



# **Dahua IR Bullet Network Camera**

## **Quick Start Guide**

**Version 1.0.0**

**ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.**

## Welcome

Thank you for purchasing our Network camera!

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

Please read the following safeguard 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 here 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 these two power supplying sources to the device at the same time; it may 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

- Please don't aim the device at strong light (such as lighting, sunlight and so on) to focus; otherwise it may cause overexposure (It is not the device malfunction), which will affect the longevity of CCD or CMOS.
- Please transport, use and store the device within the range of allowed humidity and temperature.
- Please don't keep the device in a place which is wet, dusty, extremely hot, and extremely cold and with strong electromagnetic radiation or unstable lighting.
- Please do not allow water and other liquid falling into the camera in case that the internal components are damaged.
- Please do not allow rain or damp to the indoor device in case fire or lightning may occur.
- Please keep the sound ventilation in case of heat accumulation.
- Please 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

- Please do not touch the heat dissipation component of the device directly in order to avoid scald.
- Please do not dismantle the device; there is no component which can be fixed by users themselves in the machine. It may 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 thunder proof device in order to improve thunder proof effect.
- The grounding holes of the product are recommended to be grounded to further enhance the reliability of the camera.
- 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 use the water to dilute the mild detergent first and then use it to clean the device. Finally use the dry cloth to clean the device. Don't use volatile solvent 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.
- Dome cover is an optical device, please don't touch or wipe cover surface directly during installation and use, please refer to the following methods to deal with once dirt is found:
  - Stained with dirt
  - Use oil-free soft brush or hair dries to remove it gently.
  - Stained with grease or fingerprint
  - Use soft cloth to wipe the water drop or oil gently to make it dry, then use oil-free cotton cloth or paper soaked with alcohol or detergent to wipe from the lens center to outward. It is ok to change the cloth and wipe several times if it is not clean enough.

### Warning

- Please modify the default password after login in order to avoid being stolen.
- Please use the standard accessories provided by manufacturer and make sure the device is installed and fixed by professional engineers.
- Please prevent the device surface from the radiation of laser beam when using laser beam device.
- Please do not provide two or more power supply modes for the device, otherwise it may 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 upgraded according to the product update; the upgraded 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 may 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 company's final explanation if there is any doubt or dispute.
- The company is not liable for any loss caused by the operation which is not followed by 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 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 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	1
Quick Start Guide	1
Waterproof Connector	1
CD	1

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# 1 Device Framework

## 1.1 Device External Cables

**Note**

- The following structure figure is for reference only. It is only used to know the functions of cable ports.
- There might be some minor differences between different devices, so please refer to the actual products you purchased.

The following figure shows port information.

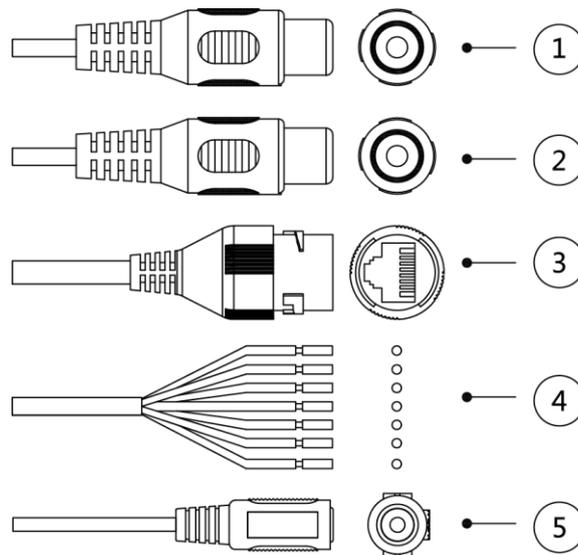


Figure 1-1

The following tables show more information about port function.

No.	Cable port	Port name	Connector	Function description
1	AUDIO IN	Audio input port	RCA	It inputs audio signal and receives analog audio signal from the devices such as pickup.
2	AUDIO OUT	Audio output port	RCA	It outputs audio signal to the devices such as speaker.
3	LAN	Network port	Ethernet port	It connects to standard Ethernet cable and provides PoE power supply. <b>Note</b> Some devices do not support PoE power supply.
4	I/O	I/O port	-	It includes alarm signal input/output, refer to Table 1-2 for more details.

