



HD Thermal Pan & Tilt Network Camera

Quick Start Guide

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IMPORTANT SAFEGUARDS AND WARNINGS

Electrical Safety

All installation and operation here should conform to your local electrical safety codes. The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) in the IEC60950-1. Please see actual product specifications for proper power requirements. Please 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.

Transportation Security

Care must be given to avoid heavy stress, violent vibration or water damage during transportation, storage and installation.

Installation

Do not apply power to the camera before completing installation. Please install the proper power cut-off device during the installation connection. Always follow the instruction guide the manufacturer recommended.

Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers. We are not liable for any problems caused by unauthorized modifications or attempted repair.

Environment

This series network camera should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc. Please keep it away from the electromagnetic radiation object and environment. Please make sure the CCD (CMOS) component is out of the radiation of the laser beam device. Otherwise it may result in CCD (CMOS) optical component damage. Please keep the sound ventilation. Do not allow the water and other liquid falling into the camera. Lightning-proof device is recommended to better prevent lightning damage. The grounding studs of the product are recommended to be grounded to further enhance the reliability of the camera.

Daily Maintenance

Please shut down the device and then unplug the power cable before you begin daily maintenance work. Do not touch the CCD (CMOS) optic component. You can use the blower to clean the dust on the lens surface. 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. Please put the dustproof cap to protect the CCD (CMOS) component when you do not use the camera.

Accessories

Be sure to use all the accessories recommended by manufacturer. 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.

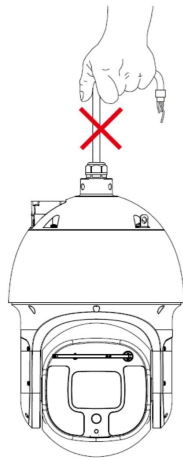
1A. OVERVIEW

This series network camera integrates the traditional camera and network video technology. It adopts video data collection and transmission together. It can connect to the network directly without any auxiliary device.

This series network camera uses standard H.264 and H.265 video compression technology, which maximally guarantees the video quality. This Pan and Tilt camera also supports DC 12v or PoE power. (See actual product specifications for power requirements)

It can be used standalone or with a network video recorder. If used standalone, it is able to utilize IC Realtime's software suite including Smart ICRSS, IC View and ICRSS Pro. This model also supports IC Realtime's P2P connection which allows easy remote connection and Pan and Tilt control.

Important: Do not carry the camera by its cable interface as shown in Figure 1-1.



1B. Cable Interface

See Figure 1-2 For reference.

1. 12V DC+ Earth: Inputs 12V DC input port and ground terminal. See Product specifications for power requirements.
2. RS485_A (Yellow), RS485_B (Orange): For RS485 Serial communication
3. Video out: BNC Port for testing image output.
4. RJ45 Port: For ethernet connection, POE+. See Product specifications for power requirements.
5. Audio In (Red): RCA connection, for audio input. Audio Out (White): RCA Connection, for audio signal output. Audio Ground (Black): Audio ground terminal.
6. I/O Ports: Alarm out (Blue), Alarm out Com (Green), Alarm In (Red), Alarm In2 (Brown), Alarm Ground (Yellow & Green).

