



6CE445XANR

Quick Installation Guide

V1.0.1

Dahua Technology Co., Ltd




Foreword

General

This manual offers reference material and general information about the basic operation, maintenance, and troubleshooting for a Dahua Network Camera. Read, follow, and retain the following safety instructions. Heed all warning on the unit and in the operating instructions before operating the unit. Keep this guide for future reference.

Safety Instructions

The following categorized signal words with defined meaning might appear in the Guide.

Signal Words	Meaning
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
 NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

No.	Version	Revision Content	Release Time
1	V1.0.0	First Release.	January 2019
2	V1.0.1	Revised for North America	July 2019

Privacy Protection Notice

As the device user or data controller, you may collect personal data such as face images, fingerprints, license plate number, email address, phone number, GPS location and other sensitive or private information. You must ensure that your organization is in compliance with local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures include but not limited to: providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact

About the Guide

- This user guide has been compiled with great care and the information it contains has been thoroughly reviewed and verified.
- The text was complete and correct at the time of printing. This guide may be periodically updated to reflect changes to the product or to correct previous information and the content of this guide can change without notice.
- If you encounter an error or have any questions regarding the contents of this guide, contact customer service for the latest documentation and supplementary information.
- Dahua accepts no liability for damage resulting directly or indirectly from faults, incompleteness, or discrepancies between this guide and the product described. Dahua is not liable for any loss caused by installation, operation, or maintenance inconsistent with the information in this guide.
- All the designs and software are subject to change without prior written notice. The product updates may cause some differences between the actual product and the Guide. Please contact the customer service for the latest program and supplementary documentation.
- Video loss is inherent to all digital surveillance and recording devices; therefore Dahua cannot be held liable for any damage that results from missing video information. To minimize the occurrence of lost digital information, Dahua recommends multiple, redundant recording systems, and adoption of backup procedure for all data.
- All trademarks, registered trademarks and the company names in the Guide are the properties of their respective owners.
- Please visit our website, contact the supplier or customer service if there is any problem occurred when using the device.
- Contact the supplier or customer service if you encounter any issue while using this unit.

FCC Information

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.

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.

Legal Notices

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Important Safeguards and Warnings

This chapter describes the contents covering proper handling of the device, hazard prevention, and prevention of property damage. Read these contents carefully before using the device, comply with them when using, and keep it well for future reference.

Installation and Maintenance Professionals Requirements

- All installation and maintenance professionals must have adequate qualifications or experiences to install and maintain CCTV systems and electric apparatus, and to work above the ground. The professionals must have the following knowledge and operation skills:
- Basic knowledge and installation of CCTV systems.
- Basic knowledge and operation skills of low voltage wiring and low voltage electronic circuit wire connection.
- Basic knowledge and operation skills of electric apparatus installation and maintenance in hazardous sites.

Power Requirements

- Install the unit in accordance with the manufacturer's instructions and in accordance with applicable local codes.
- All installation and operation must conform to your local electrical safety codes.
- Do not overload outlets and extension cords, which may cause fire or electrical shock.
- Do not place the camera near or in a place where the camera may contact overhead power lines, power circuits, or electrical lights.
- Ensure power conforms to SELV (Safety Extra Low Voltage) and that the limited power source is rated AC 24V as specified in IEC60950-1. (Power supply requirement is subject to the device label).
- All input/output ports are SELV circuits. Ensure that SELV circuits are connected only to other SELV circuits.
- Ground the unit using the ground connection of the power supply to protect the unit from damage, especially in damp environments.
- Please install easy-to-use device for power off before installing wiring, which is for emergent power off when necessary.
- Protect the plug and power cord from foot traffic, being pinched, and its exit from the unit.
- Do not attempt to service the unit. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified personnel.
- If the unit is damaged and requires service, unplug the unit from the main AC power supply and from the PoE supply and refer to qualified service personnel. Damage may include, but is not limited to:
 - The power supply cord or plug is damaged.
 - Liquid has spilled in or on the unit.

- An object has fallen on the unit.
- The unit has been dropped and the housing is damaged.
- The unit displays a marked change in performance.
- The unit does not operate in the expected manner when the user correctly follows the proper operating procedures.
- Ensure a service technician uses replacement parts specified by the manufacturer, or that have the same characteristics as the original parts. Unauthorized parts may cause fire, electrical shock, or other hazards. Dahua is not liable for any damage or harm caused by unauthorized modifications or repairs.
- Perform safety checks after completion of service or repairs to the unit.
- Use attachments and accessories only specified by the manufacturer. Any change or modification of the equipment, not expressly approved by Dahua, could void the warranty.
- Incorporate a readily accessible disconnect device in the building installation wiring for quick power disconnect to the camera.
- Dahua assumes no liability or responsibility for any fire or electrical shock caused by improper handling or installation.

Application Environment Requirements

- Please use the device within the allowed humidity (<95%RH) and altitude (<3000m).
- Transport, use, and store the unit within the specified temperature and humidity range.
- Do not place the unit in a wet, dusty, extremely hot or an extremely cold environment; and avoid environments with strong electromagnetic radiation or unstable lighting.
- Do not use the device in the corrosive environment such as high salt fog area (sea, beach and coastal area), acid gas environment and chemical plants.
- Do not use the device in applications with strong vibrations such as in boats and vehicles.
- Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or cause a short circuit that may result in fire or electrical shock. Take care to not spill any liquid on the unit.
- If your installation environment is subjected to one of the conditions above, contact our sales staff to purchase cameras intended for the particular environment.
- Please don't install the device near the place with heat source, such as radiator, heater, stove or other heating equipment, which is to avoid fire.
- Do not aim the lens at an intense radiation source (such as the sun, a laser, and molten steel for example) to avoid damage to the thermal detector.
- Use the factory default package or material with equal quality to pack the device when transporting.

Operation and Maintenance Requirements

- Do not touch the heat dissipation component of the unit. This part of the unit is hot and may cause a burn.
- Do not open or dismantle the device; there are no components that a user can fix or replace. Opening the unit may cause water leakage or expose components to direct light. Contact the manufacturer or a qualified service representative to service the camera or to replace a component, including the desiccant.
- Dahua recommends the use of a thunder-proof device in concert with the unit.

