

DINION 7100i IR

NBE-7702-ALX | NBE-7702-ALXT | NBE-7703-ALX | NBE-7703-ALXT |
NBE-7704-AL | NBE-7704-ALT | NBE-7704-ALX

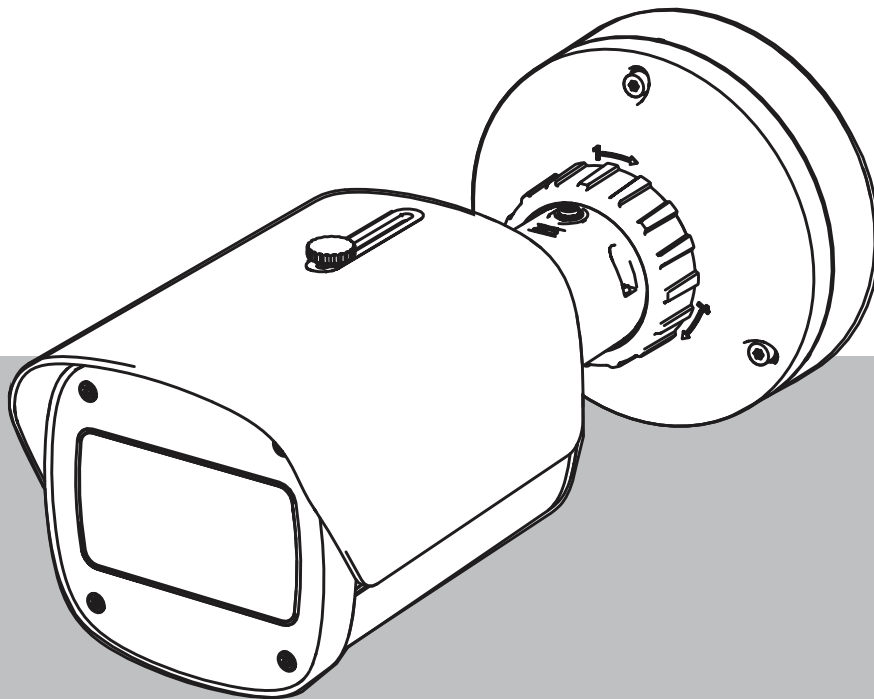


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1 Safety

Read, follow, and retain for future reference all of the following safety instructions. Follow all warnings before operating the device.

1.1 Safety message explanation

In this manual, the following symbols and notations are used to draw attention to special situations:

**Danger!**

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**Warning!**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**Caution!**

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**Notice!**

Indicates a situation which, if not avoided, could result in damage to the equipment or environment, or data loss.

1.2 Safety precautions

**Caution!**

Installation should only be performed by qualified service personnel in accordance with the National Electrical Code (NEC 800 CEC Section 60) or applicable local codes.

**Caution!**

The product must be supplied only by an external source having an output complying with PS2 or Annex Q conform to IEC 62368-1 and UL62368-1.

1.3 Important safety instructions

- To clean the device, do not use liquid cleaners or aerosol cleaners.
- Do not install the device near any heat sources such as radiators, heaters, stoves, or other equipment (including amplifiers) that produce heat.
- Do not spill liquids on the device before installation is completed.
- Take precautions to protect the device from power and lightning surges.
- If powered by a power adapter, the adapter should be properly grounded. The power cord must be connected to a socket or outlet with a ground connection.
- Use green/yellow (green with yellow stripe) ground wires.
- Adjust only those controls specified in the operating instructions.
- Operate the device only from the type of power source indicated on the label.

- Unless qualified, do not attempt to service a damaged device yourself. Refer all servicing to qualified service personnel.
- Install in accordance with the manufacturer's instructions in accordance with applicable local codes.
- Use only attachments/accessories specified by the manufacturer.
- Protect all connection cables from possible damage, particularly at connection points.

1.4 Notices



Notice!

Optical elements are sensitive and should be protected at all times. Do not allow objects to come into contact with glass surfaces and do not touch optical elements with your fingers.



Notice!

Video loss is inherent to digital video recording; therefore, Bosch Security Systems cannot be held liable for any damage that results from missing video information.

To minimize the risk of losing information, we recommend multiple, redundant recording systems, and a procedure to back up all analog and digital information.



Notice!

This device is intended for use in public areas only.

U.S. federal law strictly prohibits surreptitious recording of oral communications.

UL Disclaimer

Underwriter Laboratories Inc. ("UL") has not tested the performance or reliability of the security or signaling aspects of this product. UL has only tested fire, shock and/or casualty hazards as outlined in Standard(s) for Safety for Information Technology Equipment, UL 62368-1. UL Certification does not cover the performance or reliability of the security or signaling aspects of this product.

UL MAKES NO REPRESENTATIONS, WARRANTIES, OR CERTIFICATIONS WHATSOEVER REGARDING THE PERFORMANCE OR RELIABILITY OF ANY SECURITY OR SIGNALING-RELATED FUNCTIONS OF THIS PRODUCT.

FCC suppliers Declaration of Conformity

F.01U.390.686	NBE-7702-ALX	DINION 7100i IR
F.01U.390.687	NBE-7702-ALXT	DINION 7100i IR
F.01U.390.688	NBE-7703-ALX	DINION 7100i IR
F.01U.390.689	NBE-7703-ALXT	DINION 7100i IR
F.01U.390.690	NBE-7704-AL	DINION 7100i IR
F.01U.390.691	NBE-7704-ALT	DINION 7100i IR
F.01U.390.692	NBE-7704-ALX	DINION 7100i IR

Compliance statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and

- 2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a **residential installation**. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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.

Responsible party

Bosch Security Systems Inc
 130 Perinton Parkway
 14450 Fairport, NY, USA

For more information please contact the nearest Bosch Security Systems location or visit: www.boschsecurity.us

For use in China: CHINA ROHS DISCLOSURE TABLE

Fixed cameras with lens

Hazardous substance table according to SJ/T 11364-2014						
	Pb (Pb)	Hg (Hg)	Cd (Cd)	Cr 6+ (Cr 6+)	PBB (PBB)	PBDE (PBDE)
Housing & enclosures	x	o	o	o	o	o
PCBA with connectors	x	o	x	o	o	o
Cable assemblies	o	o	o	o	o	o
Image sensor assembly	x	o	x	o	o	o
Lens assembly	x	o	x	o	o	o
This table was created according to the provisions of SJ/T 11364						
o: The content of such hazardous substance in all homogeneous materials of such component is below the limit defined in GB/T 26572						
x: The content of such hazardous substance in a certain homogeneous material is above the limit defined in GB/T 26572						

The manufacturing datecodes of the products are explained in: <http://www.boschsecurity.com/datecodes>

IC statement (Canada)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

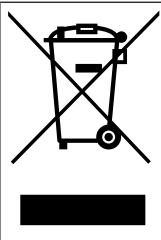
Use latest software

Before operating the device for the first time, make sure that you install the latest applicable release of your software version. For consistent functionality, compatibility, performance, and security, regularly update the software throughout the operational life of the device. Follow the instructions in the product documentation regarding software updates.

