HD Network Dome Camera Quick Start Guide

Version 1.0.0

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 12V DC, DC5V or AC24V 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.

Note: 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. 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 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.

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
Installation Accessories Bag	1
Installation Position Map	1
CD	1

Table of Contents

1 Device Structure

1.1 Port Description

Note:

The following figures are for reference only, which are used to know the functions of the device external port.

External ports may be different according to the different devices, please refer to the actual product.
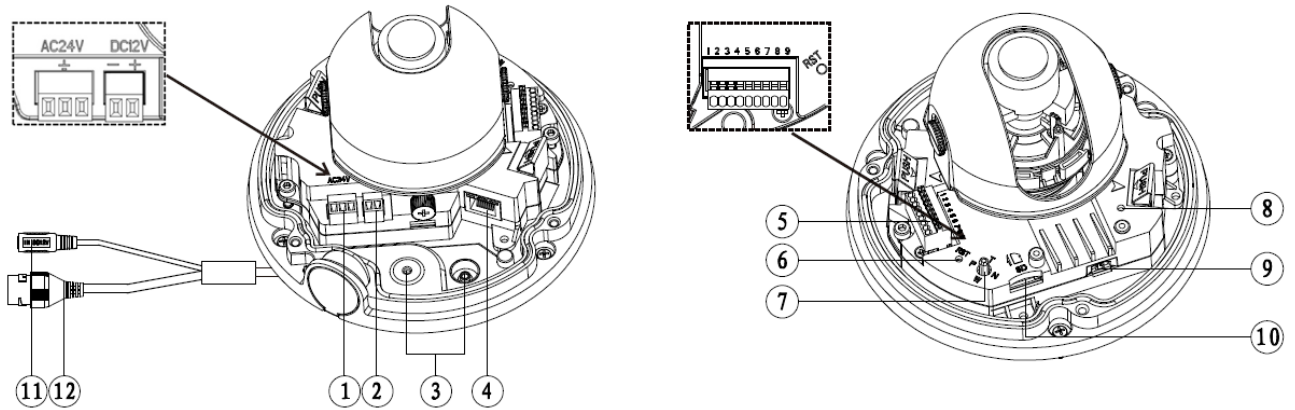
See Figure 1-1.

Figure 1- 1

See Sheet 1-1 for more details about external ports.

SN	Port	Port Name	Function Description
1	POWER	AC 24V power port	Connect to AC 24V power
2	POWER	DC 12V power port	Connect to DC 12V power
3	External cable wiring hole	-	Cable wiring hole
4	LAN	RJ45 network port	Network cable port
5	I/O	I/O port	Including alarm input, output and audio analog output.
6	RESET	Reset button	Reset button, which is to restore device factory default.
7	AUTO FOCUS	5-direction button	It is to adjust lens field angle and definition
8	Status indicator	-	It is to display device operation status
9	Fan port	-	Connect to fan and reduce internal problem of the device
10	Micro SD	Micro SD card slot entry	Connect to Micro SD card for local storage
11	POWER	12V power port	Power port provided by external cable, default input DC 12V
12	LAN	Network port	● Network port provided by external cable ● Connect to standard Ethernet ● Support POE power supply function

Sheet 1-1

Refer to sheet 1-2 for more details about I/O port functions.

Port Name	Port SN	Cable Port Name	Function Description
I/O Port	1	ALARM_NO	- Alarm output port, output alarm signal to alarm device - NO：normally open alarm output port
	2	ALARM_COM	Alarm output common port
	3	GND	GND port
	4	ALARM_IN	Alarm input port, it is to receive on-off signal from the external alarm source.
	5	GND	GND port
	6	AUDIO_IN	Input audio signal, it is to receive analog audio signal from the pickup and other devices.
	7	AUDIO_OUT	Output audio signal to sound box and other devices.
	8	GND	GND port
	9	VIDEO_OUT	Output analog video signal, it is able to connect to TV monitor to view video.

