Dahua HD Mobile Network Camera Quick Start Guide

Version 1.0.0

ZHEJIANG 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 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 voltage rated by DC 12 V or AC 24 V according to the Limited Power Source requirement of 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.

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.
- 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.

Warnings

- 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.

Component list	Quantity
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 following structure figures are for reference only. They are only used to know the functions of structure components and cable ports.
- There might be some minor differences between different devices, so please refer to the actual products you purchased.
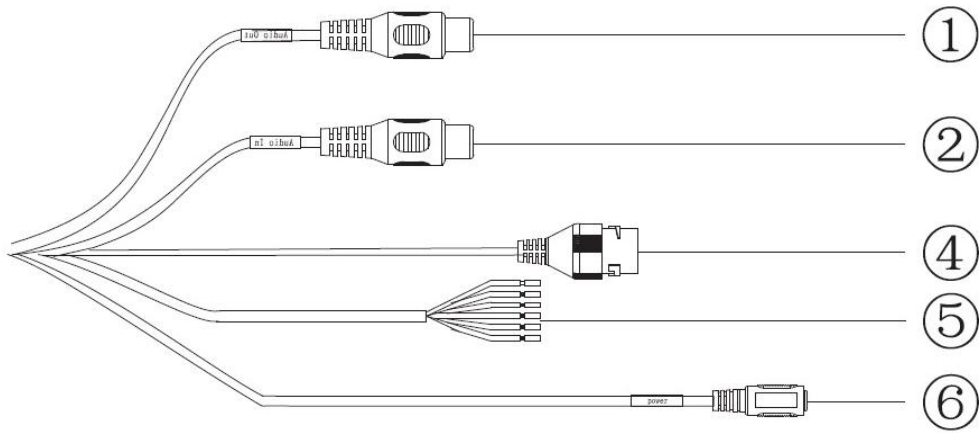

Figure 1-1

Figure 1-2

The following tables show more information about port function.

No.	Port name	Function description
1	AUDIO OUT	Output audio signal to the speakers and other devices.
2	AUDIO IN	Input audio signal, receive analog audio signal from pickup and other devices.
3	M12	Network port for mobile device, support PoE power supply. **Note** Interface type is D-Coded.
4	Network port	Connect to standard Ethernet cable, provide PoE power supply function. **Note** Some devices support two network ports. Some devices don't support PoE power supply.

No.	Port name	Function description
5	I/O port	It includes alarm input and output. Different devices have different I/O ports. Actual use shall be in accordance with device label, refer to Table 1-2 for more details.
6	Power input port	Input power, connect to DC 12V power. **Note** Power supply requirement shall be subject to device label.

Table 1-1

Port name	Cable color	Cable port name	Function description
I/O port	Blue	ALARM_IN1	Alarm input port 1, receive on-off signal from external alarm source.
	Brown	ALARM_OUT1	Alarm output port 1, output alarm signal to alarm device.
	Green	ALARM_OUT_GND1	GND 1
	White	ALARM_IN2	Alarm input port 2, receive on-off signal from external alarm source.
	Red	ALARM_OUT2	Alarm output port 2, output alarm signal to alarm device.
	Black	ALARM_OUT_GND2	GND 2

