PD950/PD980
Installation Manual

January 4, 2021

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PD950/PD980

Installation Manual

Status:	v2.3	11-Jul-23
Author:	Onno Verkerk	

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Revision history

Nr	Date	Remarks
1	9-okt-2022	Version 2.1 reworked into new format
2	16-okt-2022	Version 2.2 type from feature list on page 7
3	27-jun-2023	Version 2.3 added grommet handling

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Note: To ensure proper operation, please read this manual thoroughly before using the product and retain the information for future reference.

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Brand names

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Liability

TKH Security accepts no liability for claims from third parties arising from improper use other than that stated in this manual.

Although considerable care has been taken to ensure a correct and suitably comprehensive description of all relevant product components, this manual may nonetheless contain errors and inaccuracies. We invite you to offer your suggestions and comments by email. Your feedback will help us to further improve our documentation.

How to contact us

If you have any comments or queries concerning any aspect related to the product, do not hesitate to contact:

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1 About this manual

What's in this manual

This is version 1 of the installation assistance provided for the PD9x0 Series camera. The manual gives you all the information you need to install the product. It tells you:

- How to connect cables
- How to get access to the camera
- How to set up video resolution
- How to export and import configuration files
- How to delete previously-installed Viewer software and to enable Siqura Viewer installation

Where to find more information

Find additional manuals, and the latest firmware for this product at https://tkhsecurity.com. We advise you to make sure that you have the latest version of this manual.

Who this manual is for

These instructions are for all professionals who will install PD9x0 Series cameras.

What you need to know

You will have a better understanding of how the camera works if you are familiar with:

- Camera technologies
- CCTV systems and components
- Ethernet network technologies and Internet Protocol (IP)
- Windows environments
- Video, audio, data, and contact closure transmissions
- Video compression methods

Before you continue

Before you continue, read and obey all instructions and warnings in this manual. Keep this manual with the original bill of sale for future reference and, if necessary, warranty service. When you unpack your product, make sure there are no missing or damaged items. If any item is missing, or if you find damage, do not install or operate this product. Ask your supplier for assistance.

Why specifications may change

We are committed to delivering high-quality products and services. The information given in this manual was current when published. As we continuously seek to improve our products and user experience, all features and specifications are subject to change without notice.

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2 Functions overview

This chapter gives an overview of the functions offered by the PD900/PD910/PD920. It also gives information about the package contents, camera dimensions and connectors.

In the PD910/PD920, the bubble-less mechanical is introduced for the crystal clear images without any distortion. No matter it is at night or in any low or zero lux environments, the camera provides effective illumination to objects 200 meters away.

The camera features Servo Feedback technology, which enables the camera to return precisely to the previous position without stalling, and ensures the target-monitoring region is fully secured. The camera is compliant with the IP66 standard with various installation. Combining zero downtime power switching (ZDT) technology, the camera ensures smooth streaming without sudden power-loss.

2.1 Features

- Multiple progressive scan CMOS sensor support up to 5 MP (PD950) and up to 8 MP (PD980) resolution.
- Up to 40x optical zoom
- Multi exposure HDR
- Electrical image stabilizer (EIS) support
- Multi codec support (H.265 / H.264 / MJPEG)
- Low latency streaming
- Quad streams support
- True day/night function (ICR)
- IR LED (working distance up to 200 m)*
- BNC analogue output for installation support
- RS-485 support
- 3D motion compensated noise reduction (MCTF)
- Smart event function
- External input / Motion detection / Network failure detection / Periodical event / Manual trigger / Audio detection / Loitering Detection / Intrusion Detection / Object Abandoned
- Text overlay and privacy masks
- Micro SD/SDHC/SDXC card support
- ONVIF profile S/G/T support
- Smart low bitrate control
- Weatherproof (IP66)
- Servo feedback – guarantees no drifting
- Zero downtime (ZDT) power switching

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2.2 Package contents

Make sure that the package contains the following items.

2.2.1   PD950 / PD980
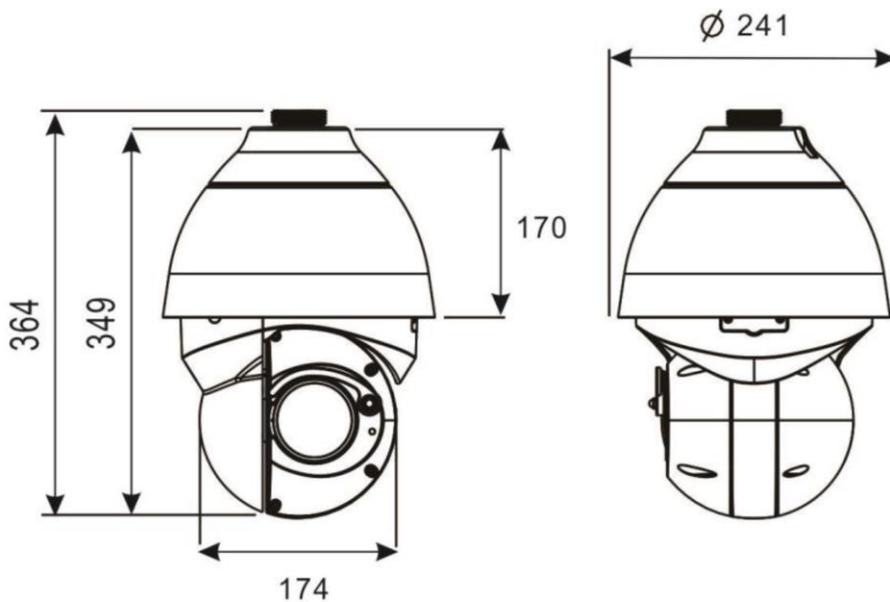
Camera Unit
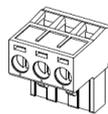
3-pin power terminal block (AC24V use)
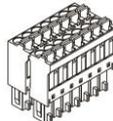
14-pin Alarm/Audio I/O terminal block

M4 security screw with rubber
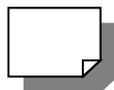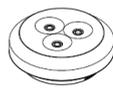
Grommet holder

RJ45 insertion tool

Quick Start Guide

Grommet

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Cautions:
If you use an external power supply, contact TKH Security to make sure that the power supply has the proper power specifications. Make sure that the power supply complies with LPS requirements.
For PoE input connection, use only with UL listed I.T.E. with "PoE" output. Description for the "PoE" is intended to be connected to not exposed (outside plant) networks or equivalent statement in installation instructions.
The PD950 requires PoE 802.3bt max 51W power supply to the camera.
The PD980 requires PoE 802.3bt max 51W power supply to the camera.
Battery replacement shall not be applied in view of the risk of explosion.
Dispose of used batteries according to the instructions.

