Dahua HD Pinhole Network Camera Quick Start Guide

Version 1.0.0

Dahua Vision Technology Co., Ltd.

Welcome

Thank you for purchasing our network cameras.

This user's manual is designed to be a reference tool for your system.

Please read the following safeguards and warnings carefully before you use this series product.

Please keep this user's manual well for future reference.

Important Safeguards and Warnings

1．Electrical safety

- All installation and operation should conform to your local electrical safety codes.
- Please check if the power supply is correct before operating the device.
- The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated DC 12V or AC 24V in the IEC60950-1. (Power supply requirement is subject to the device label).
- Please install easy-to-use device for power off before installing wiring, which is for emergent power off when necessary.
- Please prevent the line cord from being trampled or pressed, especially the plug, power socket and the junction from the device.
- Do not connect two power supplying sources to the device at the same time. Otherwise, it might result in device damage.
- We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.
- We are not liable for any problems caused by unauthorized modification or attempted repair.

2．Environment

- Do not aim the device at strong light (such as lighting, sunlight, and so on) to focus, otherwise it might cause overexposure (not the device malfunction), and affect the longevity of CCD or CMOS.
- Transport, use and store the device within the range of allowed humidity and temperature.
- Do not place the device in a damp or dusty environment, extremely hot or cold temperatures, or the locations with strong electromagnetic radiation or unstable lighting.
- Prevent water and other liquid from falling into the camera in case of damages to the internal components.
- Do not expose the indoor device to the damp environment or raining in case of fire or lightning.
- Keep sound ventilation in case of heat accumulation.
- Pack the device with standard factory packaging or material with same quality when transporting the device.
- Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3．Operation and Daily Maintenance

- Do not touch the heat dissipation component of the device directly to avoid scald.
- Do not dismantle the device as there is no component that can be fixed by users themselves in the device. Otherwise, it might cause water leakage or bad image for the device due to unprofessional

dismantling. Please contact after-sale service to replace desiccant if it becomes green.

● It is recommended to use the device with lightning arrester to improve thunder-struck protection effect.

● The grounding holes of the device are recommended to be grounded to further enhance the reliability of the device.

● Do not touch the CCD (CMOS) optic component directly. You can use the blower to clean the dust or dirt on the lens surface. Please use a dry cloth wetted by alcohol to wipe away the dust gently if it is necessary to clean.

● Always use the dry soft cloth to clean the device. If there is too much dust, please wipe away the dust with a clean cloth wetted slightly by the mild detergent, and then use the dry cloth to clean the device. Do not use volatile solvents like alcohol, benzene, thinner and etc., or strong detergent with abrasiveness, otherwise it will damage the surface coating or reduce the working performance of the device.

● When installing or using the device, do not directly touch or wipe the surface of the dome cover as it is an optical device. If stained with dirt, use oil-free soft brush or air blower to gently wipe it away. If stained with grease or fingerprint, firstly use soft cloth to gently wipe the water drop or oil and wait till it is dry, and then use oil-free cotton cloth or leans cleaning paper soaked with alcohol or detergent to wipe from the lens center outward till it is clean.

Warning

● Please modify the default password after login to avoid being stolen.

● Use the standard accessories provided by manufacturer and make sure the device is installed and fixed by professional engineers.

● Prevent the device surface from the radiation of laser beam when using laser beam device.

● Do not provide two or more power supply modes for the device, otherwise it might cause damage to the device.

Statement

● Please refer to the actual product for more details; the manual is just for reference.

● The manual will be regularly updated according to the product upgrade; the updated content will be added in the manual without prior announcement.

● Please contact the supplier or customer service if there is any problem occurred when using the device.

● Please contact the customer service for the latest procedure and supplementary documentation.

● There might be deviation between the actual value of some data and the value provided in the manual due to the reasons such as the real environment is not stable and so on. Please refer to the final explanation of the company if there is any doubt or dispute.

● The company is not liable for any loss caused by the operation that does not comply with the manual.

FCC Information

1. 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.

2. 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. This equipment generate, 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 communication. 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.

Note

Please refer to the disk for more details, check and download corresponding user's manual and tool.
Before installation, please open the package and check all the components are included.
Contact your local retailer ASAP if something is broken in your package.

Accessory Name	Amount
Network Camera Unit	1
Quick Start Guide	1
Installation Accessories Bag	1
CD	1

Table of Contents

1 Device Framework

1.1 Structure and dimension

Note

The framework figures in this manual are just for reference. There might be some minor differences between the actual products and the corresponding figures, so please refer to the actual products you purchased.

