



# 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.
- Do not allow water and other liquid falling into the camera in case of damages to the internal components.
- Do not allow rain or damp to the indoor device in case fire or lightning might occur.
- 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
Warranty Card and Certificate	1

# Table of Contents

1	Device Framework .....	1
1.1	Structure and Dimension .....	1
1.1.1	Structure and Dimension of Modular Pinhole Network Camera .....	1
1.1.2	Structure and Dimension of All-in-one Pinhole Network Camera .....	4
1.2	Bidirectional Talk .....	5
1.2.1	Device-end to PC-end .....	5
1.2.2	PC-end to the Device-end .....	6
1.3	Alarm Setup .....	6
2	Device Installation .....	8
2.1	Installation of HD Modular Pinhole Network Camera .....	8
2.2	Installation of HD All-in-one Pinhole Network Camera .....	10
3	Network Configuration .....	12
3.1	Modify IP Address .....	12
3.2	Login WEB Interface .....	13

# 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

You can refer to the following figures for port information. See [错误!未找到引用源。](#) and Figure 1-2.

Figure 1-1 Ports of the device (1)

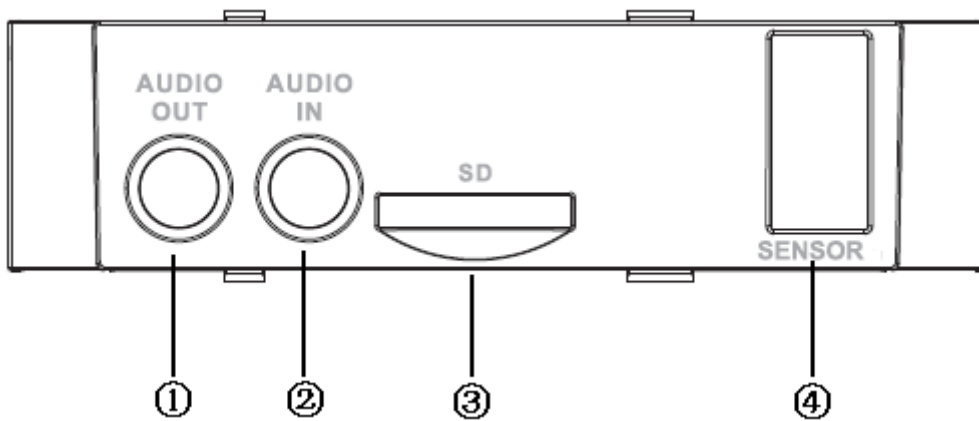
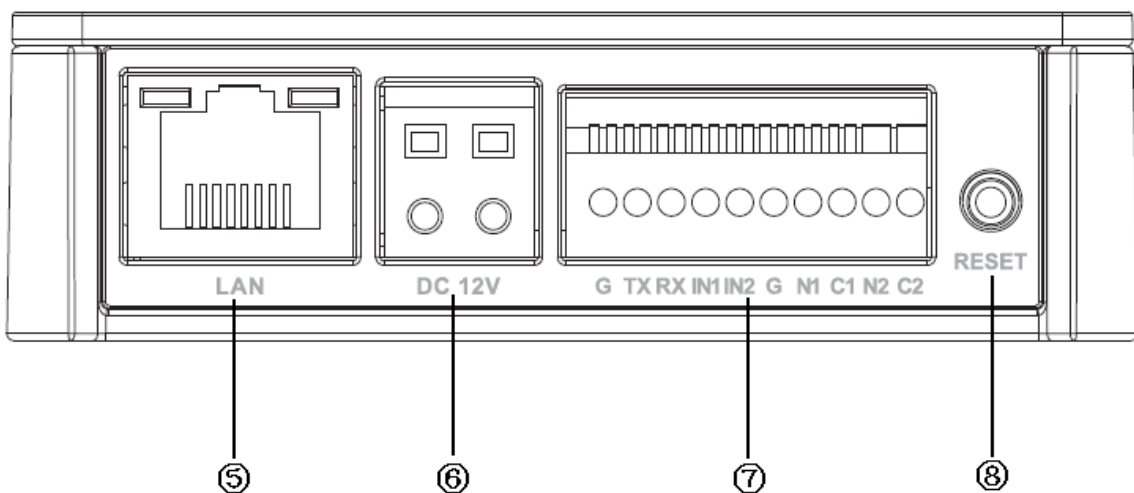


Figure 1-2 Ports of the device (2)



Please refer to the table 1-1 for detailed information about port function.

**Table 1-1 Description of Port Function**

SN	Port	Port Name	Connector	Function Note
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	-	<p>It is used to restore factory default settings for the device.</p> <p>Note:</p> <p>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.</p>

Please refer to table 1-2 for more details about I/O port.

