Dahua HD IR Vandal Proof Network Dome Camera

Quick Start Guide

Version 1.0.0

Zhejiang Dahua Vision Technology Co., LTD

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Интернет-магазин

Welcome

Thank you for purchasing our network cameras.
This user's manual is designed to be a reference tool for using your product.
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

Electrical safety

- All installation and operation should conform to your local electrical safety codes.
- The power source shall conform to the requirement of the Safety Extra Low Voltage (SELV) standard, and supply power with rated voltage which conforms to Limited power Source requirement according IEC60950-1. Please note that the power supply requirement is subject to the device label.
- Make sure the power supply is correct before operating the device.
- A readily accessible disconnect device shall be incorporated in the building installation wiring
- Prevent the power cable from being trampled or pressed, especially the plug, power socket and the junction extruded from the device.
- We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

Environment

- Do not aim the device at strong light to focus, such as lamp light and sun light, otherwise it might cause over brightness or light marks, which are not the device malfunction, and affect the longevity of Charge Coupled Device (CCD) or Complementary Metal-Oxide Semiconductor (CMOS).
- 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.
- Keep the camera away from water or other liquid to avoid damages to the internal components.
- Keep the indoor device away from rain or damp to avoid fire or lightning.
- Keep sound ventilation to avoid heat accumulation.
- Transport, use and store the device within the range of allowed humidity and temperature.
- Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.
- Pack the device with standard factory packaging or the equivalent material when transporting the device.
- The device needs to be installed in the location where professional staff can cover (professionals need to know the attentions of using the device), non-professionals are not allowed to enter device installation area when the device is operating normally, which may cause accidental damage.

Operation and Daily Maintenance

- Do not directly touch the heat dissipation component of the device to avoid scald.
- Do not dismantle the device because there is no component that can be fixed by users themselves. Otherwise, it might cause water leakage or bad image due to unprofessional dismantling.
- Please contact after-sale service to replace desiccant when it becomes green. (The desiccant is not provided by default)
- It is recommended to use the device together with lightning arrester to improve lightning protection effect.
- It is recommended to get the grounding holes to be grounded to enhance the reliability of the device.
- Do not directly touch the optic component CCD or CMOS. You can use the air blower to blow away the dust or dirt on the lens surface. Please use a dry cloth wetted by alcohol to wipe away the dust gently if necessary.
- Use the dry soft cloth to clean the device. If the dust is difficult to be removed, please wipe it away 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, 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 because 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, 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 lens cleaning paper soaked with alcohol or detergent to wipe from the lens center outward till it is clean.
- We are not liable for any problems caused by unauthorized modification or attempted repair.
- The dome cover is a kind of optical component, please do not touch or wipe the cover surface during installation and application, it may stain dust, grease or fingerprint, you can use absorbent cotton to dip some diethyl ether or use soft cloth to dip some water and then wipe gently. You can also use air gun to remove the dust if the cover is stained with dust.

Warnings

- Please strengthen the protection of network, device data and personal information, adopt necessary measures of guarantee device network security, including but not limited to using strong password, modifying password regularly, upgrading firmware to the latest version, isolating computer network and so on. For the IP camera firmware of some old version, the ONVIF password won't be modified automatically after the main password of the system is modified. You need to upgrade the camera firmware or upgrade the ONVIF password manually.
- Please modify the default password after login to avoid being stolen.
- Use the standard components provided by manufacturer and make sure the device is installed and fixed by professional engineers.
- The surface of the image sensor should not be exposed to laser beam radiation in an environment where a laser beam device is used.
- Do not provide two or more power supply sources for the device; otherwise it might damage the device.

Disclaimer

- This manual is for reference only. Please refer to the actual product for more details.
- Minor differences might be found in user interface, and 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. Please refer to the final explanation of the company if there is any doubt or dispute.
- All the designs and software are subject to change without prior written notice. The manual will be regularly updated according to the product upgrade 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.
- Please visit our website or contact your local service engineer for more information.
- The company is not liable for any loss caused by the operation that does not comply with the manual.
- If there is any uncertainty or controversy, please refer to our final explanation.