Table 1-2

1.2 **Dimension**

Refer to Figure 1-3 and Figure 1-4 for the device dimension. The unit is mm.
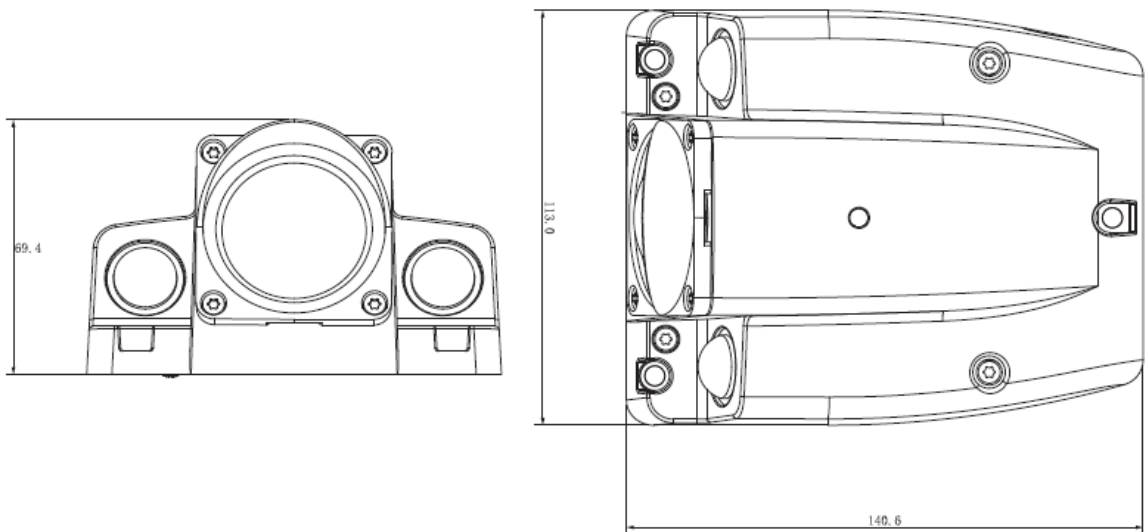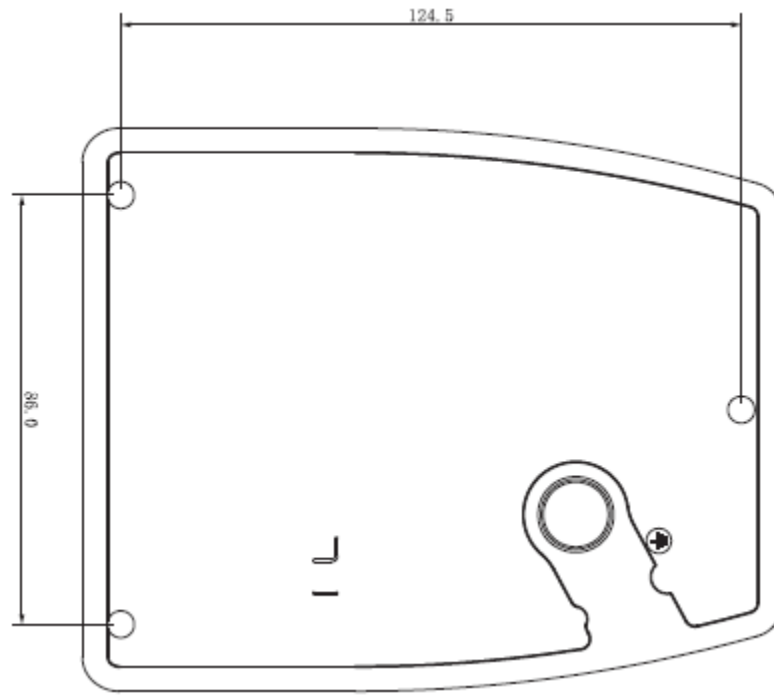

Figure 1-3

Figure 1-4

1.3 **Alarm Setup**

Note

This function is only supported by some models.
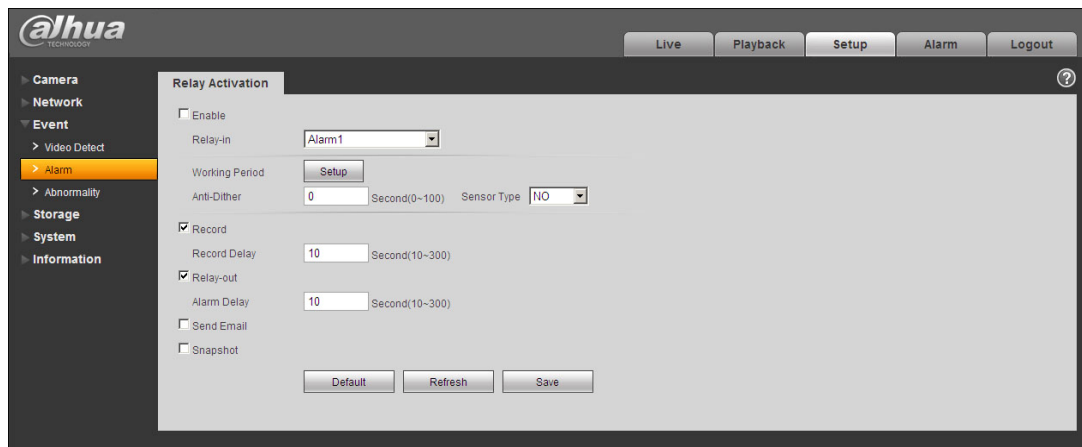
The following figure shows the Alarm setup screen.