1.1.1 Structure and Dimension of Modular Pinhole Network Camera

1.1.1.1 Structure

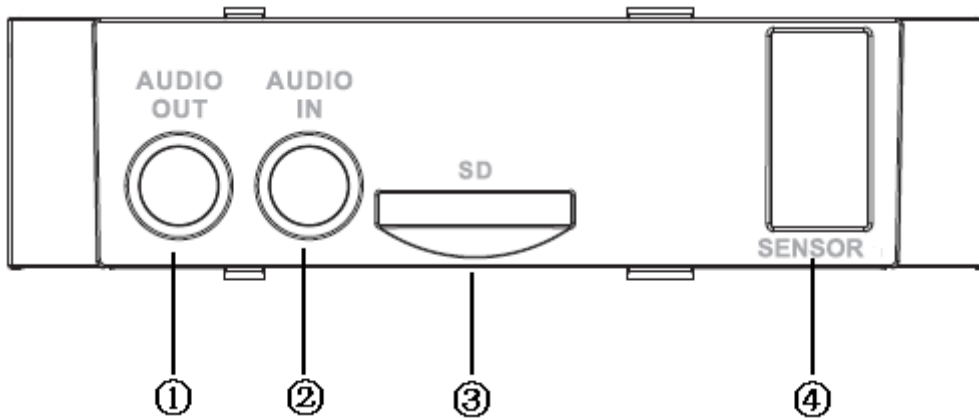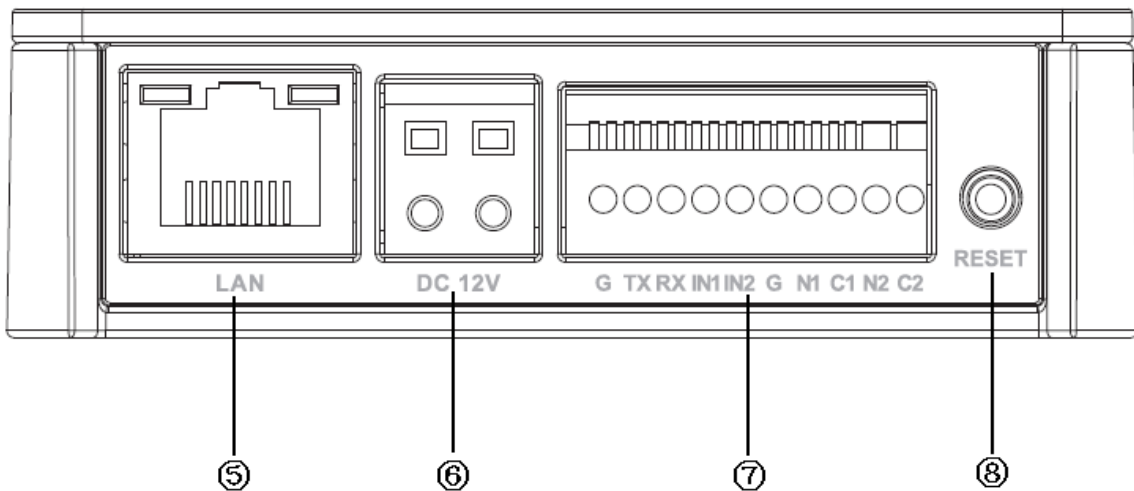The following figures show the ports of device.

Figure 1-1 Ports of the device (1)

Figure 1-2 Ports of the device (2)

The following table shows the detailed information of ports function.

Table 1-1 Description of port function

No.	Port	Port name	connector	Function description
1	AUDIO OUT	Audio output port	RCA	Output audio signal to the speakers and other devices.
2	AUDIO IN	Audio input port	RCA	Input audio signal, receive analog audio signal from pickup and other devices.
3	Micro SD Card	Micro SD	Micro SD Card slot	Micro SD card storage
4	SENSOR	Sensor port	Sensor board	Connect front end Sensor board, get image data.
5	LAN	Network port	Ethernet port	Connect standard Ethernet cable
6	DC12V	Power input port	-	Power port, input DC12 V or POE power supply.
7	I/O	I/O port	-	Connect I/O port.
8	Reset Button	Reset	-	It is used to restore factory default settings for the device. **Note** Continuously press the button for over 5 seconds in the situation where the device is working normally, then the system configuration info can be restored to factory default settings.

The following table shows more details about I/O port.

Table 1-2 Description of I/O Port

| Port name	Cable port name	Function description
I/O port	G	GND
	TX	232 sending port.
	RX	232 receiving port.
	IN1	Alarm input port1，receive on-off signal from external alarm source.
	IN2	Alarm input port 2，receive on-off signal from external alarm source.
	G	GND
	N1	Alarm output port1
	C1	
	N2	Alarm output port2
	C2	