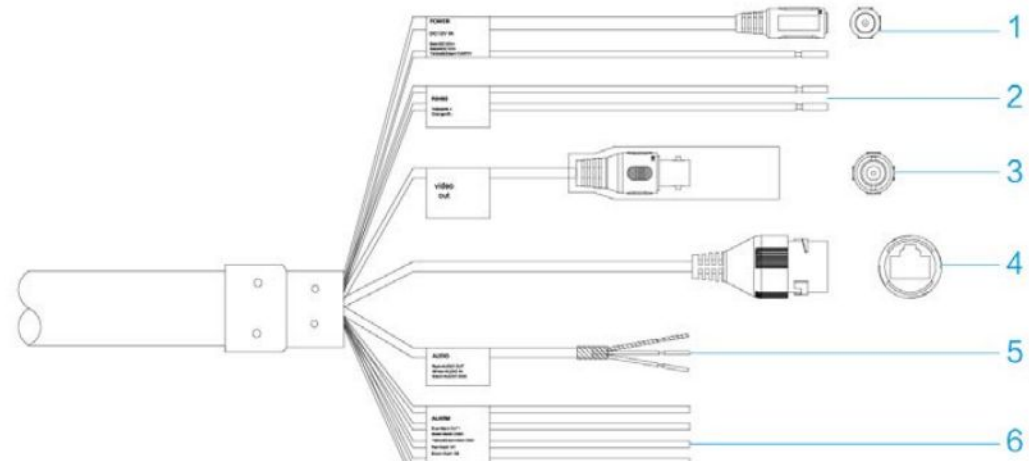


Figure 1-2

2A. INSTALLATION STEPS (With Included Arm mount)

Step 1 Prepare the mounting surface by marking and then drilling out the mounting holes as well as a cable exit hole, if necessary. Install the Arm mount to the mounting surface. See figure 2-1.

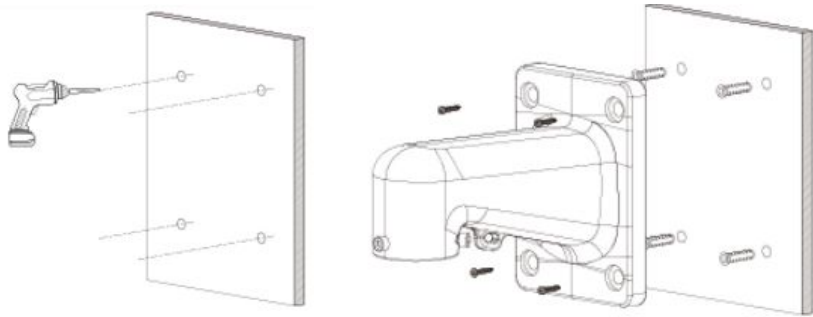


Figure 2-1

Step 2 We recommend installing the supplied safety cable from the camera to the mount to prevent damage when mounting the camera, as shown in Figure 2-2.

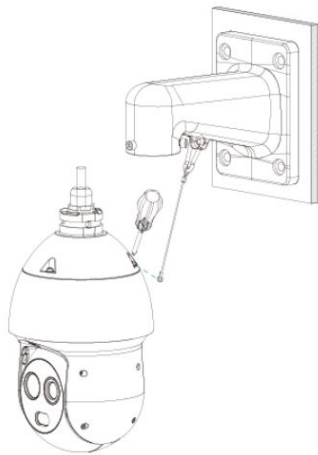


Figure 2-2

Step 3 Thread the camera cables through the mount and install the mounting collar screws as shown in Figure 2-3.

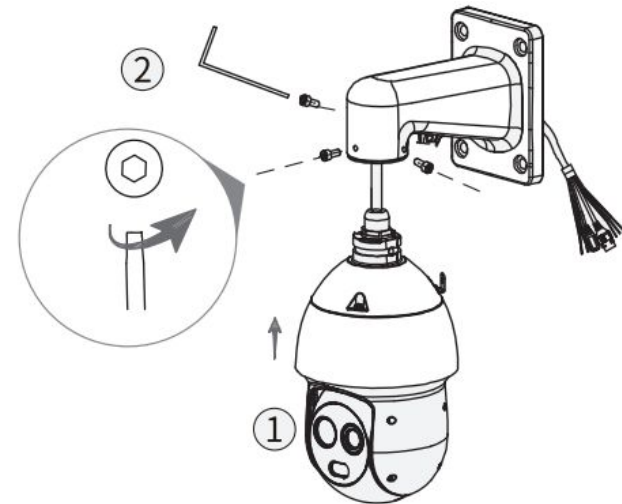


Figure 2-3

Step 4 Confirm that the screws on the mounting connector are firmly tightened, the safety cable is reliably connected and the speed dome is securely installed. See Figure 2-4.