No.	Cable port	Port name	Connector	Function description
5	POWER	Power input port	-	<p>Power port, it inputs DC 12 V or AC 24 V. Make sure the power supply is according to the device label when used.</p> <p><b>Note</b> You can connect the round port to 2-pin converter cable when using AC 24 V for power supply.</p> <p><b>Caution</b> Make sure the power supply is according to the device label when used. Failure to do so might cause device damage.</p>

Table 1-1

Port name	No.	Connector name	Function description
I/O port	1	ALARM_OUT1	Alarm output port, it outputs alarm signal to alarm device.
	2	ALM_OUT_GND1	<p><b>Note</b> ALARM_OUT1 can only be used cooperatively with ALM_OUT_GND1 when connecting to alarm device.</p>
	3	ALARM_IN1	Alarm input port 1, it receives on-off signal of external alarm source.
	4	ALARM_IN2	Alarm input port 2, it receives on-off signal of external alarm source.
	5	ALM_IN_GND	Alarm input grounding.
	6	ALARM_OUT2	Alarm output port, it outputs alarm signal to alarm device.
	7	ALM_OUT_GND2	<p><b>Note</b> ALARM_OUT 2 can only be used cooperatively with ALM_OUT_GND 2 when connecting to alarm device.</p>

Table 1-2

## 1.2 Dimension

### Note

- The following dimension figures are only for reference for you to know the device dimension.
- The lower cover might not be provided for some models, please refer to the product for more details.

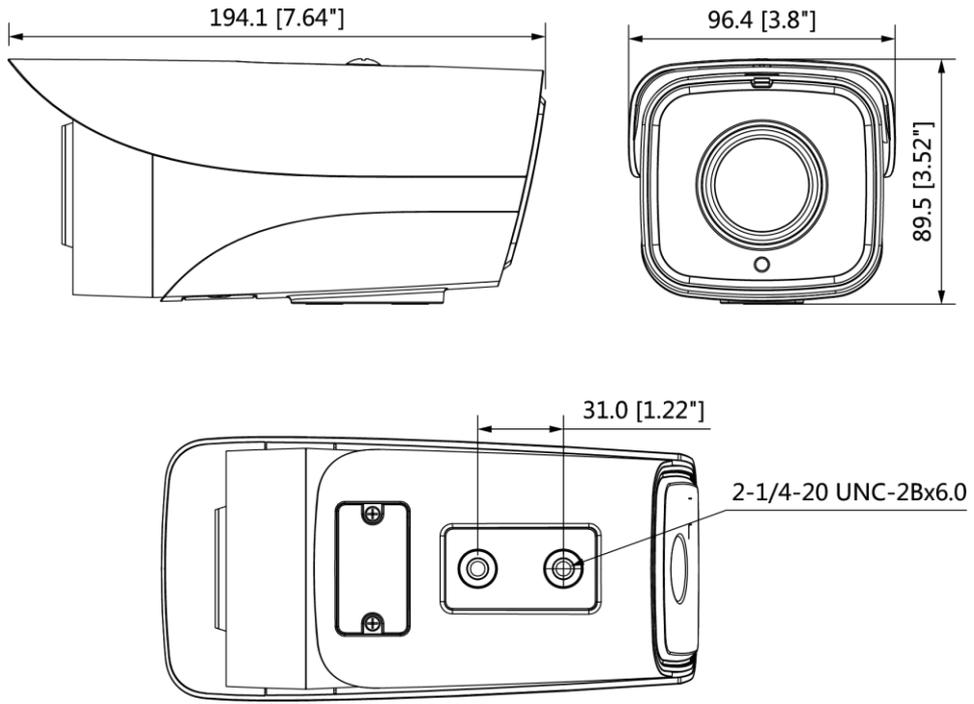


Figure 1-2

## 2 Device Installation

### 2.1 Install SD Card (Optional)

#### Note

- Please cut off device power before installing SD card.
- Please install SD card when the device is equipped with SD card slot and it needs to use SD card.
- Different devices may have different ports, please refer to the actual device for more details.

#### Step 1

Open the lower cover and then you can see the SD card slot and reset button.

#### Step 2

Insert the SD card into the card slot which is shown in Figure 2-1, the card slot is elastic, so you only need to press the SD card slightly to make it inserted.