Figure 1-5

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

Step 1 Connect alarm input device to the alarm input port of I/O cable.

Step 2 Connect alarm output device to the alarm output port of I/O cable. Alarm output is open-collector output, which needs the alarm device to pull up 10K resistance to +3V~+5V.

Step 3 Open the WEB, and make corresponding settings for alarm input and output in **Alarm Setup**. 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.

Step 4 Set alarm output on the WEB, alarm output corresponds to the alarm output port of the device, which is the alarm output port of I/O port cable.

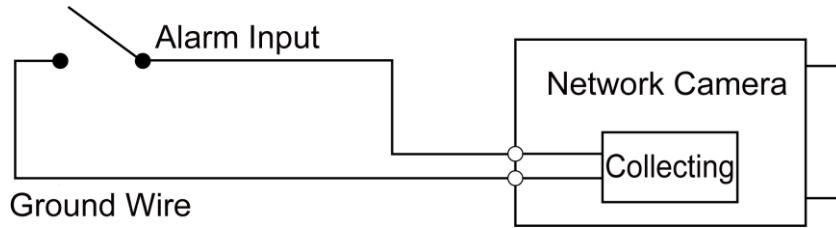Refer to Figure 1-6 for alarm input and output.

Figure 1-6

Alarm input: When the input signal is idle or grounded, the device can collect different statuses of the alarm input port. When the input signal is connected to +3.3V~5V or it is idle, the device collects the logic "1". When the input signal is grounded, the device collects the logic "0".

Refer to Figure 1-7 and Figure 1-8 for alarm output.
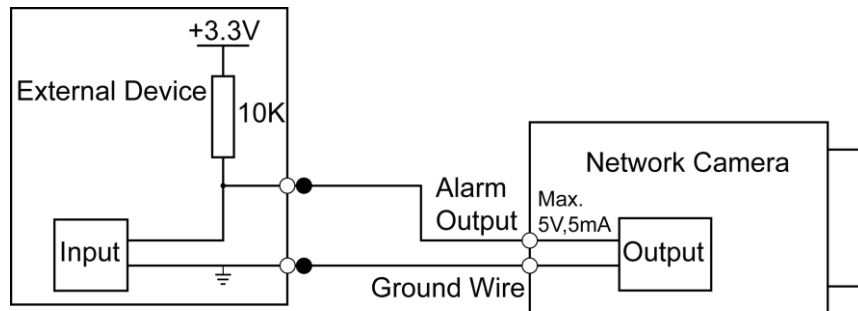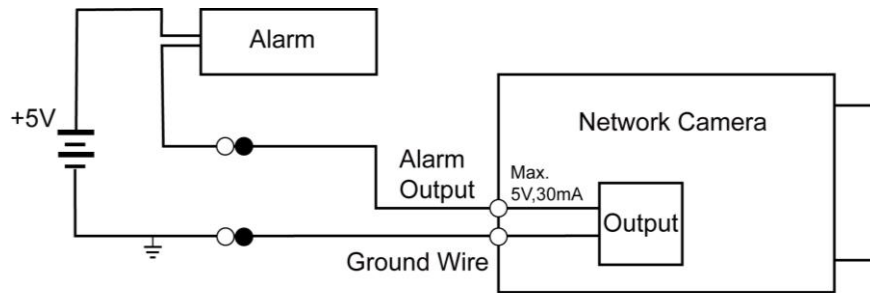
Figure 1-7

Figure 1-8

Mode A:

Level application. The alarm outputs high and low level, and alarm output is OC. It needs to increase pull-up resistance externally to work normally. The Max external pull-up level is 5V, Max port current is 5mA. After external pull-up resistance is increased, the output signal is high level by default (external pull-up voltage). When there is alarm output, it switches to low level (when the working current is 5mA, output voltage is less than 0.8V).

