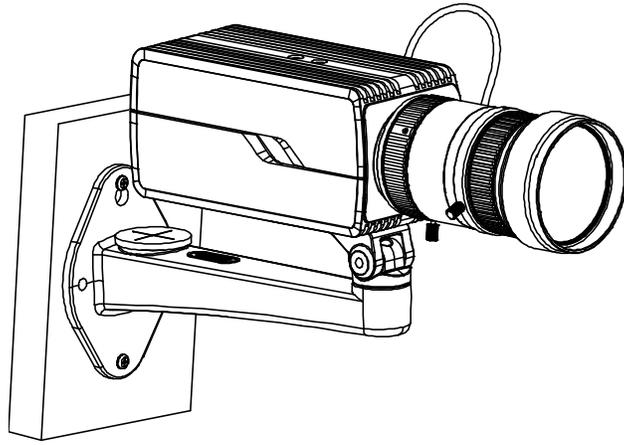


Figure 8, Install Camera to Wall Mount

5. Adjust the surveillance angle.

- 1) Loosen tilt adjusting screw. Tighten the screw after adjusting.
- 2) Loosen pan adjusting screw. Tighten the screw after adjusting.

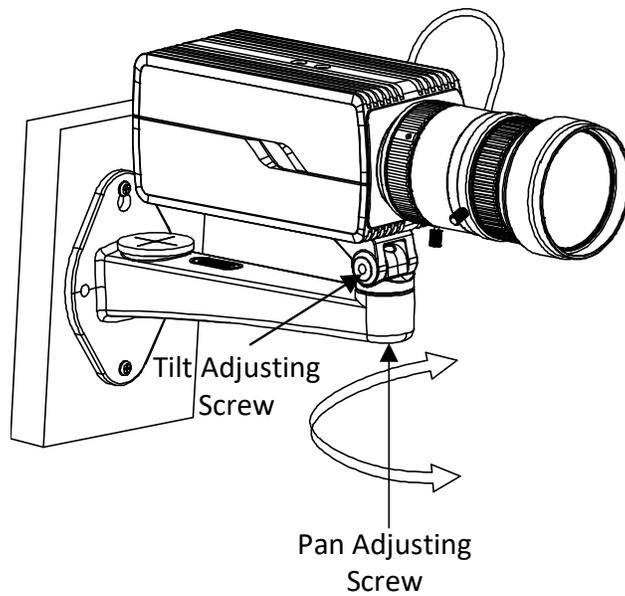


Figure 9, Adjust Surveillance Angle

6. Adjust zoom and focus level. Refer to *Section 2.5*.

2.4 Mounting with Housing

Before You Start

The shown housing is not included in package. You need to prepare one if you adopt this mounting style.

Also, for housing mounting, you need to prepare suitable brackets in advance.