Sheet 1-2

1.2 Dimension

Note:

The following figures are for reference only, which are used to know the device dimension. Please refer to the actual product for more details.
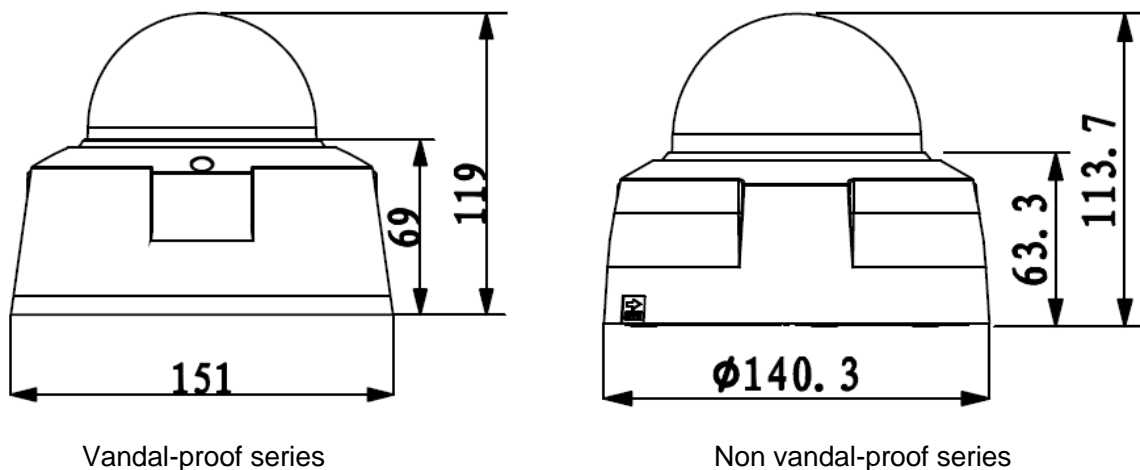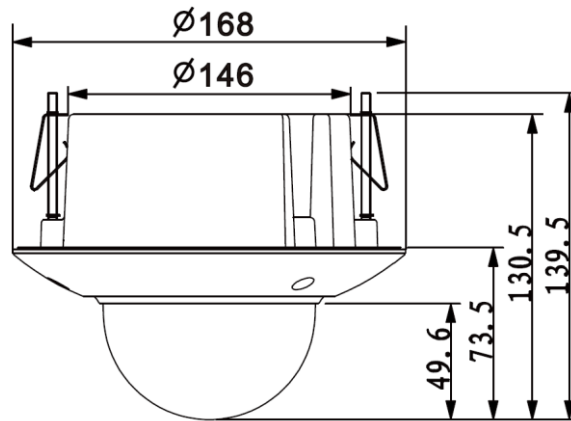
See figure 1-2 and figure 1-3.

Vandal-proof series   Non vandal-proof series

Figure 1-2

Embedded series

Figure 1-3

1.3 Bidirectional talk

Note:

Some devices don't support bidirectional talk function, which can't be applied to this chapter.

1.3.1 Device-end to PC-end

Device Connection

Step 1: Please connect the speaker or the MIC to the audio input port of the device.

Step 2: Then connect the earphone to the audio output port of the PC.

Step 3: 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 MIC, and then you can get the audio from the earphone or sound box at the pc-end.

1.3.2 PC-end to the Device-end

Device Connection

Step 1: Connect the speaker or the MIC to the audio input port of the PC.

Step 2: Then connect the earphone to the audio output port of the device.

Step 3: 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.

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

Listening Operation

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

1.4 Alarm Setup

Note:

Some devices don't support alarm function, which can't be applied to this chapter.