**Table 1-2 Description of I/O Port**

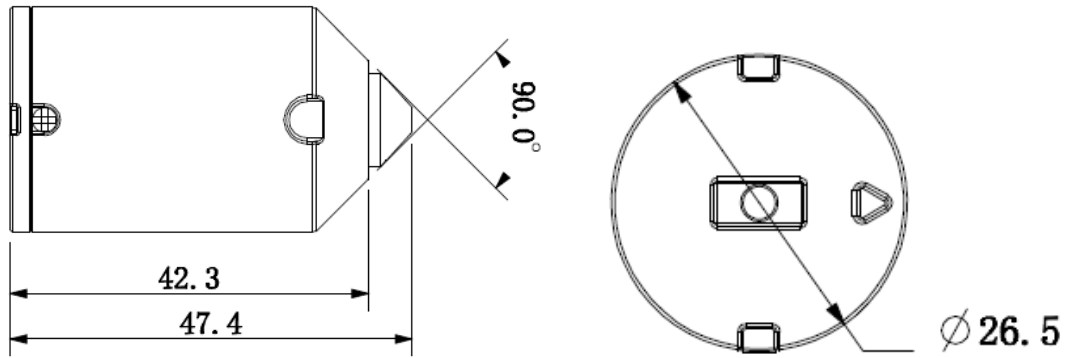
Port Name	Cable Port name	Function Note
I/O port	G	GND
	TX	232 sending port.
	RX	232 receiving port.
	IN1	Alarm input port1, receive on-off signal from external alarm source.
	IN2	Alarm input port 2, receive on-off signal from external alarm source.
	G	GND
	N1	Alarm output port1
	C1	
	N2	Alarm output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

### 1.1.1.2 Dimension

Please refer to the following figures for dimension information of different models for modular pinhole camera. The unit is mm.

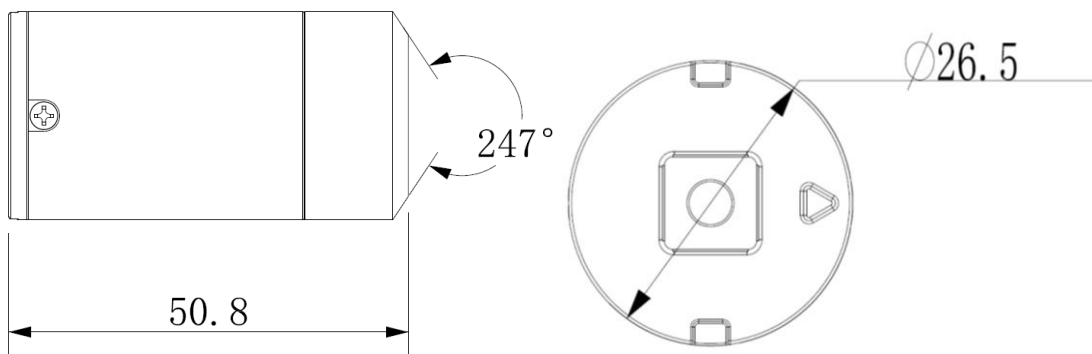
Please refer to Figure 1-3 for the dimension of model A.

**Figure 1-3 Dimension of model A**

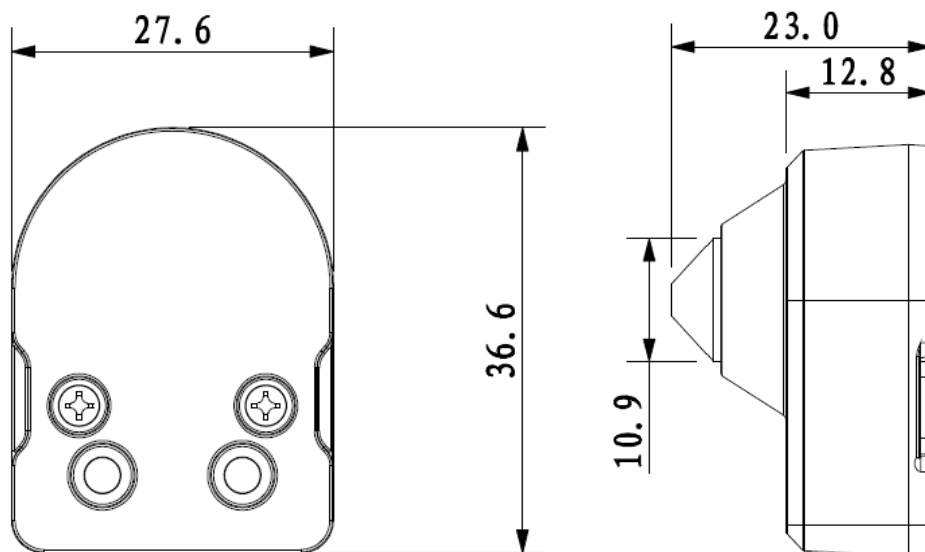


Please refer to Figure 1-4 for the dimension of model B.