The following links provide more information:

- General information: <https://www.boschsecurity.com/xc/en/support/product-security/>
- Security advisories, that is a list of identified vulnerabilities and proposed solutions: <https://www.boschsecurity.com/xc/en/support/product-security/security-advisories.html>

Bosch assumes no liability whatsoever for any damage caused by operating its products with outdated software components.

Old electrical and electronic equipment

This product and/or battery must be disposed of separately from household waste. Dispose such equipment according to local laws and regulations, to allow their reuse and/or recycling. This will help in conserving resources, and in protecting human health and the environment.

2 Short information

This manual has been compiled with great care and the information it contains has been thoroughly verified. The text was correct at the time of publication, however, the content can change without notice. Bosch Security Systems accepts no liability for damage resulting directly or indirectly from faults, incompleteness or discrepancies between this manual and the product described.

Copyright

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All rights reserved.

Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

More information

For more information please contact the nearest Bosch Security Systems location or visit www.boschsecurity.com.



<https://www.boschsecurity.com/xc/en/product-catalog/>

3 System overview

3.1 Product description

All DINION 7100i IR cameras have a 3-step concept for simple installation.

With the combination of the robust housing, exceptional image quality and the powerful video analytics, the DINION 7100i IR cameras are the ideal choice for the most demanding outdoor applications, including traffic monitoring, critical infrastructure, and perimeter security.

The cameras capture images in exceptional detail, and feature the latest bitrate management techniques, data security measures and state-of-the art Intelligent Video Analytics, delivering incredible accuracy in high security applications and interpreting captured data for smart decision-making that goes beyond security.

Starlight X and HDR X technology combined with powerful smart IR illumination ensure highly detailed images even in the most challenging situations.

The camera comes with the IVA Pro Buildings and the IVA Pro Perimeter pre-installed and brings highly reliable deep-learning based detection and tracking of persons and vehicles to scenes ranging from sterile zones to crowded and congested.

Built-in Intelligent Video Analytics Pro (IVA Pro) enriches full situational awareness and triggers relevant alerts.

Other optional licenses, such as IVA Pro Traffic are supported.

3.2 Intended use

The camera is designed to be integrated in professional IP video surveillance solutions as a surveillance camera. Installation, commissioning and operation of the camera shall be carried out by trained professionals only.

The use of surveillance cameras is restricted by national laws and regulations. Use the camera accordingly.

4 Preparing for installation

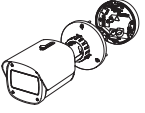
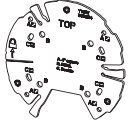


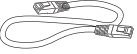
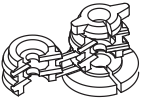



4.1 Unpacking


This equipment should be unpacked and handled with care. If an item appears to have been damaged in shipment, notify the shipper immediately.

Verify that all parts are included. If any items are missing, notify your Bosch Security Systems sales or customer service representative.

The original packaging is the safest container in which to transport the unit and can be used if returning the unit for service.

4.2 Parts included

	Quantity	Component
	1	DINION 7100i IR device
	1	Mounting plate
	1	TR20 key
	1	Mini screwdriver
	1	Patch cable (in-box configuration)
	1	NCA-U-PIG Grommet IP66
	1	NCA-U-PIGL Grommet IP67
	1	Quick installation guide
	1	Safety and security information

	<p>3</p>	<p>Installer UX labels</p>
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4.3 Preparation

Before installation, prepare and plan the installation process and materials needed.

Pre-requisites

Remove the components from the box. Make sure that all parts are included and are not damaged.

The necessary material and equipment:

- Appropriate size power drill.
- Screwdriver for TR20 bit, or use a torque wrench TR20 hex key.
- microSD card (optional)

Note: Bosch recommends the use of industrial microSD cards with health monitoring.

- Wireless installation dongle for wireless commissioning (optional).

4.4 In-box configuration

In-box configuration of the camera can be done via a wired connection with the camera still inside the box.

1. Connect a network cable with PoE, and wait 1 minute for the camera to power up.
2. Connect and configure the camera via the wired network by using the web interface, the Project Assistant app or the Configuration Manager.

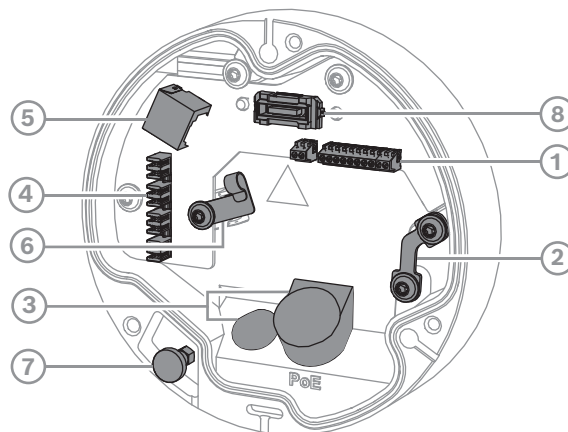
For more detail about the Project Assistant app, refer to *Commissioning, page 28*.



Notice!

The provided patch cable is only intended for in-box configuration. Dispose of the patch cable after the in-box configuration is successfully completed.

4.5 Wiring



<p>1</p>	<p>10-pin I/O connector</p>	<p>2</p>	<p>Safety wire anchor</p>
<p>3</p>	<p>Grommet (IP66 or IP67)</p>	<p>4</p>	<p>Punch down network connector</p>

5	RJ45 network connector	6	Cable holder / grounding point for punch down connector
7	Safety plunger	8	PCBA camera connector

**Notice!**

Make sure to pull and hold the safety plunger when removing the camera.

4.5.1**Network and PoE power - RJ45**

Connect the camera to a 10/100 Base-T network:

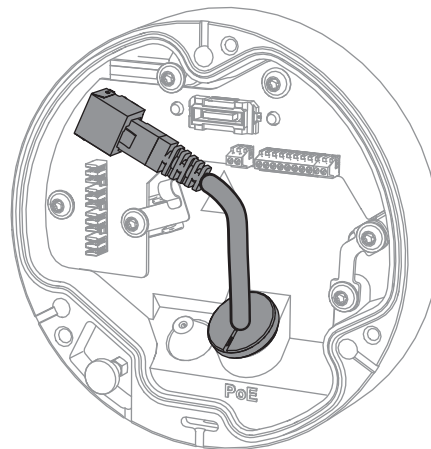
- Use STP Category 5e (or higher) cable with RJ45 connectors.
- Power can be supplied to the camera via the Ethernet cable compliant with the Power-over-Ethernet standard and/or via the 24V AC / 12-26V DC auxiliary power.