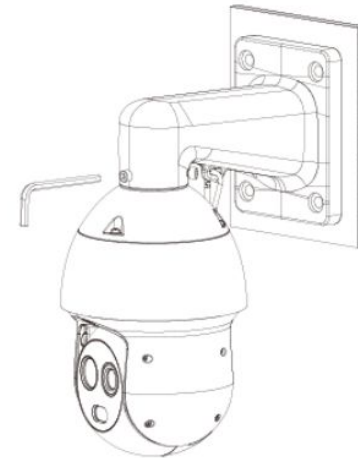


Figure 2-4

2B. OPTIONAL INSTALLATION STEPS (Ceiling Mount Installation)

Note: This accessory must be purchased separately.

Step 1 Install the base plate for the ceiling mount. Thread the end cables through. See Figure 2-5.

Step 2 Install the extension pole into the mount and thread the end cables through the extension pole, as shown in Figure 2-6.

Step 3 Thread the wires neatly through the extension pole, connect the necessary wiring and then install the camera to the bottom of the pole. See Figure 2-7.

Step 4 Secure the camera to the pole using the locking screws. See Figure 2-8.

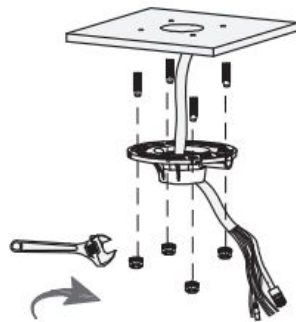


Figure 2-5

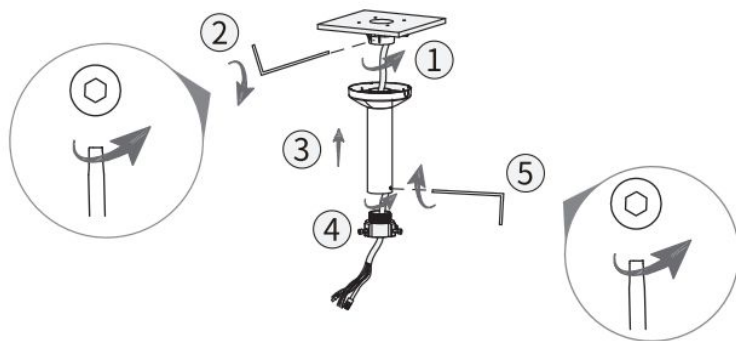


Figure 2-6

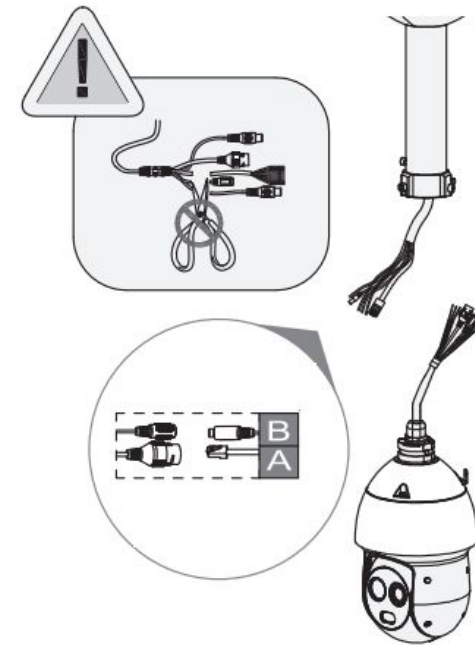


Figure 2-7

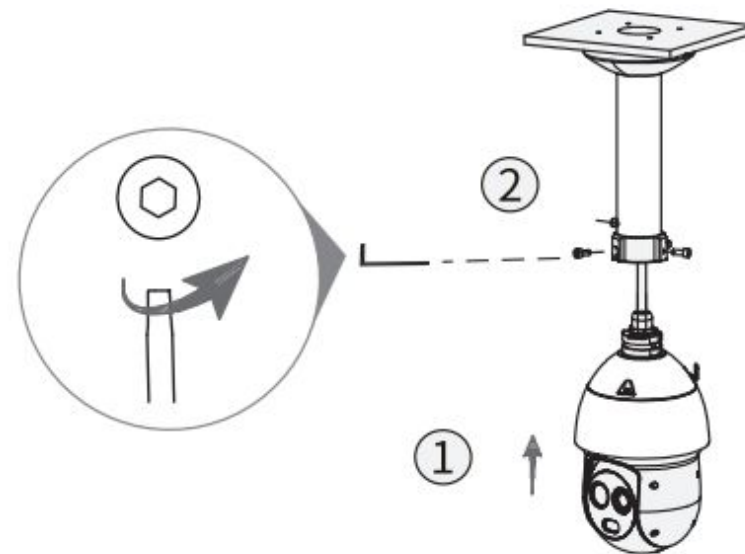


Figure 2-8

2C. RESTORE FACTORY DEFAULTS/ INSTALL SD CARD

Important: Make sure the device is powered when attempting to press RESET button.