- Do not touch the CCD or the CMOS optic sensor. Use a blower to clean dust or dirt on the lens surface. Use a dry cloth dampened with alcohol and gently wipe away any dust on the lens.
- Use a dry soft cloth to clean the unit's housing. If the unit is particularly dusty, use water to dilute a mild detergent, apply the diluted detergent to a soft cloth, then gently clean the device. Finally, use a dry cloth to wipe the unit dry. Do not use a volatile solvent like alcohol, benzene, or thinner; or use a strong detergent with abrasives, which may damage the surface coating or reduce the working performance of the unit.
- Do not touch or wipe a dome cover during installation, this cover is an optical device. Refer to the following methods clean the dome cover:
- Stained with dirt: Use an oil-free soft brush or blower to gently remove the dirt.
- Stained with grease or fingerprints: Use a soft cloth to wipe gently the water droplet or the oil from the dome cover. Then, use an oil-free cotton cloth or paper soaked with alcohol or detergent to clean the lens from the center of the dome to outside. Change the cloth several times to ensure the dome cover is clean.



WARNING

- Modify the default password after login.
- Use attachments and accessories only specified by the manufacturer. Any change or modification of the equipment, not expressly approved by Dahua, could void the warranty.
- Internal and external ground connection should be stable.
- Do not supply power via the Ethernet connection (PoE) when power is already supplied via the power connector.
- Disconnect power before device maintenance and overhaul. It is prohibited to open the cover with power on in an explosive environment.
- Please contact the local dealer or the nearest service center if the device fails to work normally, please don't dismantle or modify the device.

Cybersecurity Recommendations

Mandatory actions to be taken towards cybersecurity

- **Change Passwords and Use Strong Passwords**
 - The number one reason systems get “hacked” is due to having weak or default passwords. It is recommended to change default passwords immediately and choose a strong password whenever possible. A strong password should be made up of at least 8 characters and a combination of special characters, numbers, and upper and lower case letters.
- **Update Firmware**
 - As is standard procedure in the tech-industry, we recommend keeping NVR, DVR, and IP camera firmware up-to-date to ensure the system is current with the latest security patches and fixes.

Recommendations to improve your network security

- **Change Passwords Regularly**
 - The length should be greater than 8 characters;
 - Include at least two types of characters; character types include upper and lower case letters, numbers, and symbols;
 - Do not use an account name or the account name in reverse order;
 - Do not use sequential characters, such as 123, abc, etc.;
 - Do not use repeated characters, such as 111, aaa, etc.;
- **Change Default HTTP and TCP Ports**
 - Change default HTTP and TCP ports for systems. These are the two ports used to communicate and to view video feeds remotely.
 - These ports can be changed to any set of numbers between 1025 and 65535. Avoiding the default ports reduces the risk of outsiders being able to guess which ports you are using.
- **Update Firmware and Client Software**
 - Keep your network-enabled equipment (such as NVRs, DVRs, IP cameras, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the equipment is connected to the public network, it is recommended to enable the “auto-check for updates” function to obtain timely information of firmware updates released by the manufacturer.
 - Download and use the latest version of client software.
- **Enable HTTPS/SSL**
 - Set up an SSL Certificate and enable HTTPS to encrypt all communication between your devices and recorder.
- **Enable IP Filter**
 - Enable the IP filter to prevent unauthorized access to the system.

- **Change ONVIF Password**
 - Older IP camera firmware does not automatically change the ONVIF password when the system credentials are changed. Update the camera's firmware to the latest revision or manually change the ONVIF password.
- **Forward Only Ports You Need**
 - Forward only the HTTP and TCP ports that are required. Do not forward a wide range of numbers to the device. Do not DMZ the device's IP address.
 - Do not forward any ports for individual cameras if they are all connected to a recorder on site. Simply forward the NVR port.
- **Disable Auto-Login on SmartPSS**
 - Disable the Auto-Login feature on SmartPSS installed on a computer that is used by multiple people. Disabling auto-login prevents users without the appropriate credentials from accessing the system.
- **Use a Different Username and Password for SmartPSS**
 - Do not use a username/password combination that you have in use for other accounts, including social media, bank account, or email in case the account is compromised. Use a different username and password for your security system to make it difficult for an unauthorized user to gain access to the IP system.
- **Limit Features of Guest Accounts**
 - Ensure that each user has rights to features and functions they need to perform their job.
- **Disable Unnecessary Services and Choose Secure Modes**
 - Turn off specific services, such as SNMP, SMTP, and UPnP, to reduce network compromise from unused services.
 - It is recommended to use safe modes, including but not limited to the following services:
 - SNMP: Choose SNMP v3 and set up strong encryption passwords and authentication passwords.
 - SMTP: Choose TLS to access a mailbox server.
 - FTP: Choose SFTP and use strong passwords.
 - AP hotspot: Choose WPA2-PSK encryption mode and use strong passwords.
- **Multicast**
 - Multicast is used to share video streams between two recorders. Currently there are no known issues involving Multicast. Deactivate this feature if not in use to enhance network security.
- **Check the Log**
 - The information stored in the network log file is limited due to the equipment's limited storage capacity. Enable the network log function to ensure that the critical logs are synchronized to the network log server if saving log files is required.
 - Check the system log if you suspect that someone has gained unauthorized access to the system. The system log shows the IP addresses used to login to the system and the devices accessed.
- **Physically Lock Down the Device**
 - Perform physical protection to equipment, especially storage devices. For example, place the equipment in a special computer room and cabinet, and implement access control permission and key management to prevent unauthorized personnel from accessing the equipment.

- **Connect IP Cameras to the PoE Ports on the Back of an NVR**
 - Cameras connected to the PoE ports on the back of an NVR are isolated from the outside world and cannot be accessed directly.
- **Isolate NVR and IP Camera Network**
 - Ensure that the network for the NVR and IP cameras should not be the same network as a public computer network. Separate networks prevent unauthorized users accessing the same network the security system.
- **Secure Auditing**
 - Check online users regularly to ensure unauthorized accounts are not logged in to a device.
 - Check the equipment log to access the IP addresses used to login to devices and their key operations.

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1 Unpacking

This equipment should be unpacked and handled with care. If an item appears to have sustained damage during shipping, notify the shipper immediately.

Verify that all the parts listed below are included. If an item is missing, contact customer support or your local representative.

The original packing carton is the safest container to transport the unit, in the event the unit must be returned for service. Retain the carton and all shipping material for future use.

Please refer to the enclosed CD for more details, to view the detailed User's Manual, and for configuration software.

1.1 Parts List

Package Item	Quantity
Network PTZ Camera	1
Wall Mount	1
M6 Set Screws	3
Mounting Bolts and Nuts	4
Wall Mount Sealing Gasket	1
Weatherproof Ethernet Connector	1
Safety Tether	1
Hex Wrench	1
AC Power Adapter	1
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2 Installation and Configuration

2.1 Framework and Dimension

Use this process to plan, install, and configure the security network and the IP devices.