Regulatory Information

FCC Information

1.1 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.

1.2 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 the corresponding user's manual and tool.
- Before installation, please open the package and check all the components are included.
- Contact your local retailer as soon as possible if something is broken in your package.

Accessory Name	Amount	Accessory Name	Amount
Network Camera Unit	1	Installation Position Map	1
Quick Start Guide	1	Waterproof Connector	1
Screw Package	1	Wrench	1
CD	1		

Table of Contents

1 Device Structure

1.1 Structure Components

Note

- The following figure is for reference only, which is used to know the components and cable port function.
- There are differences about structure components and cables between different models, please refer to the actual object for more details.

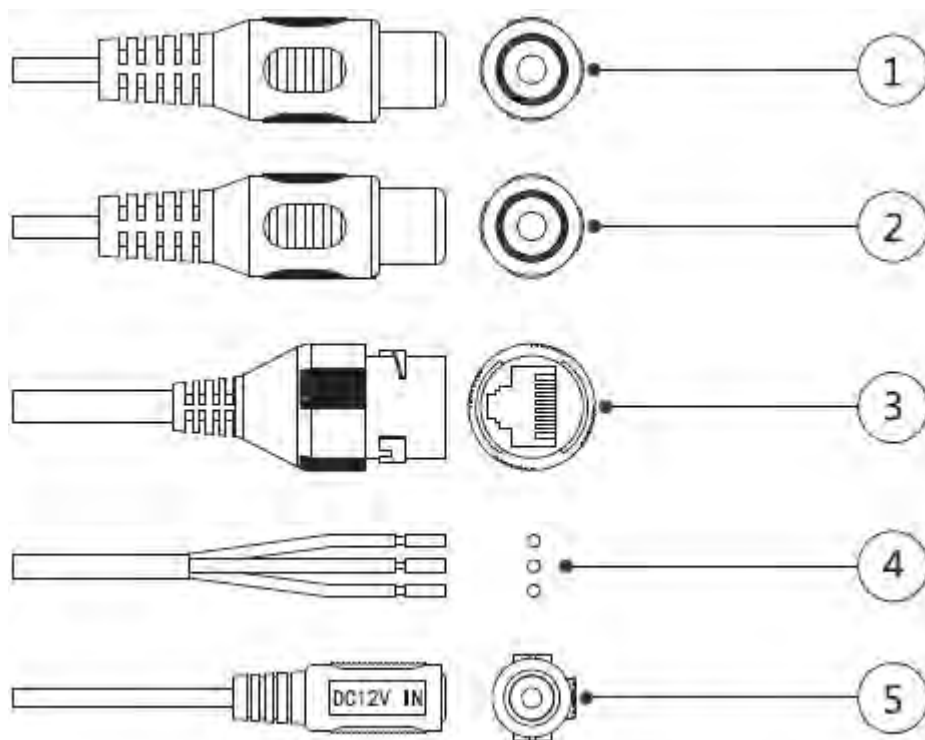You can refer to the following figure for component structure. See Figure 1-1.

Figure 1-1

Please refer to Table 1-1 for more details about cable port.

Port	Port Name	Port Function
1	Audio input port	Input audio signal, it is to receive analog audio signal from sound pick-up and other devices. **Note** Some devices do not support audio input port.
2	Audio output port	Output audio signal to sound box and other devices. **Note** Some devices do not support audio output port.
3	Network port	Connect to standard Ethernet cable; it supports PoE power supply function. **Note** Some devices do not support PoE power supply.
4	I/O port	It includes alarm input, output. Please refer to Table 1-2 for more details. **Note** Some devices do not support I/O port.

Port	Port Name	Port Function
5	Power input port	Input DC 12V, please power the device according to the label instruction. **Caution** It may cause damage to the device if it fails to power the device according to the label instruction.

Table 1-1

Please refer to Table 1-2 for detailed information about I/O port.