Note: Some PTZ models may take up to 5 minutes to reboot after reset.

Step 1 See Figure 2-9 for cover location. Remove the cover. Skip to Step 3 if only installing SD Card.

Step 2 Slightly press the RESET button for 15-30 seconds to complete the reset function. See Figure 2-9. The camera will reboot when the reset process is complete.

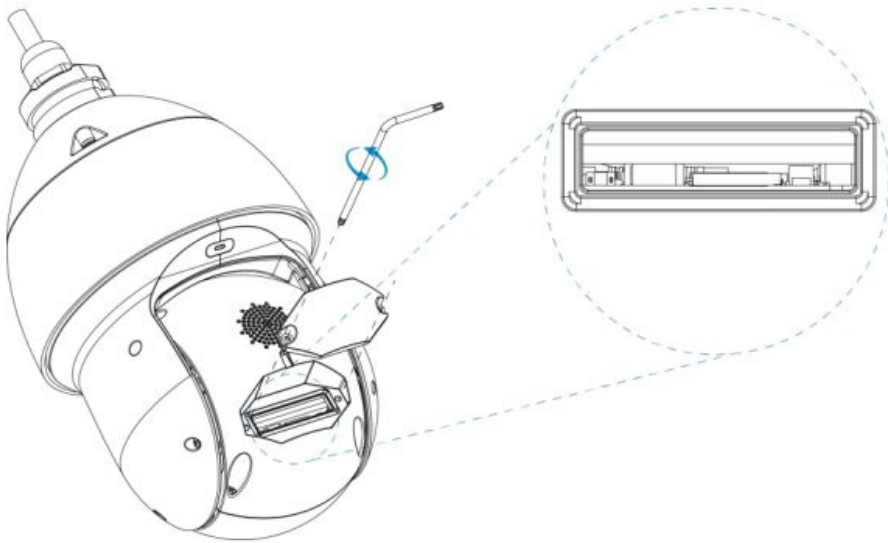


Figure 2-9

Step 3 (If installing SD Card) Adjust the Micro SD Card to the proper direction as shown in Figure 2-9.

Step 4 Secure cover and re-install camera.

3A. OVERVIEW

The IP Config tool is used to search the local network for IC Realtime devices as well as modify the IP addresses and upgrading firmware.

This software can be downloaded at:

<https://icrealtime.com/downloads> under *Desktop Utility Apps*

3B. OPERATION

Double click the “ConfigTool.exe” icon to run. The interface will be displayed as shown in Figure 3-1. Click on the blue circle icon with the two arrows to refresh and scan the network.