The alarm interface is shown as in Figure 1-4.
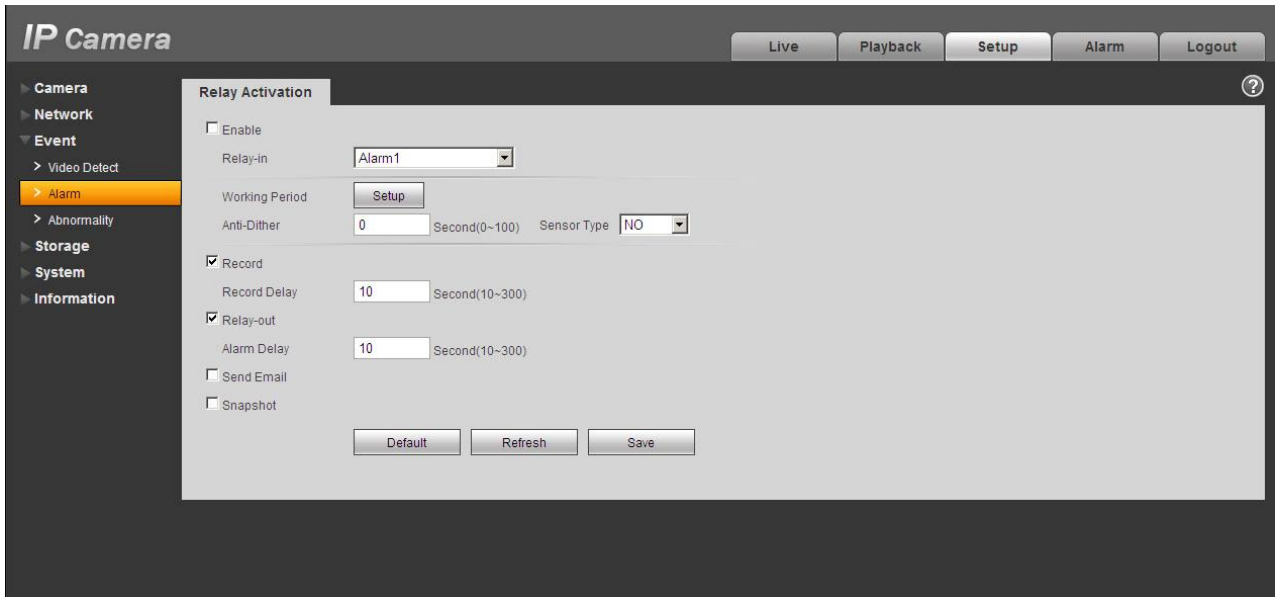
Figure 1-4

Alarm input, output description:

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

Step 2   Connect alarm output device to the alarm output of I/O cable, alarm output is collector open circuit output which connects 10K resistor to 3.3V externally.

Step 3   Open the Web, set alarm input and output correspondingly. Alarm input on WEB corresponds to 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.

Step 4   Set the WEB alarm output. The alarm output is for the alarm output port of the device. It is the alarm output port of the I/O cable.

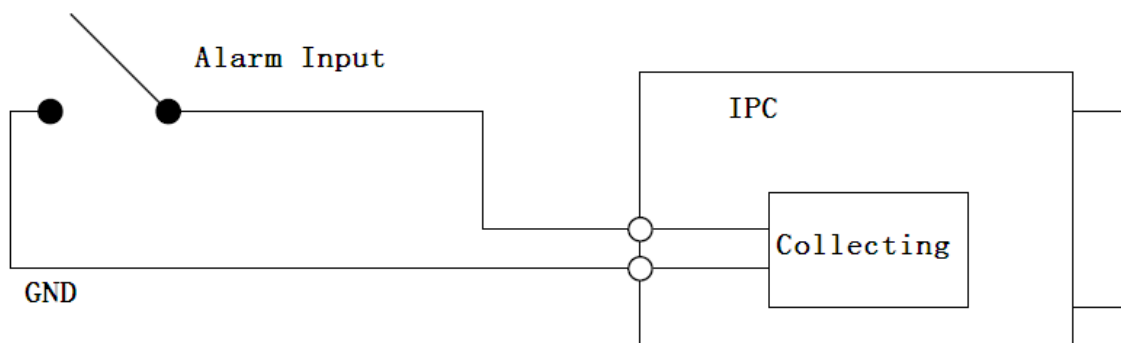Please refer to the following figure for alarm input information. See Figure 1-5.

Figure 1-5

Alarm input: 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".