2.3.3 Mounting Type I Housing

Steps

1. Screw the camera to housing mounting plate.

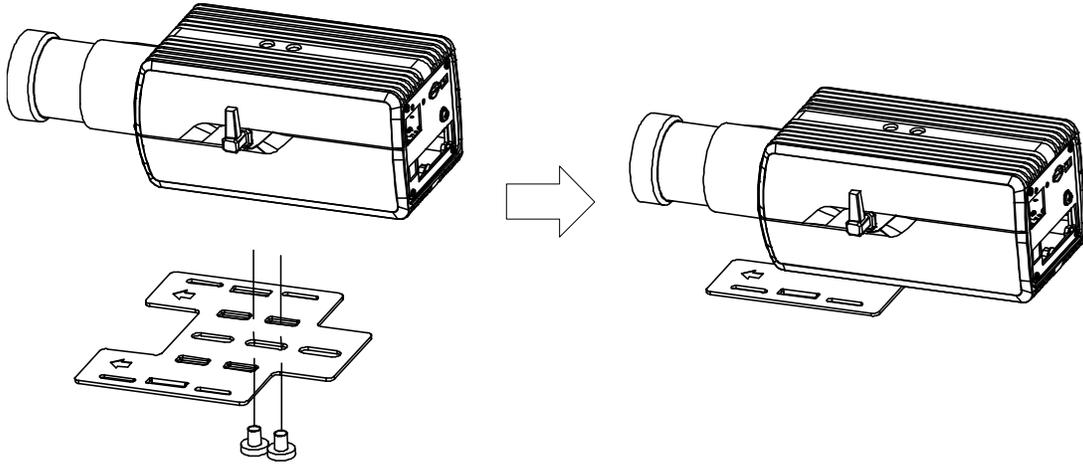


Figure 10, Install Camera to Mounting Plate

2. Screw the mounting plate together with the camera back to the housing.

NOTE: Push the camera as close to the window as possible.

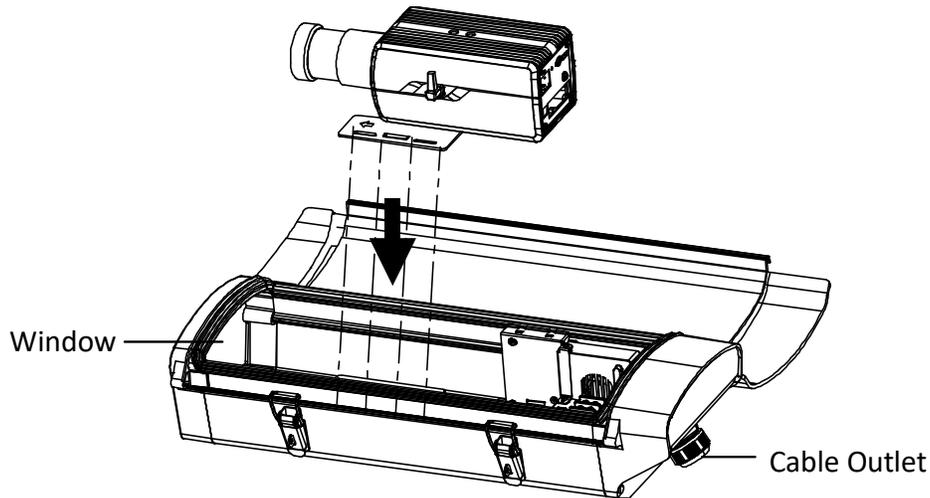


Figure 11, Install Camera to Housing

3. Connect and route cables through the cable outlet of the housing.
 - 1) For network, alarm input and output, and audio input and output, plug corresponding plugs to the rear panel of the camera. See Figure 1-1.
 - 2) For power supply and RS-485, see the following figure.