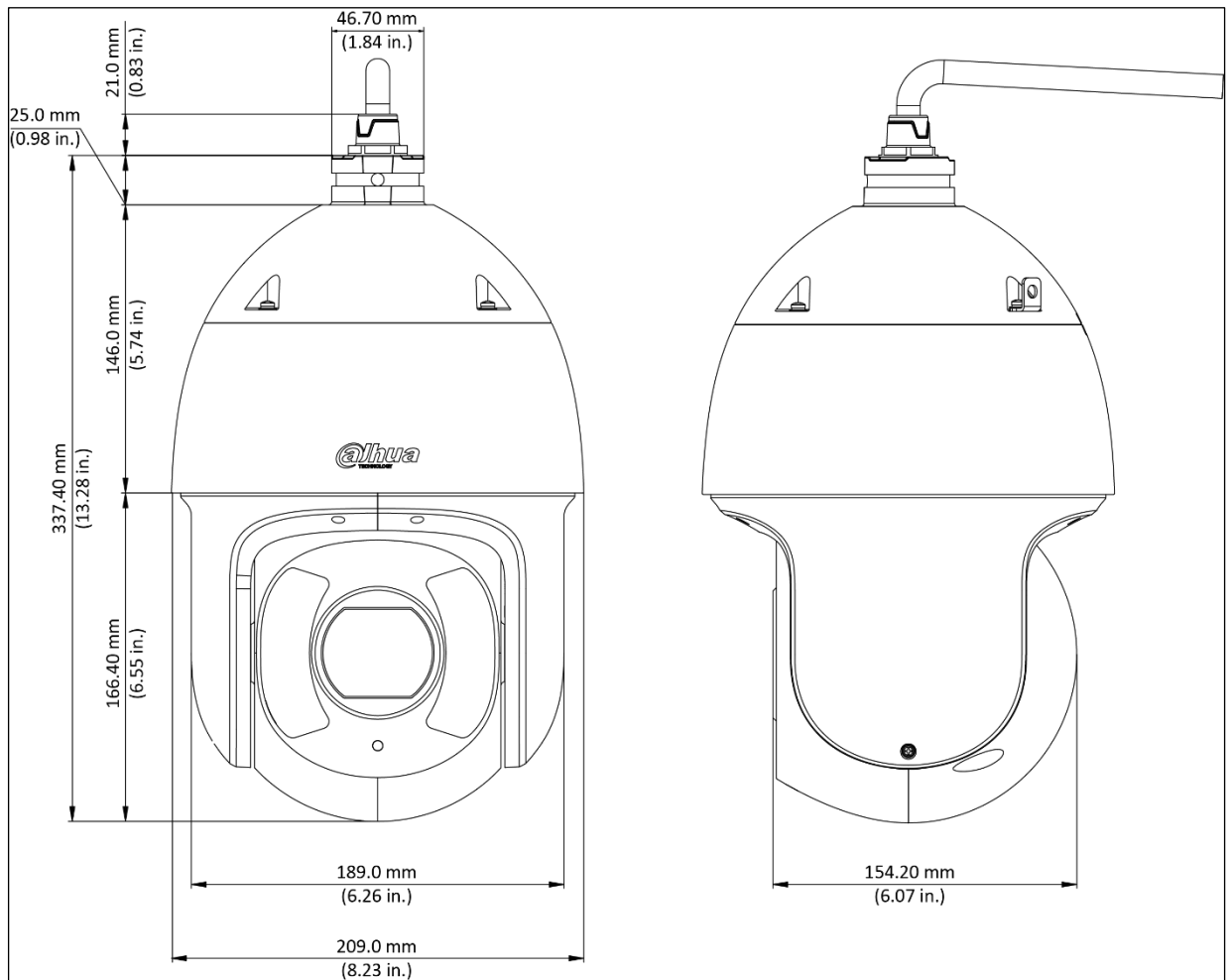


Figure 2-1: 6CE445XANR Dimension

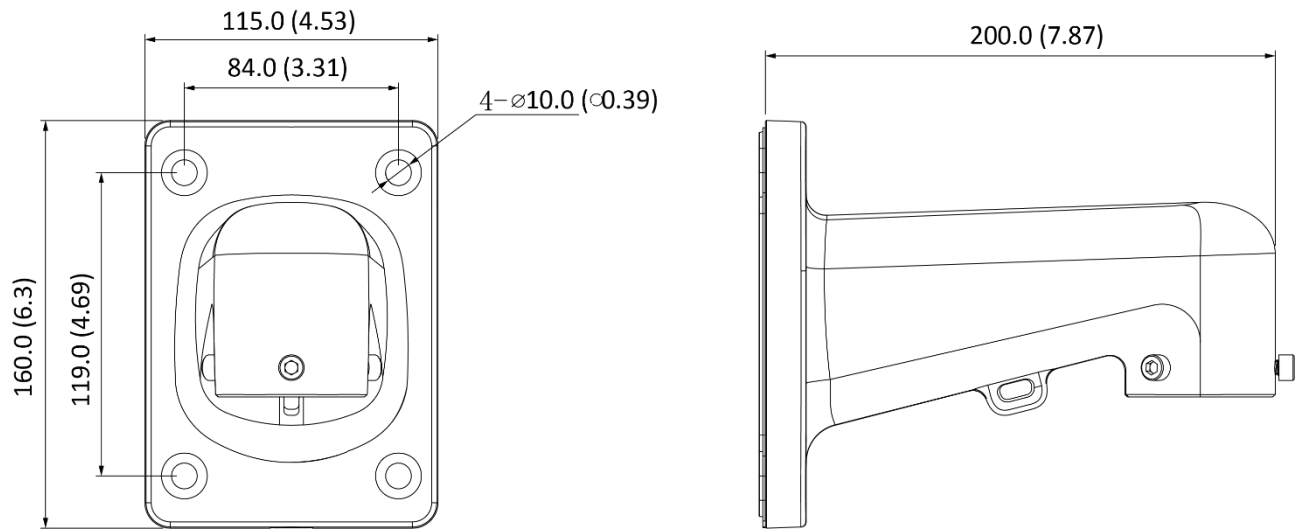


Figure 2-2: PFB305W Dimensions

2.2 Wiring

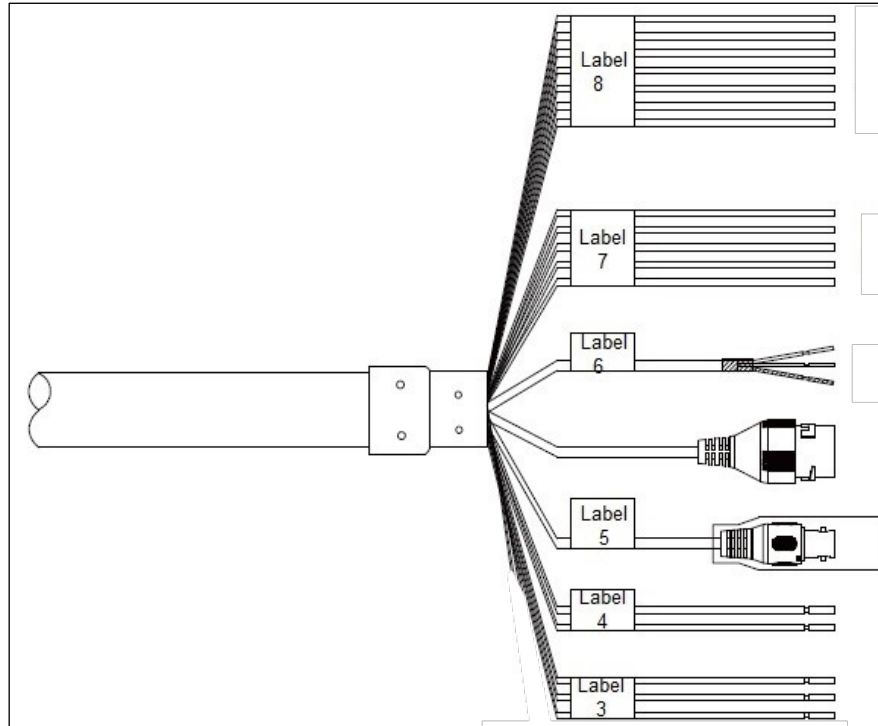


Figure 2-3: Cable Detail

Label	Function	Wire Color	Connection
3	Power Input	Red	24 VAC (positive)
		Yellow/Green	Earth Ground
		Black	24 VAC (negative)
4	RS485	Yellow	RS485 +
		Orange	RS485 -
5	Analog Video Output	—	BNC (1.0 Vp-p, 75 Ω)
—	Network	—	RJ45
6	Audio	Red	Audio Output
		White	Audio Input
		Black	Audio Ground
7	Alarm Output	Blue	Alarm Output 1
		Black	Alarm Output 2
		Green	Alarm Contact Switch 1
		Pink	Alarm Contact Switch 2
		Yellow/Green	Alarm Ground
8	Alarm Input	Red	Audio Input 1
		Brown	Audio Input 2
		Gray	Audio Input 3
		Light Green	Alarm Input 4
		Purple	Alarm Input 5
		White	Alarm Input 6
		Yellow/Black	Alarm Input 7

2.3 Alarm Setup

Certain devices support alarm inputs and outputs, check your specific device for alarm capability.

2.3.1 Alarm Input