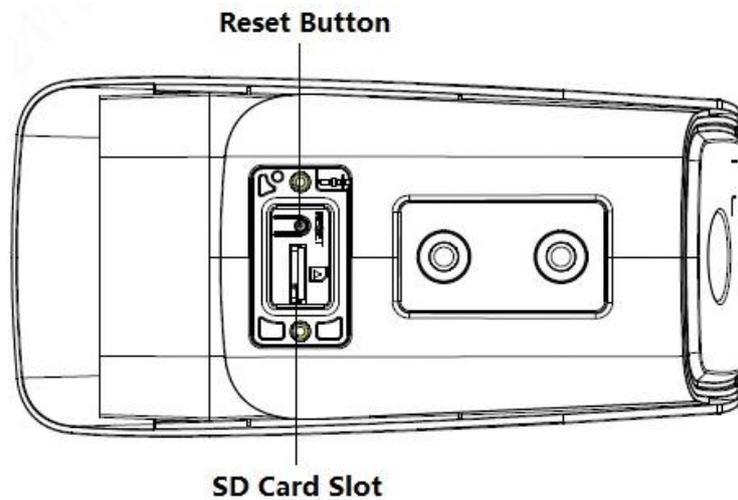


Figure 2-1

#### Note

Long press the reset button for 4s~5s to realize device reset function.

#### Step 3

Install the lower cover back to place.

### 2.2 Fix Device

#### Note

- The device mounting surface needs to sustain at least 3X weight of bracket and camera.
- Some devices are not equipped with bracket by default, please purchase separately if necessary.

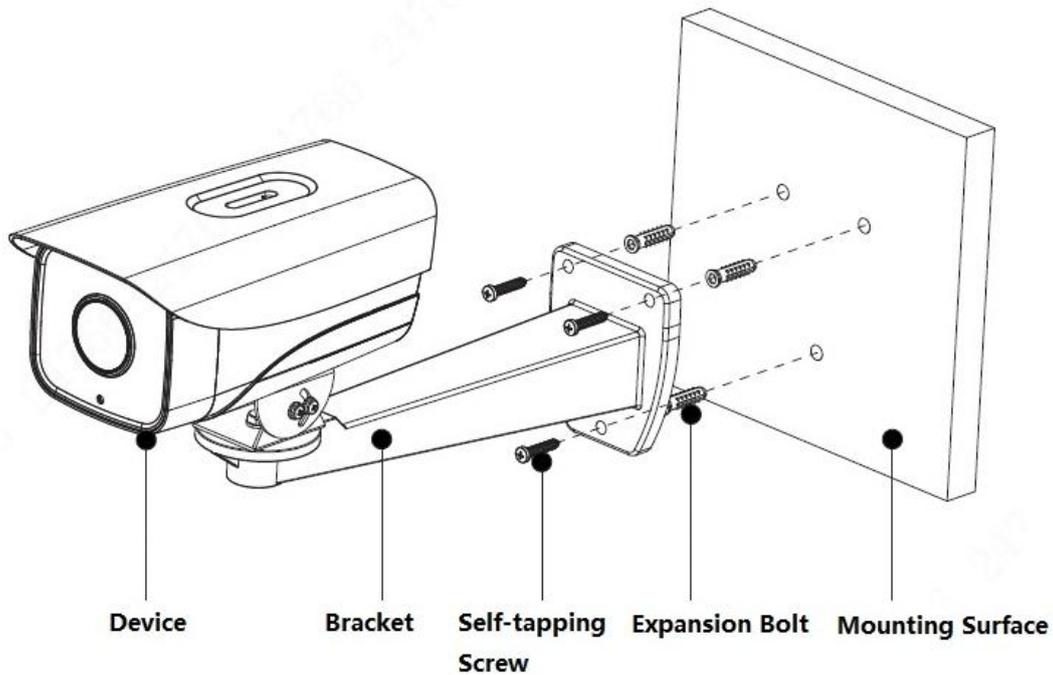


Figure 2-2

**Step 1**

Mark the bracket mounting hole sites on the mounting surface and dig expansion bolt bottom holes on the marked hole sites on the mounting surface, then knock the expansion bolts into the mounting holes and lock them firmly.

**Step 2**

Align the screw holes on the bottom of wall-mounted bracket with the mounting hole sites on the mounting surface, and then insert the self-tapping screws into the screw holes on the bracket bottom and lock them firmly.