Dimension

Refer to the following figures for dimension information of different models for modular pinhole camera. The unit is mm.
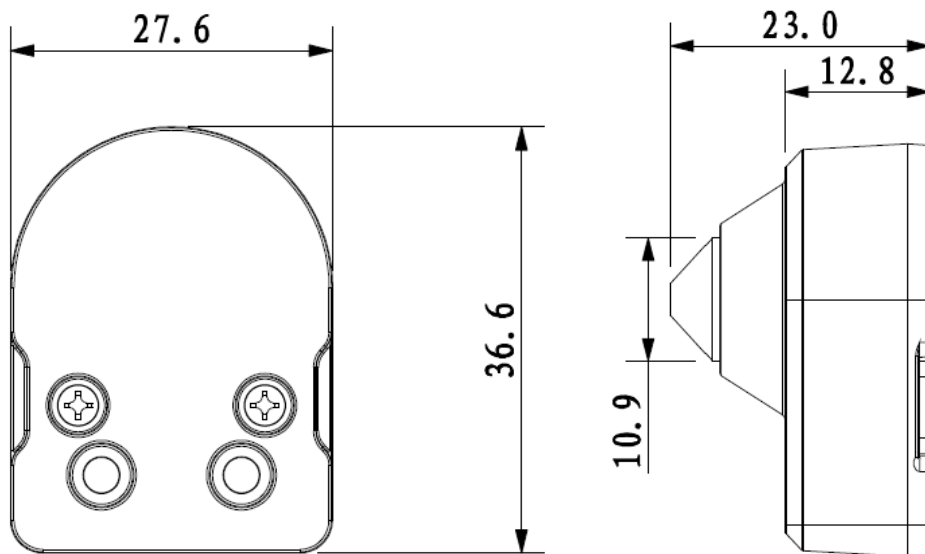
Figure 1-3 Dimension of model A
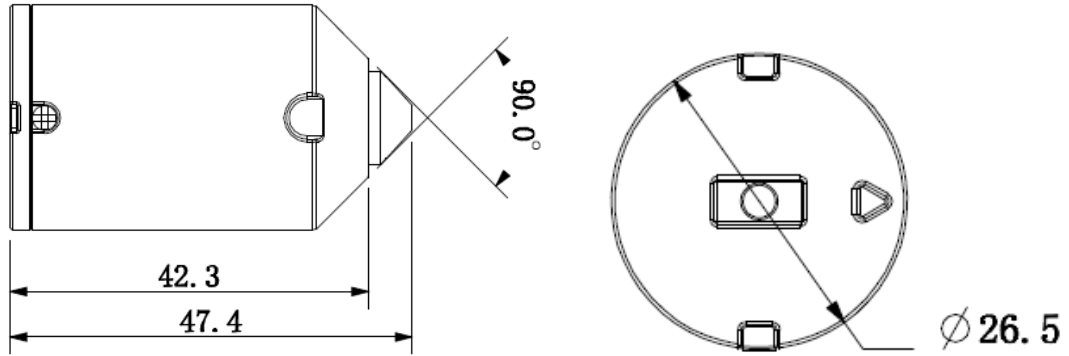
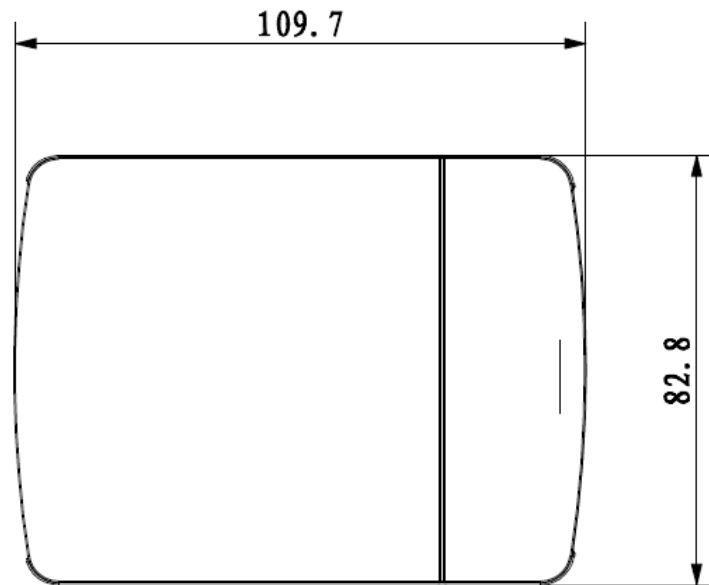**Figure 1-4 Dimension of model B**
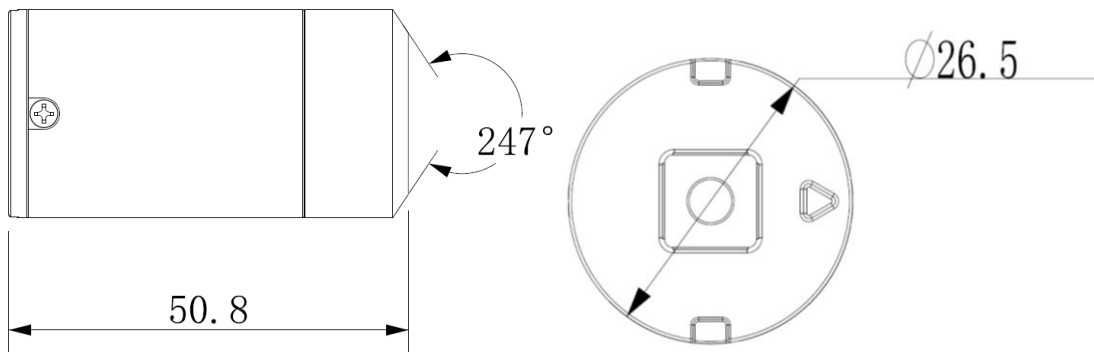
Figure 1-5 Dimension of model C

Refer to the following figure for the dimension of rear end for the three models described above.
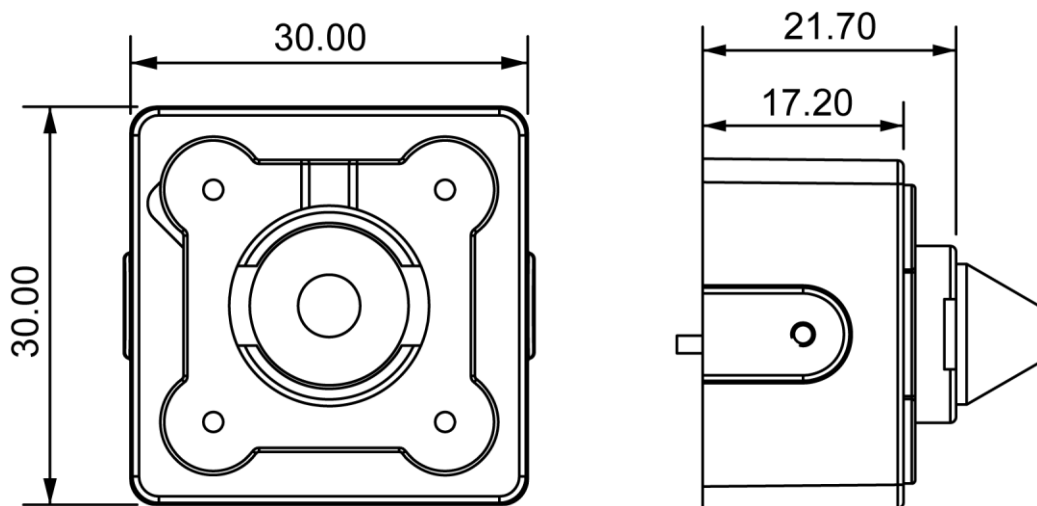
Figure 1-6 Dimension of rear end

