FLEXIDOME IP starlight 8000i

NDE-8502-R | NDE-8502-RT | NDE-8503-R | NDE-8503-RT |
NDE-8504-R | NDE-8504-RT

en Installation manual

Table of contents

1	**Safety**	**4**
1.1	About this manual	**4**
1.2	Legal information	**4**
1.3	Safety precautions	**4**
1.4	Important safety instructions	**4**
1.5	Power connection in applications	**5**
1.6	Important notices	**5**
2	**System overview**	**8**
2.1	Product description	**8**
2.2	Intended use	**8**
2.3	Application variants	**8**
2.4	Permanently disable WLAN	**8**
3	**Preparing for installation**	**10**
3.1	Unpacking	**10**
3.2	Contents	**10**
3.3	Wiring	**12**
3.3.1	Network and PoE power	**12**
3.3.2	24V AC / 12-26V DC power input	**13**
3.3.3	10-pin I/O connector	**13**
3.3.4	Grounding	**14**
4	**In-box configuration**	**15**
5	**Hardware installation**	**16**
5.1	Installing the mounting plate	**17**
5.1.1	Installing the mounting plate without conduit	**18**
5.1.2	Installing the mounting plate with conduit	**19**
5.2	Installing the camera base	**21**
5.2.1	Before the installation	**21**
5.2.2	Installation steps	**24**
5.3	Installing the camera module	**27**
5.4	LED status	**28**
5.5	Mounting accessories	**29**
6	**Commissioning**	**32**
7	**Connection via the web browser**	**33**
7.1	System requirements	**33**
7.2	Establishing the connection	**33**
7.3	Password protection in camera	**33**
8	**Troubleshooting**	**35**
8.1	Resolving problems	**35**
8.2	Testing the network connection	**37**
8.3	Customer service	**37**
9	**Maintenance**	**38**
9.1	Bubble handling	**38**
9.2	Bubble cleaning	**38**
9.3	Bubble replacement	**38**
9.4	Camera reset	**39**
10	**Decommissioning**	**41**
10.1	Transfer	**41**
10.2	Disposal	**41**

1 Safety

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

1.1 About this manual

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.

1.2 Legal information

Copyright
This manual is the intellectual property of Bosch Security Systems, and is protected by copyright. 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.

1.3 Safety precautions

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

Warning!
Medium risk: Indicates a potentially hazardous situation. If not avoided, this may result in minor or moderate injury.

Caution!
Low risk: Indicates a potentially hazardous situation. If not avoided, this may result in property damage or risk of damage to the unit.

Notice!
This symbol indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

1.4 Important safety instructions

- Clean only with a dry cloth. 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.
- 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.

Caution!
Installation must be made by qualified personnel and conform to ANSI/NFPA 70 (the National Electrical Code® (NEC)), Canadian Electrical Code, Part I (also called CE Code or CSA C22.1), and all applicable local codes. Bosch Security Systems accepts no liability for any damages or losses caused by incorrect or improper installation.

All-pole power switch - Incorporate an all-pole power switch, with a contact separation of at least 3 mm / 0.12 in, into the electrical installation of the building. If it is needed to open the housing, use this all-pole switch as the main disconnect device for switching off the voltage to the unit.
Camera signal - Protect the cable with a primary protector if the camera signal is beyond 42.7 meters /140 feet, in accordance with NEC800 (CEC Section 60).
Fuse rating - For security protection of the device, the branch circuit protection must be secured with a maximum fuse rating of 16A. This must be in accordance with NEC800 (CEC Section 60).
Outdoor signals - The installation for outdoor signals, especially regarding clearance from power and lightning conductors and transient protection, must be in accordance with NEC725 and NEC800 (CEC Rule 16-224 and CEC Section 60).
Video loss - 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 information.

1.5 Power connection in applications

24 VAC / 12-26 VDC power source: This unit is intended to operate with a limited power source. The unit is intended to operate at 24 VAC or 12-26 VDC (if PoE is not available). User supplied wiring must be in compliance with electrical codes (Class 2 power levels).
PoE: Use only approved PoE devices. Power-over-Ethernet can be connected at the same time as a 24 VAC or 12-26 VDC power supply. The power supply can work as backup power source in case of PoE power drops.

1.6 Important notices

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 60950-1 . 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 statement (USA)

1. 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.
2. 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.

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.

RF exposure statement (Canada)

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be located or operating in conjunction with any other antenna or transmitter.

Les antennes pour ce transmetteur doivent être installé en considérant une distance de séparation de toute personnes d'au moins 20 cm et ne doivent pas être localisé ou utilisé en conflit avec tout autre antenne ou transmetteur.

Simplified EC DoC (European Union)
Hereby, Bosch declares that the radio equipment type FLEXIDOME IP starlight 8000i is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **www.boschsecurity.com / (Product Catalog) / (Region) / (Country) / (Search for Product No.)**.