Mode B:

Switch application. Alarm output is used to drive external circuit. The Max current is 30mA and Max voltage is 5V, and it is advised to add a relay when it is beyond the value.

2 Device Installation

Note

- The following figures are for reference only, please refer to the product for more details.
- Make sure the bracket installation surface can sustain at least 3X weight of the total weight of bracket and camera.
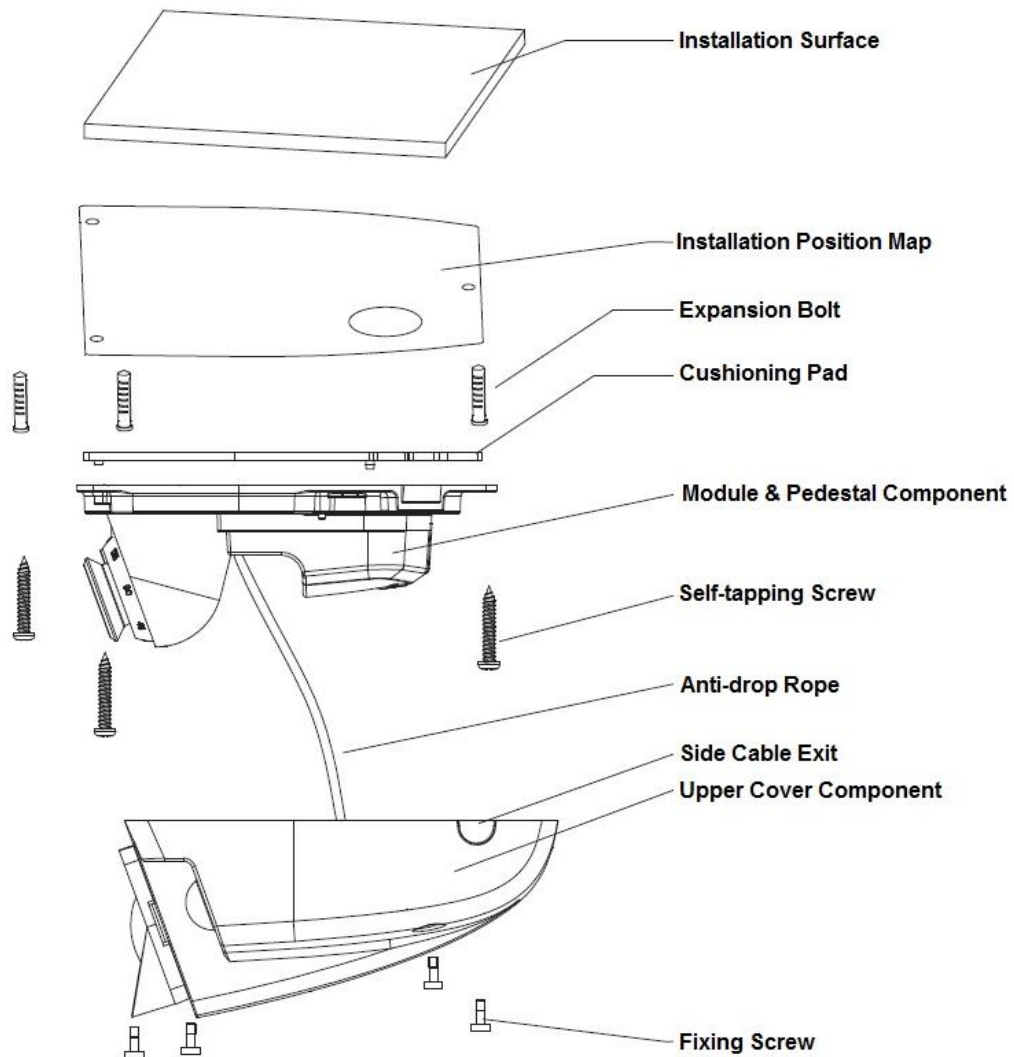- Please cut off the power before installing Micro SD card.

Figure 2-1

<u>Step 1</u>   Take out the camera from the packing box, open the upper cover component.

<u>Step 2</u>   (Optional) Install Micro SD card, which is shown in Figure 2-2.

Note

It needs to implement this step when the device is equipped with Micro SD card slot and it needs to use it.