Port Name	Port Sequence	Port name	Function Description
I/O Port	1	ALARM_IN1	Alarm input port, receive on-off signal of external alarm source.
	2	ALARM_OUT1	Alarm output port, output alarm signal to alarm device.
	3	ALARM_GND	Grounding terminal

Table 1-2

1.2 Framework and Dimension

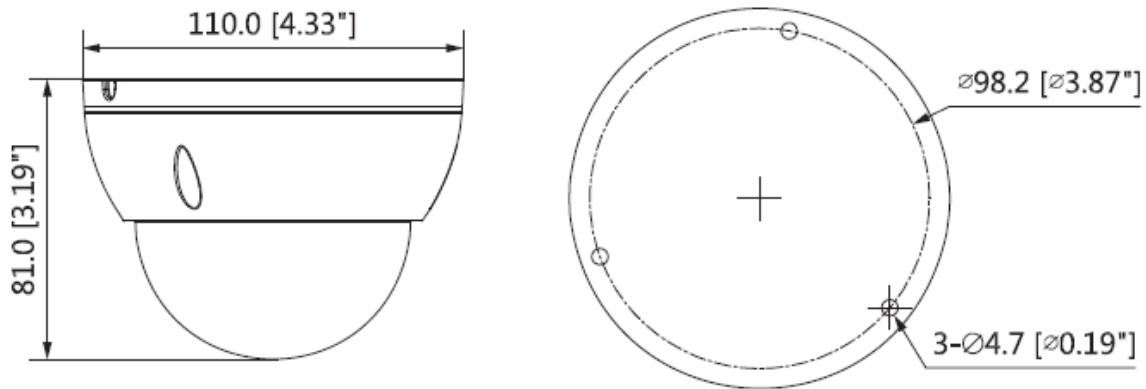The figure is for reference only, which is used to know the device dimension. See Figure 1-2. The unit is mm (inch).

Figure 1-2

2

2 Device Installation

2.1 Install SD Card (Optional)

Note

- Please install SD card if the device is equipped with SD card slot and it needs to use SD card.
- Please cut off the device power before installing Micro SD card.

Step 1

Use wrench to loosen the locking screws on the cover and then open the dome cover. You can see SD card slot and reset button after you open the cover, which is shown in Figure 2-1.
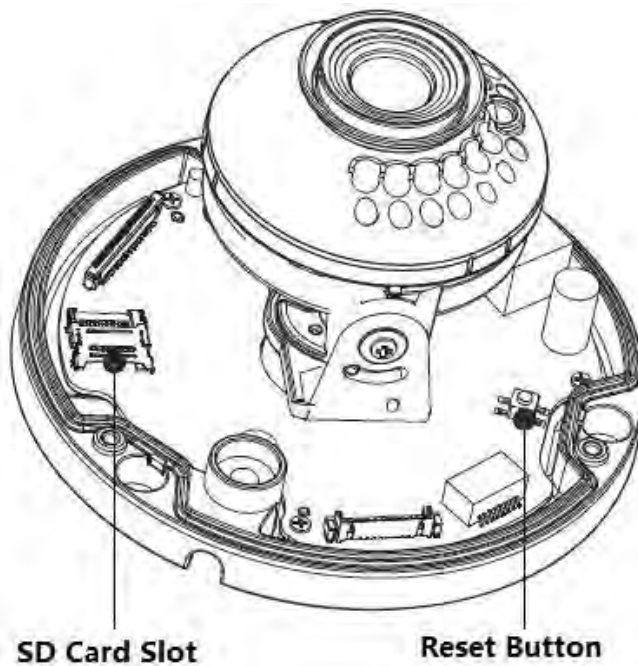
Figure 2-1

Note

- Please long press the reset button for 10 seconds with power on if it needs to restore factory default setting.
- Please press reset button for 1~2 seconds with power on and press WPS button of the router if the device needs to use WPS function. Generally the device can be connected to corresponding router within 1 minute (only supported by some models).

Step 2

Open card slot, adjust the direction of SD card, and install the SD card into the SD card slot.

Step 3

Close the SD card slot and lock it firmly.