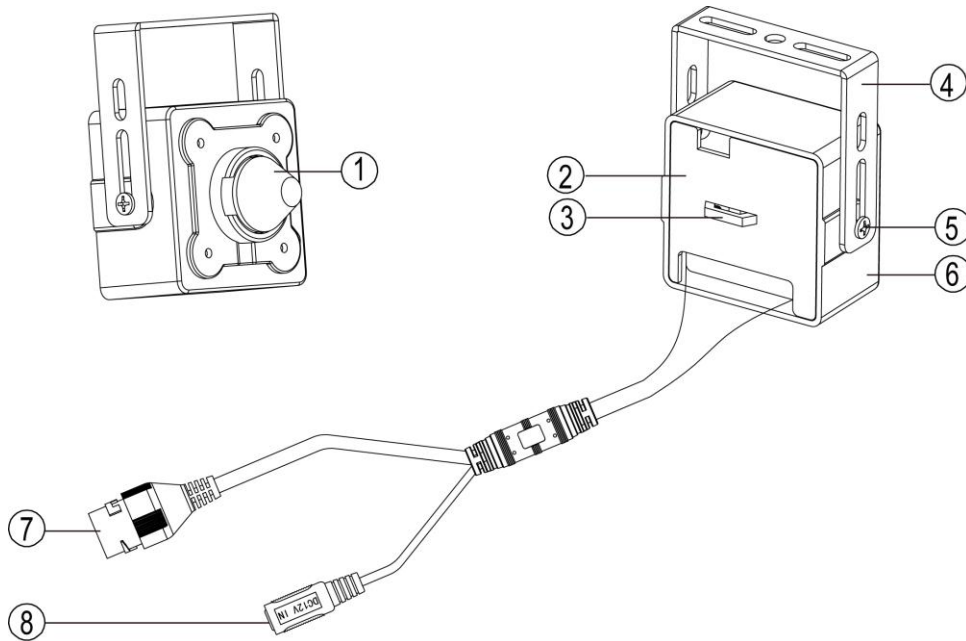## 1.1.2 Structure and dimension of All-in-one Pinhole Network Camera

The following figure shows the dimension of device.

Figure 1-7 Dimension of device

The following figure shows the structure of device.

Figure 1-8 Structure of device

The following table shows more details about each component.

Table 1-3 Description of components

No.	Name	Function
1	Lens	Receive the optical signal from the environment.
2	Back cover	-
3	Binding wire	It is used to fix the cable.
4	Bracket	It is used to fix the camera.
5	Bracket adjusting screw	It is used to adjust the camera angle.
6	Front cover	-
7	Network port	Connect to standard Ethernet cable.
8	Power input port	Power port, input DC 12V。

1.2 Bidirectional Talk

Note

- This function is only supported by HD modular pinhole network camera.
- The on-site listening operation is null during the bidirectional talk process.

To set up the bidirectional talk function, do the following:

1. Connect the MIC to the audio input port of the device and PC respectively. Then connect the earphone to the audio output port of the device and PC respectively.
2. Login the Web and then click the **Talk** button to enable the bidirectional talk function, the button becomes orange. Click **Talk** button again to close the bidirectional talk function.
3. Speak via the MIC at the device end or PC end, and you can receive the audio via the earphone at the device end or PC end.
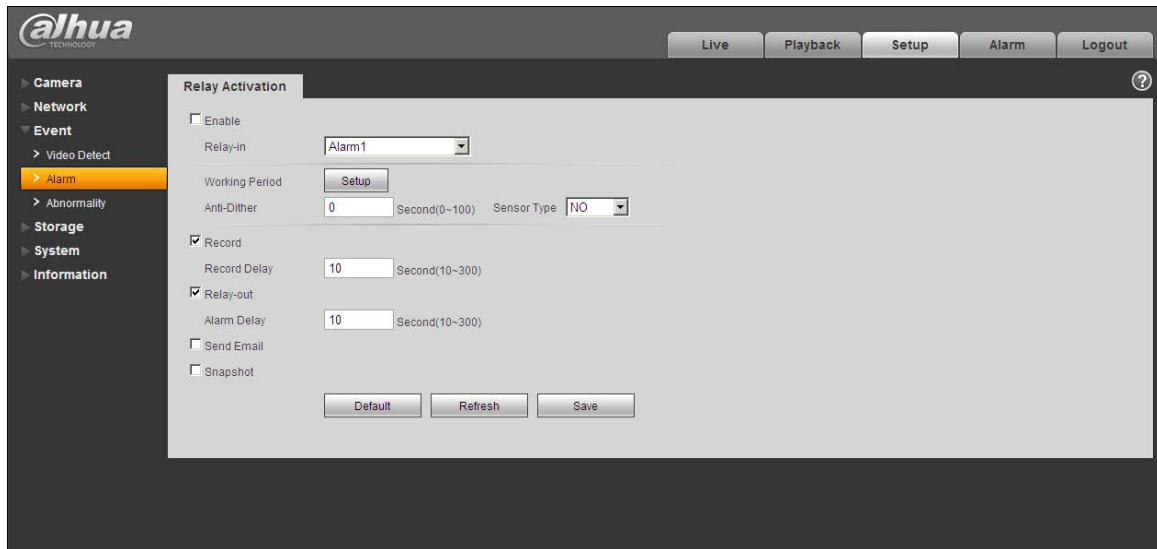
Note

The on-site listening operation is null during the bidirectional talk process.