2.2.2 PD950DC
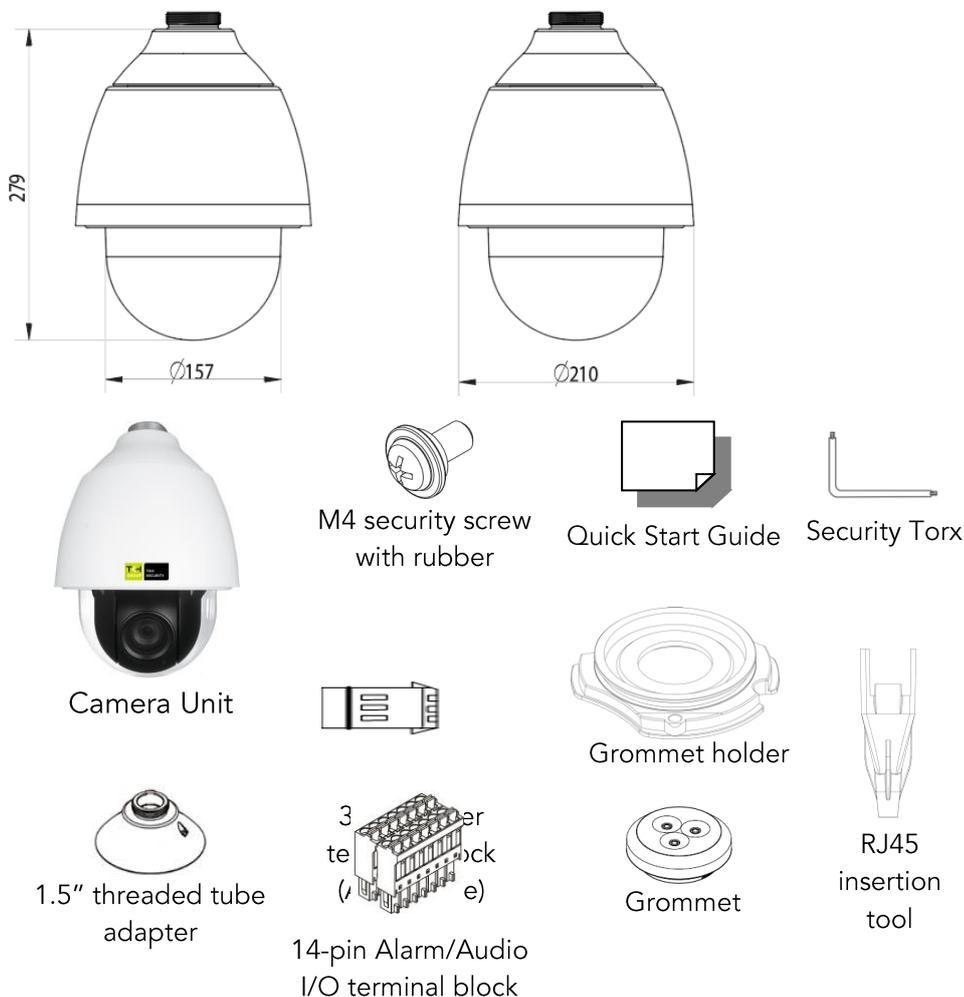
279

Ø157

Ø210

Camera Unit

M4 security screw with rubber

Quick Start Guide

Security Torx

1.5" threaded tube adapter

14-pin Alarm/Audio I/O terminal block

Grommet holder

Grommet

RJ45 insertion tool

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> **WARNING**: For "PoE" input connection, use only with UL listed I.T.E. with "PoE" output. Description for the "PoE" is intended to be connected to not exposed (outside plant) networks or equivalent statement in installation instructions.
> **POWER RATING**: 24VAC, 50-60Hz, 3.26A shall be supplied by power adapter. 55VDC, 0.93A shall be supplied by "PoE" (802.3bt type 3 class 6).
> **NOTE**: Explosion may occur due to disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery.
> **NOTE**: The wiring of input terminal block should be installed by skilled personnel.
> **NOTE**: Use wire size ranging from 16 to 24 AWG (and wire type: Cu) ONLY.
> **NOTE**: The recommended tightening torque is 0.5 N·m.
> **NOTE**: Use of controls or adjustments of performance or procedures other than those specified herein may result in hazardous radiation exposure.

2.2.3   PD950NW
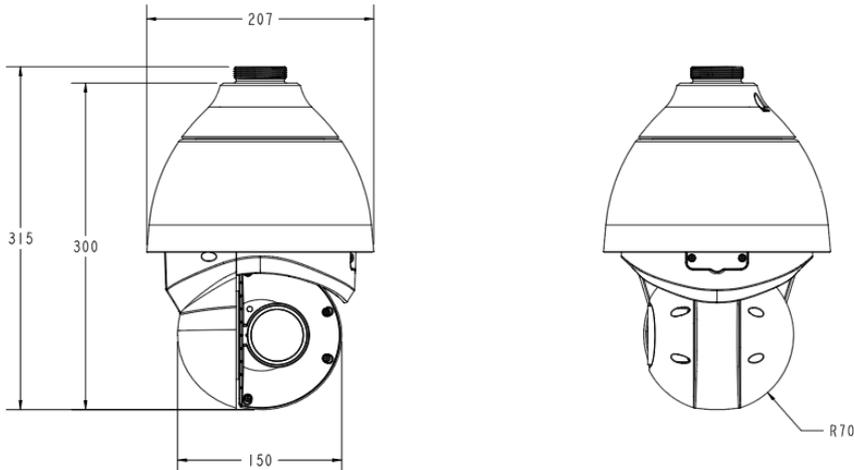
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Camera Unit

14-pin Alarm/Audio
I/O terminal block

3-pin power
terminal block
(AC24V use)

M4 security screw
with rubber

Grommet holder

RJ45
insertion
tool

Quick Start Guide

Grommet

POWER RATING OF PD950NW: 24VAC, 50-60Hz or 50/60Hz, 2.09A shall be supplied by power adapter. 55VDC, 0.91A shall be supplied by "PoE"; requires PoE 802.3bt.
**WARNING**: For "PoE" input connection, use only with UL listed I.T.E. with "PoE" output. Description for the "PoE" is intended to be connected to not exposed (outside plant) networks or equivalent statement in installation instructions.