2.2 Fix Device

Note

- The following installation figure is for reference only; please refer to the actual device for more details.
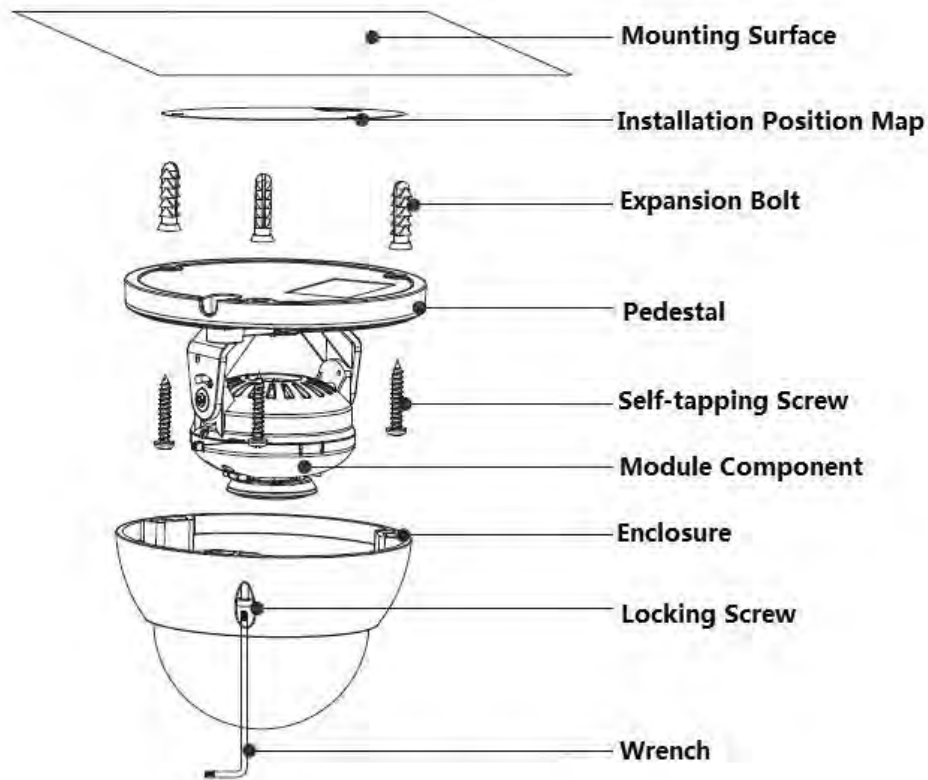- The device mounting surface needs to sustain at least 3x weight of the bracket and camera.

3

Mounting Surface

Installation Position Map

Expansion Bolt

Pedestal

Self-tapping Screw

Module Component

Enclosure

Locking Screw

Wrench

Figure 2-2

Step 1

Take out installation position map; stick it on the mounting surface according to the monitoring area. Dig bottom holes on the hole sites with cross mark of the installation position map, and then knock the expansion bolts into the mounting holes and lock them firmly.

Step 2

Adjust the location of device mounting pedestal; lead the cable into the cable exit hole which is on the mounting surface, you can select bottom cabling or side cabling.

Note

● It needs to dig a cable exit hole on the mounting surface according to the installation position map if users adopt bottom cabling when installing device.

● It needs to lead out the cable via U-shaped cable channel side exit on the dome pedestal if users adopt side cabling when installing device.

Step 3

Make sure the "TOP" direction on the device is in accordance with that of the installation position map, align the screw hole on the device mounting pedestal with the mounting hole on the mounting surface, and then twist the self-tapping screws into the plastic expansion bolts and lock them firmly, finally fix the dome on the mounting surface.

2.3 Connect Device Cable

● Connect device corresponding power, audio cable to external 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".

4

Connect Alarm Input/Output Port

Note

Some devices 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 cable.