Refer to the figure below for alarm input configuration. The device collects that status of the alarm input port when the input signal is idle or grounded. If the input signal is connected to the 3.3 V or it is idle then the device receives the alarm input signal. If input signal is grounded, then no alarm input signal is detected.

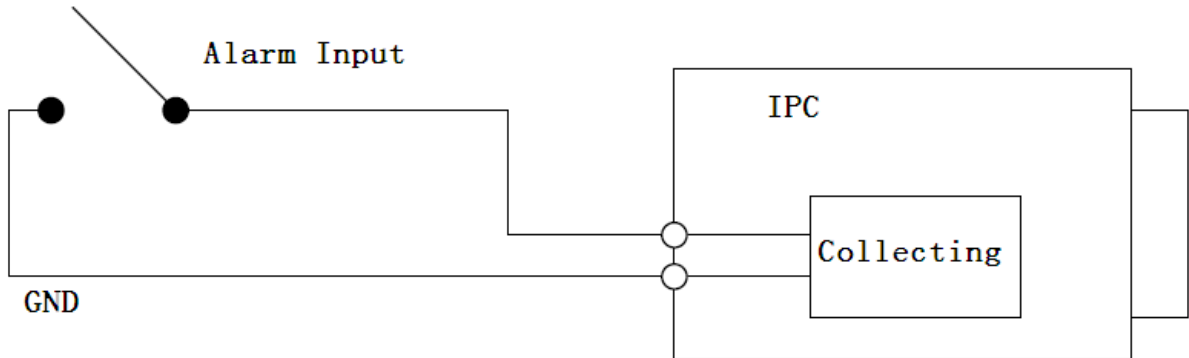


Figure 2-4: Alarm Input Diagram

2.3.2 Alarm Output – Level Application

Use this alarm output configuration if the output triggers an external device by increasing the voltage.

The alarm must increase the external pull-up resistance to trigger (high level) the device. The maximum external pull-up level is 5 V and the maximum port current is 5 mA. Once the output increases the pull-up resistance, the alarm decreases the output voltage to the normal state (low level) at less than 0.8 V.

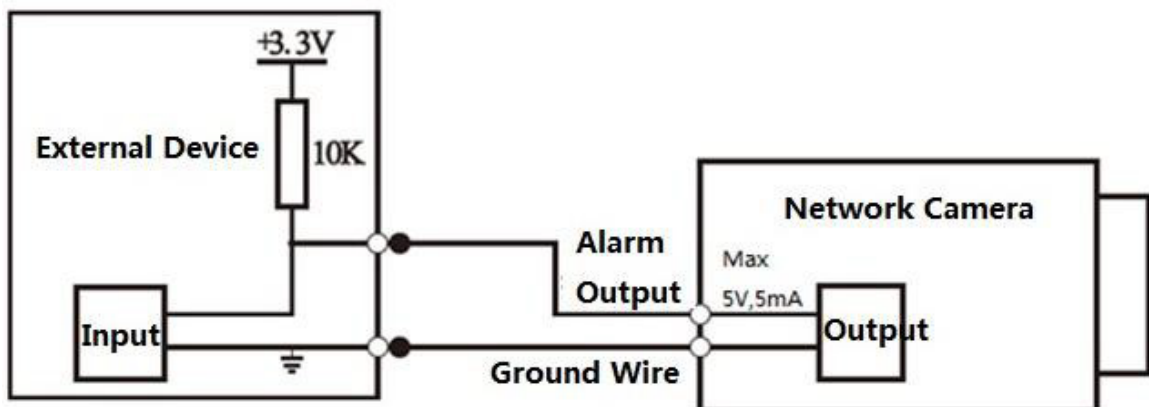


Figure 2-5: Alarm Output Level Application Diagram

2.3.3 Alarm Output – Switch Application

The alarm output drives the external circuit, with a maximum current of 30 mA and a maximum voltage of 5 V. It is recommended to add a relay if the circuit exceeds the maximum values.