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2.3 Connectors

2.3.1 PD950/PD980 connectors
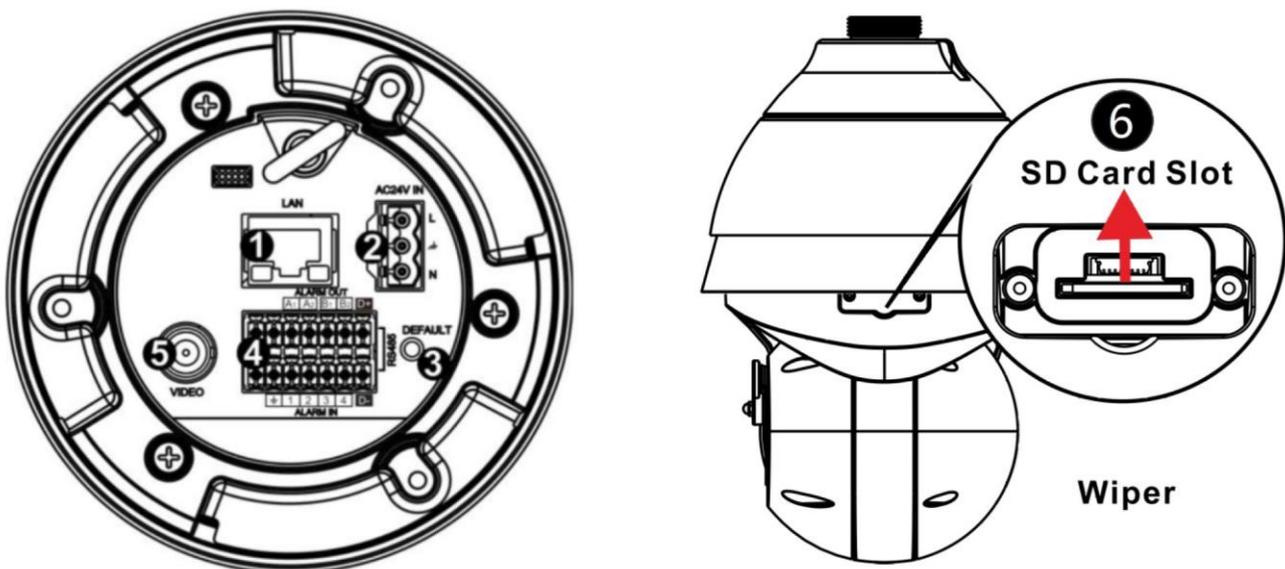
| Nr	Connector	Definition
1	RJ-45 Port	For network communications and optional PoE 802.3bt type 3 class 6 power supply. Contact TKH Security for a compatible PoE injector.
4	Power (24 VAC)	24 VAC power connection
3	Reset button	Press the button with a proper tool for at least 20 seconds to restore the system.
4	Audio/Alarm I/O & RS-485	Audio/Alarm I/O and RS-485 connection Do **not** connect external power to the alarm I/O connector of the camera.
5	BNC	Analog video output
6	SD card slot	Insert the SD card into the card slot to store videos and snapshots. Do not remove the SD card when the camera is powered on.

Note: It is not recommended to continuously (24/7) record with the micro SD card, as the camera may not support long-term continuous data read/write. Contact the manufacturer of the micro SD card for information about the card's reliability and life expectancy.

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2.3.2 PD950DC connectors
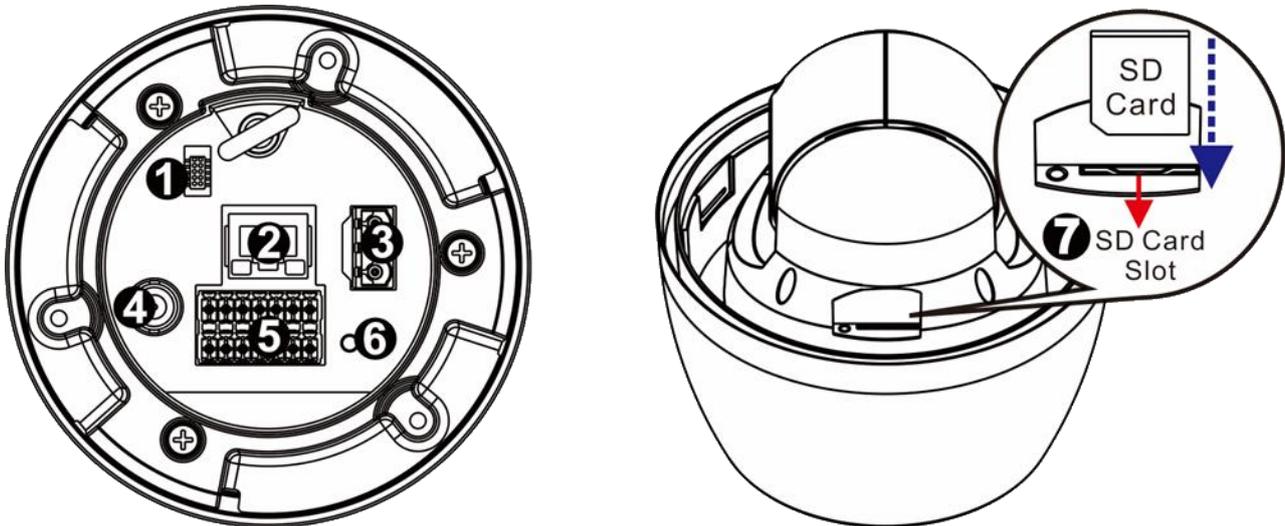
No.	Connector	Definition
1	Console Connector	Reserved for manufacturer use
2	RJ-45 Port (Contact TKH Security for a compatible PoE injector.)	For network and PoE+ connections
3	Power (AC24V)	AC24V power connection
4	BNC	For analog video output
5	Audio/Alarm I/O & RS-485	Audio/Alarm I/O & RS-485 connection
6	Reset Button	Press the button with a proper tool for at least 20 seconds to restore the system.
7	SD Card Slot	Insert the SD card into the card slot to store videos and snapshots. Do not remove the SD card when the camera is powered on.

Note. It is not recommended to continuously (24/7) record with the micro SD card, as the camera may not support long-term continuous data read/write. Contact the manufacturer of the micro SD card for information about the card's reliability and life expectancy.

2.3.3 PD950NW connectors

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> **Note**: It is not recommended to continuously (24/7) record with the micro SD card, as the camera may not support long-term continuous data read/write. Contact the manufacturer of the micro SD card for information about the card's reliability and life expectancy.

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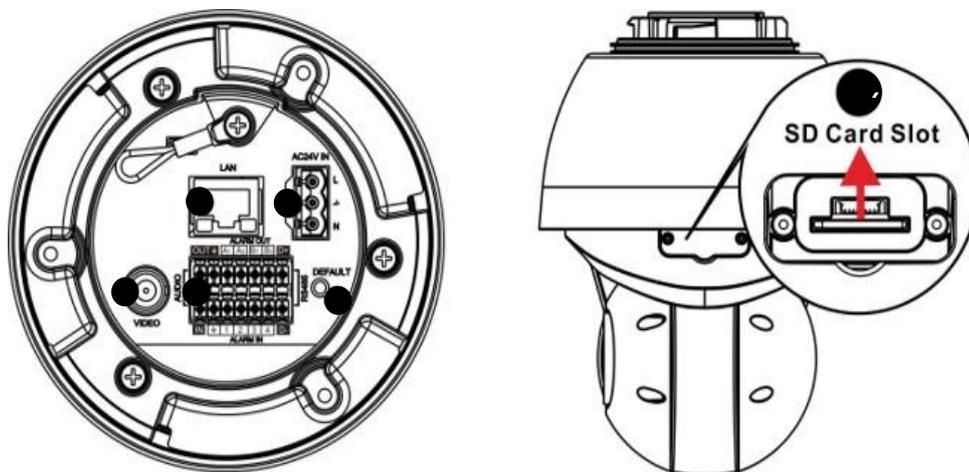
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3 Connect cables

This section gives instructions for connecting the camera.

> **Caution:**
> The camera shall be installed by qualified personnel only.
> Installation shall be in accordance with local procedures.

The models are IP66-rated to prevent water from entering the camera. However, water may still enter the camera if the camera is not properly installed. Therefore, make sure to strictly follow the steps below before you connect any cables.