**Step 3**

Align the mounting holes on the bottom of device enclosure with the mounting holes on the front of wall-mounted bracket, and then insert the locking screws into the screw holes and lock them firmly.

**2.3 Connect Device Cable**

- Connect device corresponding power, audio cable and other cable well according to requirement, and then use insulated tape to twine the connection respectively to make it waterproof.
- Connect alarm input and output terminal to external cable according to “Connect Alarm Input/output Port”, and use insulated tape to twine connection to make it waterproof.
- Connect network cable to corresponding network port of the device cable according to “Install Waterproof Connector (Optional)”.

**Note**

Some models do not support alarm function, which cannot be applied to this chapter.

**Step 1**

Connect alarm input device to the alarm input of I/O port.

When the input signal is idle or grounded, the device can collect the different statuses of the alarm input port. When the input signal is connected to 3.3V or it is idle, the device collects the logic "1". When the input signal is grounded, the device collects the logic "0".

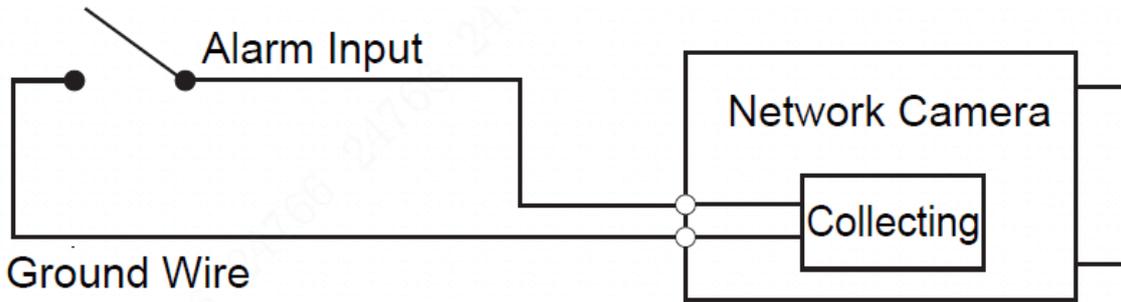
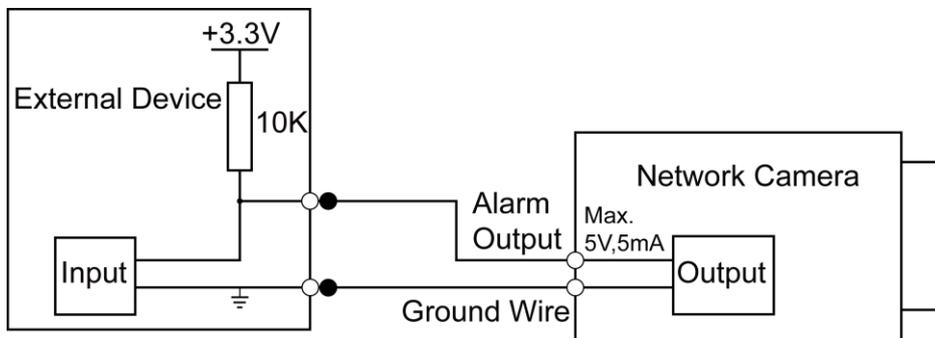


Figure 2-3

**Step 2**

Connect alarm output device to the alarm output of I/O cable, alarm output is collector open circuit output which connects pull-up 10K resistor to 3.3V externally.

- ✧ **Mode A:** Level application. Alarm output high and low level, alarm output is OC; it needs to increase pull-up resistance externally to work normally. Max external pull-up level is 5V, max port current is 5mA (peak). After external pull-up resistance is increased, the default output signal is high level (external pull-up voltage), and it switches to low level when there is alarm output. (Output voltage is less than 0.8V when working current is 5mA)
- ✧ **Mode B:** Switch application. Alarm output is used to drive external circuit, max voltage is 5V and max current is 30mA (peak), it is recommended to add an external relay when it is beyond the value.