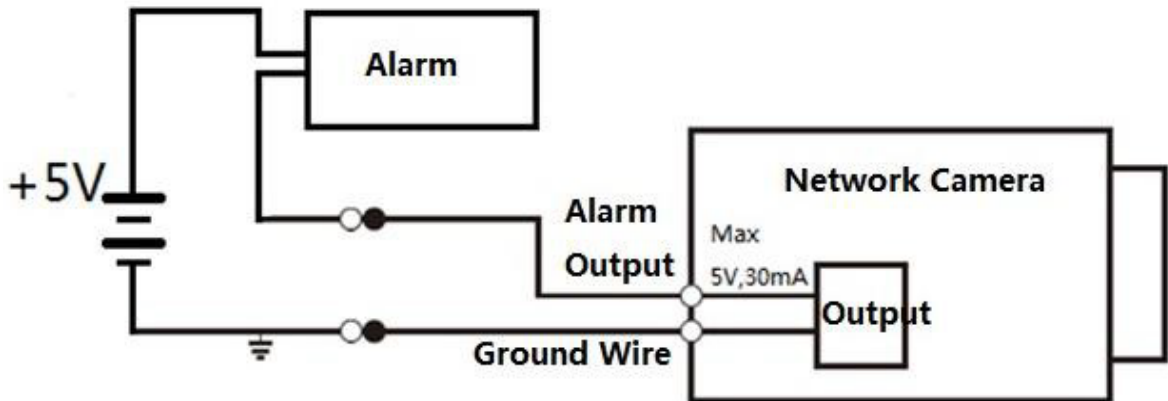


Figure 2-6: Alarm Output Switch Application Diagram

2.4 Locally Storing Data

Certain cameras include a SDHC card slot for onboard storage that support a 128 GB Micro SD card. Dahua recommends using a SanDisk Extreme Micro SD card (or an equivalent substitute) as these cards have been fully tested without issue and the SanDisk Extreme line is better suited for constant recording. Lower-grade SD cards meant for multimedia applications will, at times, have questionable quality and reliability.

Recording to the SD card is first in first out (FIFO). The camera deletes the oldest (first) entry as new storage requirements arise. The camera does not signal nor make an indication when data is deleted. Storage time is dependent on a variety of factors such as SD card size, image resolution and video frames per second.

SD Recording supports video only. Audio is not supported.

3 Camera Installation

This section details installing the camera to a solid wall or to a ceiling, in an outdoor or an indoor environment. Note that the wall or ceiling must be capable of supporting a minimum of eight (8) times the weight of the camera and a bracket (if used).

DO NOT connect the camera to the power supply during installation.

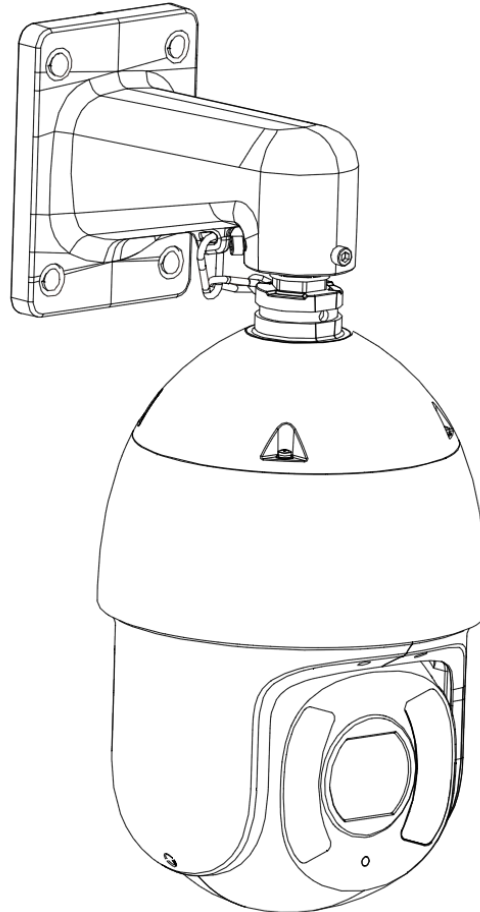


Figure 3-1: PTZ Camera and Wall Mount

Warning: DO NOT connect the camera to the power supply during installation.

Warning: For units intended to be installed outdoors: All wiring connecting to the unit must be routed separately inside a different permanently earthed metal conduits (not supplied).

Warning: Install external interconnecting cables in accordance to NEC, ANSI/NFPA70 (for US application) and Canadian Electrical Code, Part I, CSA C22.1 (for CAN application) and in accordance to local country codes for all other countries. Branch circuit protection incorporating a

20 A, 2-pole Listed Circuit Breaker or Branch Rated Fuses are required as part of the building installation. A readily accessible 2-pole disconnect device with a contact separation of at least 3 mm must be incorporated.

Note: Dahua recommends attaching a “drip loop” (flex or hard conduit) during installation to ensure condensation does not form in the mount or the conduit.

Note: 24 VAC Class 2 power supply only.

3.1 Preparing the Camera

The Network PTZ camera comes with the PFB305W Wall Mount, the installer must supply the following hardware:

- Four (4) bolts, washers or other fastening hardware to secure the wall mount to the installation medium. The hardware must be capable of supporting eight (8) times the weight of the camera and mount.
- Appropriate tools to mount the camera to the wall.

3.1.1 Unpacking the Camera

1. Remove the camera, the mount accessories and any hardware packages from the boxes.
2. Remove the camera from the plastic wrapping and place the camera dome-end up in the foam packaging.