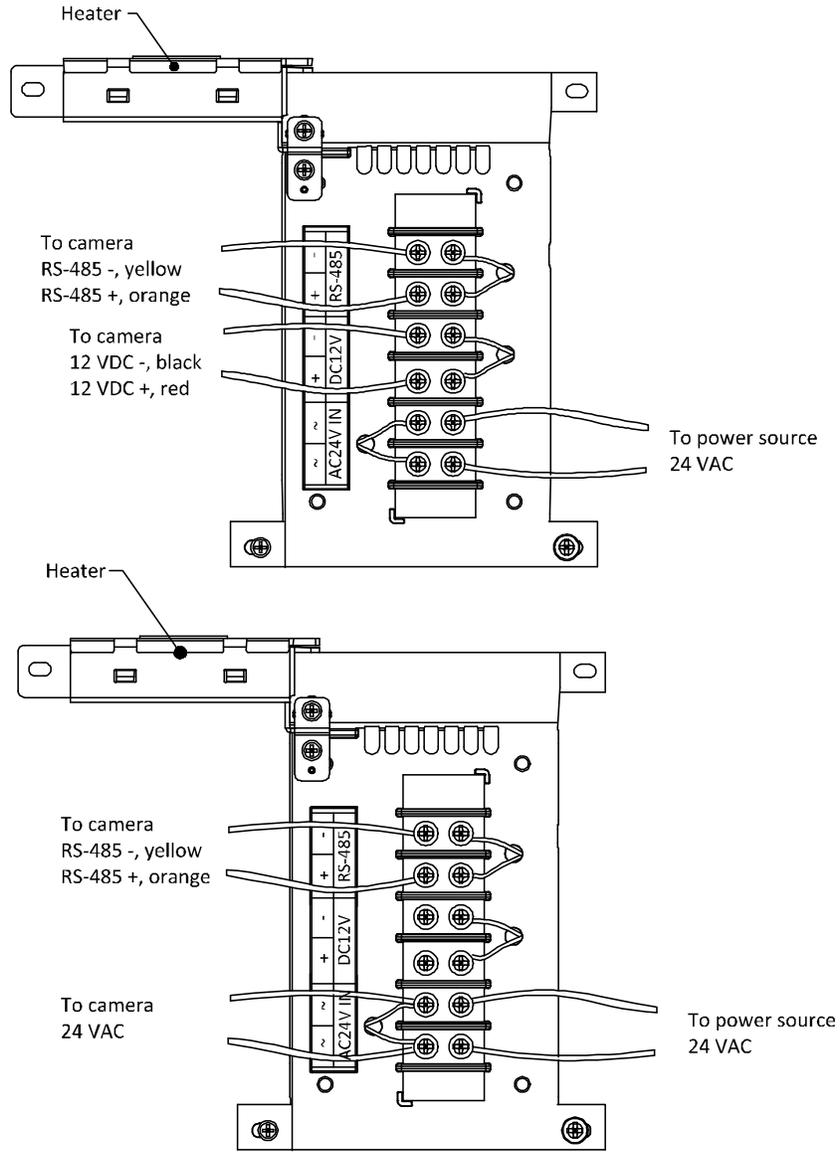
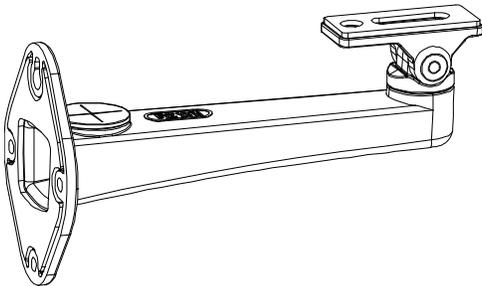


Figure 12, Wiring Board in Housing

4. Buckle the housing.
5. Install the housing to surveillance scene.

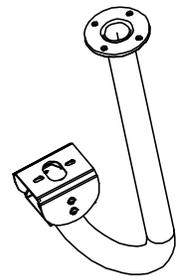
Using brackets, the housing supports wall mounting, pole mounting, and pendent mounting. The brackets are shown in the figures below:



Wall Mount



Horizontal Pole Mount



Pendent Mount

- 3) Install the bracket onto the wall/ceiling/pole. The wall mounting bracket, pole mounting bracket, and the pendent bracket are shown in the figures below.

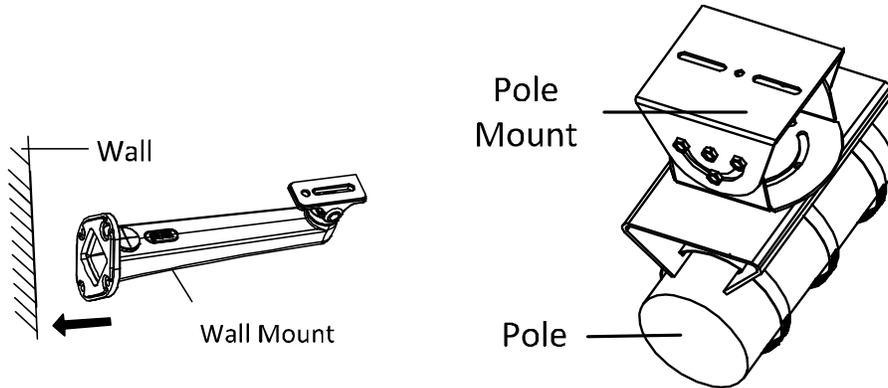


Figure 13, Install the Bracket to Mounting Place (1)

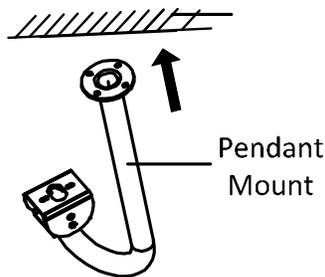


Figure 14, Install the Bracket to Mounting Place (2)

- 4) Fix the housing (with camera) onto the bracket with the supplied screws.
- 5) Loosen the adjusting screw to adjust the surveillance angle of the camera. Tighten the screw after adjustment.