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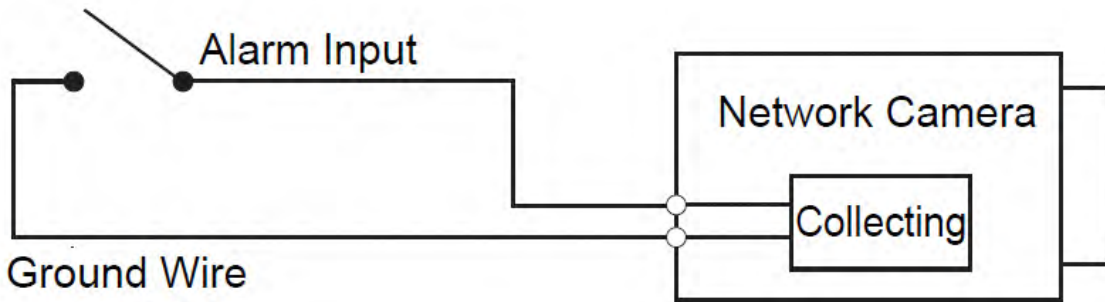

Figure 2-3

Step 2

Connect alarm output device to the alarm output port of I/O port cable, alarm output is collector open circuit output which connects 10K resistor to 3.3V externally, which is shown in Figure 2-4.

- Alarm output: when alarm output is OC, it needs to increase pull-up resistance externally to work normally; output signal is high and low level. After external pull-up resistance is increased, the default of output signal is high level, and it switches to low level when there is alarm output.
- The working current of alarm output port is recommended as <= 10mA. The max current which is used to drive external circuit is 80mA, it is advised to add a relay if it is beyond the value.
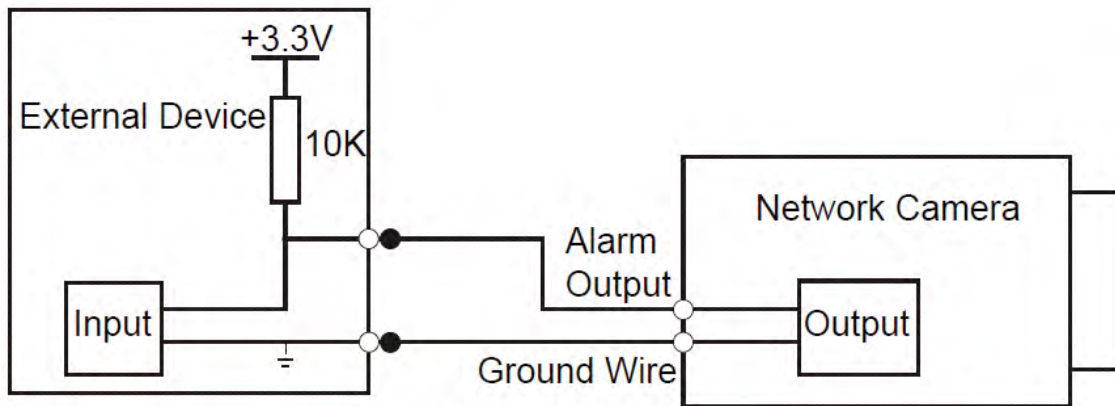

Figure 2-4

Step 3

Open WEB, set corresponding settings upon alarm input and output on the interface of alarm setup.

- Alarm input on WEB is corresponding to the 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.
- Set alarm output on WEB, alarm output is corresponding to alarm output end of the device, which is the alarm output port of the I/O cable.

5

Install Waterproof Connector

The installation process of waterproof connector for network port is shown in Figure 2-5.

Note

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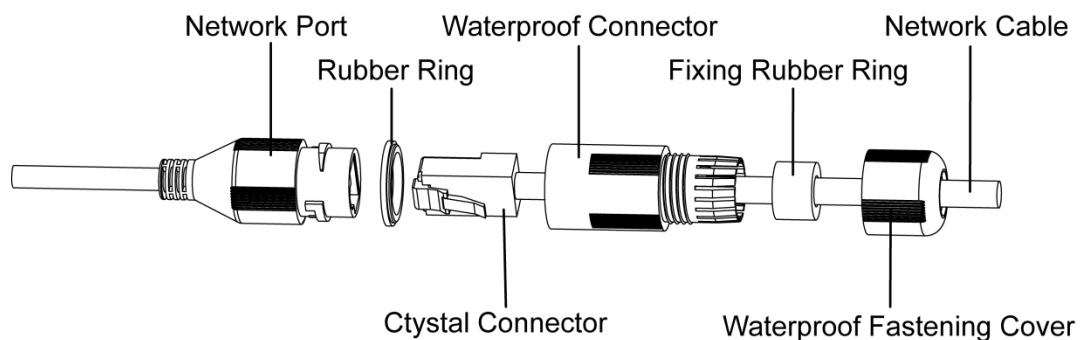