3.1.2 Insert a Micro SD Card

The Micro SD card slot is located on the ISP board above the camera module

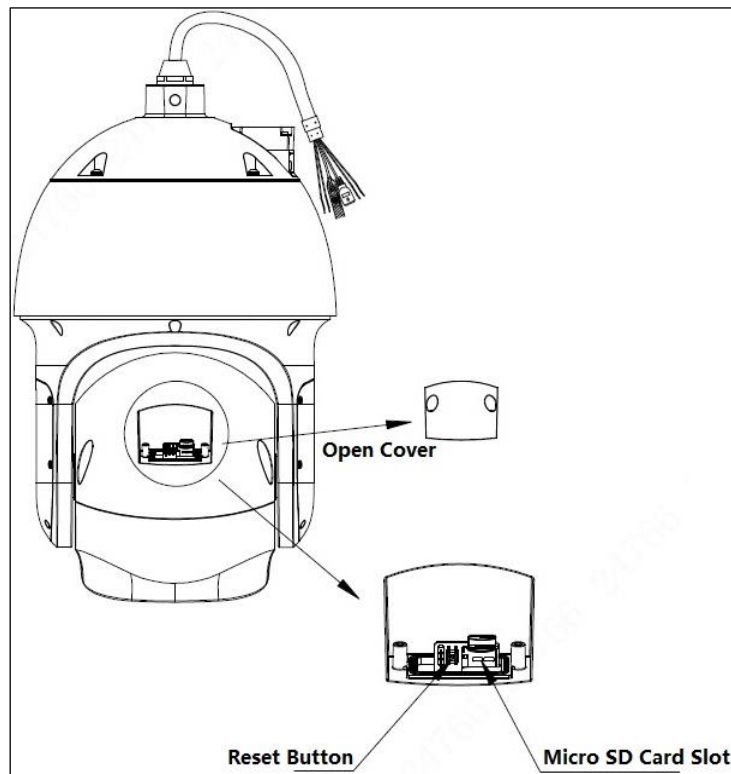
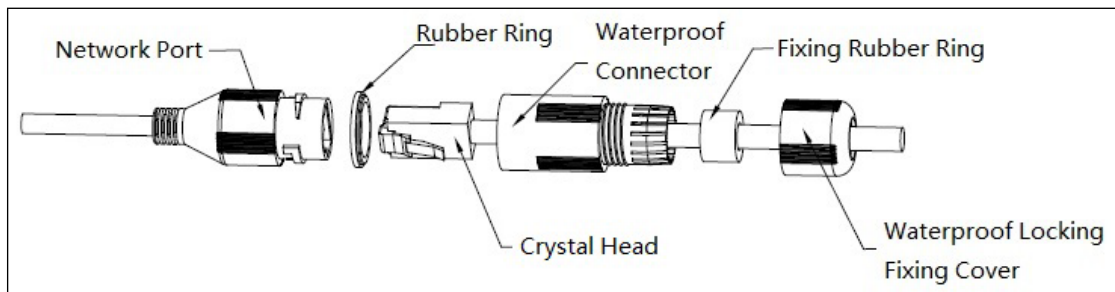


Figure 3-2: Micro SD Card Installation

1. Loosen the two (2) screws from the rear panel on the back of the dome. Remove the panel.
2. Place the Micro SD card with the metal contact down into the slot on the ISP board.
3. Replace the rear panel.

3.2 Mounting the Camera to a Wall

1. Place the Wall Mount against the wall and mark the location of the center hole and mark the four (4) perimeter mounting holes.
2. Pre-drill the four perimeter holes as marked on the wall for the expansion bolts, using a drill bit that is no wider than the expansion bolt.
3. Drill a 50-mm (approximately 2 in.) center hole to route the cables, if necessary.
4. Insert an M8 expansion bolt into each pre-drilled perimeter hole.
5. Remove the M4 Stainless Screw from the front of the Wall Mount Bracket.
6. Route the incoming cables through the wall or through the metal conduit, then through the wall mount bracket.
7. Secure the wall mount bracket to the wall using four M6 x 15 screws with the four (4) hex screws and four (4) flat washers.
8. Connect the safety tether to the dome and to the hook on the wall mount.
9. Attach the waterproof network connector if the camera is used outdoors.



- a) Place the wide side of the rubber ring onto the end of the network cable extending out from the camera.
 - b) Pull the waterproof cable end without the Ethernet connector through the body of the Waterproof Connector. Thread the cable through the Fixing Rubber Ring and the Waterproof Locking Cover.
 - c) Attach the male Ethernet connector to the network cable coming from the camera. Ensure the Waterproof Connector shroud covers the Ethernet connection.
 - d) Connect the other end of the waterproof connector to the network port and rotate it clockwise to lock the network port and waterproof connector firmly.
 - e) Slide the Waterproof Locking Cover over the main body of waterproof connector and rotate it clockwise to seal the connection.
10. Connect the incoming cables routed through the wall mount to the corresponding power, Ethernet, audio, and alarm cables from the dome composite cable.
Caution: Connect the Earth Ground cable to the YELLOW/GREEN cable (contained in the VAC Power bundle) to ensure the camera is well grounded.
 11. Pull the connected cables into the wall mount bracket with care.
 12. Align the straight edge of the flange on the dome with the straight edge of the mount adapter quick installation port. Slowly push the dome into the wall mount.
 13. Insert the three (3) stainless steel set screws into the corresponding holes on the wall mount flange and tighten to dome flange with the hex wrench.
 14. Ensure the safety tether is attached to wall mount and to the camera.

4 Network Configuration

Dahua IP cameras feature a built-in Web interface to control all aspects of camera operation. This section includes details about the supported network protocols, configuring IP addresses, and configuring alarms and local recording options. Refer to the camera's *Operations Manual* for full details.

4.1 Network Protocols

Dahua cameras support RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, QoS, IP version 4 (IPv4) and IP version 6 (IPv6).

- RTSP – Cameras communicate with video management systems over Real Time Streaming Protocol. Do not change the RTSP port unless you are sure your VMS does not use the default setting.
- RTP/TCP – The Real-time Protocol/Transmission Control Protocol is best suited for applications that require high reliability, and transmission time is relatively less critical.
- RTP/UDP – The Real-time Protocol/User Datagram Protocol is used for live unicast video, especially when it is important to always have an up-to-date video stream, even if some images are dropped.
- HTTP – The Hypertext Transfer Protocol is an application protocol for distributed, collaborative, hypermedia information systems.
- DHCP – The Dynamic Host Configuration Protocol allows network administrators to centrally manage and automate the assignment of IP addresses. DHCP should only be enabled if using dynamic IP address notification, or if the DHCP can update a DNS server.
- TFTP – The Trivial File Transfer Protocol is a simple, lock-step, File Transfer Protocol which allows a client to get from or put a file onto a remote host. TFTP lacks security and most of the advanced features offered by more robust file transfer protocols such as File Transfer Protocol.
- QoS – Quality of Service guarantees a certain level of a specified resource to selected traffic on a network. A QoS-aware network prioritizes network traffic and provides a greater network reliability by controlling the amount of bandwidth an application may use.
- IPv4 – The IPv4 (IP version 4) is enabled by default and obtains the IP address automatically. The address can be used to allow or block network traffic that matches a specified address or protocol. The IP address must be valid for the network. For more information, contact your network administrator.
- IPv6 – A typical IPv6 (IP version 6) node address consists of a prefix and an interface identifier (total 128 bits). The prefix is the part of the address where the bits have fixed values or are the bits that define a subnet. A typical IPv6 address may resemble the following example: 2001:db8::52:1:1. The IP address must be valid for the network. Before making changes to the IPv6 address, consult with your network administrator.

4.2 Modifying the IP Address

To operate the camera in your network you must assign it a valid network IP address. The default IP address is 192.168.1.108, but you may have to change this address if it conflicts with another device on the network.