1.3 Alarm Setup

Note

This function is only supported by some models of HD modular pinhole network camera.

The following figure shows the Alarm setup screen.

Figure 1-9 Alarm setup screen

To set up the Alarm input and output, do the following:

1. Connect alarm input device to the alarm input port of I/O cable.
2. Connect alarm output device to the alarm output port of I/O cable, alarm output port can only be connected to NO alarm device.
3. Open the WEB, and then configure the alarm input and output in **Alarm**. Alarm input on WEB corresponds to the Alarm input of I/O cable. Because the alarm input device will generate high or low level signal when there is alarm, the configurations are corresponding NO and NC inputs.
4. Set the WEB alarm output. The alarm output corresponds to the alarm output of I/O cable.

2 Device Installation

Note

All the installation figures below are for reference only due to the different models and appearances. Please refer to the actual devices for exact details.

## 2.1 Installation of HD Modular Pinhole Network Camera

This product is a kind of separate device, and both the front end and the rear end of the device have to be installed respectively. For front end, there are two types that are square and round, and the square front end type has two installation ways.

Note

Please make sure the installation surface can support at least the 3X weight of the total weight of the camera and the bracket.

The following figure shows the installation of round and square rear end:

**Figure 2-1 Installation of round and square rear end**
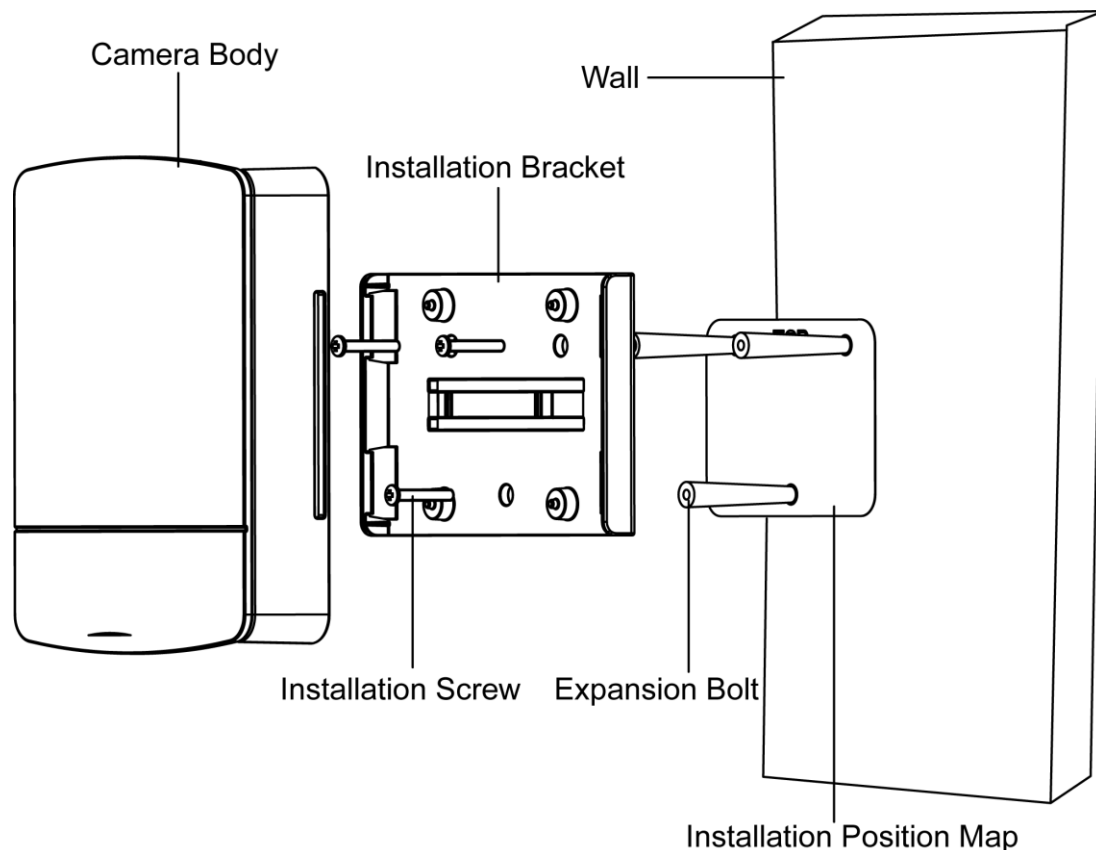
To install the round and square rear end, do the following:

1. Stick installation position map to designated surface where you will install the device.
2. Dig a hole according to position of hole on installation position map.
3. Open accessories bag, take out expansion bolt and insert it into the hole you just dug.
4. Open accessories bag, take out screws. Tighten the 3 screws to fix the device on the installation surface where the bolts are located.
5. Put the camera body into the installation bracket directly.
6. Connect front-end lens to camera body by cable.

The followings figure shows the installation of round front end.