**Figure 1-4 Dimension of model B**



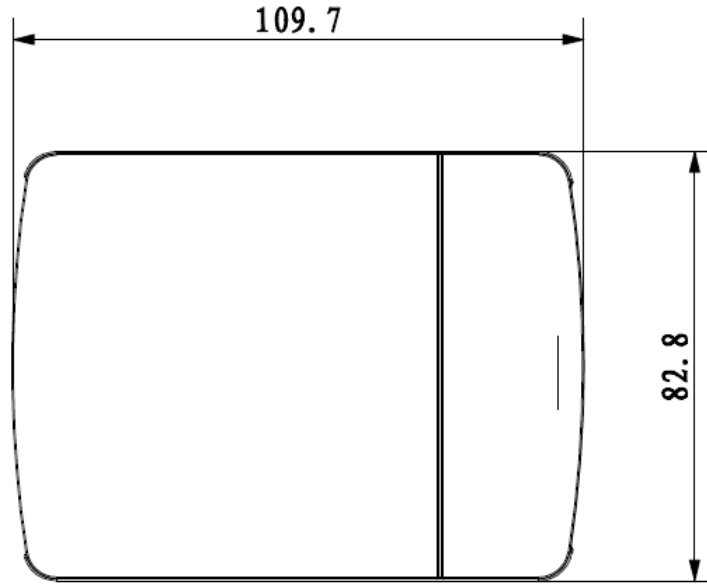
**Figure 1-5 Dimension of model C**





**Figure 1-6 Dimension of rear end**

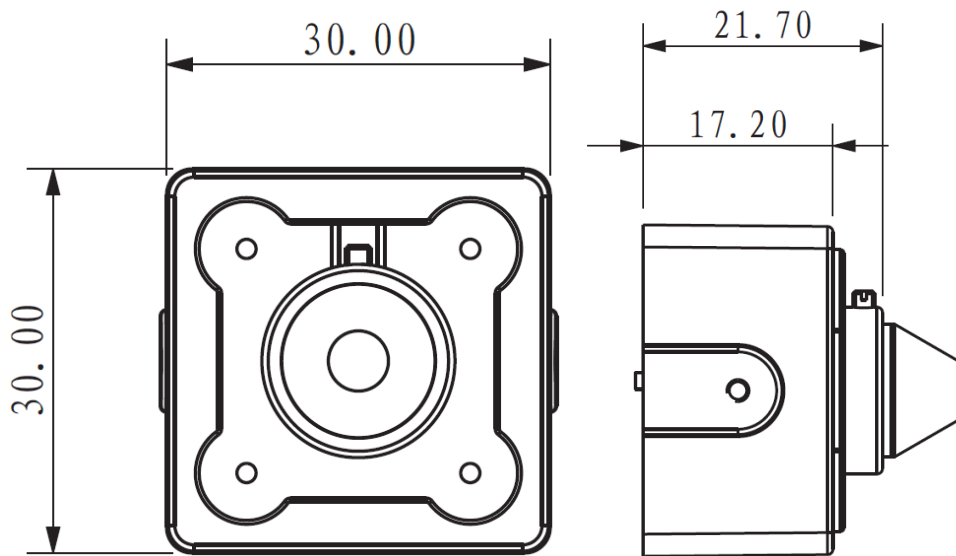
Please refer to Figure 1-6 for the dimension of rear end for the three models described above.



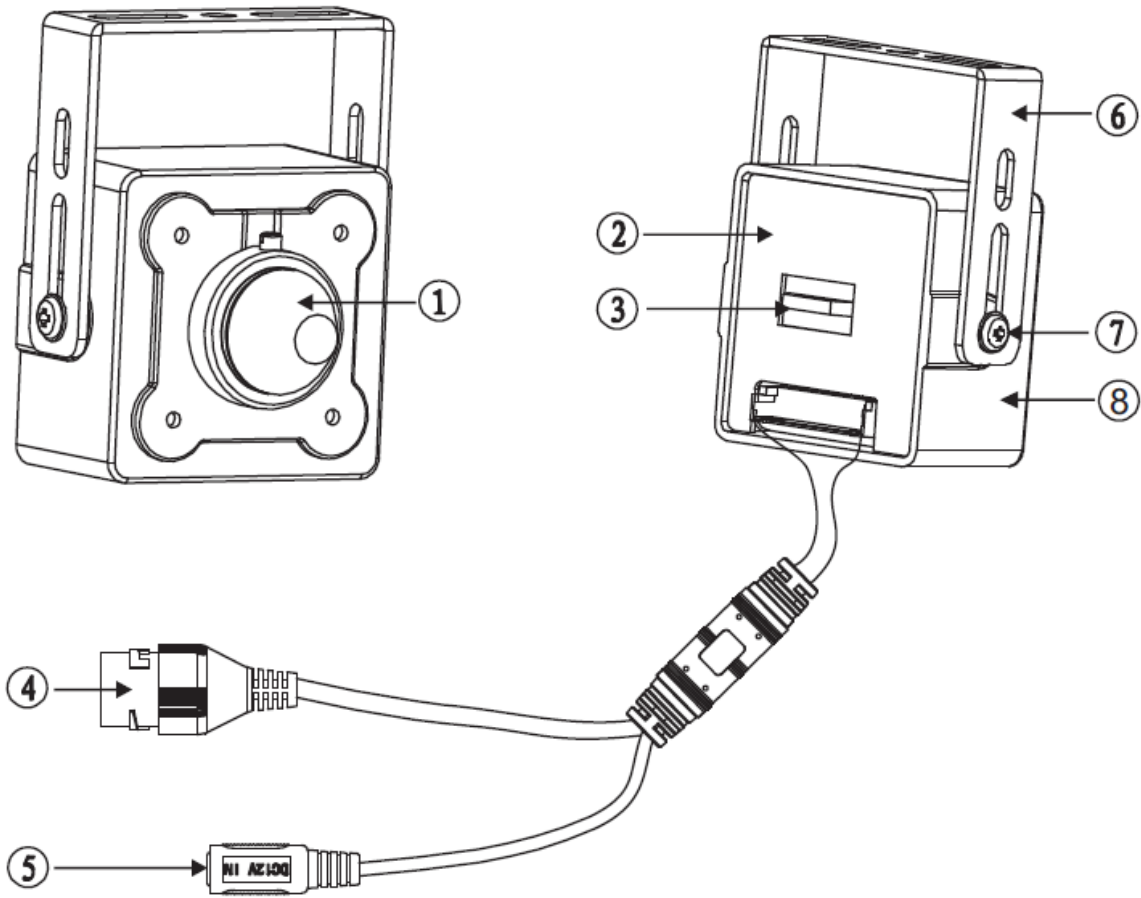
### 1.1.2 Structure and dimension of All-in-one Pinhole Network Camera