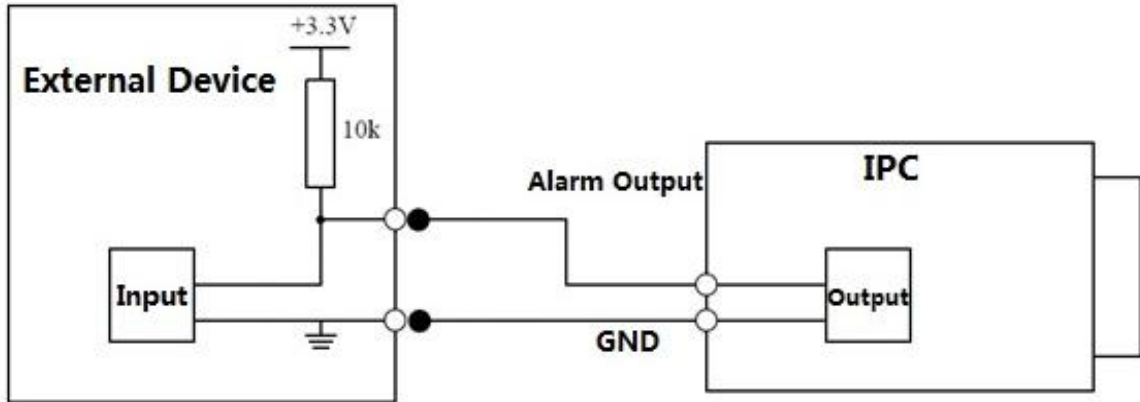Please refer to the following figure for alarm output information. See Figure 1-6.

Figure 1-6

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.

2 Device Installation

2.1 Install Device

Note:

Before the installation, please make sure the installation surface can sustain at least 3X weight of the bracket and the camera.

Vandal-proof/Non vandal-proof series   Embedded series
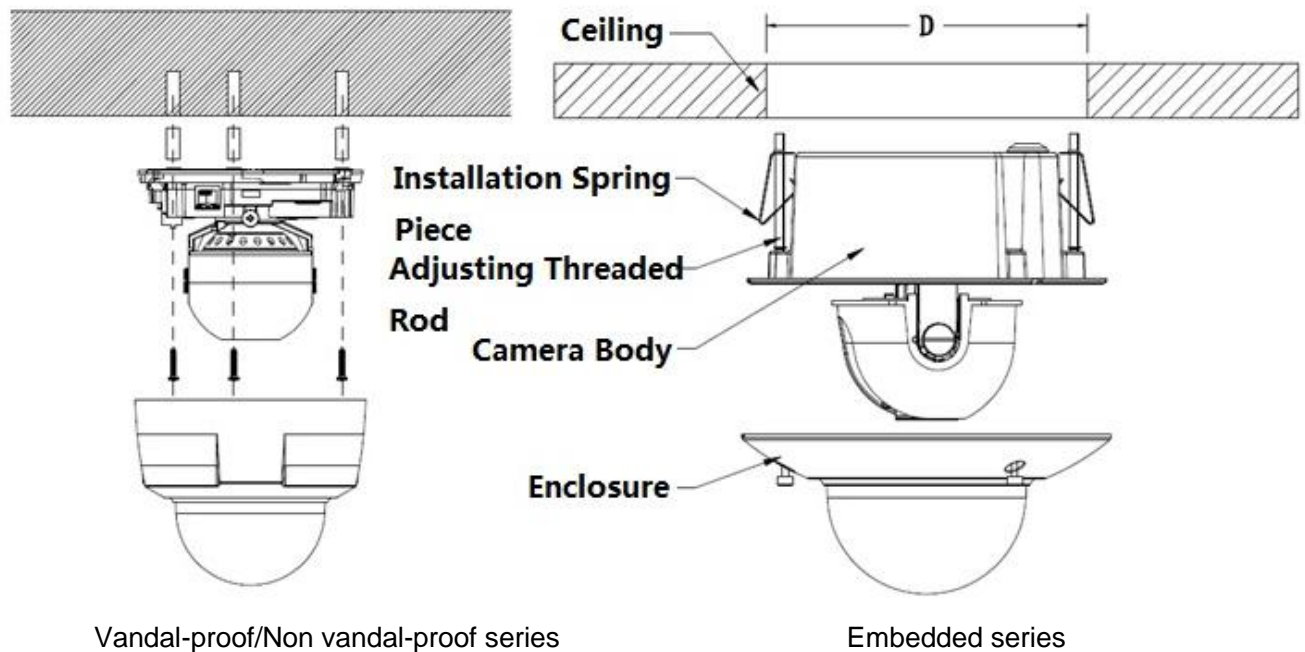
Figure 2-1