KC (South Korea)
Applicant name: Bosch Security Systems B.V.
Product name: FLEXIDOME IP starlight 8000i
Model name: FLEXIDOME IP starlight 8000i
Manufacturer name: Bosch Security Systems B.V.
Country of origin: Portugal
Manufactured year and month: https://www.boschsecurity.com/datecodes/
For KCC compliance, the maximum length of the DC power input cable must be 3 meters (118 inches).

NBTC (Thailand)
This telecommunication equipment conforms to NBTC technical standard or requirement.

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

2 System overview

2.1 Product description

All FLEXIDOME IP starlight 8000i cameras have a unique 3-step concept for simple installation, because with wireless commissioning there is no need to detach the bubble or manually point the camera to the required field of view. Commissioning can also be done remotely, reducing installation time by up to 75%.

The cameras capture images in exceptional detail (up to 4K ultra HD with starlight and high dynamic range), 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.

2.2 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.

2.3 Application variants

This device has 2 application variants:
– FLEXIDOME IP starlight 8000i - SD + WLAN (default).
– FLEXIDOME IP starlight 8000i - DUAL SD.
By default, the device has SD card slot 1 and its wireless function enabled which allows for wireless commissioning via WLAN (IEEE 802.11b/g/n).
Switching to the DUAL SD application variant disables the wireless function to enable the second SD card slot.
When the application variant is switched, the device reboots, but all settings are maintained.

Notice!
SD + WLAN mode
WLAN mode is used for wireless local commissioning with the Project Assistant app only and cannot be used in standard operation.

2.4 Permanently disable WLAN

You can permanently disable the WLAN functionality in the device if required.

Notice!
This permanently disables the WLAN functionality.
You must send the device to a Bosch service center to re-enable the WLAN functionality.

To permanently disable the WLAN functionality, obey the following steps:
1. Navigate to the **Configuration** page.

2. Click **Service**.
3. Click **Licenses**.
4. Locate the **Activation key** field.
5. Enter the following key: 12-01.6B.01-CF47F87B-B082146B-D79F9999-C40ED3E9-0E31AA55
6. Click **Set**.

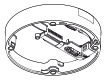
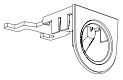
The WLAN functionality is now permanently disabled.

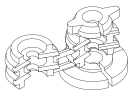
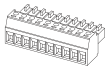
3 Preparing for installation

3.1 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.

3.2 Contents

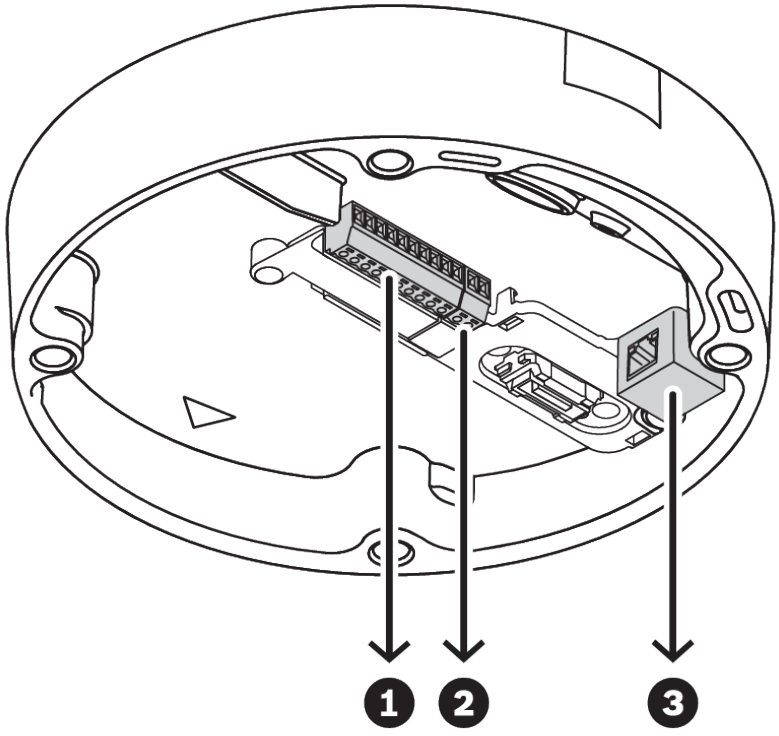
	Quantity	Component
	1	Mounting plate
	1	Camera module
	1	Camera base
	1	Conduit plate
	1	Conduit cover: pre-installed on conduit plate
	2	Conduit plate hole adapters: M25 (3/4 in.) - pre-installed on conduit plate - and M20 (1/2 in.)
	1	Conduit hole adapter rubber: for diameters less than M20 (1/2 in.)
	1	Screw
	1	Washer: for mounting of conduit plate

	Quantity	Component
	2	Grommet (1 spare): for waterproofing network cable
	1	10-pin I/O connector
	1	2-pin 24V AC / 12-26V DC input connector
	1	CAT5e STP network patch cable (50 cm / 19.7 in.)
	1	TR20 bit
	1	Desiccant bag **Note: Do not open the bag before it is necessary to use its content.**
	1	Quick installation guide
	3	Identification label stickers

Make sure that:

- All parts are included and without damage.
- The necessary cables are ready for use (refer to *Wiring, page 12* for more information):
  - Network cable.
  - 24V AC / 12-26V DC (optional)
  - Audio input cables (optional).
  - External inputs (optional).