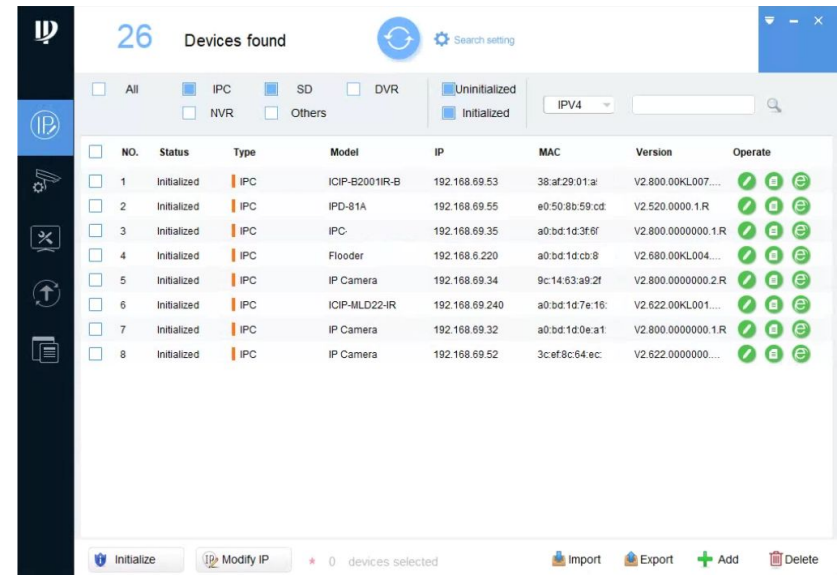


Figure 3-1

Select “Search Setting” to modify the IP range to scan for and input the correct login information for the device. See Figure 3-2.

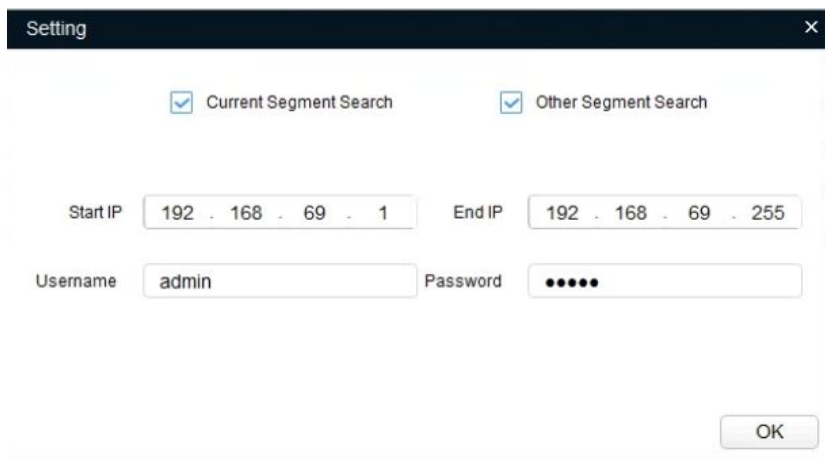


Figure 3-2

Note: If the Camera status is “Uninitialized,” select the camera and then click the “Initialize” icon on the bottom left side and follow the process on screen to initialize the device.

The Operate column will allow you to modify device, view device information and link to web browser. See figure 3-3.

Version	Operate
V2.622.0000000....	  

  
Edit IP Address Info Web GUI link

Figure 3-3

To modify the device IP address, select one of the devices from the list and then click the pencil icon. The dialog box to modify the IP information will populate. See Figure 3-4.