1. Make sure that all cables and the power adapter are in a dry and water-proof environment, for instance waterproof boxes. This is to prevent moisture accumulation inside the camera and moisture penetration into the cables, which may lead to device breakdown.

2. While running cables, slightly bend the cables to a U-shaped curve to make a low point (as shown below). This is to prevent water from entering the camera along the cables from above.
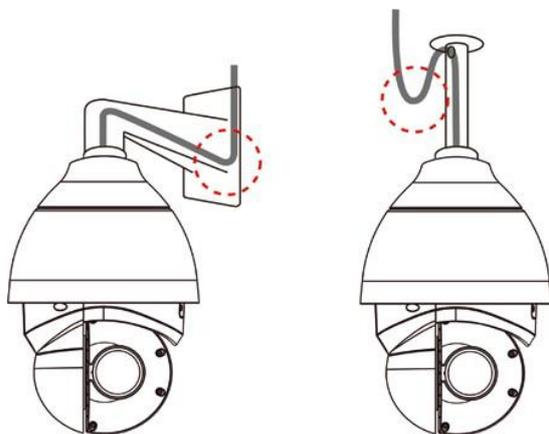
3. Seal the cable entry hole of the mounting kit (see below) with thread seal tape to prevent water from entering the camera.

4. Fasten the M4 security screw with rubber on the cap.

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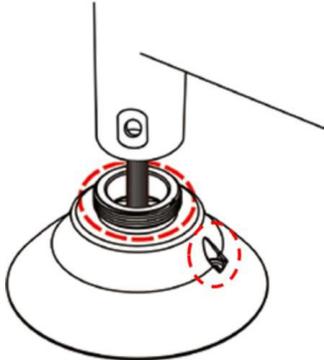
5. If the long sky mounting or J-type (Candy Cane type) bracket is used, the rubber stopper is designed to stop the ingress of condensation water inside the J-type bracket. Sudden temperature changes may cause excessive condensation on the inner side of the J-type tube. The below picture shows how the rubber stopper and cabling should be installed on the tube adapter. The wider side of rubber stopper shall be at the top of cap. To seal of the rubber stopper additional silicon-grease (O-ring grease) is essential. Apply the outdoor rated silicone grease or sealant on the areas indicated by red dots.

    Please note: security screw must be properly installed to avoid water ingress to the camera housing. Outdoor rated silicone sealant should also be added before the screw is fitted.

    The tube adapter thread is NPS 1.5" type (https://en.wikipedia.org/wiki/National_pipe_thread) which is an straight thread in- and ouside. Teflon tape should be used to seal the threads when attaching the tube adapter to the bracket pipe or coupler. Refer to chapter 4 for installation guide of NPS-NPT coupler.

    Note: The accessory "Rubber stopper" is available for PD900 and PD910.

6. The cables shall be applied with electrical plumber tape to prevent shortage caused by water.

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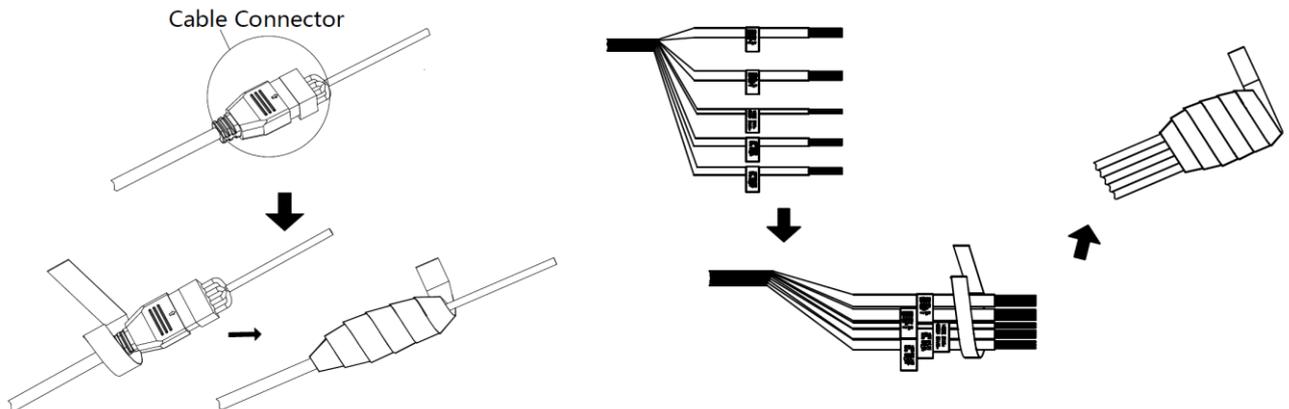
3.1 Grommet installation guide

3.1.1 Package Contents
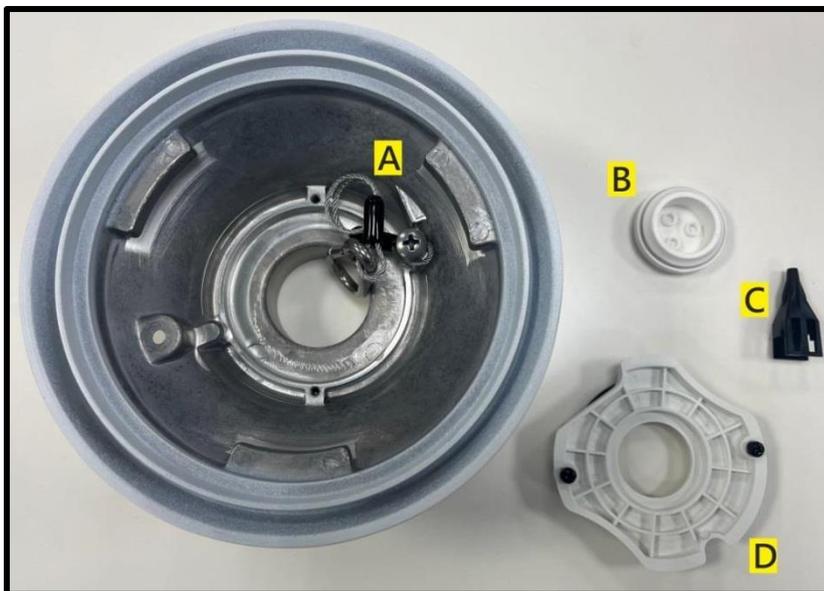
	Item
A	Pendant Cap with anti-drop chain
B	Grommet
C	RJ45 insertion tool
D	Grommet holder

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Items Needed:

- H.265 Network PTZ Camera
- Ethernet Cable
- Power Cable (necessary if PSE is not available)
- Alarm/Audio Cable (optional)
- Pendant Mount (optional accessory)
- Screws and Screw Anchors for fixing the Pendant Mount

Tools Needed:

- Tool for drilling
- Tool for screwing
- PTFE Thread Seal Tape

Follow the steps to install the grommet to PTZ.

STEP 1

Make a cable entry hole on the wall to recess the cables. Run the Ethernet cable through the pendant mount. If there are other cables, such as power cable, alarm I/O cable or audio I/O cable, also insert them through the pendant mount.

NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the pendant mount. The sponge can be placed in two ways as shown in the illustrations below.
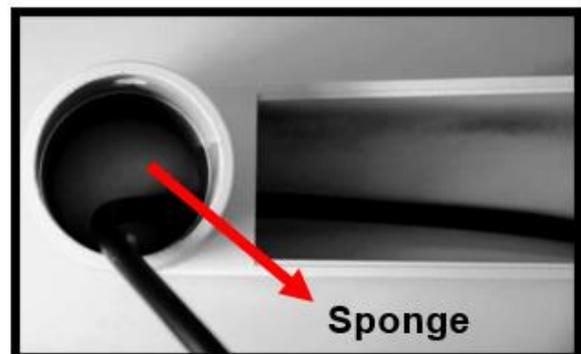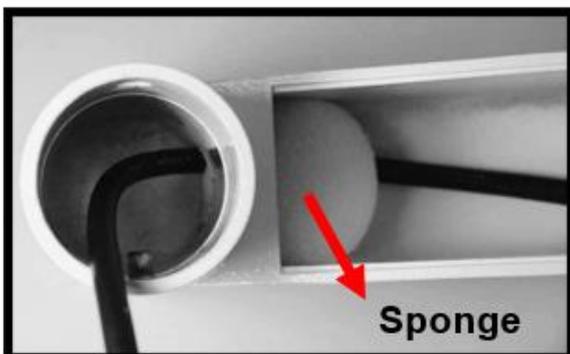
STEP 2

Align the screw holes on the pendant mount with the drilled holes and fix the pendant mount to the wall with four screws.

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STEP 3

Coat the PTFE thread seal tape (not supplied) to the thread of mounting kit around five times for waterproof purpose as shown here:

Then thread the Ethernet cable and other cables through the mounting kit and fix the mounting kit to the pendant mount.


STEP 4

Thread the Ethernet cable through the grommet with the RJ45 insertion tool.

NOTE: Please thread the Ethernet cable straight through the grommet. Do not bend the Ethernet cable as it may cause damage to the grommet.

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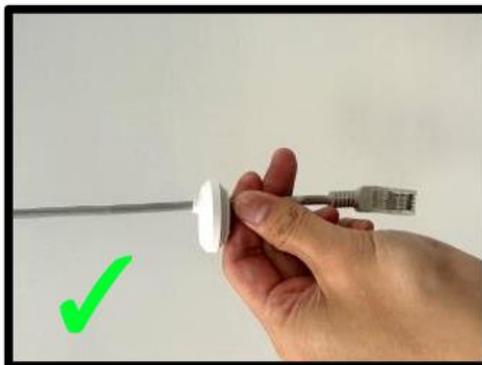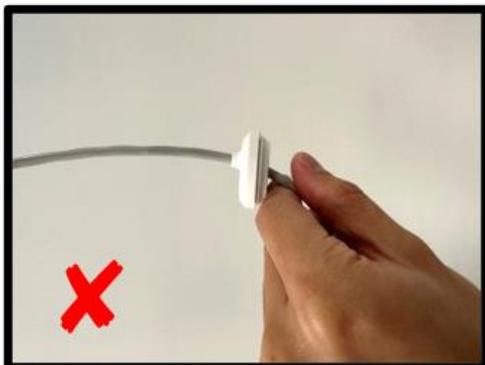
NOTE: After threading the Ethernet cable through the grommet, make sure to pull the grommet downward so that it tightly wraps around the Ethernet cable, achieving an effective waterproofing seal.
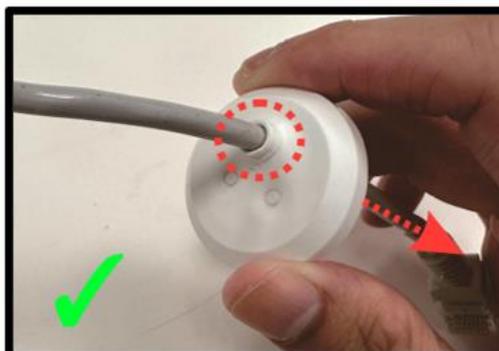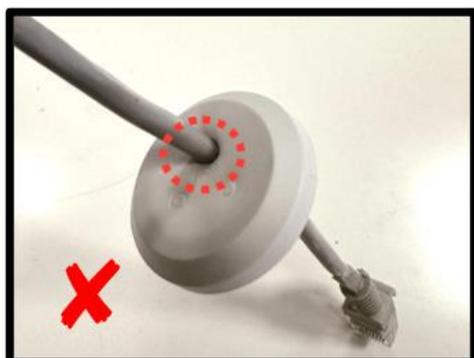
Then remove the RJ45 insertion tool from the Ethernet cable.

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STEP 5

Thread the Ethernet cable through the grommet holder, and then install the grommet into the grommet holder.
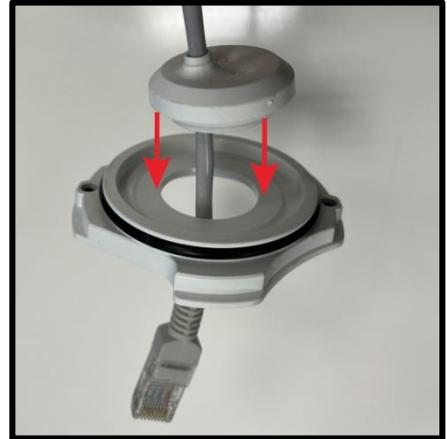
STEP 6

Screw the grommet holder to the mounting kit.

Installation completed.

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NOTE: After completing the installation, make sure that the grommet tightly wraps around the Ethernet cable by pulling it downward, in order to achieve effective waterproofing.

3.2 Connect Power

To power up the camera:
Connect the AC 24V power adaptor to the power connector of the camera and the power outlet. See the diagram and pin definitions below for AC 24V power connection.

24 VAC power connector
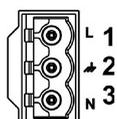
Pin	Definition
1	24 VAC L
2	GND
3	24 VAC N

Alternatively, connect an Ethernet cable to the RJ-45 connector of the camera, and use a PoE 802.3bt type 3 class 6 compatible power injector/switch to power the camera up. Consult TKH Security for more advise on the choise of PoE 802.3bt type 3 powering devices.

3.3 Connect Ethernet cable

For Ethernet cable connection, follow these steps:
1. Connect one end of the Ethernet cable to the RJ-45 connector of the camera.
2. Plug the other end of the cable to the network switch or PC.
3. Check the status of the power and the network activity indicator LEDs. If a LED is unlit, check the corresponding connection.
   - The green link LED is lit when there is a good network connection.
   - The orange network LED flashes to indicate that there is network activity.

Note: In some cases, Ethernet crossover cable may be needed when connecting the camera directly to the PC.