3.3 Wiring



1	10-pin I/O connector.	2	2-pin 24V AC / 12-26V DC power input connector.
3	RJ45 network connector.		

3.3.1 Network and PoE power

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

– Use STP Category 5e (or higher) cable with RJ45 connectors (the camera network socket is Auto MDIX compliant).
– 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.

3.3.2 24V AC / 12-26V DC power input

Connect a SELV-LPS or a SELV Class 2 power supply with a rated supply voltage of 24V AC or 12-26V DC.

Notice!
When using a 24V AC power supply, do not make a ground connection with one of the 24V AC supply leads. This will damage the camera.

3.3.3 10-pin I/O connector

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

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 input level (not suitable for direct microphone signal); impedance 18 kOhm typical; 1 Vrms maximum input voltage.
2. Output:
   Line output level (not suitable for direct speaker connection); impedance 1.5 kOhm minimum; 0.85 Vrms maximum output voltage.

Use shielded audio connection cable with advised maximum cable lengths for audio line input and output levels.

3.3.4 Grounding

The camera is double-insulated and does not need a safety earth connection, but grounding is recommended for outdoor applications.
Grounding provides improved surge protection (up to 1 kV, 2 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.

4 In-box configuration

In-box configuration of the camera can be done via a wired or wireless connection with the camera still inside the box, by using a mobile device or PC.

1. Connect a network cable with PoE, and wait 1 minute for the camera to power up.
2. A - Connect via wireless with the Project Assistant app by scanning the data matrix on the box label or the QR code on the identification label stickers, and apply the required configurations.
   B - 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 32*.

5 Hardware installation

Caution!

Do not remove the bubble to move the camera lens manually.

The lens system is motorized for easy commissioning. Moving these parts manually will break the gears and damage the camera. In order to move or focus the camera lens, always use the motorized PTRZ controls mentioned in this manual. Removal of the bubble is only allowed for bubble replacement.

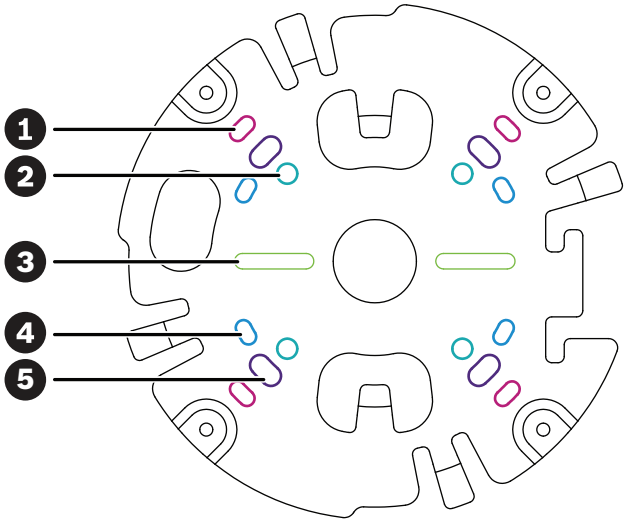
Installation overview

The installation of the camera follows these steps:

1. *Installing the mounting plate, page 17*.
2. *Installing the camera base, page 21*.
3. *Installing the camera module, page 27*.

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	10.2 cm / 4 in. Square junction box	2	Pole mount (NDA-U-PMAL/NDA-U-PMAS)/Corner mount (NDA-U-CMA)
3	Single gang box or universal slot, 45 mm / 1.8 in to 85 mm/3.3 in	4	Double gang box
5	Ceiling/wall mount and pendant interface plate (NDA-8000-PIP(W))		Note**:** Only options 1, 2, and 5 maintain IK10+ rating

Installation options

The camera has two configurations for surface mounting:

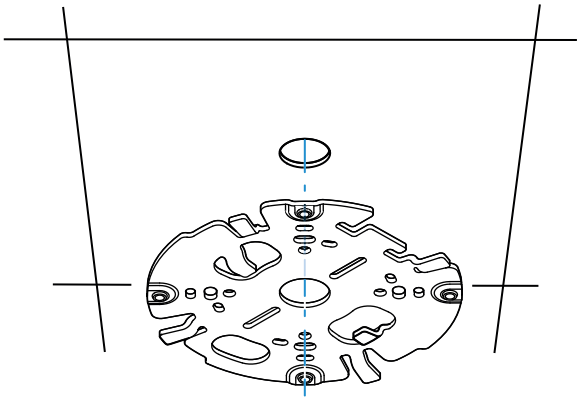
- Refer to *Installing the mounting plate without conduit, page 18*, if the wires are not on the outside of the surface.
- Refer to *Installing the mounting plate with conduit, page 19*, if the wires are on the outside of the surface.

Additionally, the camera can cover various mounting options when combined with the available accessories. See the *Mounting accessories, page 29* chapter for the available accessories.