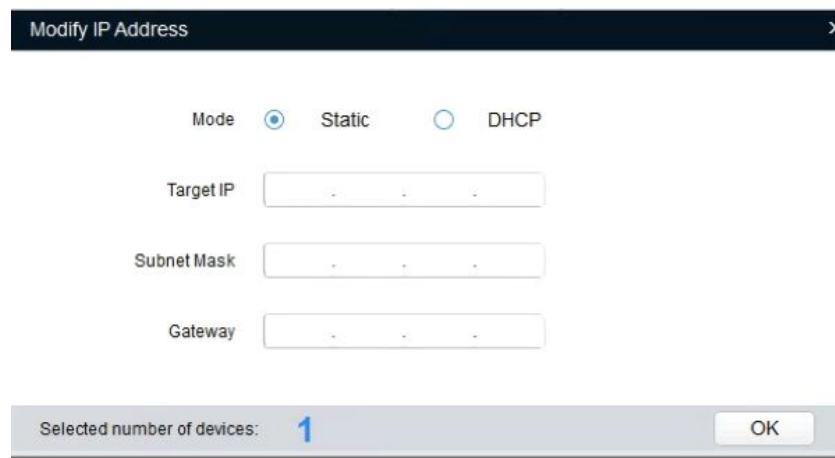


Figure 3-4

This series network camera product supports the Web access and management via PC.

4A. NETWORK CONNECTION

Please follow the steps listed below for network connection.

- Make sure the network camera is connected to the network and powered properly.
- Please set the IP address, subnet mask and gateway of the PC and the network camera respectively. The camera is set to DHCP out of the box with default IP address of 192.168.1.108 if DHCP pool is not available. Subnet mask is 255.255.255.0. Gateway is 192.168.1.1
- Using Command Prompt, type “ping ***.***.***.***(* network camera address)” to check if connection is OK or not.

4B. LOGIN AND LOGOUT

Open IE or Chrome and input the network camera address in the address bar. See Figure 4-1.

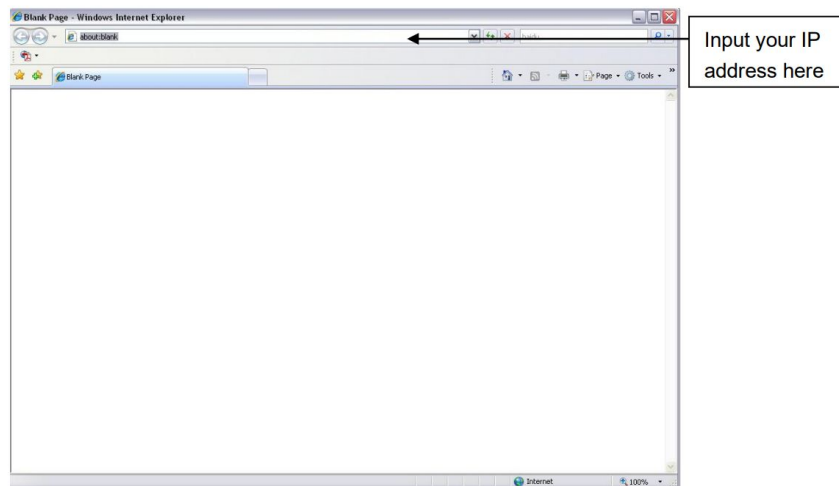


Figure 4-1

The login interface is shown as below. See Figure 4-2.

Note: If it is your first time logging into the camera (and it has not been initialized through the ConfigTool or NVR), the camera will need to be initialized. A pop-up will appear to select your region. After selecting region, you will be prompted to create a password for the admin account as well as security questions in case the password is lost. After initializing, you will be able to login to the web interface of the camera.

Please input your user name and password.



Figure 4-2

Web includes several modules: monitor channel preview, system configuration, alarm and etc. See Figure 4-3.

- Live: Live video of camera
- Playback: View recording from SD card (if applicable)
- Setting: For configuration changes.
- Alarm: For monitoring alarm triggers (motion detect, IVS, abnormalities, etc)
- Logout: Logs out of the camera web GUI