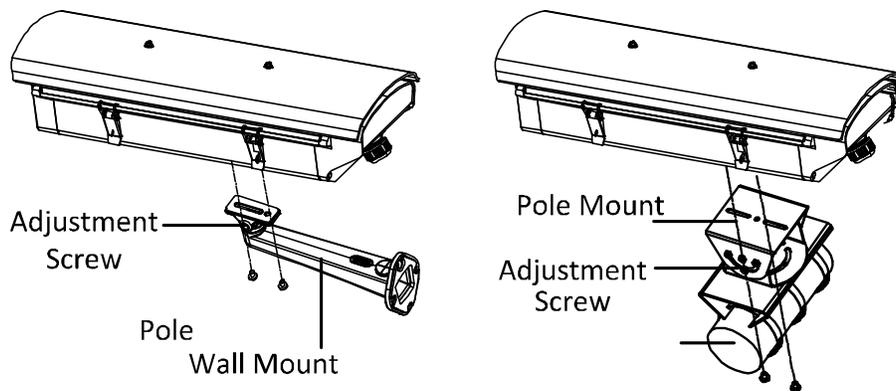


Figure 15, Fix the Housing to Brackets (1)

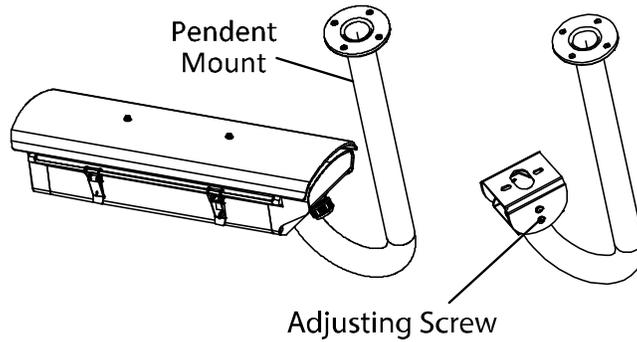


Figure 16, Fix the Housing to Brackets (2)

6. Adjust zoom and focus. Refer to **Section 2.5**.

2.3.4 Mounting Type II Housing

Steps

1. Connect and route cables through the cable outlet of the housing.
 - 1) For network, alarm input and output, and audio input and output, plug corresponding plugs to the rear panel of the camera. See **Figure 1-1**.
 - 2) For power supply and RS-485, see the following figure.

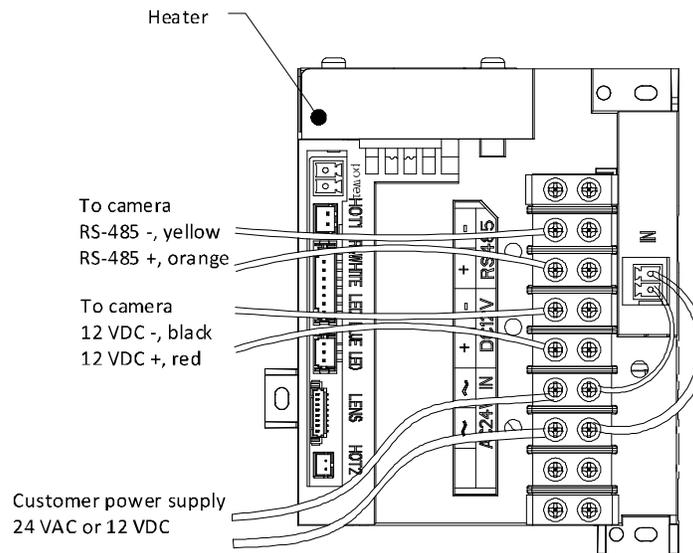
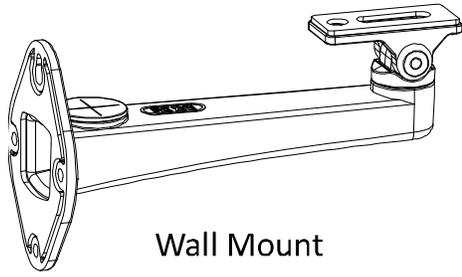