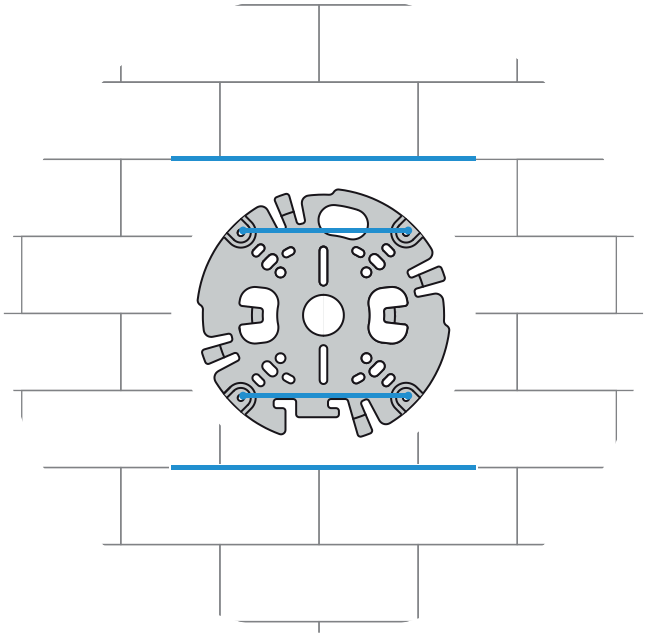
Notice!
The plugs and screws for surface mounting are not supplied with the camera.

5.1.1 Installing the mounting plate without conduit

1. Remove the mounting plate from the box.
2. Position the mounting plate with the center hole on top of the cable exit on the surface, and mark the positions of the screw holes on the surface.



– For a camera mounted on a wall: make sure that the mounting plate is oriented in a 90º angle, with the holes parallel to the floor, to allow for the use of a weather protector if necessary.

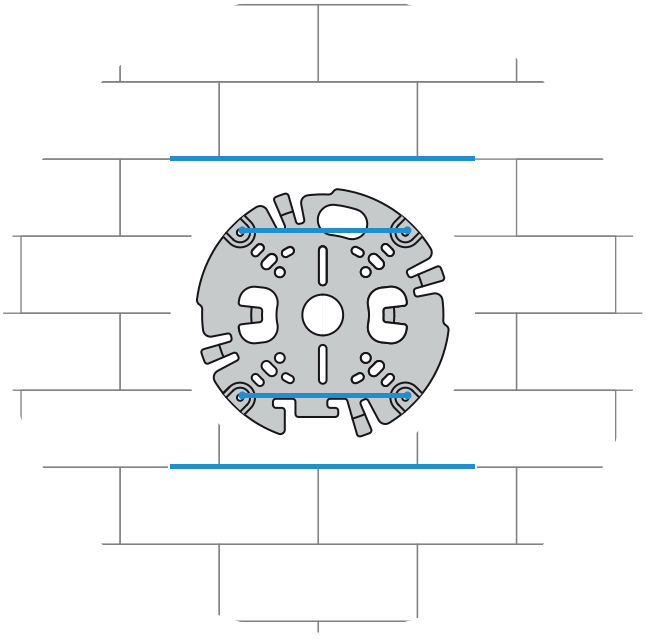


3. Drill the 4 holes with the appropriate diameter drill to support your 5-6 mm (0.2 in.) screws and plugs.
4. Install 4 plugs in the holes.
5. Put the cable through the center hole of the mounting plate.

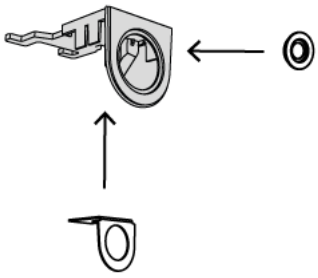
6. Attach the mounting plate to the surface with 4 screws. Tighten the screws between 4 and 7 Nm (3 and 5.2 lbfft).

5.1.2 Installing the mounting plate with conduit

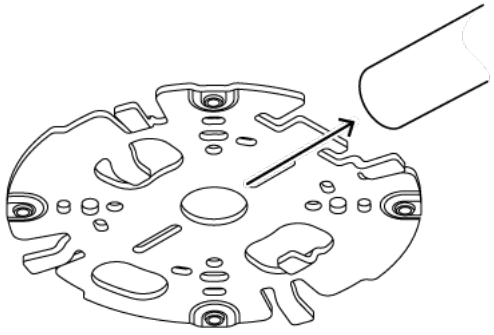
– For a camera mounted on a wall: make sure that the mounting plate is oriented in a 90º angle, with the holes parallel to the floor, to allow for the use of a weather protector if necessary.