You can refer to the following figures for more details. See Figure 1-7.

**Figure 1-7 Dimension of device**



**Figure 1-8 Structure of device**



Please refer to the table 1-3 for 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	Network port	Connect to standard Ethernet cable.
5	Power input port	Power port, input DC 12V.
6	Bracket	It is used to fix the camera.
7	Bracket adjusting screw	It is used to adjust the camera angle.
8	Front cover	-

## 1.2 Bidirectional Talk

### Note:

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

### 1.2.1 Device-end to PC-end

#### Device Connection

Please connect the speaker or the MIC to the audio input port of the device. Then connect the earphone to the audio output port of the PC.

Login the Web and then click the Talk button to enable the bidirectional talk function.

You can see the button becomes orange after you enabled the bidirectional talk function.

Click Talk button again to stop the bidirectional talk function.

### Listening Operation

At the device end, speak via the speaker or the pickup, and then you can get the audio from the earphone or sound box at the pc-end.

## 1.2.2 PC-end to the Device-end

### Device Connection

Connect the speaker or the MIC to the audio input port of the PC and then connect the earphone to the audio output port of the device.

Login the Web and then click the Talk button to enable the bidirectional talk function.

You can see the button becomes orange after you enabled the audio talk function.

Click Talk button again to stop the bidirectional talk function.

### Note:

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

### Listening Operation

At the PC-end, speak via the speaker or the pickup, and then you can get the audio from the earphone or sound box at the device-end.

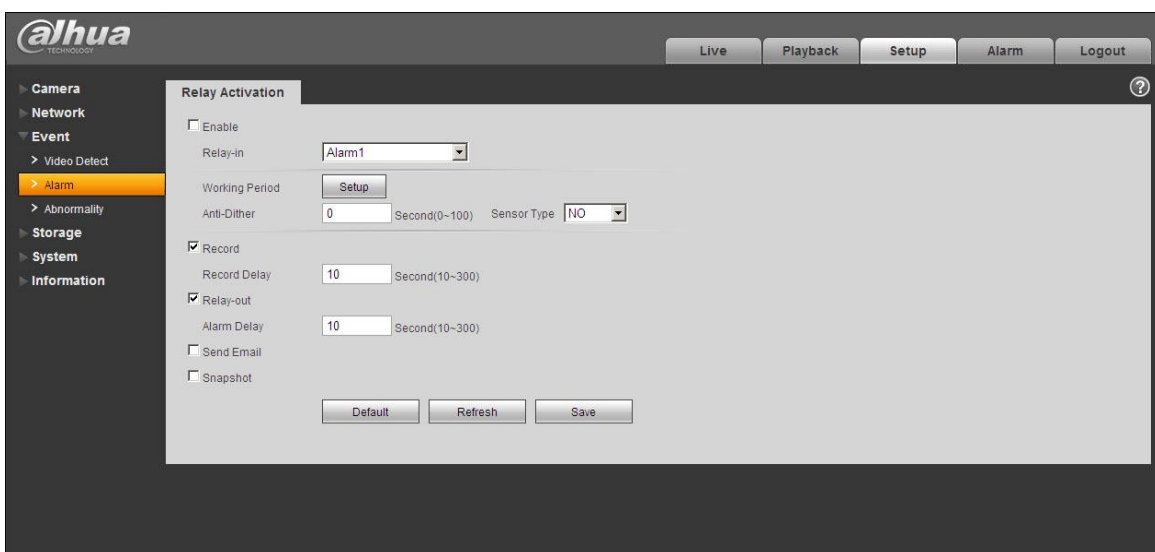
## 1.3 Alarm Setup

### Note:

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

Please refer to Figure 1-9 for more information.