**Figure 2-2 Installation of round front end**
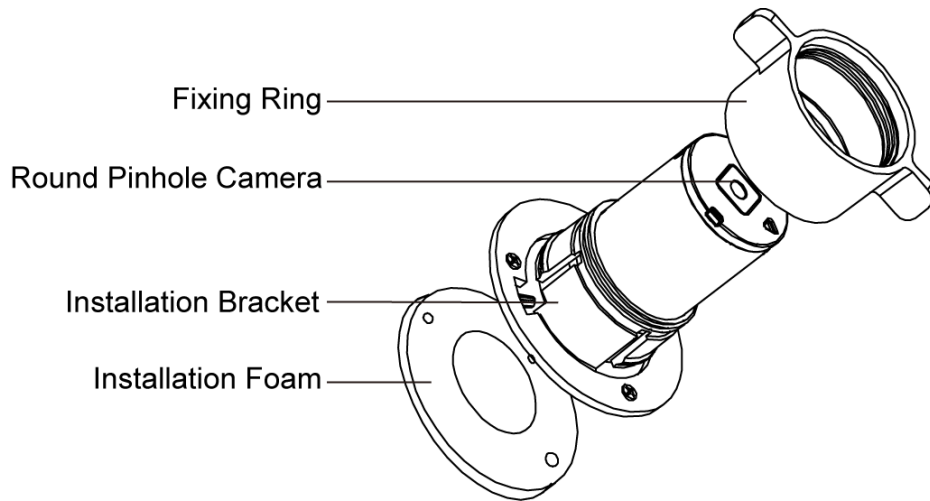
To install the round front end, do the following:
1. Take out the installation bracket from the accessories bag (with installation foam)
2. Tear off the film of the foam, and stick it on the surface to be installed.
3. Set the fixing ring on the installation bracket.
4. Put the round front end into the installation bracket and adjust the location.
5. Tighten the fixing ring.

There are two installation modes for square front end as follows:
Installation mode 1:

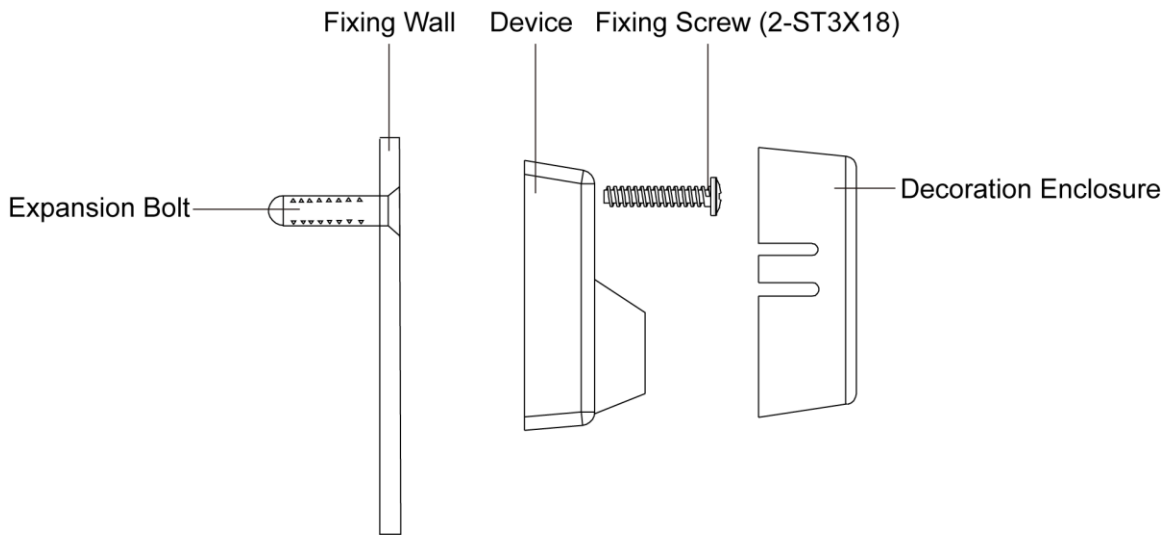**Figure 2-3 Installation mode 1 for square front end**
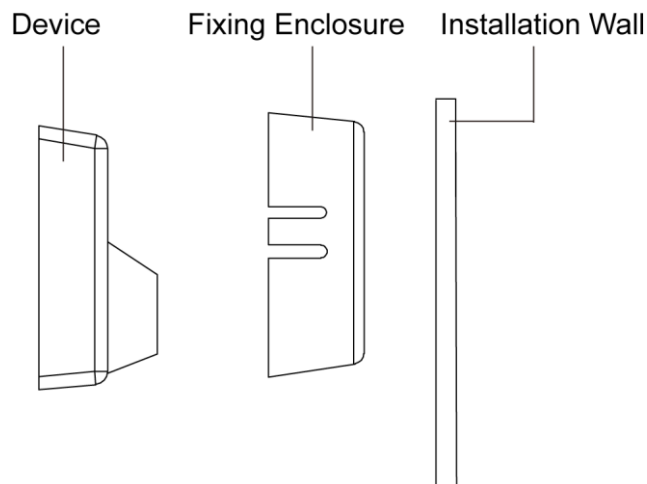
Refer to the following installation steps:
1. Open the accessories bag and take out the fixing enclosure (with fixing foam).
2. Stick the fixing enclosure on the installation surface.
3. Embed the square front end into the fixing enclosure.

Installation Mode 2:

Figure 2-4 Installation mode 2 for square front end

Refer to the following installation steps:

1. Dig the holes for installation expansion bolts on the installation surface.
2. Take out the expansion bolts from the accessories bag and nail them into the holes you just dug.
3. Open the accessories bag and take out the screws; tighten the three screws and fix the device on the installation surface where the bolts are located.
4. Take out the decoration enclosure from the accessories bag, aim the device and press it hard to install.

2.2 Installation of HD All-in-one Pinhole Network Camera

Note

The pinhole camera mainly adopts ceiling installation. The installation surface has to be thick enough to sustain at least 3X weight of the camera.