Figure 2-5

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 Adjust Device Angle

Note

- Some models do not have vertical rotation ring, which fails to support image rotation. Please refer to the actual device for more details.
- There is difference on the layout of IR lights for some models, please refer to the actual model for more details.
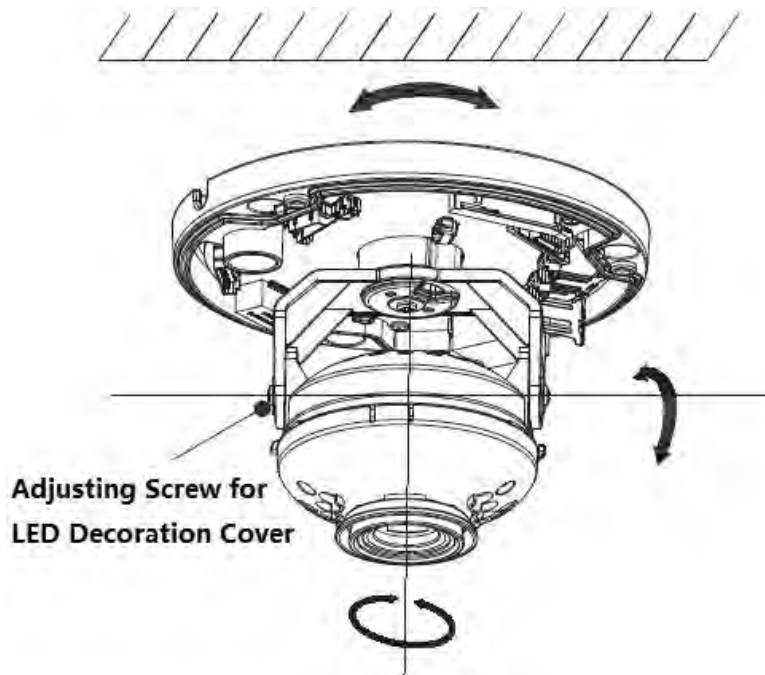
6

Figure 2-6

Step 1

Hold the bottom on both sides of the rotation bracket, rotate it horizontally along the axis, and adjust the lens horizontal direction to target location.

Step 2

Hold the LED decoration cover, rotate it vertically, and adjust lens vertical direction to target location; you can loosen the adjusting screws on both sides of the rotating bracket if it is too tight to adjust vertically (just make it loose, it does not need to dismantle it completely), tighten adjust screws after adjustment is completed.

Step 3

Hold LED decoration cover, rotate it horizontally along the axis, and adjust the lens image direction to target location.

Note

- The range of lens adjustment angle: vertical rotation (0°～+64°), horizontal rotation (0°～+355°), image rotation direction (0°～+355°).
- When it rotates to 64° vertically, please pay attention to the image rotation direction in order to avoid the outer cover blocking IR light and influencing IR effect.

Step 4

Align the dome cover with screw hole site of the pedestal after adjusting angle, and put the outer cover back to place. Use wrench to tighten locking screw and installation is completed.