Find **SD** sign inside the device, adjust the Micro SD card direction according to the prompt direction shown on the device, insert it into the slot and install the Micro SD card properly.
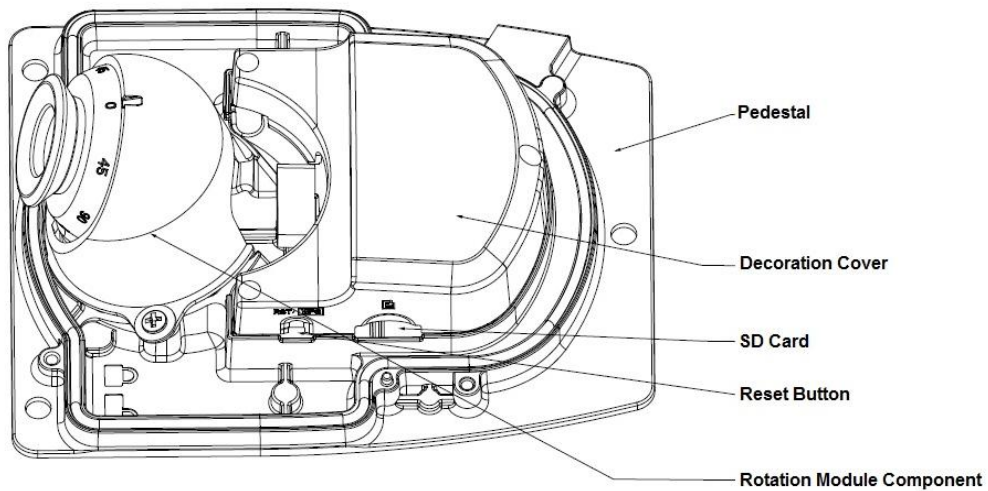
Figure 2-2

Note

Long press the reset button for 10s with power on if it needs to restore the device factory settings.

Step 3 Fix the device on the installation surface.

1. Take out the installation position map from the accessory bag, paste it on the installation surface according to the monitoring area.
2. Dig 3 plastic expansion bolt bottom holes on the three hole sites with cross sign on the installation position map, and then insert 3 expansion bolts into the mounting holes and lock them firmly.
3. Adjust the location of device installation pedestal, lead the cable into the outlet hole on the installation surface, take out the silica gel from the accessory bag and place it on the corresponding location of mounting pedestal, then align the pedestal fixing holes with the three expansion bolt fixing holes on the installation surface, tighten three self-tapping screws into the three plastic expansion bolts and lock them firmly, fix the pedestal on the installation surface.

   Note

   It needs to remove the side cable outlet slot on the upper cover component by hand or sharp-nose pliers if the device adopts side cable outlet.

Step 4 Adjust device monitoring direction

Loosen one screw which is located on the right of the compression cover (don't demount it completely), adjust the direction of lens monitoring image to proper monitoring angle, it is recommended to use inner hex wrench to adjust, and then tighten the screw back in place, which is shown in Figure 2-3.
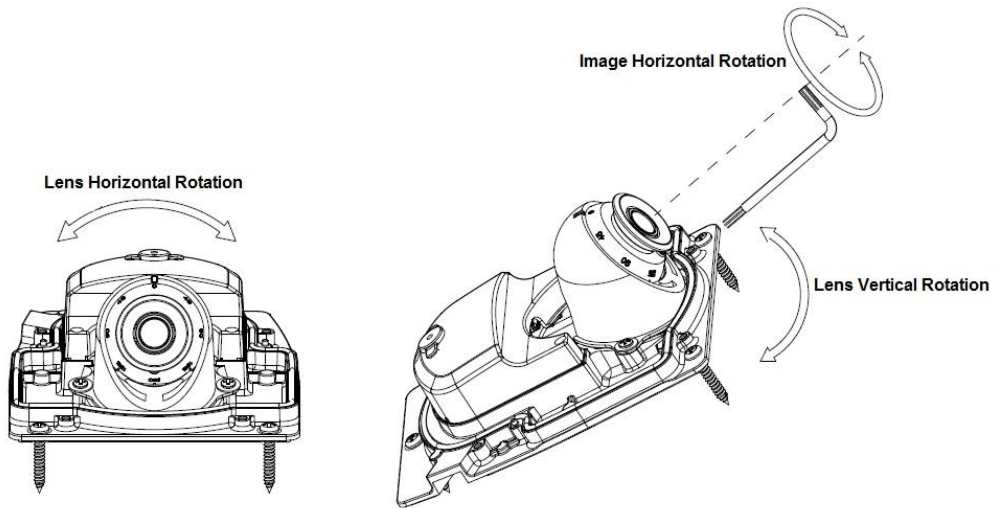
Figure 2-3

Note

The angle adjustment range of the lens is (-20° ～0°) vertically and (-15° ～+15°) horizontally, the image rotation direction is (0° ～ +360°).