**Notice!**

Use only PoE approved devices.

Power-over-Ethernet (PoE) can be connected at the same time as a 24V AC / 12-26V DC power supply. If auxiliary power (24V AC / 12-26V DC) and PoE is applied simultaneously, the camera draws its power from PoE by default, and seamlessly switches to auxiliary input if PoE power fails.

When PoE power returns, the camera seamlessly switches back to PoE as its default power source.

**4.5.2****Network and PoE power - punch down connector**

Connect the camera to a 10/100 Base-T network:

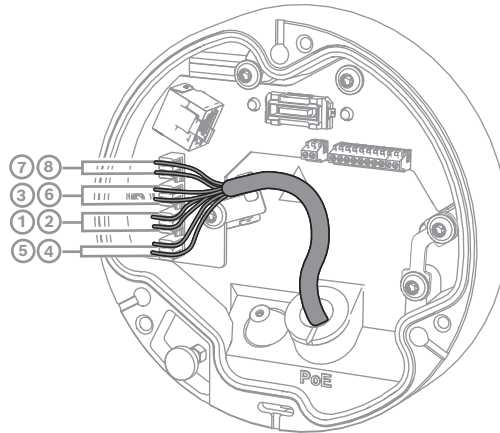
- Use STP Category 5e (or higher) cable with punch down connector.
 - Note:** If needed, test the cable by putting the network cable tester in the RJ45 port.
- Power can be supplied to the camera via the Ethernet cable compliant with the Power-over-Ethernet standard and/or via the 24V AC / 12-26V DC auxiliary power.

**Notice!**

Use only PoE approved devices.

Power-over-Ethernet (PoE) can be connected at the same time as a 24V AC / 12-26V DC power supply. If auxiliary power (24V AC / 12-26V DC) and PoE is applied simultaneously, the camera draws its power from PoE by default, and seamlessly switches to auxiliary input if PoE power fails.

When PoE power returns, the camera seamlessly switches back to PoE as its default power source.

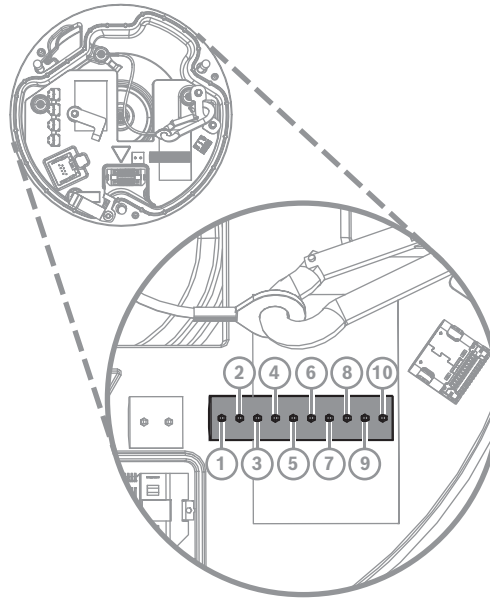


4.5.2.1

8-pin T568A

Pin	T568A
1	White/Green
2	Green
3	White/Orange
4	Orange
5	White/Blue
6	Green
7	White/Brown
8	Brown

4.5.3 10-pin I/O connector



Pin	Connection
1	+12V OUT
2	GND
3	ALARM IN 2
4	ALARM IN 1
5	GND
6	ALARM OUT
7	ALARM OUT
8	AUDIO OUT
9	GND
10	AUDIO IN

12V DC power output

The 12V DC output can be enabled/disabled via the web interface, and controlled via the Alarm Task Editor.

Maximum load of 50 mA.

Alarm I/O

1. Input:

- Use the alarm input to connect external alarm devices such as door contacts or sensors:
 - TTL logic, +5V nominal, +40V DC maximum, DC coupled with 50k Ohm pull-up to +3.3V.
 - Configurable as active low or active high.

Use a zero potential make-contact or switch as the actuator (with a bounce-free contact system).

2. Output:
Use the alarm output for switching external devices such as lamps or sirens. The alarm output switching capability has a maximum voltage of 30V AC or +40V DC; maximum 0.5 A continuous, 10 VA.

Audio I/O

Connect audio devices to the audio input and audio output connectors.

The unit has full-duplex mono audio for two-way communication between a speaker or door intercom system. The audio input signal is transmitted in synchronization with the video signal.

1. Input:
 - **Line In:** Line level input
 - **Microphone:** Microphone level input with 2.5 VDC (4 mA) supply voltage for external microphone
2. Output:
Line output level (not suitable for direct speaker connection); impedance 1.5 kOhm minimum; 1 Vrms maximum output voltage.

4.5.4

Grounding

The camera does not require a safety earth connection, but grounding is recommended for outdoor applications.

Grounding provides improved surge protection (up to 1 kV, 1 kA to ground (8/20 μs pulse)).

The grounding wire is not included in the box. Bosch recommends the use of a grounding wire with a ring terminal.

The ring terminal must not have a thickness greater than 2 mm (0.01 in.).



Notice!

Use proper surge protection on cables that are routed outdoors, or close to large inductive loads or electrical mains supply cables.

5 Hardware installation

Installation overview

The installation of the camera follows these steps:

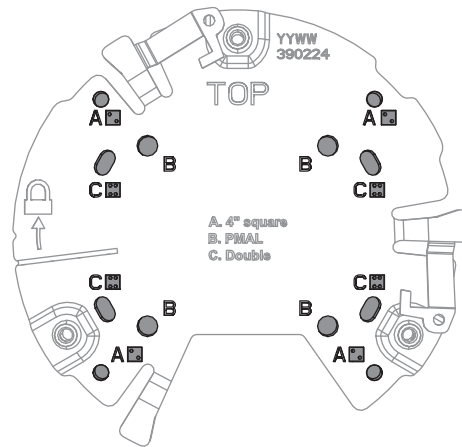
1. *Installing the mounting plate, page 17*
2. *Installing the camera base, page 18*
3. *Installing the camera, page 20*

Installation options

The camera can cover various mounting options when combined with the available accessories. Refer to the *Other optional accessories, page 22* chapter for instructions on the installation of the available accessories.

5.1 Installing the mounting plate

The mounting plate is used to fix the camera to a flat surface. It offers different holes and slots for a variety of fixing options.