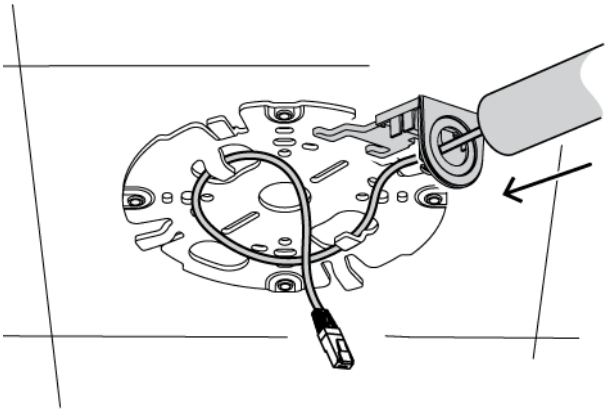
1. Remove the conduit plate from the box.
2. Mark the position of the hole on the surface.
3. Drill the hole with the appropriate diameter drill.
4. Install a plug in the hole.
5. Select the applicable conduit plate adapter and install it on the conduit plate:
   – If the conduit is M25 / ¾ in., use the conduit plate adapter with the larger hole (mounted by default).
   – If the conduit is M20 / ½ in., use the conduit plate adapter with the smaller hole.
   – If the conduit or cable diameter is smaller than M20, use the rubber adapter with the conduit plate adapter with the larger hole. The rubber must be perforated to put the conduit or cable through.



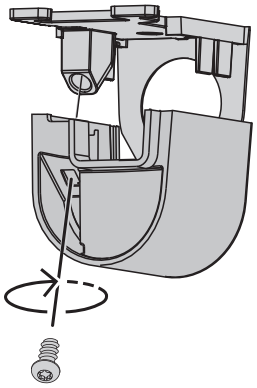
6. Put the cable through the hole of the conduit plate.
7. Attach the conduit plate with the conduit plate adapter to the surface with the washer and a 5-6 mm (0.2 in.) screw. Tighten the screw between 2.5 and 4 Nm (1.8 lbfft and 3 lbfft).
8. Remove the mounting plate from the box.
9. Mark the positions of the holes on the surface. The mounting plate has only one side available for the conduit. Make sure to position it accordingly.



10. Drill the 4 holes with the appropriate diameter drill to support your 5-6 mm (0.2 in.) screws and plugs.
11. Install 4 plugs in the holes.
12. Attach the mounting plate to the surface with 4 screws. Tighten the screws between 4 and 7 Nm (3 and 5.2 lbfft).



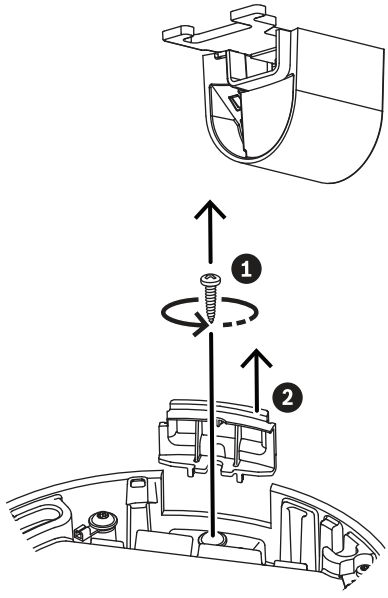
13. Install the conduit cover on the conduit plate with the bolt. Tighten the screw between 1.4 and 2 Nm (1 lbfft and 1.5 lbfft).



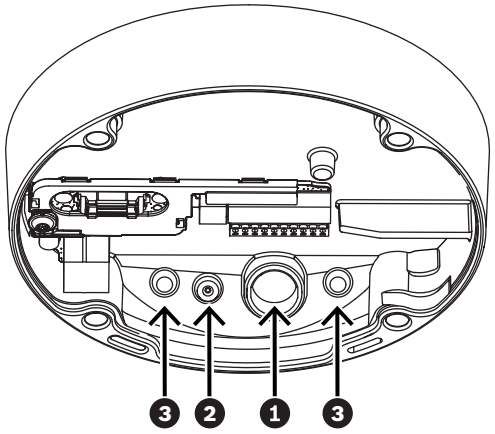
5.2 Installing the camera base

5.2.1 Before the installation

1. With the camera inside the box, remove the tapes from the sides of the camera base.
2. Remove the camera base from the box.
3. If it is not preferred for installation, remove the optional CAT5e patch cable (50 cm / 19.7 in.).
4. If the installation of the mounting plate was done with the conduit, remove the door on the camera base as shown in the image. Keep the screw and lid.



5. If there are auxiliary connections, puncture a hole in the rubber of the secondary cable inlet (2) in the camera base to put them through. The diameter of the whole must be between 5 and 8 mm (0.2 and 0.3 in.).
   The network cable inlet (1) is for the network cable only.

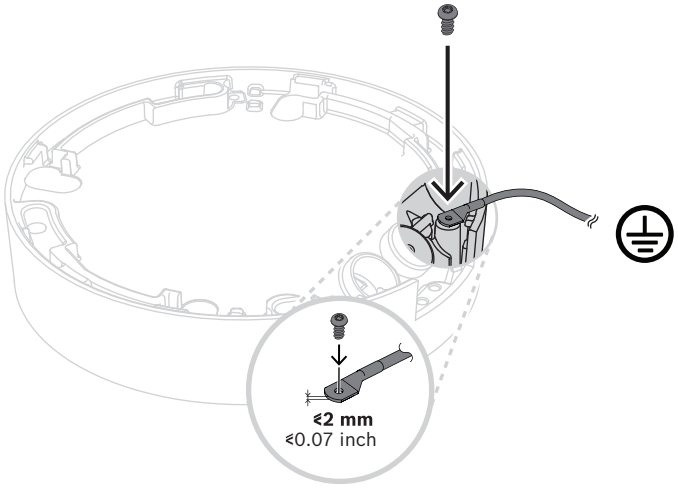


1	Network cable inlet.	2	Secondary cable inlet for additional cabling. It is waterproof if not in use.
3	Protective breathing vents. Do not remove or break the sealing from these holes.		