Step 1

Take the installation position map from the accessories bag and then paste it on the installation ceiling or the wall according to the monitoring area. Please dig three bottom holes of the plastic expansion bolts according to the map. Take three expansion bolts from the accessories bag and then insert them to the holes you just dug and then fix firmly. You need to dig a wiring hole whose diameter is not less than 28mm on the installation surface according to the position shown on the installation position map if the cable exit is located on the installation surface.

Step 2

Use the inner hex wrench from the accessories bag to unscrew the three inner hex screws on the enclosure and open the dome enclosure.

Step 3

Plug out the default cable network port and power port of the device, and use the inner hex wrench in the accessories bag to unscrew the two inner hex screws on the camera module, then push the metal hook to both sides according to the prompt on the device and remove the camera module from the pedestal.

Step 4

Adjust the location of the device installation pedestal, and pull the cable into the cable exit on the installation surface, then aim the fixing hole of the pedestal at the fixing hole of the three expansion bolts which have been installed in step 1, and take out three ST 3.0 self-tapping screws from the accessories bag and insert into three plastic expansion bolts firmly to fix the pedestal on the installation surface.

Step 5

Take step 3 reversely; install the camera module into the metal hook of the pedestal, and use inner hex wrench to tighten two inner hex screws into the pedestal, and then connect the network cable to power port well.

Note:

For embedded series, it needs to dig a round installation hole with diameter Φ146～Φ150mm on the ceiling. Make the dome body aim the hole and press properly to deform the installation spring piece to enter the ceiling. It is unnecessary to take step 3, step 4 and step 5 when it is confirmed that the device has been hung on the ceiling.

Step 6

Adjust the lens to proper angle according to the requirements.

Note:

For non-IR series, you need to remove the black plastic decoration enclosure before adjusting lens. Put it back after adjustment.

a) Lens pan rotation angle setup. Please unfasten the lock screw A and adjust the pan monitor angle to the proper position. Then fix the lock screw A. The pan angle ranges from 0°~350°.

b) Lens tilt rotation angle. Please unfasten the lock screw B and lock screw C and adjust the tilt monitor angle to the proper position. Then fix the lock screw B and lock screw C. The tilt angle ranges from -20°~+70°.

c) Image pan rotation angle setup. Please unscrew lock screw D to adjust the video pan angle. Then fix the lock screw D firmly. The video pan angle ranges from 0°~+350°.

d) Manual zoom focus operation:

● Slightly loosen the adjusting screw E and push the adjust screw E to make it swing. Adjust the lens focus to the proper position according to the displayed video.

● Slightly loosen the adjusting screw F and push the adjust screw F to make it swing. Adjust the lens to get the clear video and then fix the adjusting screw firmly.