A

Figure 2-4

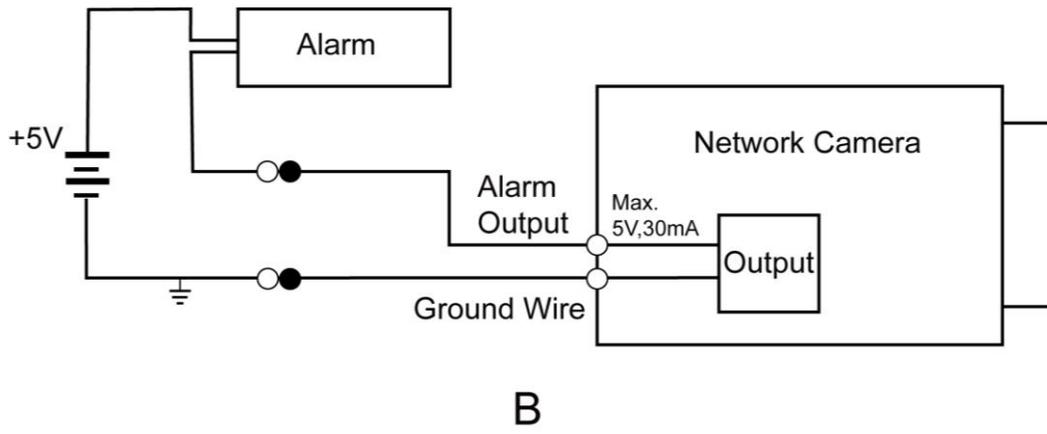


Figure 2-5

**Step 3**

Log in WEB interface, make corresponding settings upon alarm input and output on the interface of alarm setup.

- Alarm input of WEB is corresponding to the alarm input of I/O port cable. It is to set corresponding NO, NC input according to the high and low level signal generated when alarm happens for alarm input device.
- Set alarm output on the WEB, alarm output is corresponding to the alarm output end, which is the alarm output port of the I/O port cable.

**Install Waterproof Connector (Optional)**

The installation process of waterproof connector for network port is shown in Figure 2-6.

**Note**

It needs to implement the operation when the device is equipped with waterproof connector and it is used outdoors.

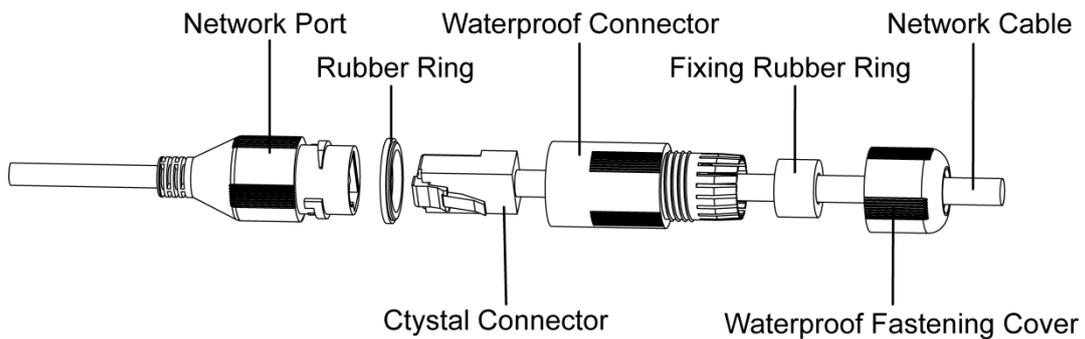


Figure 2-6

**Step 1**

Keep the convex groove outward and install the rubber ring into the network port, keep the smaller hole of the rubber ring outward and install the fixing rubber ring into the main body of the waterproof connector.

**Step 2**

Pull the network cable without crystal head through main body of waterproof connector, fixing rubber ring and waterproof locking cover, make the crystal head of network cable, and then insert it into the network cable.

**Step 3**

Put the main body of waterproof connector on the network port and rotate it clockwise to lock the network port and waterproof connector firmly.

**Step 4**

Put the waterproof locking cover on the main body of waterproof connector and rotate it clockwise to lock the waterproof connector and waterproof locking cover firmly.

**2.4 Remove Oil Stain on Front Cover (Optional)****Note**

It needs to implement this step if the device front cover is covered with oil stain after the device has been used for a period of time.