3 Network Configuration

You can initialize the device and modify IP address via "Quick Configuration Tool", for Wi-Fi network camera, it needs to connect to wired network to configure Wi-Fi parameters; 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 ![IP icon] 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.
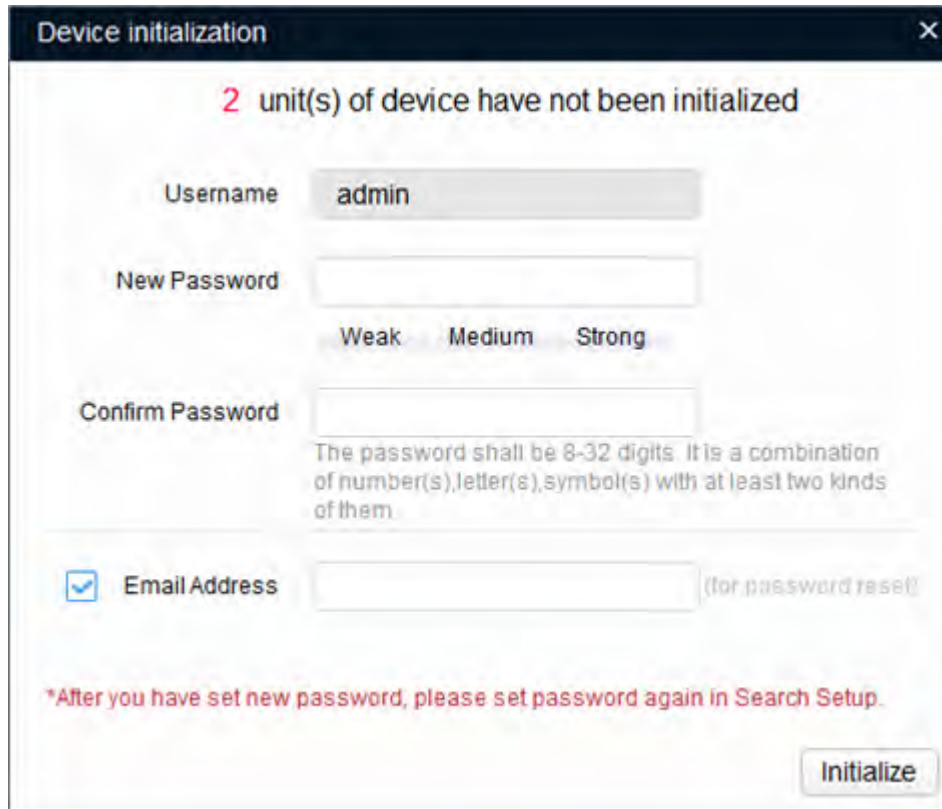
Figure 3-1

Step 5

Set new password and confirm password, select **Email Address** and input email address.

Note

The password can be set as 8 to 32 characters; it can be a combination of number(s), letter(s) and symbol(s) with at least two kinds of them (excluding """,""","*;"","".","&"). Please set password with high security according to the password strong and weak prompt.

Step 6

Click **Initialization**, the system begins to initialize the device.

✓ means initialization succeeded; ⚠ means initialization failed. Click the icon to check more details.

Step 7

Click **OK** to complete device initialization.

3.2 Modify IP Address

Step 1

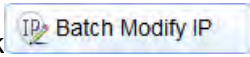Double click "ConfigTool.exe" and open quick config tool.

Step 2

Click ⑫ 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

9

Select the devices whose IP addresses need to be modified, and then click [IP Batch Modify IP]. The system will display the dialog box of Modify IP Address, which is shown in Figure 3-2.

Modify IP Address　　　　　　　　　　　　　　　　　　　　×

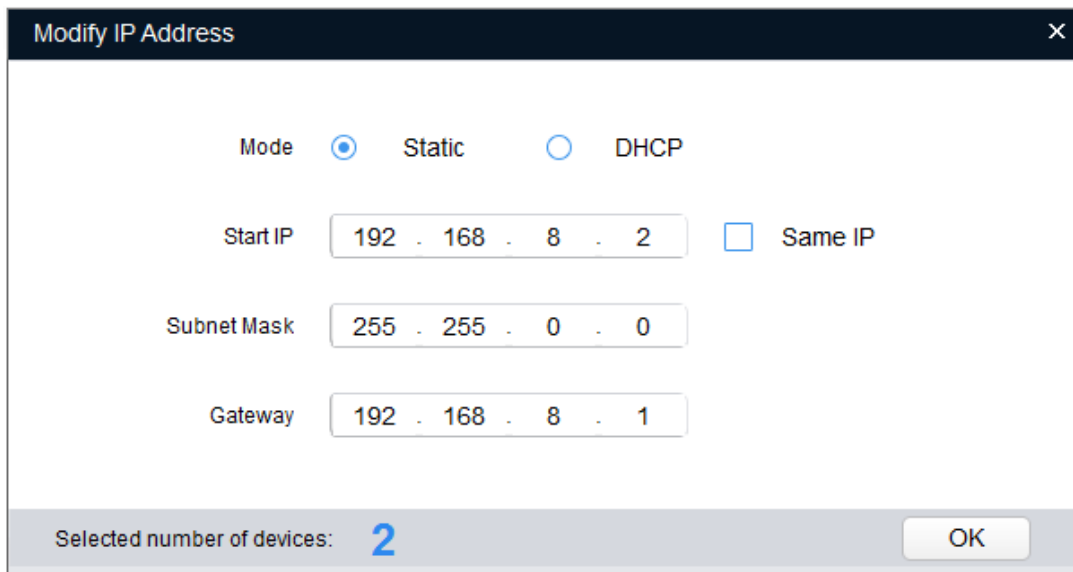|	
Mode	⦿ Static　　　○ DHCP
Start IP	192 . 168 . 8 . 2　　☐ Same IP
Subnet Mask	255 . 255 . 0 . 0
Gateway	192 . 168 . 8 . 1