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3.4 Connect Audio/Alarm I/O and RS-485

See the diagram and pin definitions below for audio/alarm I/O and RS-485 connection.
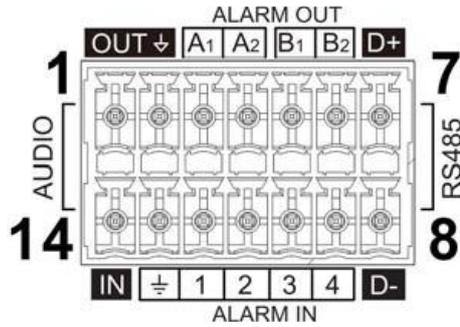
Pin	Definition	Pin	Definition
1	Audio OUT	8	RS-485 D-
2	GND (Audio I/O)	9	Alarm IN 4
3	Alarm OUT A1	10	Alarm IN 3
4	Alarm OUT A2	11	Alarm IN 2
5	Alarm OUT B1	12	Alarm IN 1
6	Alarm OUT B2	13	GND (Alarm I/O and RS-485)
7	RS-485 D+	14	Audio IN

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3.5 Surge protection

Protection against lightning strikes (direct and indirect)

Additional protection against direct or indirect lightning strikes is required according the IEC 62305 series standards, or equivalent standards. Consideration shall be given to the following:

- The use of properly earthed air-termination rods for pole mounted or high mounted cameras (see illustration on the right)
- Avoid wiring loops
- Locate protection devices close to the protected equipment (within 1m)
- Keep wiring to protection devices short.

Ethernet port surge protection

Outdoor Ethernet wiring with or without PoE needs additional surge protection at both ends:

- Close to the camera, to protect the camera and close to the Ethernet switch or PoE injector, at the building entry.
- An external surge protector with isolation transformer in the signal lines, like AETEK SD-101 or SD-201 is recommended.
  Note: Surge protectors with gas-discharge tubes (GDTs) only shall be avoided (*).
- Make sure the surge protector is properly grounded
- Make sure the camera housing is properly grounded
  Prevent ground loops.
- Shielded Ethernet cable is preferred
- The AETEK I69-200 or I69-200-V2 UPoE injector has built in surge protection up to 12kV, so in this case surge additional protection is only required at the camera side.

PoE injectors for PD900/PD910/PD920 shall support following:

- PoE+ 802.3at class 4 for PD900
- UPoE with PoE Handshaking for PD910/PD920
- PoE++ 802.3bt type 3 class 6 for PD950/PD980

(*) This is because of the fact that GDTs do not trigger at the same time. A differential surge voltage with a very fast rise time is created by the GDT being triggered one after another. The surge can cause current to flow into port on one conductor in the cable and back out of the port on another conductor in the same cable. Through Ethernet transformer coupling, this will induce a surge on the secondary side of the transformer, potentially damaging the Ethernet transceiver chip (often on the surveillance camera). More information, please refer to [here](https://incompliancemag.com/article/designing-ethernet-cable-ports-to-withstand-lightning-surges/)
(https://incompliancemag.com/article/designing-ethernet-cable-ports-to-withstand-lightning-surges/).

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4 Installation with NPS-NPT coupler

This section gives instructions of properly installing the coupler to prevent the water ingress.

> **Caution**:
> The camera shall be installed by qualified personnel only.
> Installation shall be in accordance with local procedures.

The models are IP66-rated to prevent water from entering the camera. However, water may still enter the camera if the coupler connecting with camera and camera mounting are incompatible.

The tube adapter thread offered with camera is NPS 1.5" type, which is a straight thread in and outside. (https://en.wikipedia.org/wiki/National_pipe_thread) The proper coupler adapter is essential to ensure the same thread in both end.

NPT-NPS aluminum coupler is specifically designed to create a watertight seal between the male threaded NPT camera mount and the male threaded NPS pipe adapter. In addition to the aluminum coupling the kit contains a high-quality Polyurethane Adhesive Sealant product. 3M 560 is a one component, moisture curing product which forms permanent elastic bonds on a wide variety of materials including plastics, metals, fiberglass, and wood. It is formulated to have a wide variety of Shore A hardness, open times, and performance parameters to meet many application needs.

4.1 Before installation

Surfaces to be sealed or bonded should be clean and dry. Surfaces should be free from grease, mold release, oil, water/condensation, and other contaminants that may affect the adhesion of the sealant. Abrading with 180 to 220 grit abrasive followed by a solvent wipe will improve the bond strength but is not specifically required in this application. Suitable solvents include 3M™ Adhesive Remover or methyl ethyl ketone (MEK).*

- When using solvents, use in a well-ventilated area. Extinguish all sources of ignition in the work area and observe product directions for use and precautionary measures. Refer to product label and MSDS for further precautions. Always pre-test solvent to ensure it is compatible with substrates.
- Alcohol will interfere with the curing process and extra care must be taken when using alcohol as a cleaning solvent to prevent any contact with the sealant.

4.2 Application

Loading the applicator gun: make sure the applicator is setup with correct plunger attachment for cartridge.

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1. Puncture seal in nozzle and remove the pull-tab seal at the bottom of the cartridge. Load into applicator and fix retaining ring (if applicable). Assemble the nozzle (if applicable) and cut tip to create between a 1/8" and 1/4" bead taking precaution to be no wider than 1/4".

2. Dispense product with the nozzle tip in contact with the substrate to insure good gap filling.

3. A continuous bead of adhesive sealant shall be applied approximately 1/3 of the way into the threads as shown in below illustration.

4. Thread NPT-NPS aluminum adapter coupling on the threated end of the camera mount. Pay special attention to ensure the NPT threads are going toward the camera mount and the NPS end is going to the camera.

5. Ensure that the coupling completely covers the adhesive sealant and is locked down tight. It is suggested that after hand tightening, a pipe wrench is used to gain another ¼ turn or more if available.

6. When the adhesive sealant is applied properly, and the coupling tightened fully the result should be a continuous unbroken bead of adhesive sealant at the top of the coupling. This bead should be in contact with both the top of the coupling and the camera mount as shown in below two illustrations. While there is no need to remove the exposed adhesive sealant, the installer may at their discretion decide to smooth off the excess.

The adhesive sealant should be tack-free in 50 – 60 minutes with a full cure occurring at approximately 24 hours. There is no need to wait for the product to become tack-free before

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installing the camera. The installer may move on and allow the adhesive to seal naturally after he or she has left.

- It is recommended that a Teflon tape or similar plumbing pipe dope is used to seal the NPS side of the coupling to the camera pipe adapter. Ensure that the coupling covers the Teflon tape and is locked down tight. It is suggested that after hand tightening, a pipe wrench is used to gain another ¼ turn or more if available.

- After seal is punctured, it's recommended by manufacturer to used adhesive sealant within 24 hours. As long as the characteristics or behavior of the adhesive changes, it is recommended that unused portion be disposed of and a new tube used.

- Bonding must occur within the first 50% of published skin time. Do not apply polyurethane sealants and adhesive sealants on frozen nor wet surfaces. Do not apply over silicone nor in the presence of curing silicone nor hybrid products. Avoid contact with alcohol and solvents during curing. Sealant can be tooled immediately after applying to give desired appearance.