● When you are securing the adjusting screw F, you can see the video may blur. Please push the adjusting screw E to adjust the video slightly. Please secure the adjust screw E if you get a clear video.
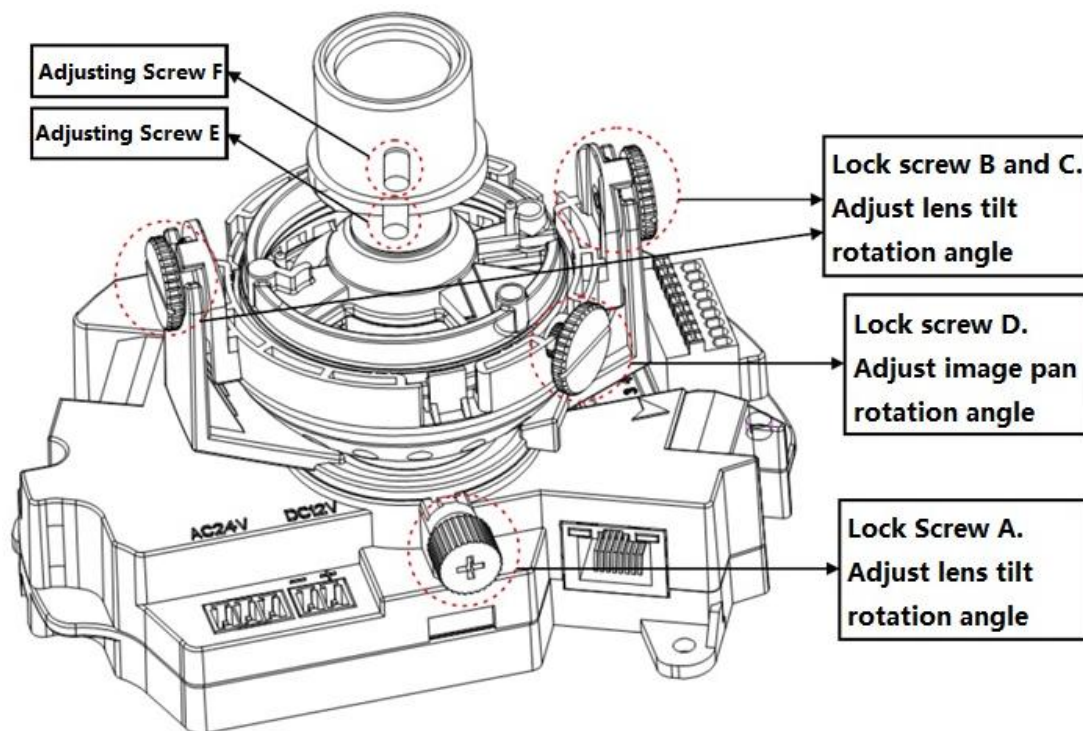
Figure 2-2

Step 7

Hold the dome enclosure, aim the location of side cable exit, cover the enclosure, and then use inner hex wrench to tighten the three inner hex fixing screws. So far, installation is completed.

Note:

After installation, cover the screw hole on the enclosure with three white electrostatic protection mats to improve the device reliability.

Side Cable Exit

If you adopt side cable exit when you are installing the device, you need to pull out the plastic decoration plug on both sides of the device pedestal, and use proper tool to break though its thin part to form a wiring channel, and install the plastic decoration plug back to the pedestal, then you can pull the cable through side cable exit from the pedestal.

For some special user, he may need the metal protection tube to protect when he pulls through the cable from the side cable exit and PG11 screw thread port is provided. Please remove the plastic decoration plug from the side panel of the chassis and pull through the cable to the tunnel of the PG11 screw thread. Now secure the tunnel in the PG11 screw threaded hole of the device.

Cable Connection

The device reserves two cable exits. The pin diameter shall be less than 15mm. One of the cable exits has M22 screw thread and can work with the default combination cable to remove the risk of the dragging and pulling of the cable.

The device has two waterproof airproof plugs (One default position is the cable exit of the chassis of the device and the other is in the accessories bag.). The waterproof airproof plug has two functions. One is to fill in the cable exit and pull through the cable. It supports the cable whose diameter ranges from 4.0~6.0 mm. It is very convenient for you to do the waterproof work when you pull the cable through your own exit. Please refer to the steps listed.

Step 1

Take the waterproof airproof plug out, pull the cable (diameter ranges from 4.0 to 6.0 mm) through the waterproof airproof plug. See Figure 2-3.
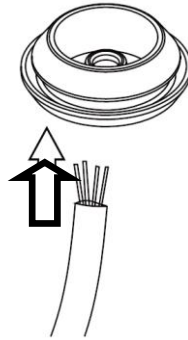
Figure 2-3

Step 2

Before you go to Step 4, please pull through cable with the waterproof airproof plug to the device chassis via the installation hole at the bottom of the chassis and then connect the cable pins.