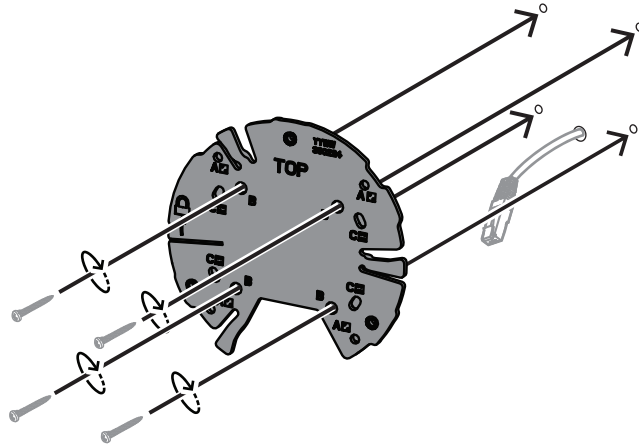


1	A Mounting holes for 4 inch or 4S electrical box installation. There are four mounting holes available on the mounting plate, but you need only two for the installation.	2	B Mounting holes for standard wall, ceiling, or pole mount installation. Use four screws. If required, use plugs (for concrete walls/ceilings).
3	C Mounting holes for double gang box installation. Align the mounting plate with the four screw holes in the electrical gang box.		

5.1.1 Installation steps

1. Remove the mounting plate from the box.
2. Position the mounting plate correctly on the desired installation surface. This is ensured by having the TOP indicator facing upwards.

3. Mark the positions of the screw holes on the surface.
Note: For standard installation, use the mounting holes marked with a B on the mounting plate. For a different installation, for example for an installation on a surveillance cabinet, use different mounting holes. For more information, refer to *Surveillance cabinet (fiber optics) installation, page 26*.
4. Drill the 4 holes with the appropriate diameter drill to support your 5-6 mm (0.2 inch) screws.
5. Attach the mounting plate to the surface with 4 screws. Tighten the screws between 4 and 7 Nm (3 and 5.2 lbfft).

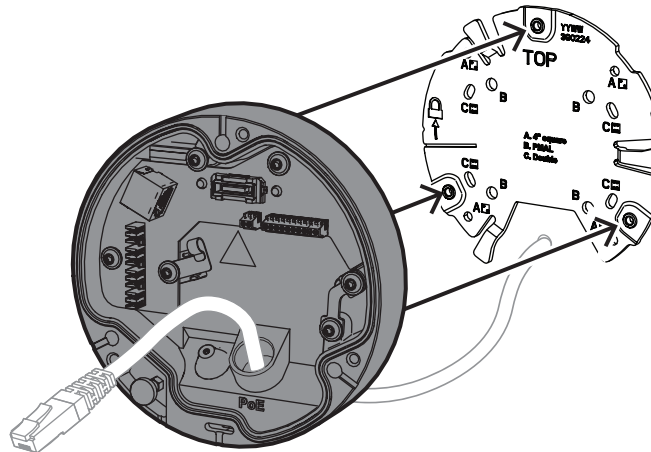


5.2 Installing the camera base

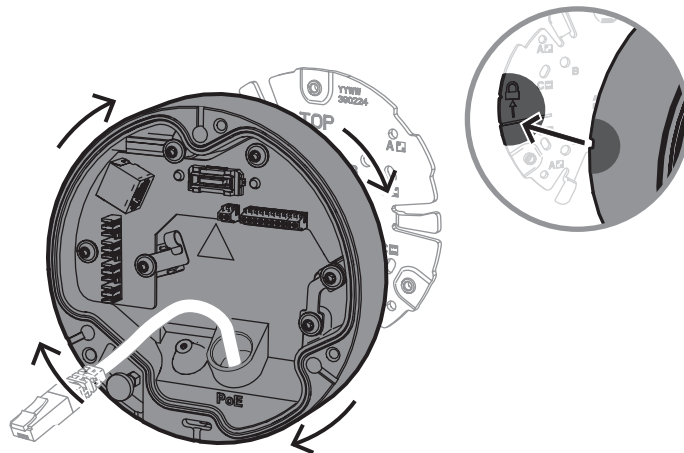
The camera base is used to fix the camera to the mounting plate for easy three-step installation. All wired connections are established through the camera base before installing the camera.

5.2.1 Installation steps

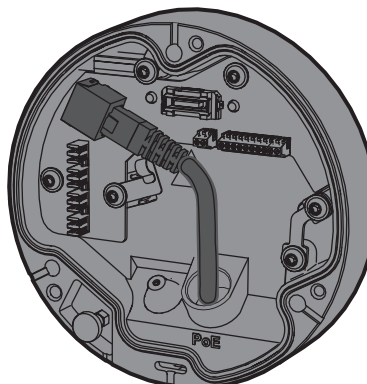
1. Remove the device from its packaging.
2. Separate the camera module from the camera base.
3. If necessary, remove the network cable connected to the camera base and pull it through the selected installation surface.
4. Connect the network cable through the camera base hole.
5. Place the camera base on top of the mounting plate with the camera base hole facing down.



- 6. Slightly rotate the camera base in a clockwise motion until it makes a clicking sound.
Note: Make sure that the camera base is secured.



- 7. Insert a grommet to protect the cable:
 - For an RJ45 network cable, insert the IP66 grommet tightly around the cable.
 - For a network cable to be connected via punch down connector, insert the cable through the IP67 grommet.
- 8. Connect the network cable to the camera base (punch down connector or RJ45 connector).
Note: If necessary, connect the cable with a punch-through aid on the network cable.

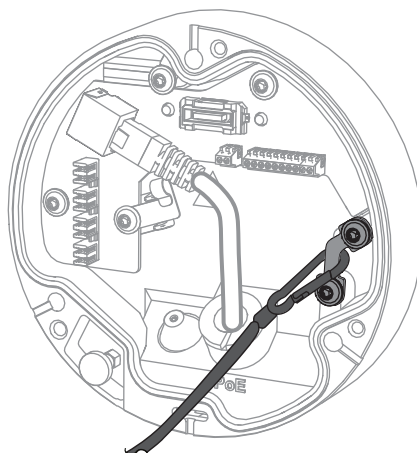


- 9. Fit the grommet in the camera base hole until firmly closed.