- Cleanup: While sealant is still soft, cleaning can be done with the same solvents used for surface preparation. Avoid cleaning with alcohol as it will interfere with the curing process. If sealant is already cured, removal is done mechanically with razor knife, piano wire, sanding or 3M™ Scotch-Brite™ Molding Adhesive and Stripe Removal Disc.

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5 System requirements

Before you access the camera via a web browser, make sure that you have a good network connection and that the system requirements given below are met.

Items	System requirement
Personal computer	Minimum: • Intel® CoreTM i5-2430M @ 2.4 GHz • 4 GB RAM Recommended: • Intel® CoreTM i7-3770 CPU@ 3.4 GHz, 8GB RAM • 8 GB RAM
Operating system	Windows XP / Vista / 7 / 8 / 10 / 11
Web browser	Microsoft Edge (Chrome based version) Google Chrome Mozilla Firefox Safari Opera Microsoft Internet Explorer 11.0 (Caution: unsafe, requires camera ActiveX component installation)
Network card	10Base-T (10 Mbps), 100Base-TX (100 Mbps), or 1000Base-T (1000 Mbps) operation
Viewer	Web browser viewing: • During normal use (without ActiveX control), your browser may encounter problems showing video feed, or show reduced frame rate. This is normal and does not affect performance in your VMS client • With Microsoft Edge, you can enable Compatibility Mode via the browser settings. After this, show the camera web page in Compatibility Mode to install and activate its ActiveX control. The ActiveX control will allow for the same streaming performance as also found in your VMS client. (Caution: unsafe, requires camera ActiveX component installation)

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6 Get Access to the Camera

For initial access to the camera, you can search the camera using SDM2 Device Manager. You can download this free tool from the TKH Security web page, https://tkhsecurity.com > Services > Software Downloads.

6.1 Factory default network settings and login information

Default settings are as shown in the below table:

Model/Series	Default network and login settings
900-series cameras (both fixed and PTZ, including 900, 910, 920, 950, 980, and later models)	Default network settings: ➢ Static IP address 10.x.y.x as also found on the camera label, subnet mask 255.0.0.0, no default gateway. Default login information (Username/Password): ➢ Username: Admin ➢ Password: 1234 ➢ Note: When unboxed (or after factory default), the camera is not 'activated' and will require you to specify the new Admin (with uppercase A) password. To do this, open the camera web page, login with Admin / 1234, and then enter your new non-trivial Admin password. Until the camera is activated, its functional behavior is limited.

1000/2000-series cameras (both fixed and PTZ, including 1022, 1104, 2000, 2000v2, and later models)	Default network settings:
	➢ DHCP enabled: if a DHCP server is active on the network, the camera will obtain its network settings from this DHCP server automatically.
	➢ If no DHCP network settings can be acquired within a certain amount of time, then camera will default back to static network settings, as follows:
	    ○ Static IP address 192.168.1.x, subnet mask 255.255.255.0, no default gateway
	    ○ The last octet in the IP address is 64 by default, but the camera will dynamically assign itself another address value if this IP address .64 is already found to be in use.
	
	Default login information (Username / Password):
	➢ Username: n/a
	➢ Password: n/a

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	➢ Note: When unboxed (or after factory default), the camera is not 'activated' and will require you to specify the new admin (with lowercase A) password. To do this, open the camera web page, and then enter your new non-trivial admin password. Until the camera is activated, its functional behavior is limited.

6.2 Get Access via SDM2 Device Manager

To establish an IP connection between the camera and the browsing PC, the camera and the browsing PC must be on the same subnet. You may need to change your PC/Laptop network adapter settings to the camera network (see the above table with default network settings).

SDM2 Device Manager will auto discover the TKH Security device using different protocols and mechanisms. Normally, your device should appear in the device list within a couple of seconds. If the automatic discovery does not detect your device, follow these troubleshooting steps:

1. Verify that the camera is powered on.
2. Verify that your camera is directly connected to the PC/Laptop, either physically with a cross cable, or via a regular (Level 2) switch.
3. Verify that your PC/Laptop has network settings properly set. To do this, once more make sure that you know which network your camera is assumed to be in, then adjust your PC/Laptop network settings accordingly.
4. Perform a manual scan with SDM2, over the IP range where you expect the camera to be in.
5. If at this point still no contact with the camera, isolate PC/Laptop from the Internet, then disable the Firewall, and try again.

Once the device appears in the SDM2 Device Manager device list, double click it to open its web page in the default browser. If the camera has factory defaults, the first thing you must now do is create a new administrator password.
Once the camera is activated with non-trivial administrator password, you may Edit the device by right-clicking it in the device list and selecting Edit device:
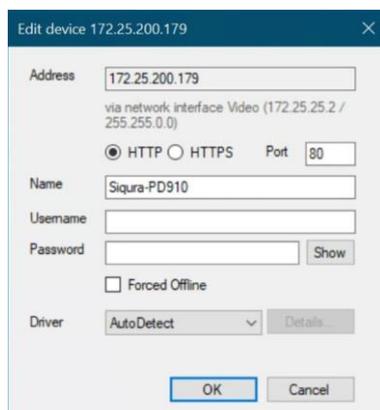
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If you now enter the admin username and password in here, this will allow SDM2 to automatically connect to the device.

> **Note:** Username and password are case sensitive. For security reasons, it is strongly advised to change the administrator password. Refer to the user manual for more details.

6.3 Get Access via Web Browser

The camera should be fully accessible without the need of installing extra plugins or add-ons. You can open the camera web pages with any modern web browser, such as Microsoft Edge (the latest Chrome based version), Google Chrome, Mozilla Firefox, Opera, Safari, etc. For safety reasons, this is the recommended way of working.

Sometimes you may notice that the web page implementation of the camera still requires its old-school and unsafe ActiveX control. The camera is still prepared for browsers that use ActiveX (i.e. Internet Explorer 11). Although not recommended to do this, for security reasons, you can still use this ActiveX driven web page content from the camera. To do this, either use Microsoft Edge in Compatibility mode, or use Internet Explorer 11 (which is now obsolete but may still be found in Windows 10). The camera web page will then try to install the ActiveX control called Siqura Viewer (or SiquraSecurity in the 1000/2000 series). Install this control, then allow using this in the browser.

The 900-series cameras main web page is shown in Figure 1 900-series cameras main web page.

Zoom and focus adjustment
After accessing the camera, the live image will be displayed on the home page.
If needed, use the zoom and focus function buttons on the home page to adjust the zoom and focus settings of the camera. For more information about the function buttons, refer to the user manual.