Step 3

Refer to Step 4 and 5, install and connect the cable pin to the device and then follow the proper steps to go on the installation.

2.2 Micro SD Card Installation

Note:
● Some devices don't support Micro SD card function, which can't be applied to the following chapter.
● Please cut off the device power and turn off the device before installing Micro SD card.

Step 1

Please refer to Step 2 in chapter 2.1 to open the device protection enclosure.

Step 2

Please find the "Micro SD" mark inside the device and adjust the Micro SD card direction according to prompt direction. Insert the card into the slot and then install the Micro SD card. See Figure 2-4.
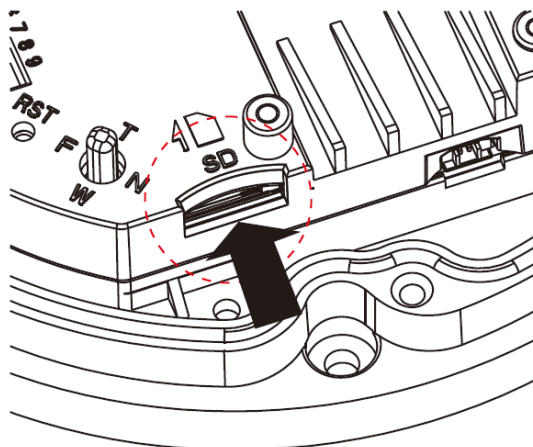
Figure 2-4

3 Network Configuration

The IP address of all the cameras is the same when leaving factory (default IP192.168.1.108), in order 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.

Step 1 Double click the "ConfigTools.exe" and open the quick configuration tool.

Step 2 Double click the device to be configured, the system will pop out the "Login" dialog box. 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
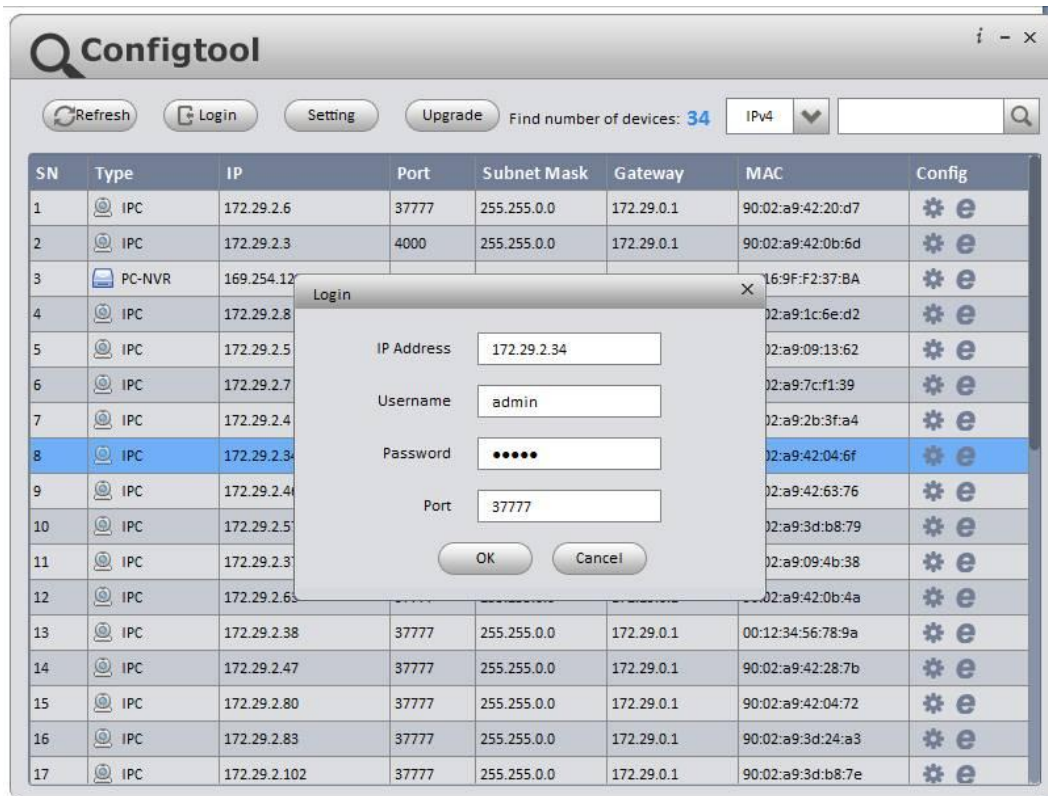37777. See Figure 3-1 for more details.