Grounding

To ground the camera:

1. Remove the screw from the bottom of the camera base.
2. Install the ring terminal on the screw.
3. Hold the camera base and attach the screw with the grounding cable.



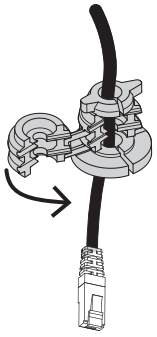
Warning!

Trained electricians only!

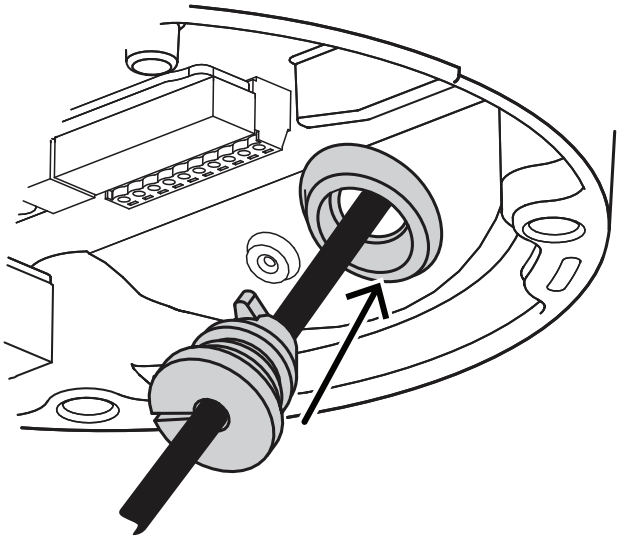
Work at electric appliances must only be carried out by qualified technicians.

5.2.2 Installation steps

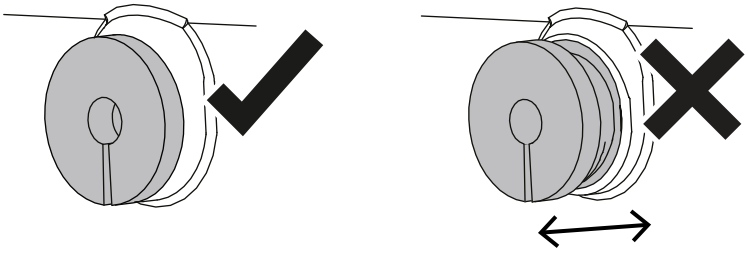
1. Put the network cable through the network cable inlet.
2. If necessary, put all auxiliary connections through the secondary cable inlet.
3. Attach the grommet to the network cable.



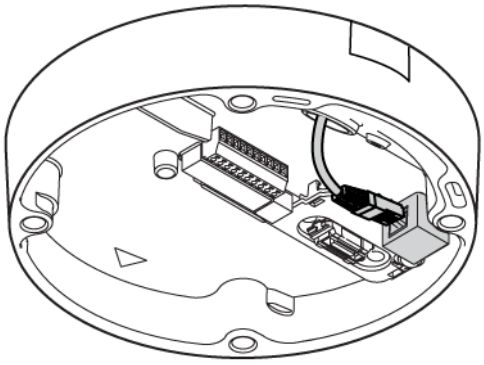
4. Grab the camera base with both hands and push the grommet into the network cable inlet with both thumbs on the opposite sides of the network cable.



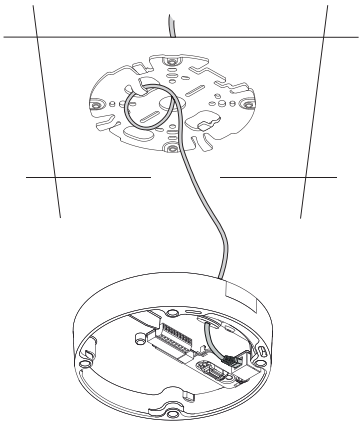
5. Make sure that the grommet is pushed in to its full length.



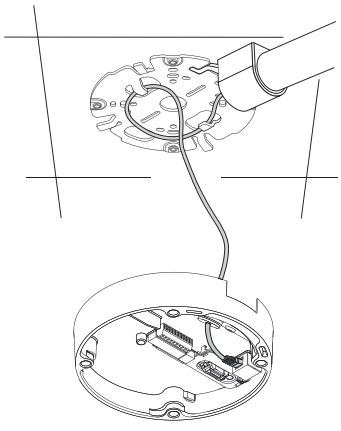
6. Adjust the length of the network cable as necessary.
7. Connect the network cable to the network connector.