Figure 1-9 Alarm setup screen



Alarm input and output steps:

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, set alarm input and output correspondingly. Alarm input 01 on WEB corresponds to the first alarm input of I/O cable on device. When there is alarm, alarm input device will generate signal of high and low level. Set corresponding NO and NC inputs.
4. Set the WEB alarm output. The alarm output corresponds to the first channel alarm output of I/O port on the device.

## 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

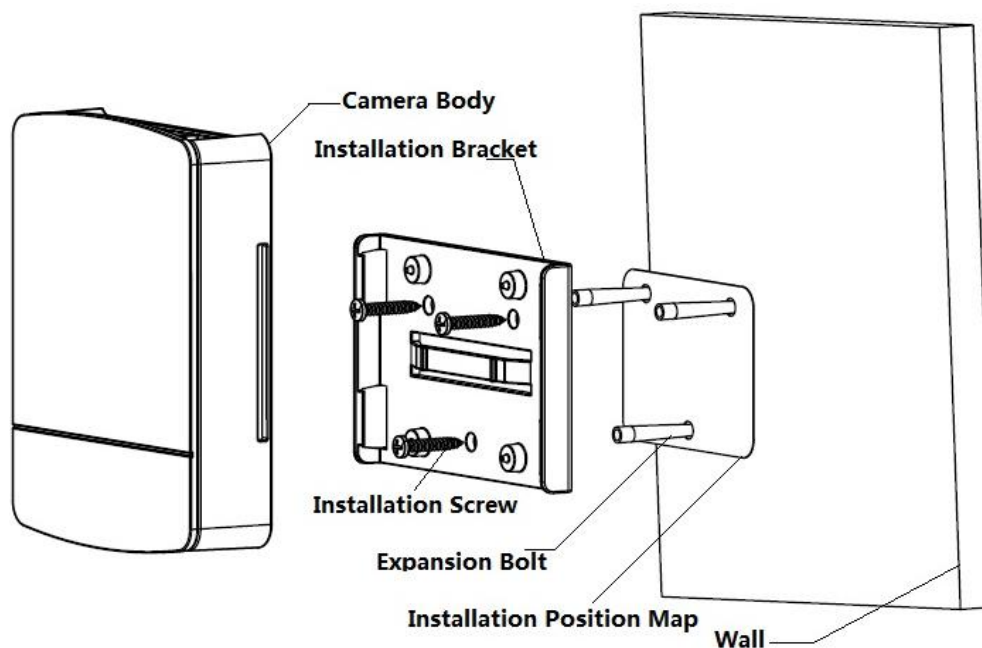
This product is a kind of separate device, and both the front end and the rear end of the device have to be installed respectively. For front end, there are two types that are square and round, and the square front end type has two installation ways.

### Note:

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

Refer to the followings steps for the installation of round and square rear end:

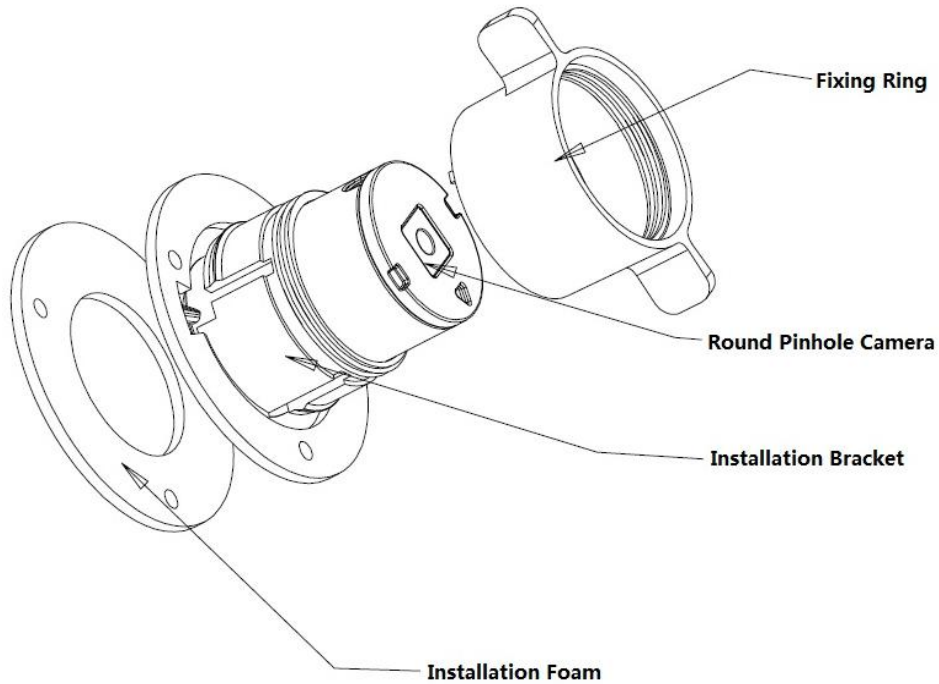
**Figure 2-1 Installation of round and square rear end**



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.