To properly configure the camera for your network, you need the following information:

- Camera IP address – This address is an identifier for the camera on an IP network. For example, 140.11.2.115 is valid syntax for an IP address.
- Subnet mask – A mask is used to determine the subnet an IP address belongs to.
- Gateway IP address – This address is a node on a network that serves as an entrance to another network.
- Port – A port is an endpoint to a logical connection in an IP network.

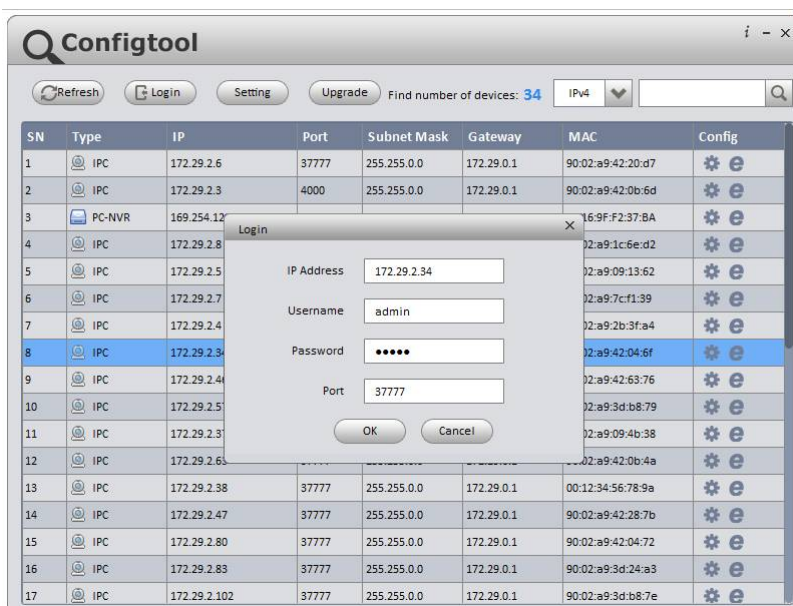
Dahua supplies the ConfigTool to access and to modify the network settings of a device. Refer to the Operation Manual, available on the CD included with the camera or on Dahuasecurity.com, for complete information.

Notes:

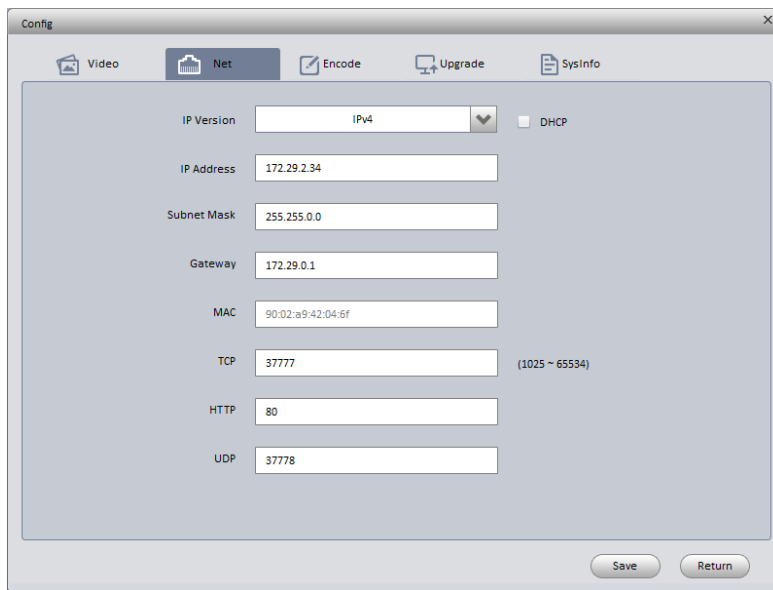
- Ensure that the network parameters of each camera is available before starting configuration.
- The ConfigTool supports those cameras that are part of the same network that as the computer running the ConfigTool.

4.3 Using the ConfigTool

1. Install the ConfigTools.exe on a computer.
2. Adjust the computer's network settings so that it is on the same network as the camera.
3. Launch the ConfigTool to generate a list of devices on the network.
4. Double click the device to be configured, the ConfigTool opens the Login dialog box for the device.
5. Enter the IP address, Username, Password, and Port number of the camera, then click OK. Note: the default Username and Password for the device is "admin" and "admin" respectively. The default port is 37777.



6. Click the Net icon at the top of the ConfigTool.
7. Modify the IP Address and any other applicable network parameter.
8. Click Save to finish modification and store the modified network parameters.



4.4 Accessing the Web Interface

Each camera can be accessed directly from the Internet Explorer Web browser. The Web Interface allows you to set camera parameter, configure alarm inputs and outputs, view live camera images, and review recorded video.

Note: Different devices may have different Web interfaces, the figures below are for reference only, and may not represent the Web Interface for your camera. Refer to the Web Operation Manual, included on the CD shipped with the camera, for more details.

1. Launch Internet Explorer and type the modified camera IP address in the address bar. Internet Explorer opens the Login page.
2. Type the Username and Password for the camera. (The default Username and Password is "admin"). Then, click Login.



3. Install the controls according to the system prompt. Once the controls are installed IE displays the Web Interface main page.
4. Modify the administrator password as soon as possible after you successfully logged in.

4.5 Configuring Alarms

The device's Web Interface offers a Relay Activation page to configure alarms and to set alarm responses.