8. If required, do a loop with the cable on the hooks of the mounting plate.

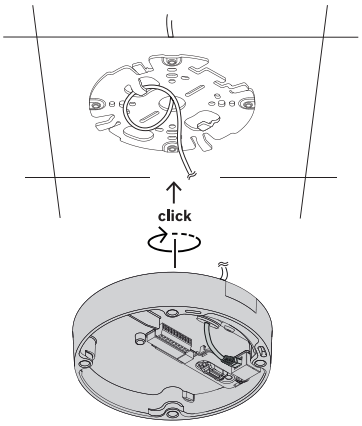


Without conduit

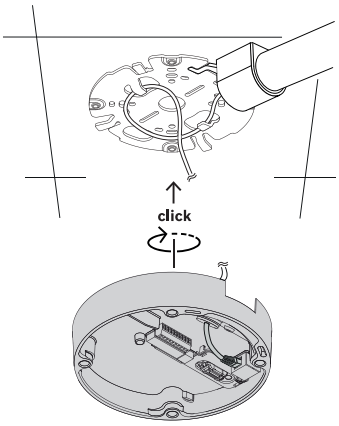


With conduit

9. Push the camera base against the mounting plate and turn the camera base in the clockwise direction until you hear/feel a click. Make sure that the camera base is secured.



Without conduit

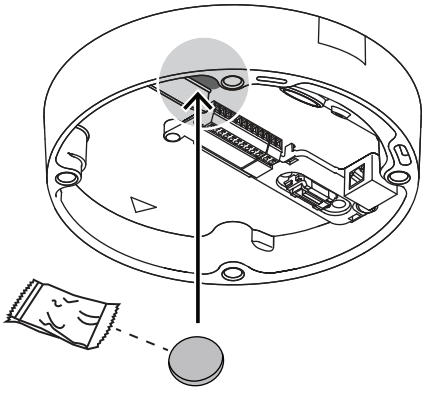


With conduit

10. If necessary, connect the auxiliary wires to the terminals supplied (refer to *Wiring, page 12*).
11. Connect the terminals to their related connectors.

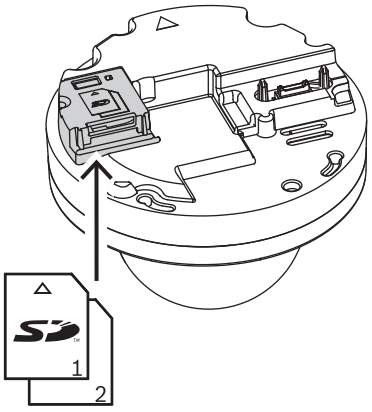
Moisture protection

1. Remove the desiccant tablet from the bag.
   After removing the desiccant tablet from the bag, installation must be completed in less than 10 minutes.
2. Attach the desiccant tablet with the adhesive side facing the camera base. Make sure not to cover the vents with the desiccant.

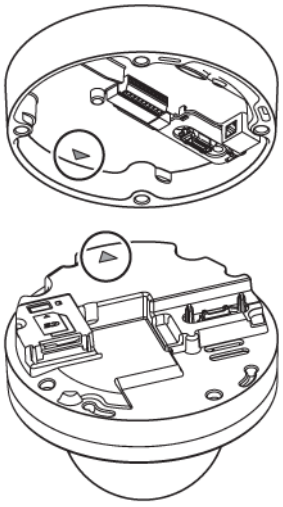


5.3 Installing the camera module

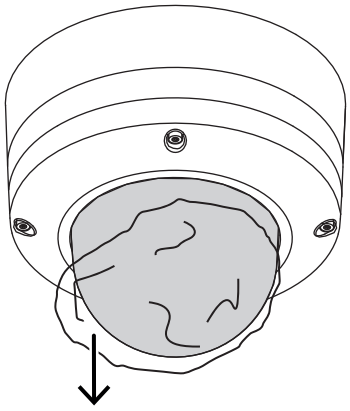
1. Remove the camera module from the box.
   – If necessary, install the SD card in SD slot 1.
   – Press the SD card firmly until it latches into place in the slot.



   – To remove the card, press it into the slot until it unlatches again.
   – If more than one SD card is necessary, install the other SD card in SD slot 2.
2. Attach the camera module to the camera base and tighten the four screws between 2.5 to 4 Nm (1.8 and 3 lbfft). Make sure that the arrow on the camera module points in the same direction as the red arrow on the camera base.



3. Remove the protective cover from the bubble.



4. Make sure that all necessary wiring is done, and that energy is being supplied.

Notice!
Use full size SD cards for maximum reliability, and to eliminate the risk of bad connections in a microSD to full size SD adapter. Bosch recommends the use of industrial SD cards with health monitoring.