Figure 2-5 Installation of device
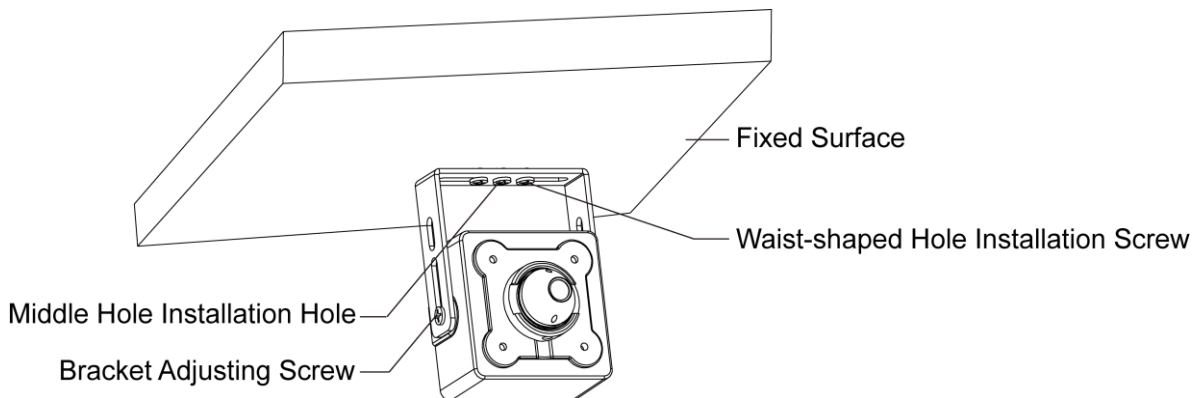
Install the camera:

Use screws to fix the camera on the installation wall, as it is shown in Figure 2-1.

Location /angle adjustment:

1. Install the camera on the fixed wall together with the bracket.
    ● The screw is installed in the middle hole, and then the camera can rotate.
    ● The screw is installed in the left and right waist-shaped holes, and then the camera can be adjusted rightward and leftward.
2. Loosen the bracket adjusting screw to adjust the camera angle.

3 Network Configuration

The IP address of all the cameras is the same when leaving factory (default IP 192.168.1.108). To make the camera access to the network smoothly, please plan the available IP segment reasonably according to the actual network environment.

3.1 Modify IP Address

The cameras which are accessed via wired network can acquire and modify the IP address through "Quick Configuration Tool". For the wireless network cameras, you need to connect to the wired network to configure wireless parameters before use.

This section introduces the approach of modifying IP address via "Quick Configuration Tool". You can also modify the IP address in the network parameters of the WEB interface. Please refer to the document *WEB Operation Manual* in the disk for more details.

Note

The camera can be configured only when the IP addresses of the camera and the computer are in the same network segment.

To modify IP address, do the following:

1. Double-click the "ConfigTools.exe" and open the "Quick Configuration Tool".
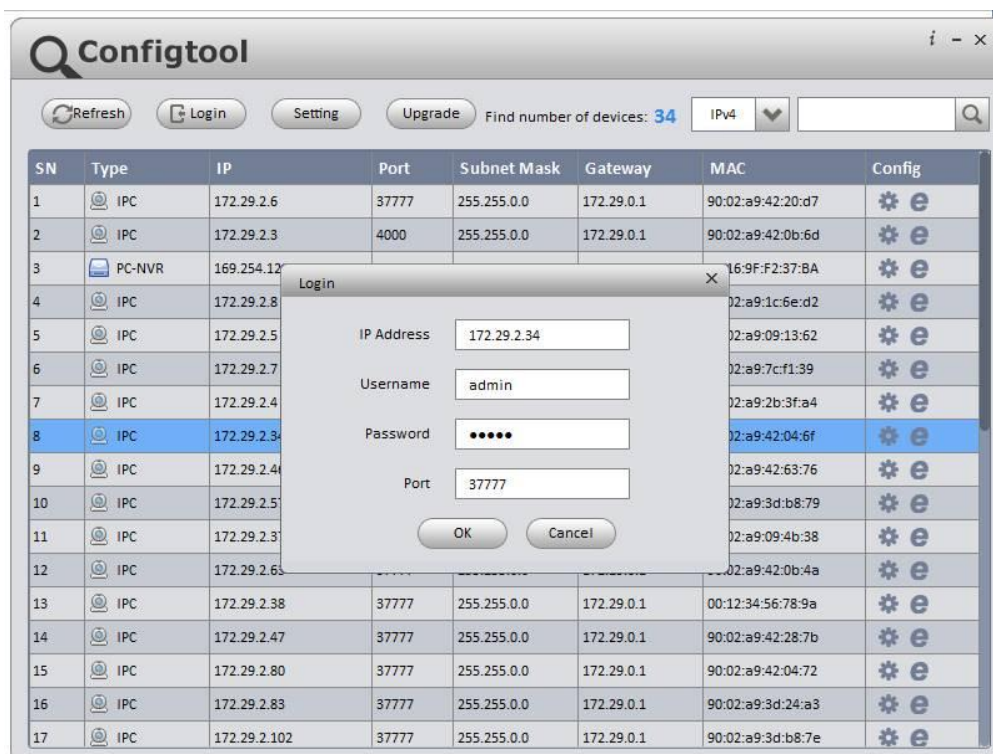2. Double-click the device that needs to be configured.
   The system will pop out the **Login** dialog box. See Figure 3-1 for more details.
3. Enter the IP address, username, password and port number of the camera, and then click **OK**.