5.3 Installing the camera

5.3.1 Installation steps

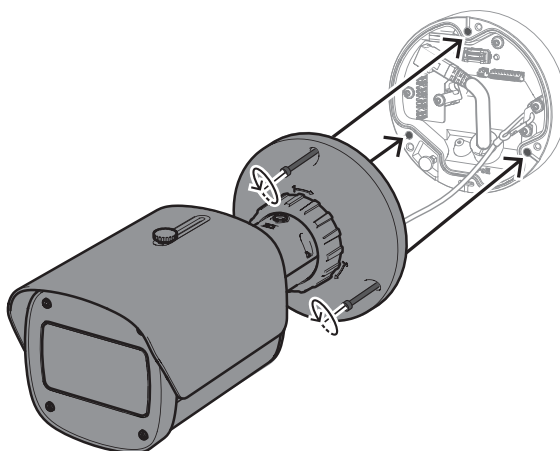
1. Carefully align the camera with the camera base.
2. Connect the safety cable on the camera to the safety hook located on the right side of the camera base.



Notice!

Make sure the safety hook is correctly locked into place.

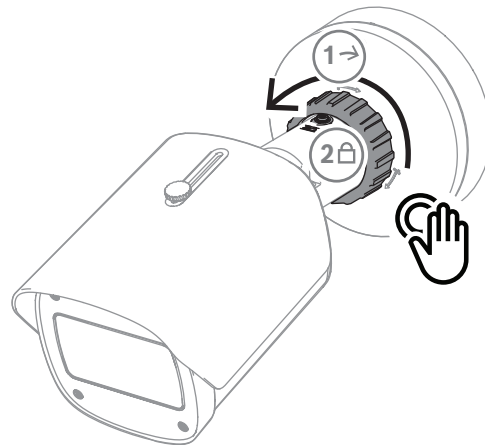
3. Align the camera with the camera base using the 3 alignment pins located on the bottom of the camera.
4. Push the alignment pins into the camera base pinholes.
5. Tighten the 3 screws (3 Nm) to fix the camera to the camera base.
Note: Make sure that the camera is secured before releasing it.



5.3.2 Camera positioning and rotation

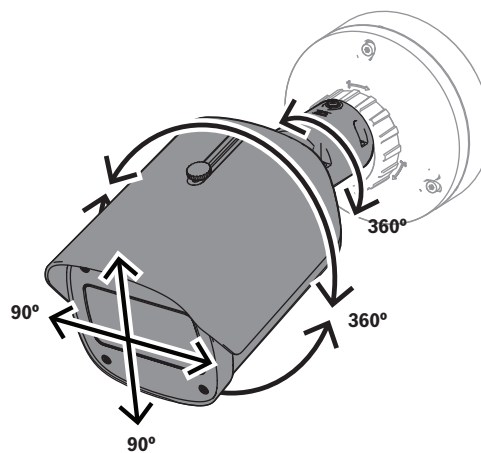
The device is manually adjustable to accommodate different angles and rotations. This is helpful for capturing specific scenes.

To adjust the position of the camera, unlock the locking ring by rotating it counter-clockwise.



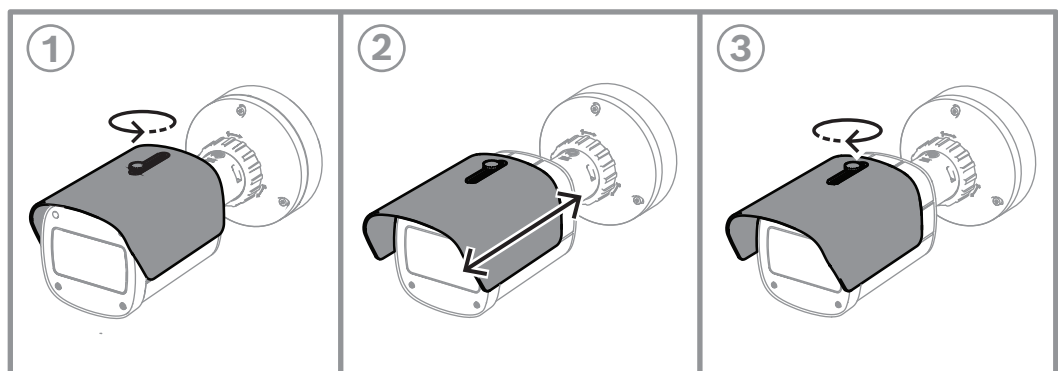
Once the position is set:

1. Lock the device manually by rotating the locking ring clockwise.
 2. To fully secure the device, lock it with the locking screw (4 Nm).
- The device tilts 90 degrees in every direction and rotates 360 degrees.



Adjust the sunshield after locking the camera in position:

1. Rotate the top knob counter-clockwise to enable back and forth adjustment.
2. Adjust the sunshield.
3. Rotate the top knob clockwise to lock the sunshield in position.



**Notice!**

The sunshield might be visible in the image with a wide angle view. If needed, pull the sunshield up to avoid it showing in the image.

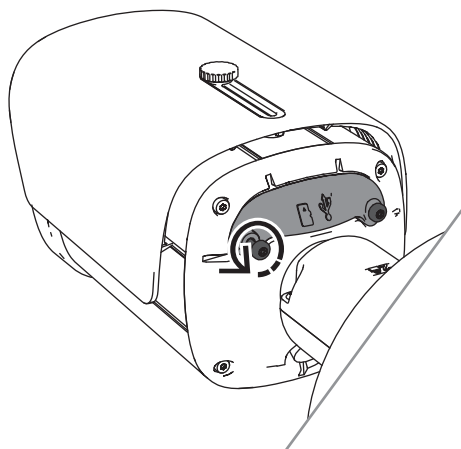
5.4 Other optional accessories

5.4.1 Inserting microSD card(s) and Wireless installation dongle

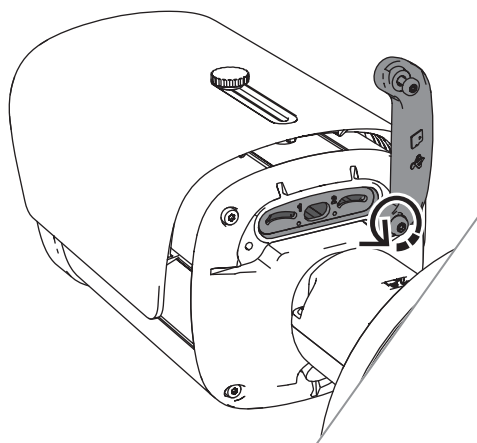
**Notice!**

Use microSD cards for maximum reliability. Bosch does not recommend the use of SD to microSD adapters.

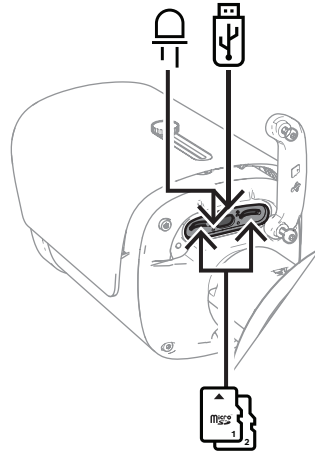
1. Locate the rear panel on the back of the device.
2. Fully untighten one screw.
Note: The rear panel should open upwards, hanging on one screw.