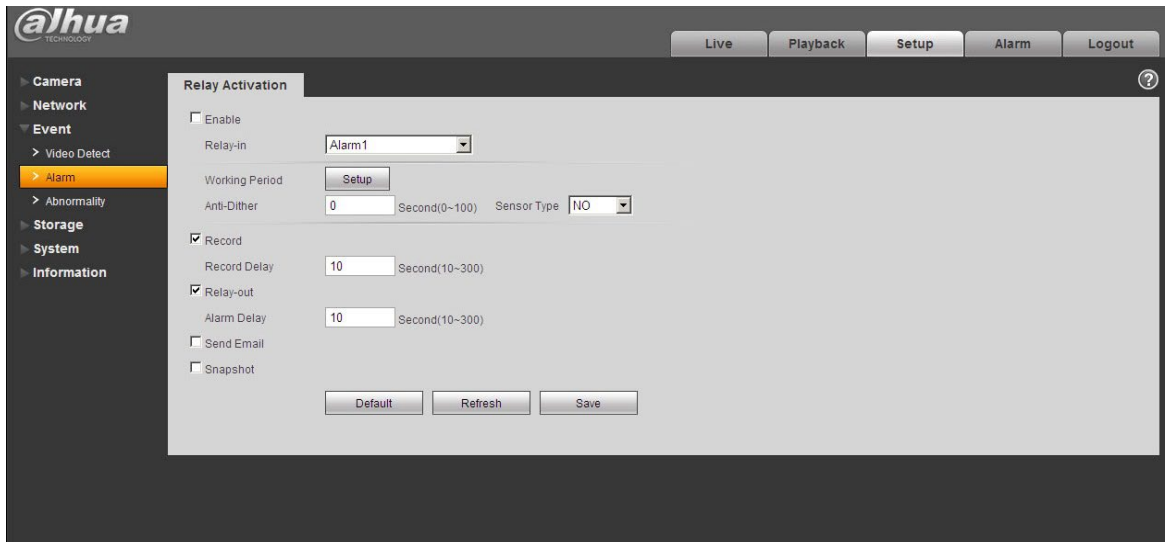


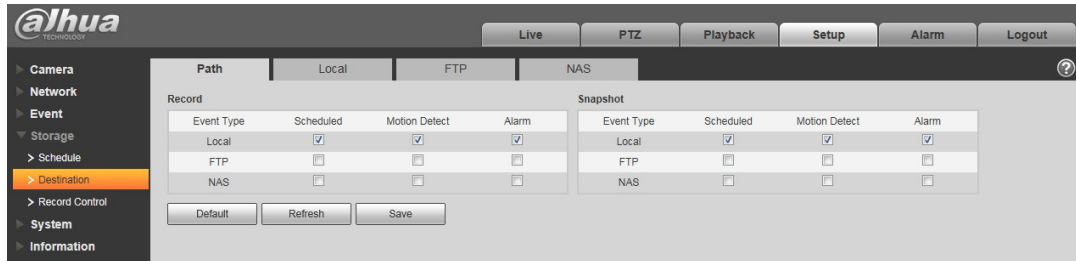
Figure 4-1: Alarm Configuration

1. Access the Web Interface for the device and click the Setup tab. Expand the Event menu, then choose the Alarm page. Set the alarm input and output parameters in the Relay Activation page.
2. Set the parameters for the alarm inputs. Check the Enable box to activate the chosen alarm input (Alarm 1 or Alarm 2). Set the sensor type for the alarm, either Normally Open (NO) or Normally Closed (NC).
3. Check the Relay Out box to enable the alarm activation function.
4. Select an alarm output port to activate a corresponding alarm device when an alarm occurs. Check Send Email to have the device send an email to alert when alarm occurs and ends. Check Snapshot to have the device automatically take a snapshot of the scene if alarm occurs.

4.6 Configuring Local SD Card Recording

The devices Web interface contains settings to control the recording medium and to configure an alarm that triggers once the Micro SD card passes a pre-determined storage.

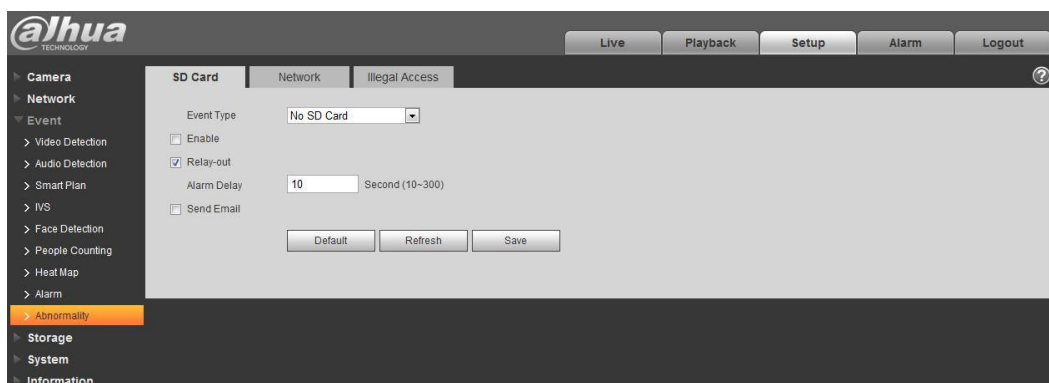
1. Access the Web Interface for the device and click the Setup tab. Expand the Storage menu, then choose the Destination page.



2. Select the recording medium for each event Recorded and Snapshot event, Scheduled, Motion Detect and Alarm. Select the Local check box to record an event to the Micro SD card.
3. Click the Local tab to view the used capacity and the total capacity of the Micro SD card.

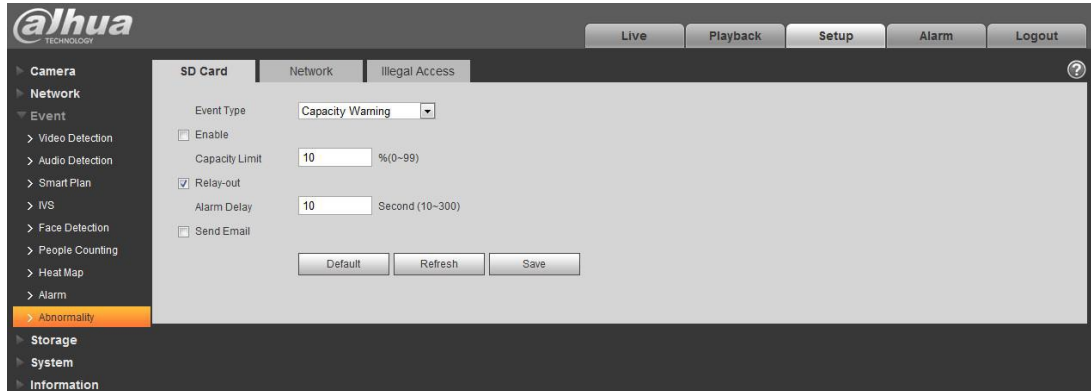


4. Expand the Event menu, located at the left of the Web interface, then select the Abnormality page to set alarms related to the Micro SD card. The contains the following Micro SD card alarm options:
 - No SD Card: Device triggers an alarm if the device does not contain a Micro SD card.
 - Capacity Warning: Device triggers an alarm when the data on the Micro SD card passes a defined threshold.
 - SD Card Error: Device triggers an alarm if it detects an issues writing data or retrieving data from the Micro SD card.



5. Select the event from the Event Type pull-down menu (No SD Card, Capacity Warning, SD Card Error).
6. Check the Enable box to activate the alarm for this event.

7. Check the Relay-out box to enable a relay alarm. Then, specify the time in seconds to delay the alarm relay output (10 s to 300 s).
8. Check the Send Email box to send an email to a specified user after the device triggers an alarm.
9. Set the capacity limit for the Micro SD Card (available with the Capacity Warning event type). The device triggers an alarm once the amount of data on the card surpasses this limit.





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