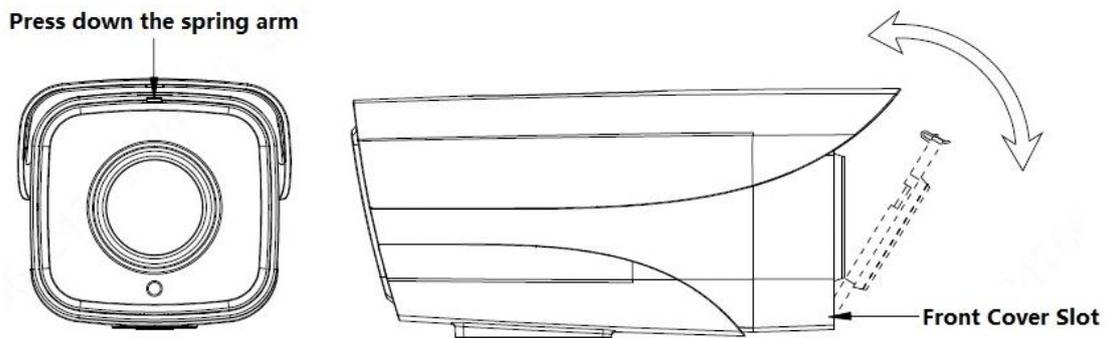


Figure 2-7

**Step 1**

Press down the spring arm on the device front cover, and meanwhile pull out the front cover outward, then the front cover is demounted.

**Step 2**

Use clean soft cloth to erase the oil stain on the device front cover.

If the oil stain is difficult to eliminate, use clean soft cloth to dip a little neutral detergent and wipe it away gently, and then dry it.

**Caution**

Do not use hard object to clean the device front cover in case it might scratch the front cover.

**Step 3**

Align the device front cover with the front cover slot and install it back to the device.

### 3 Network Configuration

You can initialize the device and modify IP address via "Quick Configuration Tool"; you can also initialize device and modify IP address on the WEB interface. Please refer to the *WEB Operation Manual* in the disk for more details.

#### Note

- It needs to implement initialization if it is the first time use device or the device is restored to factory default. Only some device support initialization function.
- It can implement initialization only when the device IP address (192.168.1.108 by default) and the IP address of PC are in the same network segment.
- In order to make the camera have access to network smoothly, please plan available IP segment according to the actual network environment.
- The following figures are for reference only; different models may have different interfaces.

#### 3.1 Device Initialization

##### Step 1

Double click "ConfigTool.exe" and open quick config tool.

##### Step 2

Click  to enter the interface where you can modify IP address, click **Search Setting**, the system will display the **Setting** dialog box.

##### Step 3

Set the device network segment, login user name and password, and then click **OK**. The system will display the searched devices after searching completes.

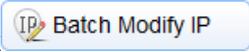
##### Step 4

Select the devices which need initialization and click **Initialization**. The system will display the interface of **Device Initialization**, which is shown in Figure 3-1.



Set the device network segment, login user name and password, and then click **OK**. The system will display the searched devices after searching completes.

#### **Step 4**

Select the devices whose IP addresses need to be modified, and then click  .

The system will display the dialog box of Modify IP Address, which is shown in Figure 3-2.