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Figure 1 900-series cameras main web page

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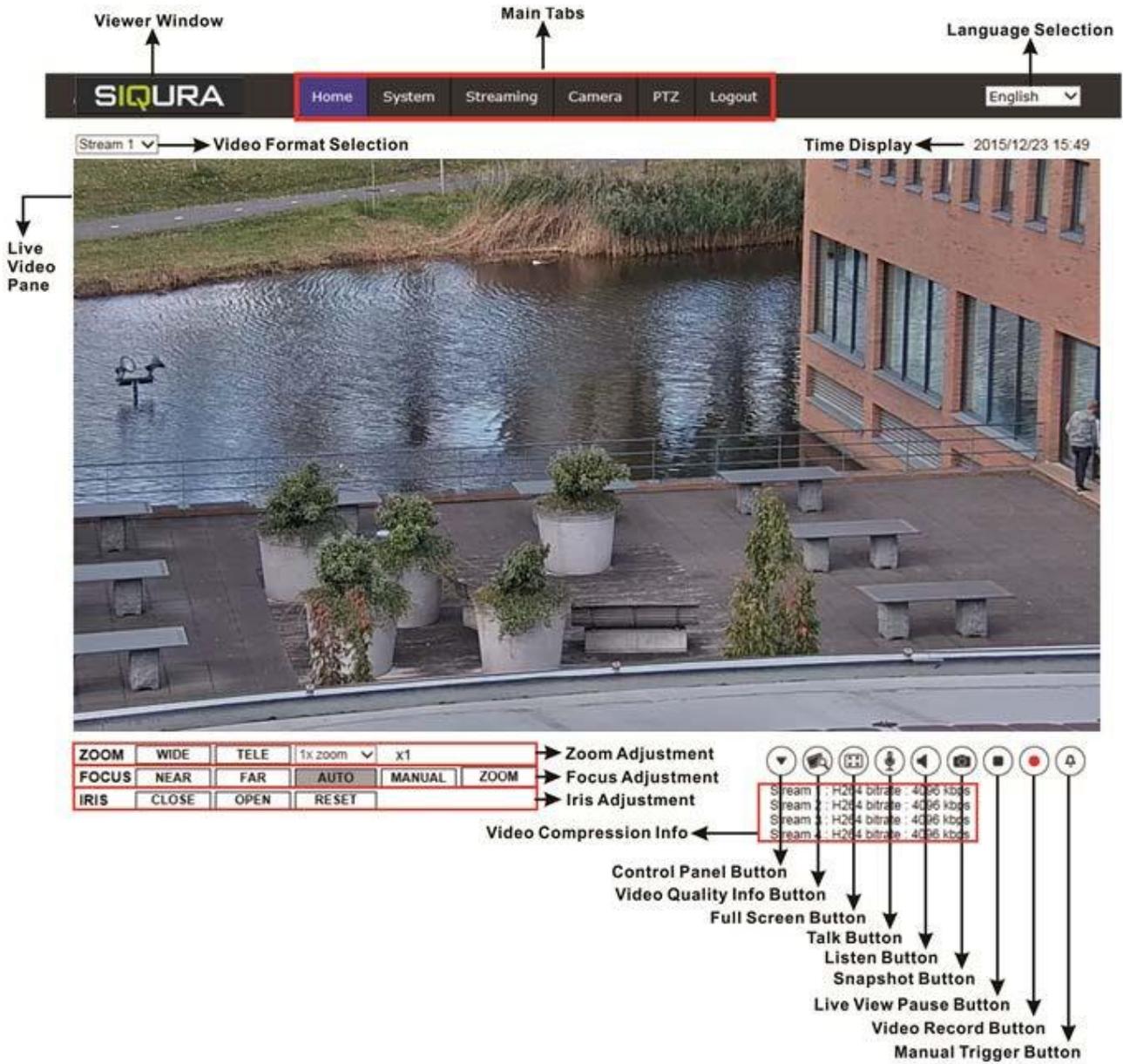
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7 Set Video Resolution

You can set the video resolution on the Video configuration page of the camera's web interface. The Video configuration page is found under the Streaming tab.

For more information about video resolution combinations, refer to the user manual.

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8 Export/Import configuration files

You can export configuration files to a specific location and retrieve data by uploading an existing configuration file to the camera. This is especially convenient if you want multiple cameras to have the same configuration.

To export and import configuration files, open the Maintenance page of the camera's web interface. The Maintenance page is found under the System tab.

8.1 Export configuration file

You can save the system settings by exporting the configuration file (.bin) to a specific location for future use.
Follow these steps:
1. Click on **Export**. The pop-up window File Download will appear.
2. Click on **Save** and enter the desired location for saving the configuration file

8.2 Import configuration file

To import a configuration file to the camera, follow these steps:
1. Click on **Browse** to select the configuration file.
2. Click on **Upload** to import the configuration file.

9 Technical Support

This chapter describes how to remove previously-installed Siqura Viewer software from your PC and how to enable ActiveX control installation.

9.1 No Video on Chrome, Firefox, Edge

If there is no live video showing on Chrome, Firefox and Edge, the MJPEG has to be enabled as one of the streams.

Enable MJPEG Stream
Follow these steps:
1. Access the camera and login with the pre-defined username/password.
2. Click the **Streaming** tab and enter to **Video Configuration** page
3. Select **Yes** at Encoding at any stream and select **MJPEG** as Encode Type
4. Click **Save** to save the configuration.

9.2 Delete Previously Installed Siqura Viewer

If Siqura Viewer has been installed previously on your PC, the Siqura Viewer software has to be removed from your PC before you access the camera.

Delete Siqura Viewer
Follow these steps:
1. In the Windows Start menu, open the Control Panel.
2. Double-click on **Add or Remove Programs**.
3. In the list of currently installed programs, select **Siqura Viewer**.
4. Click on **Remove** to uninstall the existing Siqura Viewer.

Delete temporary Internet files
To improve browser performance, it is recommended to delete all temporary Internet files.
Follow these steps:
1. Start Internet Explorer.
2. Select **Tools** in the menu bar.
3. Select **Internet options**.
4. Click on **Delete** under the **Browsing History** section. A new window is opened.
5. Tick the box beside **Temporary Internet Files** and click on **Delete** to start deleting the files.

9.3 Allow ActiveX Control Installation

If ActiveX control installation is blocked, either set the Internet security level to default or change the ActiveX controls and plug-ins settings.

Set Internet security level to default
1. Start Internet Explorer.
2. Select Tools in the menu bar.
3. Select Internet options.

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4. Select the Security tab and then Internet.
5. Click on Default level.
6. Click on OK to confirm.
7. Close the browser window and open a new one later to access the IP camera.

Change ActiveX controls and plug-ins settings

1. Start Internet Explorer.
2. Select **Tools** in the menu bar.
3. Select **Internet options**.
4. Select the **Security** tab and then **Internet**.
5. Click on **Custom level**. The Security Settings window will appear.
6. Set the following items under *ActiveX controls and plug-ins* to **Prompt** or **Enable**. Note that items may vary depending on the Internet Explorer version.
   - Allow previously unused ActiveX controls to run without prompt
   - Allow Scriptlets
   - Automatic prompting for ActiveX controls
   - Binary and script behaviors
   - Display video and animation on a webpage that does not use external media player
   - Download signed ActiveX controls
   - Download unsigned ActiveX controls
   - Initialize and script ActiveX controls not marked as safe for scripting
   - Only allow approved domains to use ActiveX without prompt
   - Run ActiveX controls and plug-ins
   - Script ActiveX controls marked safe for scripting*
7. Click on **OK**.
   A dialog window will ask you to confirm the changes.
8. Click on **Yes**.
9. Click on **OK** to close the Internet Options window.
10. Close the browser window and open a new one later to access the camera.