Figure 17, Wiring Board in Housing

2. Buckle the housing.
3. Install the housing to surveillance scene.

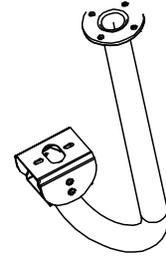
Using brackets, the housing supports wall mounting, pole mounting, pendent mounting, column mounting, integrated mounting, and integrated mounting with junction box. The brackets are shown in the figures below:



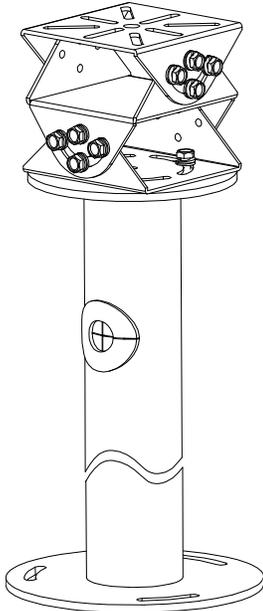
Wall Mount



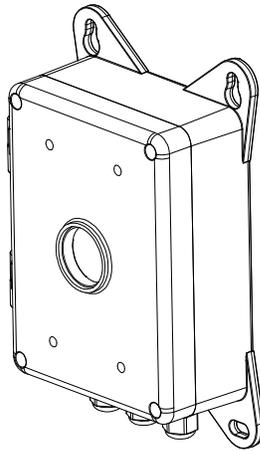
Horizontal Pole Mount



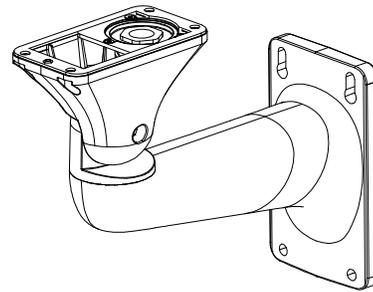
Pendent Mount



Column Mount



Junction Box



Integrated Mount

- 1) Install the bracket onto the wall/ceiling/pole/ground. The wall mounting bracket, pole mounting bracket, pendent bracket, column mounting bracket, integrated mounting bracket, and junction box are shown in the figures below.