Figure 3-1

Step 3 Modify the camera IP address on the "Net" interface, click "Save" to finish modification.

See Figure 3-2 for more details.

Figure 3-2

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

Step 1 Open IE and input the modified camera IP address in the address bar.

Step 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".

See Figure 3-3 for more details.

Figure 3-3

Step 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.
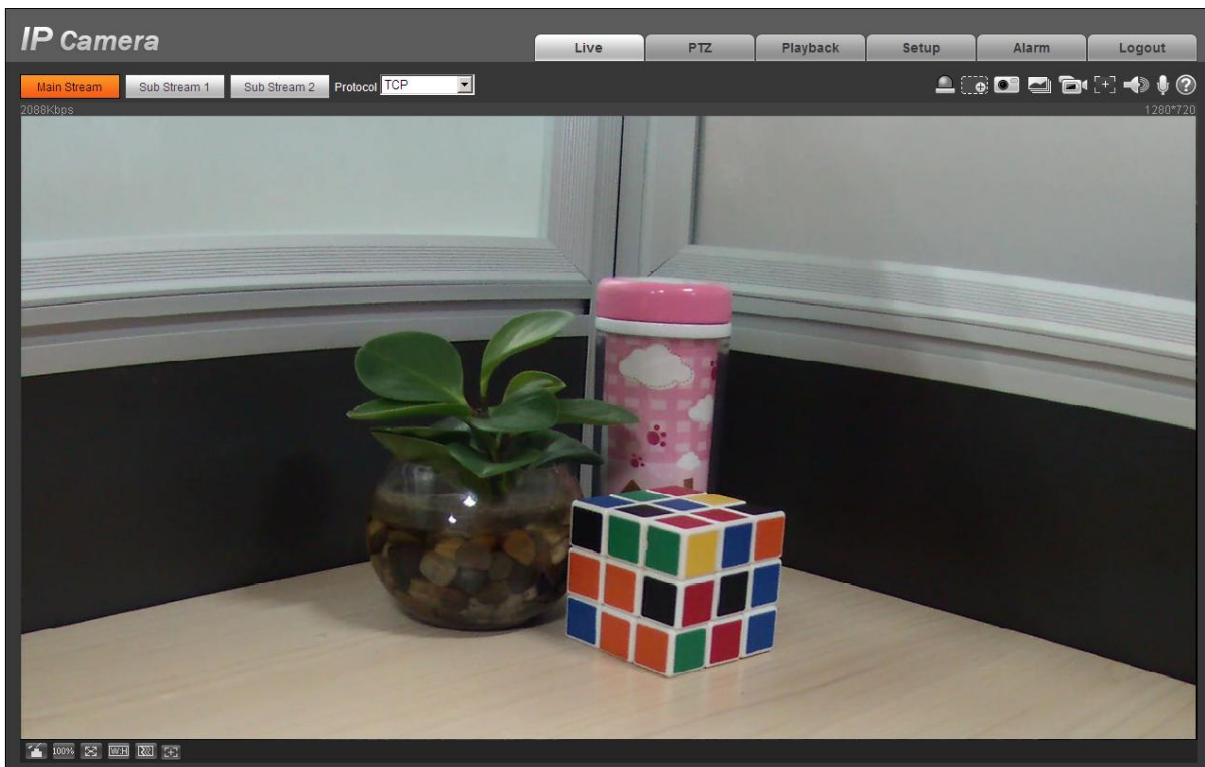

Figure 3-4

Note

- **This user's manual is for reference only. Slight difference may be found in user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks mentioned are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website for more information.**