Step 5   Take up the upper cover and align it with the screw hole sites on the pedestal, put the cover back in place. Then use wrench to tighten 4 inner hex fixing screws firmly to complete installation.

Note

Make sure the upper cover is firmly fixed to make the device waterproof.

Step 6   (Optional) Install waterproof connector for network port, which is shown in Figure 2-4.

Note

It needs to implement this step if the device is equipped with network port waterproof connector and it is used outdoors.
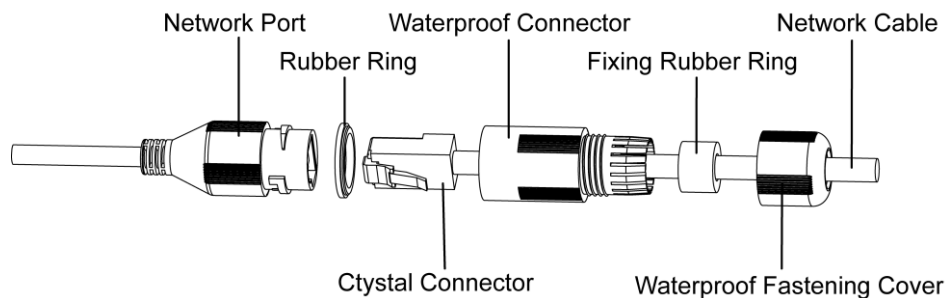

Figure 2-4

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

2. After pulling the network cable without crystal head through main body of waterproof connector, fixing rubber ring and waterproof

fastening cover, make the crystal connector of network cable and then insert it into the network cable.

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.

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

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". 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

You can search out all the cameras within the LAN via "Quick Configuration Tool". 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:

Step 1 Double-click "ConfigTool.exe" to open the "Quick Configuration Tool".

Step 2 Click ⑫ to enter the interface where you can modify IP address, and then click **Search setting**.

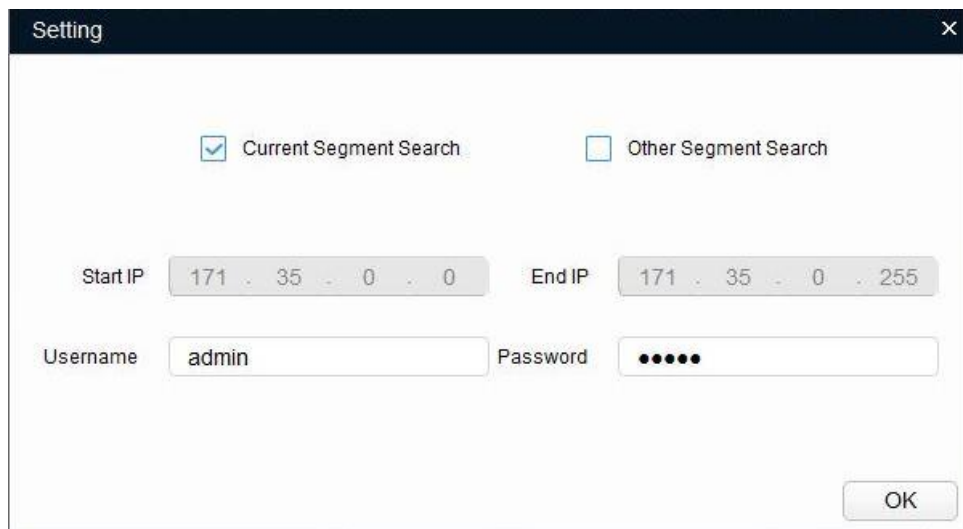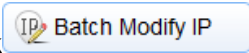The system pops up the **Setting** dialog box, see Figure 3-1.