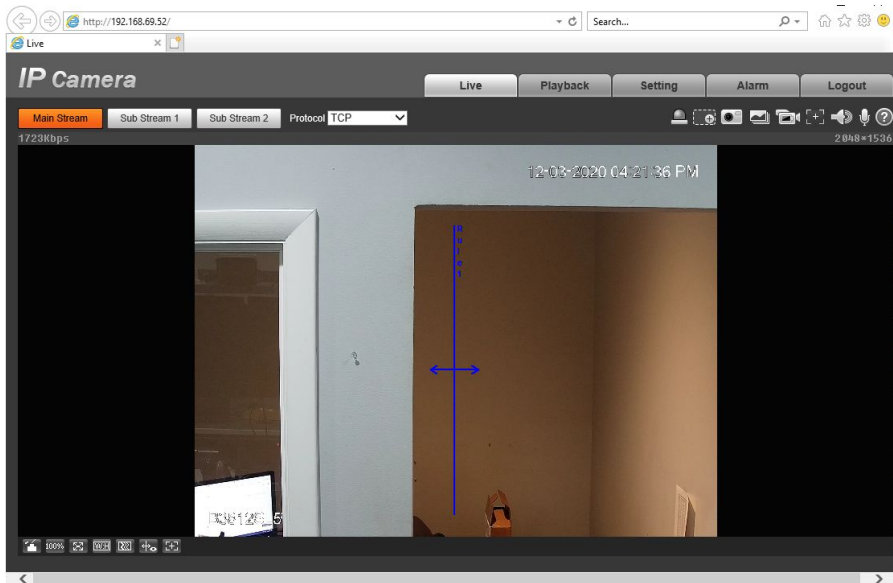










Figure 4-3

Live View Functions:

	<p>Relay Out: Displays alarm output state. Click the icon to enable or disable alarm output.</p> <ul style="list-style-type: none"> • Red: Alarm output enabled. • Grey: Alarm output disabled.
	<p>Digital Zoom: Click the icon, and then select an area in the video image to zoom in; right-click on the image to resume the original size. In zoom in state, drag the image to check other area. Scroll the mouse wheel in the video image to zoom in or out.</p>
	<p>Snapshot: Click the icon to capture one picture of the current live view. It will be saved to the configured storage path.</p>
	<p>Triple Snapshot: Click the icon to capture three pictures of the current live view. They will be saved to the configured storage path.</p>
	<p>Record: Click the icon to record live video. It will be saved to the configured storage path.</p>
	<p>Easy Focus: Click the icon to display the AF Peak (focus eigenvalue) and AF Max (max focus eigenvalue) on the video image.</p>
	<p>Audio: Click the icon to enable or disable audio output.</p>
	<p>Talk: Click the icon to enable or disable the 2 way talk.</p>

5A. FAQ

Device does not operate properly/ lost password.	Please refer to section 2B for factory reset process. Cam will need to be initialized after factory reset.
P2P status is “not connected/ offline”	You may need to set device IP to DHCP. After acquiring a different IP address, verify P2P status and set camera back to static IP if successful.
IR video is poor/ does not turn on.	Verify the camera is supplied with the recommended amount of power. You may need to test voltage/ amperage of the camera while under load. Enough visible light at the location can also cause IRs to not switch on.
I can not upgrade the device via network.	Contact technical support to request firmware.
I cannot login to the client-end or the WEB.	If the Camera HTTP port is changed, you will need to specify the port number after the IP. (ex: http://192.168.1.108:8080) Ensure the correct login credentials are being used. The Smart ICRSS software will use the TCP port. Make sure you input the correct TCP port number.
The account is locked	Reboot the camera to clear lock out. Verify the login to make sure it is correct.
Camera does not show up on local network.	Verify the camera is supplied with the recommended power supply. Change network cable or use short patch cable to troubleshoot.

5B. LIGHTNING PROOFING AND SURGE PROTECTION

This PTZ adopts TVS lightning protection technology. It can effectively prevent damages from various pulse signals below 6000W, such as sudden lighting and surge. Necessary precaution measures should be taken in accordance to local guidelines when installing the speed dome in an outdoor environment.