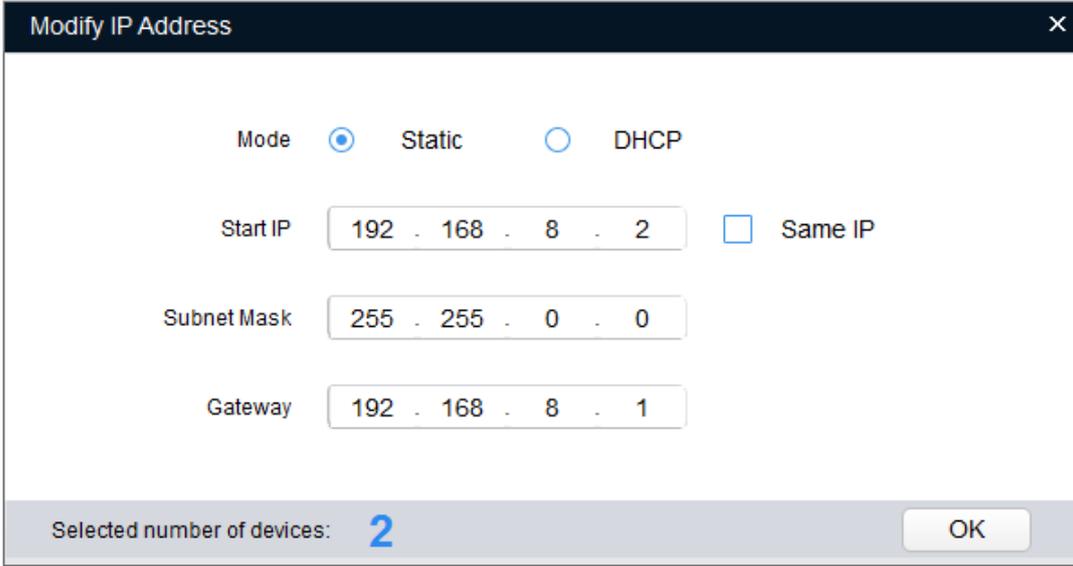


Figure 3-2

#### **Step 5**

Set the mode as **Static**, and enter the planned start IP, subnet mask and gateway.

#### **Note**

Set the mode as **DHCP** when there is DHCP server in the network, the device will automatically acquire IP address from the DHCP server.

#### **Step 6**

Click **OK** to complete modification of device IP address.

### **3.3 Login WEB Interface**

#### **Step 1**

Open IE browser, enter the modified camera IP address into the address bar and then press **Enter** button. Please operate according to the interface prompt if the interface displays guide of **Software License Agreement** and **Online Upgrade**.

#### **Step 2**

Enter username and password, click **Login**.

#### **Step 3**

For the first login, click **Click Here to Download Plug-in**, install controls according to system prompt. The main interface will be shown in Figure 3-3 after control installation is completed.

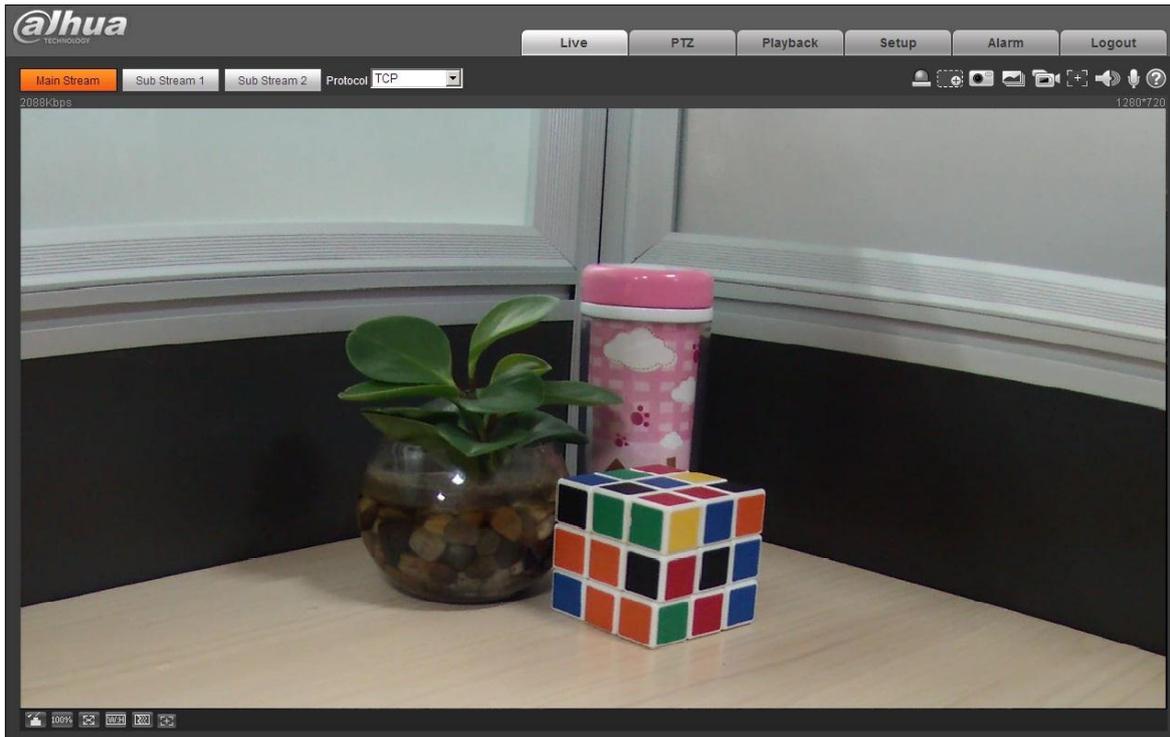


Figure 3-3