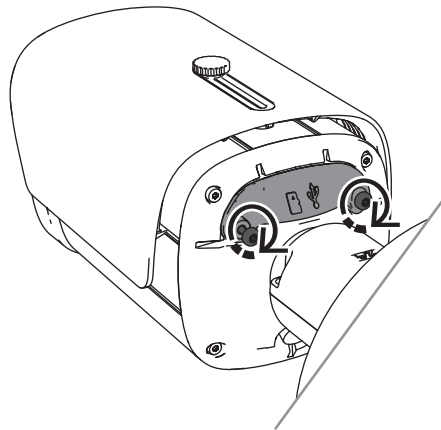
3. Slightly untighten the other screw.
Note: Do not detach the entire rear panel.



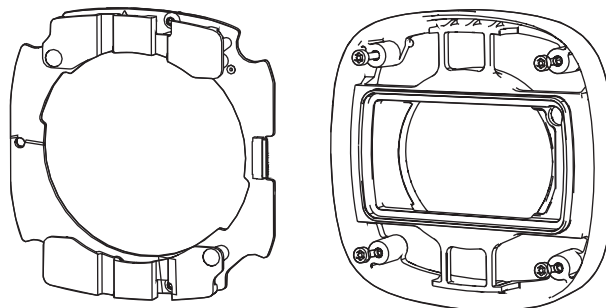
4. Insert microSD card(s) and/or a Wireless installation dongle for wireless commissioning.



5. Once the wireless commissioning process is completed, remove the Wireless installation dongle.
6. Place the rear panel back.
7. Tighten both rear panel screws (2 Nm).



5.4.2 Illuminator module/kit



The illuminator module/kit provides covert or semi-covert lighting for wide range outdoor surveillance applications.

5.4.2.1 Illuminator module invisible light

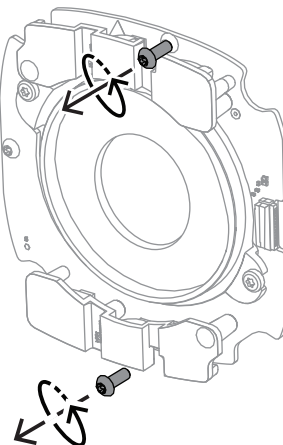
Installation steps



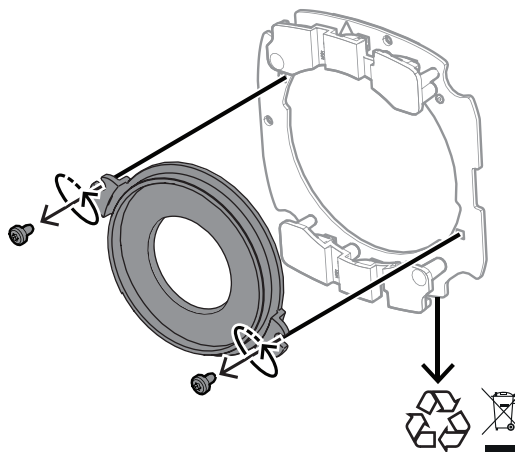
Notice!

Make sure that the camera is on top of a flat surface and disconnected from a power source before starting this procedure.

1. Remove the 4 screws from the front window of the device.
2. Remove the front window.
3. Remove the 2 screws from the IR module.



4. Disconnect the cable from the connecting terminal.
5. Remove the IR module from the device.
6. Separate the circular lens support from the IR module by removing 2 screws.



7. Take the IR module of the illuminator out of its packaging.
 8. Attach the same circular lens support to the new IR module with 2 screws.
 9. Use 2 screws to attach the IR module to the device.
- Note:** Reconnect the cable to the terminal.
10. Reattach and tighten (1 Nm) the front window back to the device.

5.4.2.2 Illuminator kit white light

Installation steps

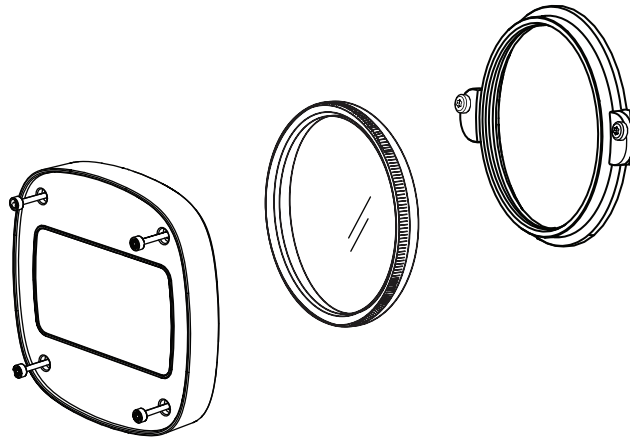


Notice!

Make sure that the camera is on top of a flat surface and disconnected from a power source before starting this procedure.

1. Remove the 4 screws from the front window of the device.
2. Remove the front window and recycle it.
Note: Set the removed screws aside. You will need to use the screws again in step 11.
3. Remove the 2 screws from the IR module.
4. Disconnect the cable from the connecting terminal.
5. Remove the IR module from the device.
6. Separate the circular lens support from the IR module by removing 2 screws.
7. Take the IR module of the illuminator kit out of its packaging
8. Attach the same circular lens support to the new IR module with 2 screws.
9. Attach the IR module to the device with 2 screws.
Note: Reconnect the cable to the terminal.
10. Take the front window from the illuminator kit out of the box.
11. Reattach and tighten (1 Nm) the new front window to the device.

5.4.3 Polarizing filter kit

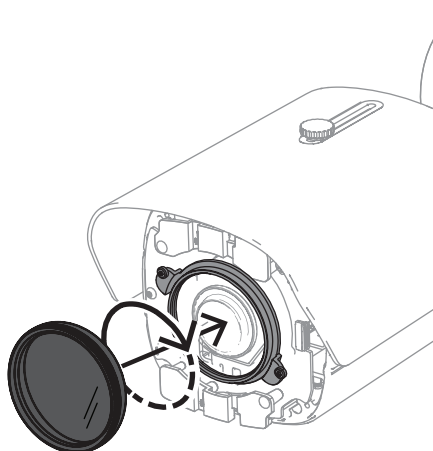


The polarizing filter kit provides clear imaging in cases of extreme light in contact with the window of the lenses, for indoor and outdoor surveillance applications. The filter reduces reflections, haze, and scattered light that can compromise image visualization, and enhances color saturation and contrast. In such events caused by sunlight, white surfaces, vehicles, mirrors, etc., the polarizing filter offers optimal image quality. The polarizing filter kit is available for DINION 7100i IR tele variants only.