   Note

   The default username and password is **admin** and **admin** respectively, and the default port is **37777**.
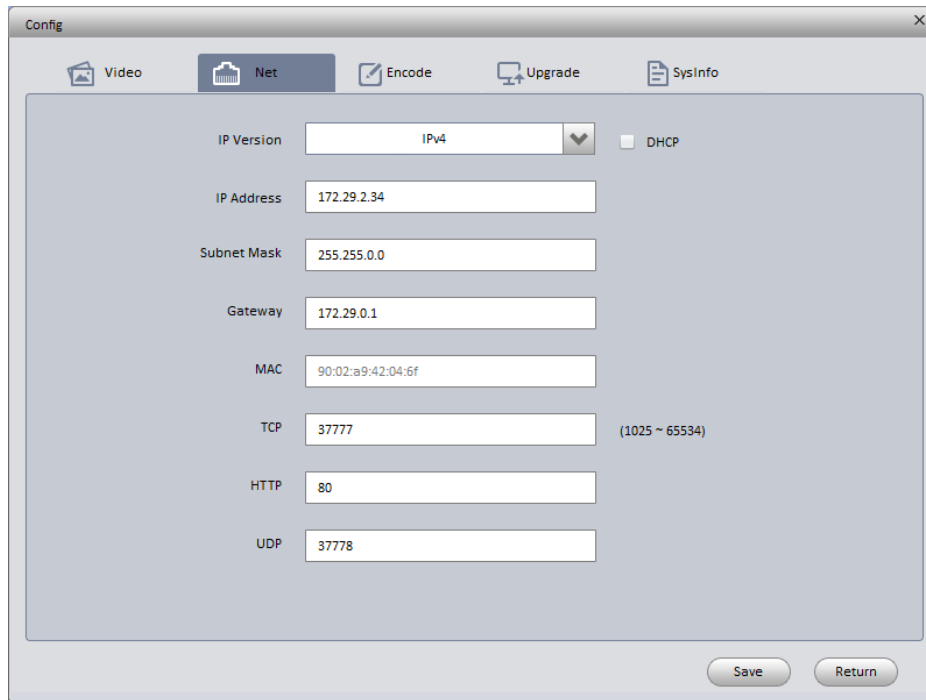
Figure 3-1 Login

4. Modify the camera IP address on the **Net** interface, and then click **Save** to finish modification. See Figure 3-2 for more details.

Figure 3-2 Network parameters

3.2 Login WEB Interface

Note

Different devices might have different WEB interfaces, the figures in this document are just for reference, please refer to the document *WEB Operation Manual* in the disk and the actual interface for more details.

To login WEB interface, do the following:

1. Open IE and input the modified camera IP address in the address bar, and then press **Enter** key. The login interface shows. See Figure 3-3 for more details.

Figure 3-3 WEB Login

2. Input your username and password (Default username is **admin** and password is **admin** respectively), click **Login**.

Note

The default username and password is **admin** and **admin** respectively, please modify the administrator password as soon as possible after you successfully logged in.

3. Install controls according to the system prompt. See Figure 3-4 for the WEB main interface.

Figure 3-4 WEB main interface
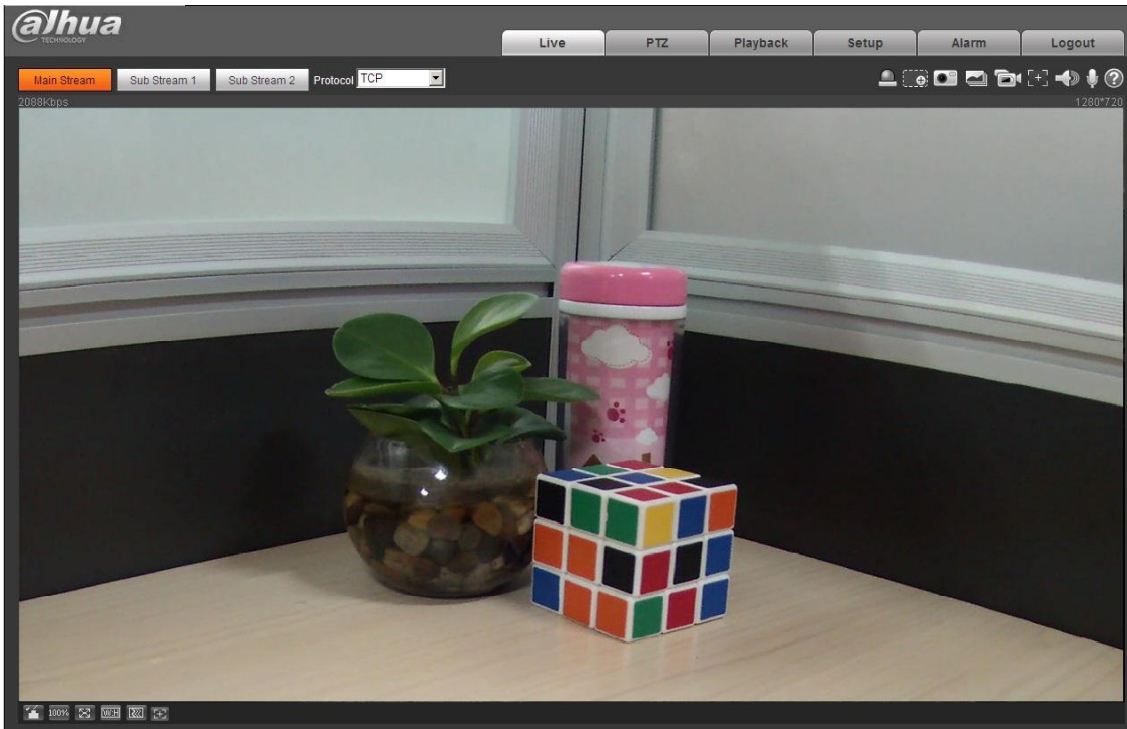
Note

● This quick start guide is for reference only. Minor differences might be found in user interface.

● All the designs and software are subject to change without prior written notice.

● If there is any uncertainty or controversy, please refer to our final explanation.

● Please visit our website or contact your local service engineer for more information.