Refer to the followings steps for the installation of round front end:

**Figure 2-2 Installation of round front end**

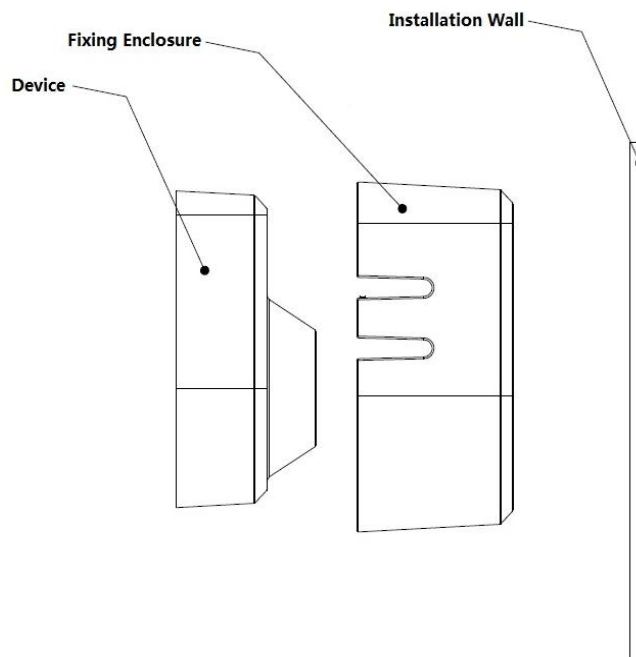


1. Take out the installation bracket from the accessories bag (with installation foam)
2. Tear off the film of the foam, and stick it on the surface to be installed.
3. Set the fixing ring on the installation bracket.
4. Put the round front end into the installation bracket and adjust the location.
5.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

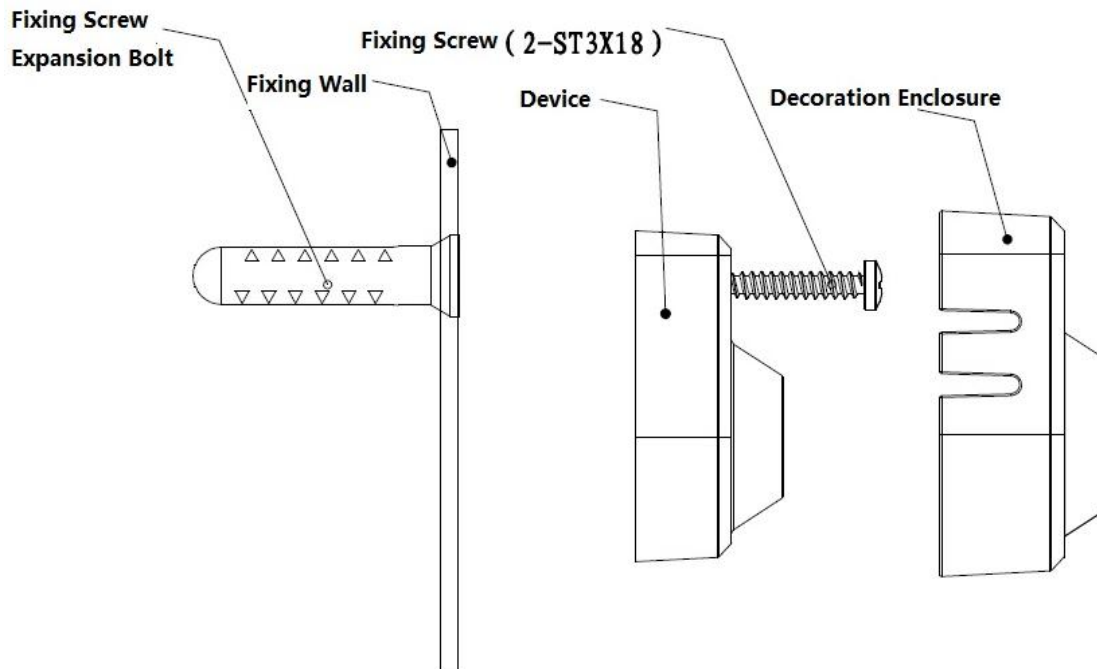


Refer to the following installation steps:

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



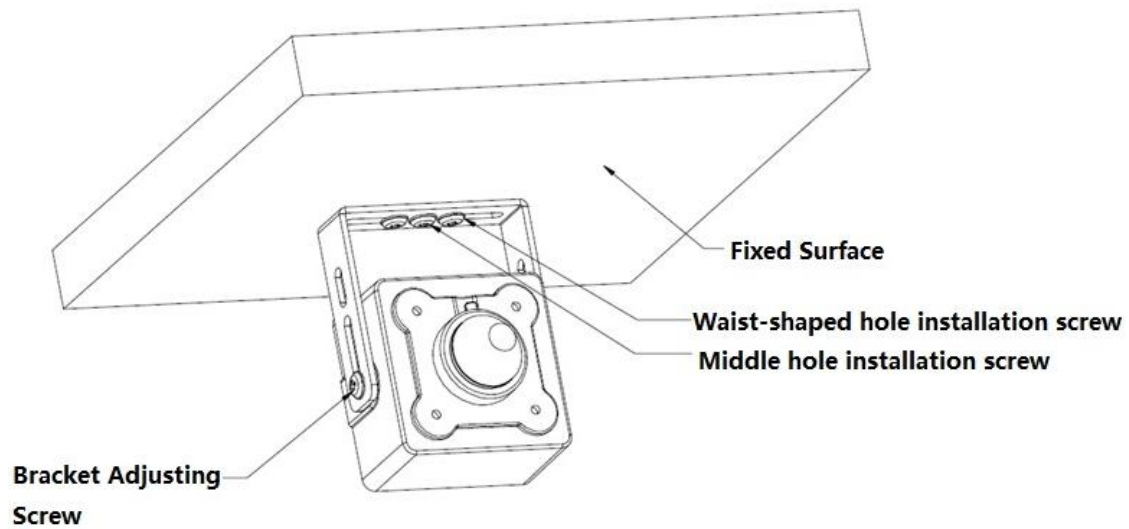
Refer to the following installation steps:

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 IP192.168.1.108). To make the camera get access to the network smoothly, please plan the useable IP segment reasonably according to the actual network environment.

#### 3.1 Modify IP Address

IP address can be acquired and modified through quick configuration tool for the cameras which are accessed via wired network, it needs to connect wired network to configure wireless parameters before using wireless network cameras. In this chapter, it will introduce the approach of modifying IP address via “Quick Configuration Tool”; also you can modify the IP address in the network parameters of the WEB interface, please refer to the document in the disk *WEB Operation Manual* for more details.

Note:

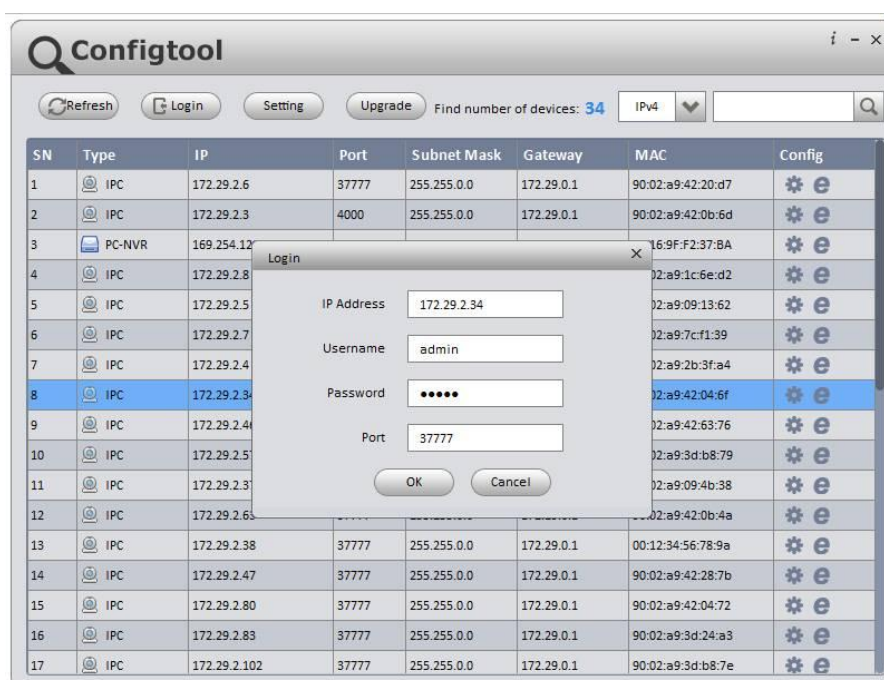
Currently the quick configuration tool only supports the cameras which apply to the same network segment with computer IP address.

1. Double click the “ConfigTools.exe” and open the quick configuration tool.
2. Double click the device to be configured, the system will pop out the “Login” dialog box.
3. Enter the IP address, user name, password and port number of the camera, and click “Confirm”.

Note:

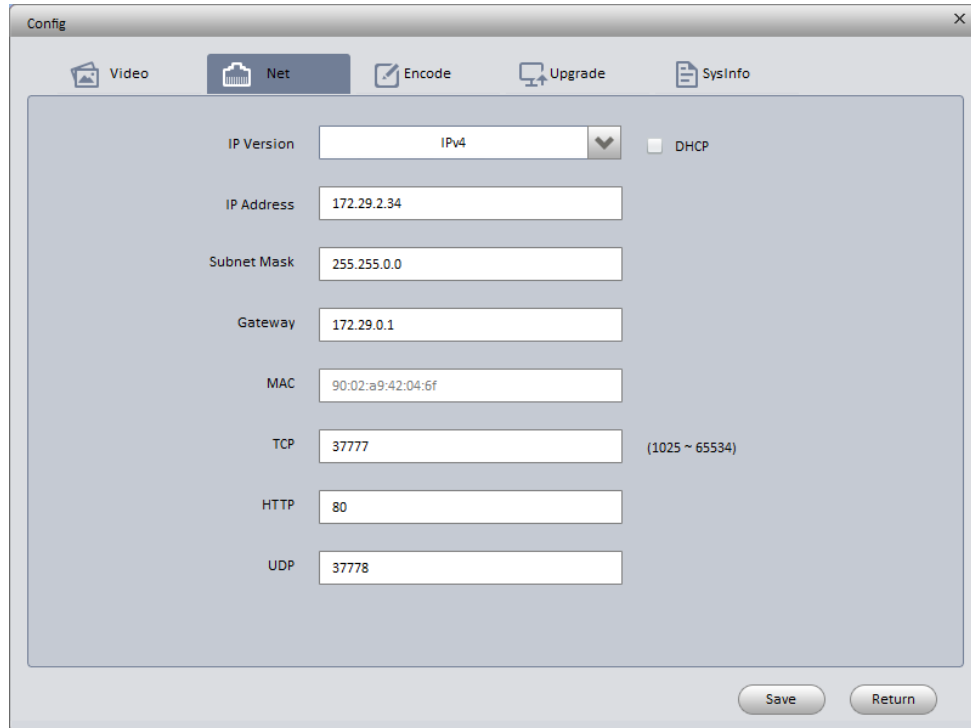
The default user name and password are admin and admin respectively, the default of port is 37777. See Figure 3-1 for more details.