- The signal transmission cable and high-voltage device (or high-voltage cable) should be at least 50 meters apart.
- If possible, route cables through a properly grounded and shielded underground conduit.
- In areas of strong lightning occurrence or near high sensitive voltage (such as near high-voltage transformer substation), it is required to install additional a high-power lightning protection device or lightning rod.
- Electrical bonding is recommended. The ground device should meet anti-jamming requirements and conform to your local electrical safety code. The ground device should not short circuit to N (neutral) line of high voltage power grid or mixed with other wires. When connecting the system to the ground alone, the grounding resistance should not be more than 4Ω and earth cable cross-sectional area should be no less than 25 mm². See Figure 5-1.
- For indoor usage, The yellow and green GND wire or GND screw of the speed dome should be reliably connected by several strands of copper wire with no less than 25mm² and indoor equipotential GND terminal. Please refer to Figure 5-2 for lightning proof installation mode.

5B. LIGHTNING PROOF AND SURGE PROTECTION (Continued)

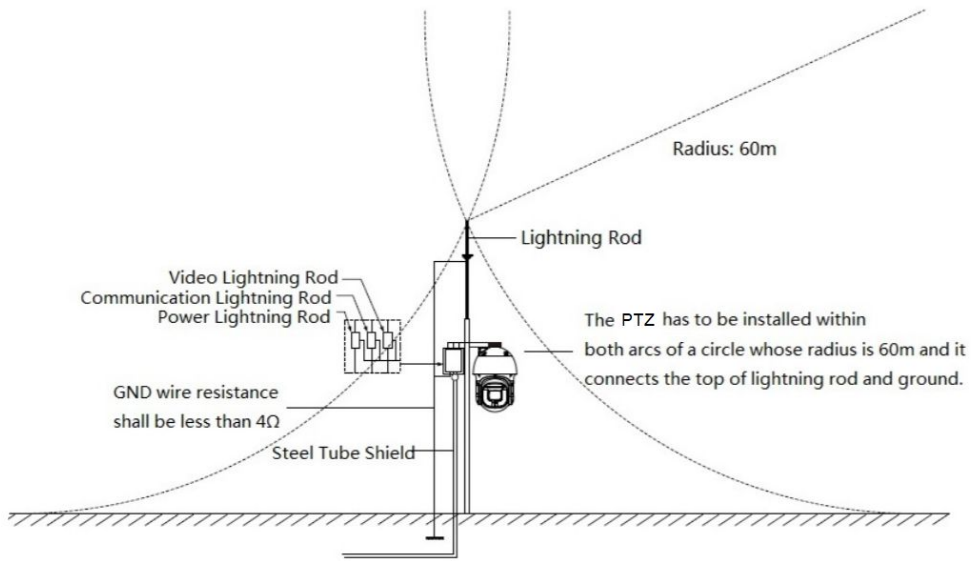


Figure 5-1

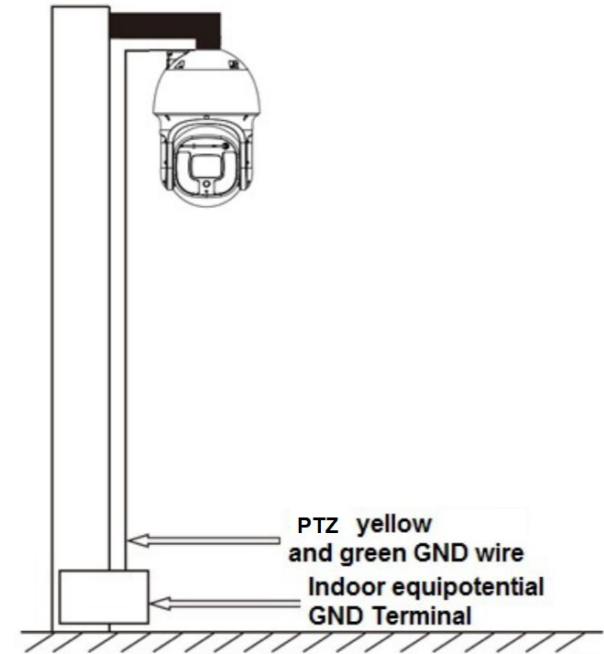


Figure 5-2