Selected number of devices: **2**　　　　　　　　　OK

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.
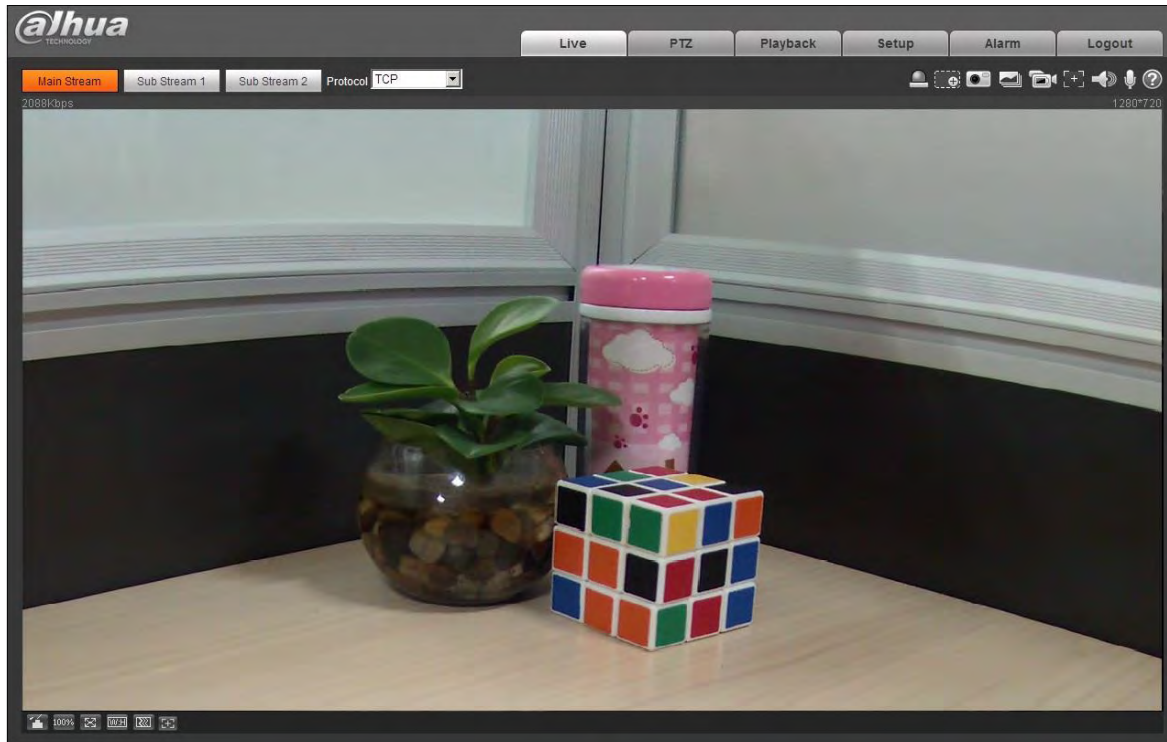
Figure 3-3

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