Figure 3-1 Modify IP address



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

**Figure 3-2 Network parameters**



The screenshot shows a configuration window titled "Config" with a "Net" tab selected. The interface includes the following fields and options:

- IP Version: IPv4 (dropdown menu)
- DHCP:  (checkbox)
- IP Address: 172.29.2.34
- Subnet Mask: 255.255.0.0
- Gateway: 172.29.0.1
- MAC: 90:02:a9:42:04:6f
- TCP: 37777 (range: 1025 ~ 65534)
- HTTP: 80
- UDP: 37778

Buttons for "Save" and "Return" are located at the bottom right of the configuration area.

### 3.2 Login WEB Interface

**Note:**

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

1. Open IE and input the modified camera IP address in the address bar. See Figure 3-3 for more details.

**Figure 3-3 Login**

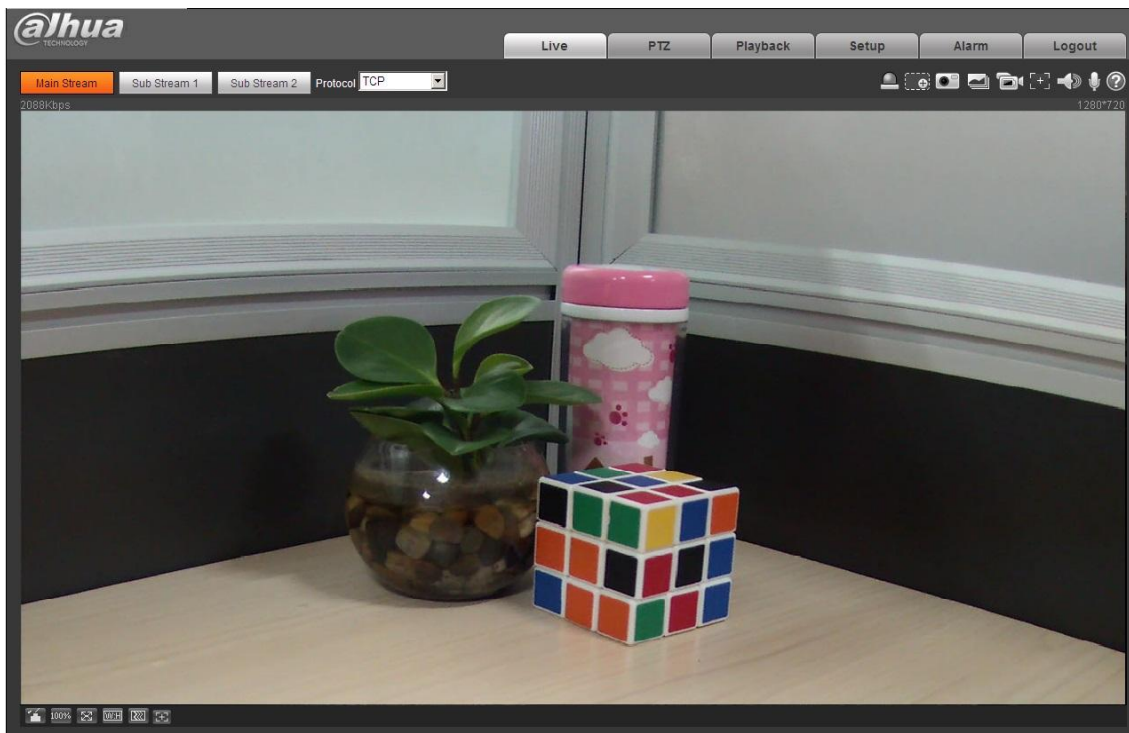


The screenshot shows a login dialog box with the Dahua logo and a camera lens icon. The fields and buttons are:

- Username: admin
- Password: (empty field)
- Login button
- Cancel button

2. The login interface is shown below, please input your user name and password (Default user name is admin and password is admin respectively), click “login”.
3. Install controls according to the system prompt. See Figure 3-4 for the WEB main interface. Please modify the administrator password as soon as possible after you successfully logged in.

**Figure 3-4 WEB main screen**



**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.