Figure 3-1

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 IP addresses need to be modified, and then click Batch Modify IP .

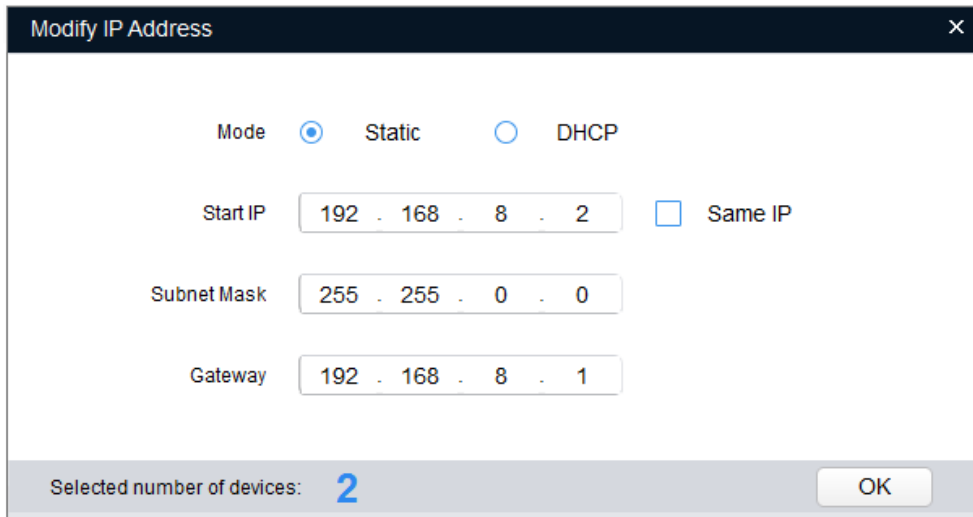The system will pop up the **Modify IP Address** dialog box, see Figure 3-2.

Figure 3-2

Step 5 Set the mode as **Static,** and input 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 finish modification.

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:

Step 1 Open IE browser and input the modified camera IP address in the address bar, and then press **Enter** key.

The login interface shows, see Figure 3-3.

Figure 3-3

Step 2 Input username and password, click **Login**. The system will pop out WEB main interface.

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.

Step 3 Click **Here to Download Plug-in,** and then install controls according to the system prompt. See Figure 3-4 for the WEB main interface.
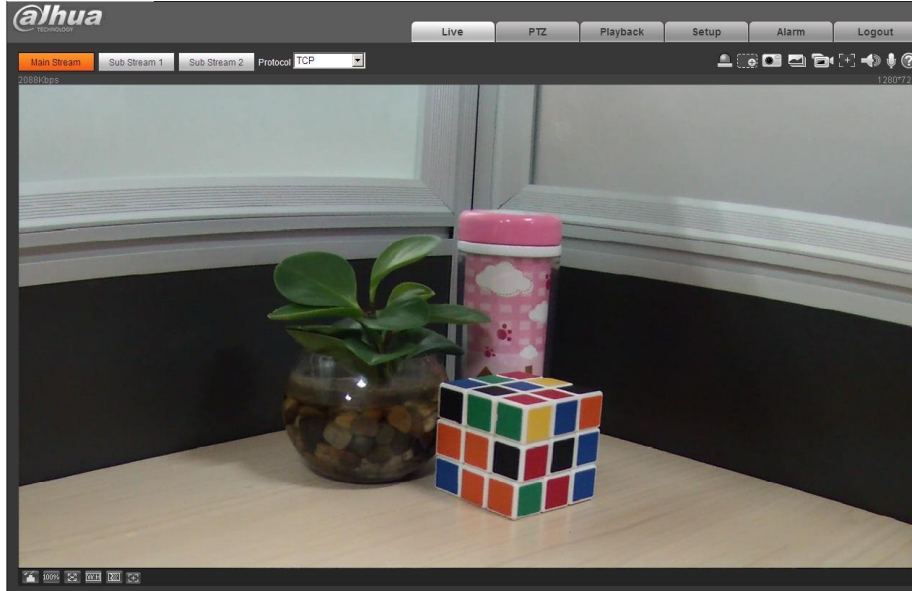

Figure 3-4

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