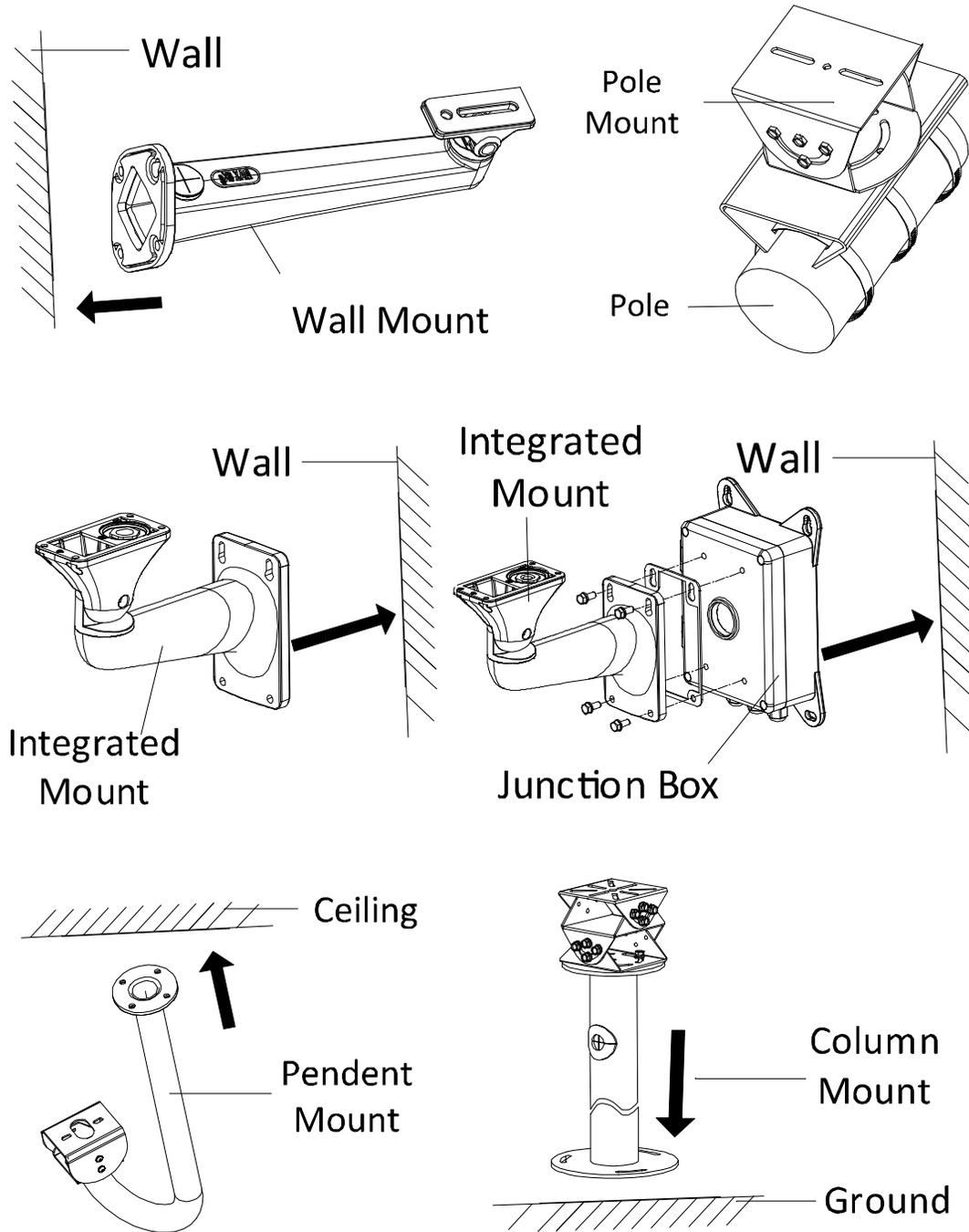


Figure 18, Install the Bracket to Mounting Place

- 2) Fix the housing (with camera) onto the bracket with the supplied screws.
- 3) Loosen the adjusting screw to adjust the surveillance angle of the camera. Tighten the screw after adjustment.

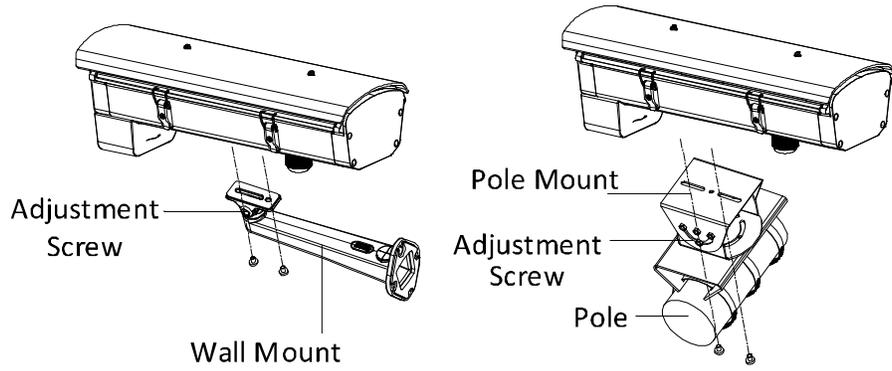


Figure 19, Fix the Housing to Brackets (1)