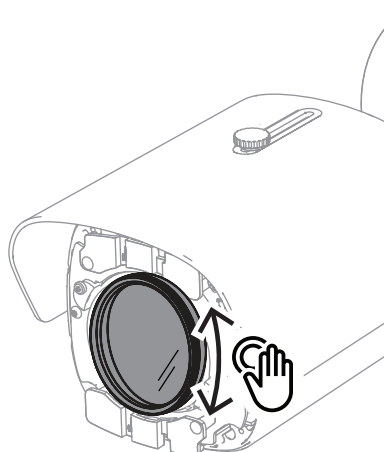
Installation steps

1. Remove the 4 screws from the front window of the device.
Note: Set the removed screws aside. You will need to use the screws again in step 10.
2. Remove the front window and recycle it
3. Remove the 2 screws from the circular lens support.
Note: Set the removed screws aside. You will need to use the screws again in step 6.
4. Remove the lens support and recycle it.

5. Take the circular lens support, the filter and the front window out of its packaging.
6. Use 2 screws to install the new lens support to the device.
7. Insert the polarizing filter on top of the lens support.
8. Rotate the polarizing filter clockwise to attach it to the lens support.



9. Once attached, rotate the filter to adjust the angle of polarization manually.



10. Use 4 screws to install and tighten (1 Nm) the new front window to the device.

5.4.4

Surveillance cabinet (fiber optics) installation

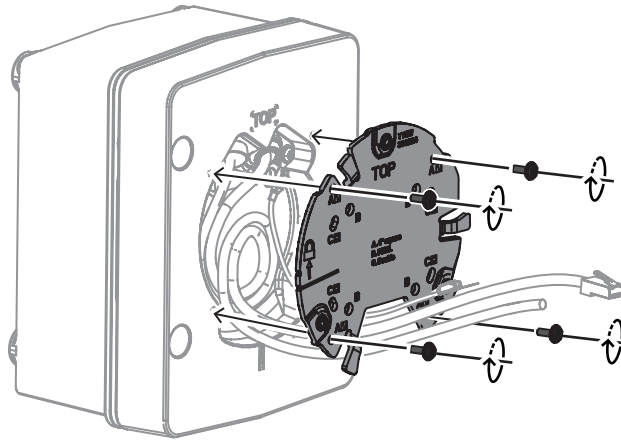
You can extend your installation with a surveillance cabinet to provide a power supply. The surveillance cabinet provides additional room to install the fiber optics module VG4-SFPSCKT.

Bosch surveillance cabinets are designed to meet the power and electrical safety requirements for cameras used in outdoor security applications. The surveillance cabinets provide a power supply for situations without PoE.

Installing the DINION 7100i IR on a surveillance cabinet:

1. Align the TOP of the mounting plate with the TOP of the surveillance cabinet.
2. Attach the mounting plate to the surveillance cabinet with 4 screws (use the indicated **B** screw holes on the mounting plate).
3. Before tightening the screws, keep the cables on the inner side of the surveillance cabinet.

Note: The two cables must be able to go through the gap of the mounting plate.

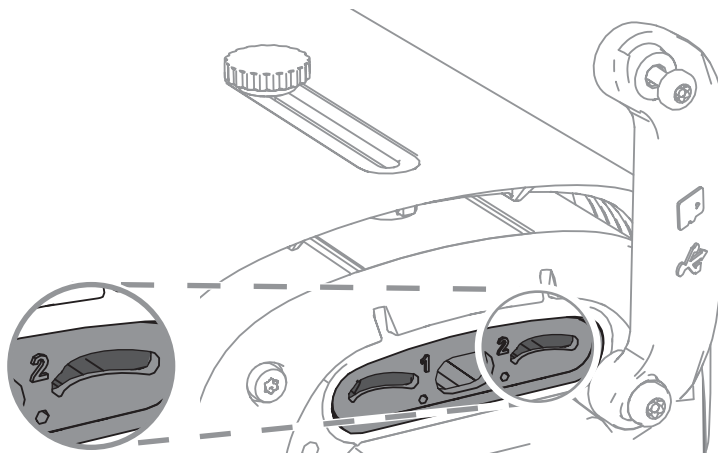


4. Follow the installation instructions for the camera base and camera in:
 - *Installing the camera base, page 18*
 - *Installing the camera, page 20*

5.5 LED status

The device includes a status LED. This LED is in the rear panel of the device, accessible by removing the cover.

The status LED is identified with 2 in the following image:



The following table includes detailed information on the different status LED functions:

Status LED	Meaning
Solid red	Booting
Flashing red	Resetting
Solid green	Working, but stream is not being watched or recorded
Flashing green	Stream is being watched and/or recorded

Disable the status LED in the camera settings, if necessary.

1. Select **Camera**.
2. Select **Installer menu**.
3. Select **Disabled** in **Camera LED**.

6 Commissioning

The DINION 7100i offers commissioning functionalities to access the device for installation, configuration and test:

- In-box configuration via an RJ45 patch cable connection to enable wired commissioning
- Configuration using a Wireless installation dongle for local commissioning

The commissioning can be done locally by connecting the camera via one of the following:

- Wireless installation dongle
- Ethernet cable

To configure the camera using the Project Assistant app, you can use the camera's web interface or the Configuration Manager.

To commission the camera using the Project Assistant app:

1. Connect the network cable to the PoE.
2. Download the Project Assistant app.



3. Do the necessary steps to configure the device. Use the step-by-step instructional video for help.



7 Connection via the web browser

A computer with a web browser (Google Chrome, Microsoft Edge, or Mozilla Firefox) is used to receive live images, control the unit, and replay stored sequences. The unit is configured over the network using the browser.

7.1 System requirements

Our recommendations are:

- Computer with Dual core HyperThreading processor or better
- Graphic card with performance that matches or is better than the resolution of the camera
- Windows 10 or later
- Network access
- Google Chrome, Microsoft Edge, or Mozilla Firefox

- or -

Application software, for example, Video Security Client or BVMS.

7.2 Establishing the connection

The unit must have a valid IP address and a compatible subnet mask to operate on your network. By default, DHCP is pre-set at the factory to **On** and so your DHCP server assigns an IP address. With no DHCP server the default address is automatically assigned via link-local address.

The Project Assistant app or Configuration Manager (version 7.60 or higher) can be used to find the IP address. Download the software from <https://downloadstore.boschsecurity.com>:

1. Start the web browser.
2. Enter the IP address of the device as the URL.
3. During the initial installation, confirm any security questions that show.

If a RADIUS server is used for network access control (802.1x authentication), you must configure the device before the device can communicate with the network.