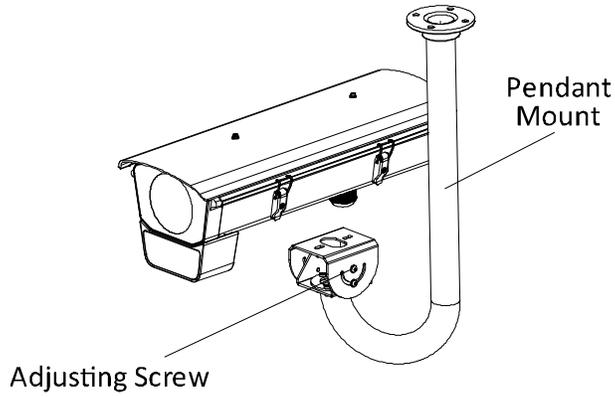


Figure 20, Fix the Housing to Brackets (2)

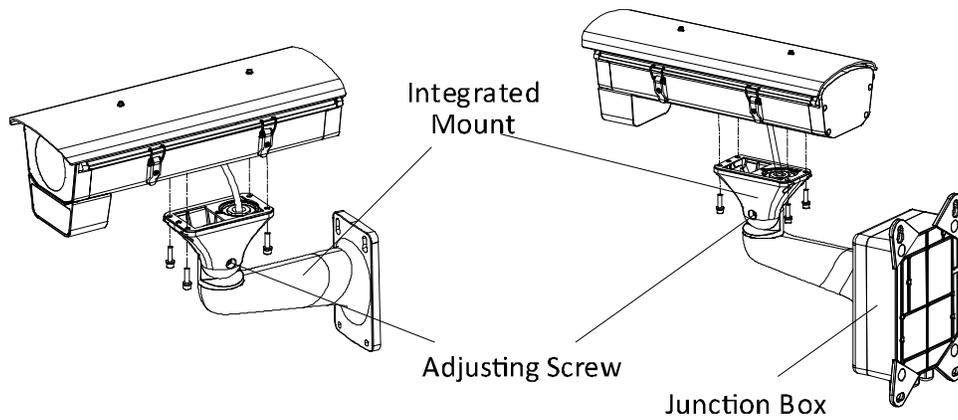


Figure 21, Fix the Housing to Brackets (3)

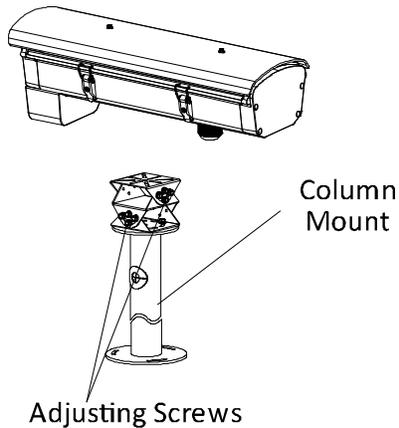


Figure 22, Fix the Housing to Brackets (4)

4. Adjust zoom and focus. Refer to *Section 2.5*.

2.5 Zoom and Focus Adjustment

Steps

1. Power on the camera.
2. Connect the video out interface of the camera to the installation display device.
3. Adjust zoom and focus.
 - For certain camera models, zoom and focus must be manually adjusted via zoom/focus lever according to the image on the display device.

NOTE: For a camera equipped with auto iris, it is suggested you change the iris mode to manual from the camera menu (accessed via Web browser), and re-change it back to auto iris after you adjust the focus by the focus lever.

- For a camera equipped with a motor-driven lens, adjust the zoom and focus on the PTZ control panel by visiting the camera via a Web browser or client software.
4. (Optional) For the camera supports ABF, you can adjust the focus manually, or click the ABF button on the rear panel of the camera to adjust the focus automatically.

3 Activate and Access Network Camera

Scan the following QR code to display the **Activate and Visit Network Camera** prompt. Note that mobile data charges may apply if Wi-Fi is unavailable.