To configure the device, connect it directly to a computer using a network cable and then set the service-level password.

Note:

If you cannot connect, the unit may have reached its maximum number of connections.

Depending on the device and network configuration, each unit can have up to 50 web browser connections, or up to 100 connections via BVMS.

7.3 Password protection in camera

The device is password-protected. The first time that any user accesses the device, the device will prompt the user to set a password at the service level.

The camera requires a strong password. Follow the prompts in the dialog box, which specifies what is required. The system measures the strength of the password that you enter.

When you use Configuration Manager to access your device for the first time, you must set the initial password of the device in Configuration Manager. The Users section (General > Unit Access > Users) displays the message, "Before you can use this device you have to secure it with an initial password."

Note: After you set the initial password, a "lock" icon appears next to the device name in the **Devices** list in Configuration Manager.

You can also launch the device webpage directly. In the device webpage, an initial password page appears, displaying input fields and a password strength gauge.

Enter the user name (“**service**”) and a password in the appropriate fields. Refer to the section **User Management** for more information.

After a service-level password is set for the device, the device displays a dialog box that prompts users to enter the user name (“**service**”) and the service-level password every time that they access the device.

1. Fill in the fields **User name** and **Password**.
2. Click **OK**. If the password is correct, the desired page appears.

Note: New releases of software may require you to set a new and stronger password.

8 Troubleshooting

8.1 Resolving problems

The following table is intended to help identify the causes of malfunctions and correct them where possible.

Malfunction	Possible causes	Solution
Unit does not operate.	Power failure.	Make sure that the power supply is working properly.
	Faulty cable connections.	Do a check of all cables, plugs, contacts, and connections.
No connection established, no image transmission.	Incorrect unit configuration.	Check all configuration parameters (reset to factory default if necessary).
	Faulty installation.	Check all cables, plugs, contacts and connections.
	Wrong IP address.	Check the IP addresses (ping).
	Faulty data transmission within the LAN.	Check the data transmission with ping.
	The maximum number of connections has been reached.	Wait until there is a free connection and call the transmitter again.
No audio transmission to remote station.	Faulty microphone cable connection.	Check audio parameters on the Audio configuration and LIVE page functions pages.
	Incorrect configuration.	
	Incorrect audio selected.	
The unit does not report an alarm.	Alarm source is not selected.	Select possible alarm sources on the Alarm sources configuration page.
	No alarm response specified.	Specify the desired alarm response on the Alarm connections configuration page; if necessary change the IP address.
The unit is not operational after a firmware upload.	Power failure during programming by firmware file.	Have the unit checked by Customer Service and replace if necessary.
Web browser contains empty fields.	Active proxy server in network.	Create a rule in the local computer's proxy settings to exclude local IP addresses.

8.2 Testing the network connection

The ping command can be used to check the connection between two IP addresses. This allows testing whether a device is active in the network.

1. Open the DOS command prompt.
2. Type `ping` followed by the IP address of the device.

If the device is found, the response appears as "Reply from ... ", followed by the number of bytes sent and the transmission time in milliseconds. Otherwise, the device cannot be accessed via the network. This might be because:

- The device is not properly connected to the network. Check the cable connections in this case.
- The device is not correctly integrated into the network. Check the IP address, subnet mask, and gateway address.

**Notice!**

The *ping* command only works when ping response is not disabled in the device.

8.3 Customer service

If a fault cannot be resolved, please contact your supplier or system integrator, or go directly to Bosch Security Systems Customer Service.

The version numbers of the internal firmware can be viewed on a service page. Please note this information before contacting Customer Service.

1. In the address bar of your browser, after the unit IP address, enter: `/version`
for example: `192.168.0.80/version`
2. Write down the information or print out the page.

9 Maintenance

9.1 Cleaning

Front window cleaning

**Caution!**

Do not touch the front window.

It is important to keep the front window clean to ensure optimum performance. Dust, grease, or fingerprints should be removed from the front window surface

- Remove dust with a blower-brush or grease-free soft brush.
- Wipe water drops off the front window with a clean soft lint-free cloth and dry the front window surface.
- Use special cleaning paper or cloth treated with cleaning fluid to gently wipe off any remaining dirt.

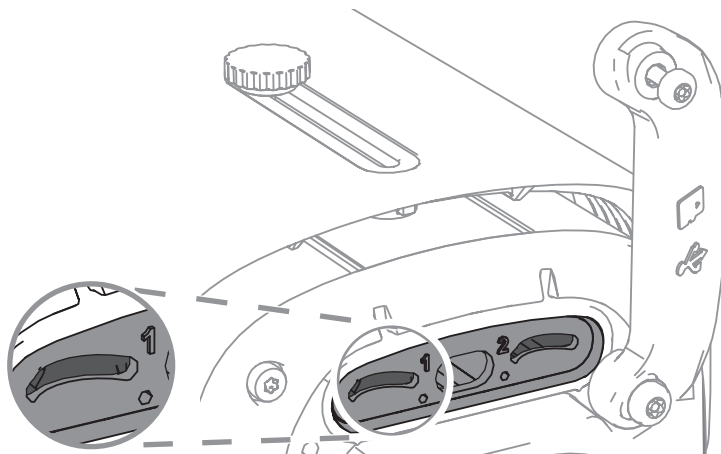
9.2 Repair

The unit does not contain any user-serviceable parts. Refer all repairs to suitable qualified specialists.

9.3 Reset

To reset the camera to factory settings:

1. Locate the rear panel on the back of the device.
2. Fully untighten one screw.
Note: The rear panel should open upwards, hanging on one screw.
3. Slightly untighten the other screw.
Note: Do not detach the entire rear panel.
4. Press the reset button located under the USB-C slot for 10 seconds until the LED starts flashing red. The reset button is identified with 1 in the following image:



Note: Use a suitable tool to press the reset button.

**Notice!**

Only reset the device when connected and powered up.

-
1. Place the rear panel back.
 2. Tighten both rear panel screws (2 Nm).

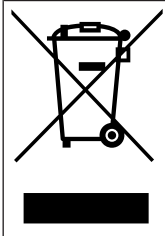
10 Decommissioning

10.1 Transfer

The device should only be passed on together with this Installation manual.

10.2 Disposal

Old electrical and electronic equipment



This product and/or battery must be disposed of separately from household waste. Dispose such equipment according to local laws and regulations, to allow their reuse and/or recycling. This will help in conserving resources, and in protecting human health and the environment.



Support

Access our **support services** at www.boschsecurity.com/xc/en/support/.

Bosch Security and Safety Systems offers support in these areas:

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- [Building Information Modeling](#)
- [Warranty](#)
- [Troubleshooting](#)
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