5.4 LED status

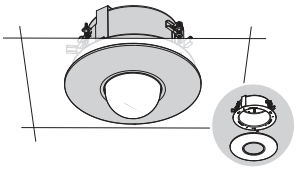
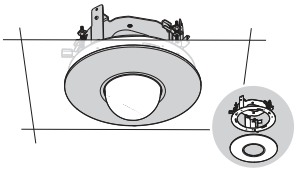
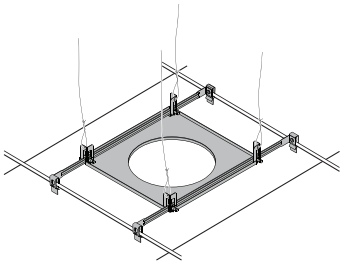
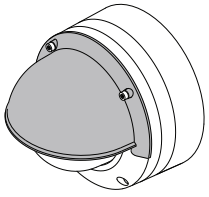
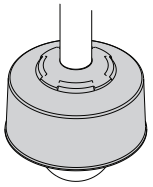
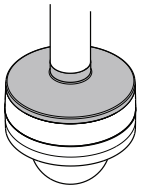
A status LED can be seen in the camera bubble on the opposite side of the camera lens. Refer to the table below for the different status LED functions.

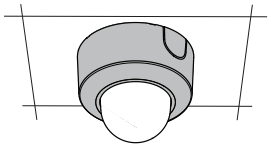
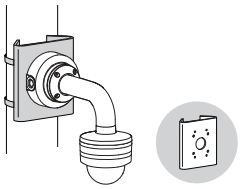
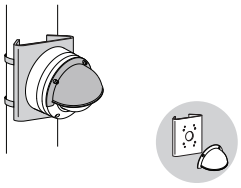
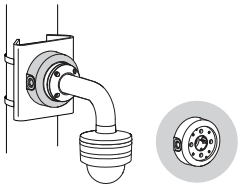
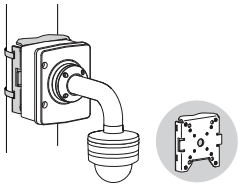
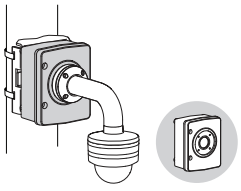
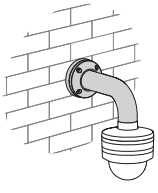
Status LED	Meaning
Solid red	Booting
Flashing red	Resetting
Solid green	Working, but stream is not being watched or recorded
Flashing green	Stream is being watched and/or recorded

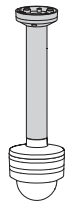
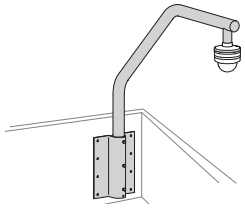
Disable the status LED in the camera settings, if necessary.

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

5.5 Mounting accessories

NDA-8000-PLEN	Plenum-rated in-ceiling mount kit for FLEXIDOME IP 8000i.	
NDA-8000-IC	In-ceiling mount kit.	
NDA-8000-SP	Optional soft ceiling support for in-ceiling mount kit.	
NDA-8000-WP	On-camera weather protector for FLEXIDOME IP 8000i.	
NDA-8000-PIPW	Pendant interface plate including weather protector, outdoor.	
NDA-8000-PIP	Pendant interface plate for FLEXIDOME IP 8000i, indoor.	

NDA-8000-PC	Paintable cover (4 pieces) for FLEXIDOME IP 8000i.	
NDA-U-PMAS	Universal pole mount adapter, white; small.	 
NDA-U-PSMB	Surface mount box (SMB) for wall mount or pipe mount.	
NDA-U-PMAL	Universal pole mount adapter, white; large.	
NDA-U-PAx	Surveillance cabinet	
NDA-U-WMT	Universal wall mount for dome cameras, white.	

NDA-U-PMT	Universal pipe mount for dome cameras, 31 cm, white.	
NDA-U-RMT	Universal roof mount for dome cameras, white.	

6 Commissioning

With the FLEXIDOME IP starlight 8000i remote commissioning functionality, only a PC or a mobile device is needed to pan, tilt, roll, and zoom (PTRZ), and point the camera to the required field of view - without ever having to remove the camera from the box.
Do the commissioning locally at the camera via WLAN using the Project Assistant app, available for iOS, Windows or Android, or by connecting remotely to the camera via the network using the Project Assistant app, 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.

If required, re-commissioning can be done at any time via WLAN, if not disabled, or via the network.

Notice!
The remote commissioning functionality (PTRZ) of the FLEXIDOME IP starlight 8000i and the WLAN mode of the camera are designed as installation aid for first set-up or adjustments at a later moment in time.

Notice!
Remote commissioning can be done down to temperatures of -40º C / 104º F.

7 Connection via the web browser

This device can be accessed via a web browser to configure, control, receive live images, and replay stored video.
For best experience, use Microsoft Internet Explorer browser with the Bosch MPEG-ActiveX plugin. This enables these functions:
– Native Bosch video decoder.
– Video analytics overlays.
– Video analytics configuration.
– Live Page: snapshot and record to PC.
– Status icon overlays.

Optionally, these tools can be used to configure the device:
– Project Assistant app: user friendly software to change basic device configurations and set fields of view. Available in iOS, Android, and Windows.
– Configuration Manager: advanced configuration software available for Windows. Download the software from https://downloadstore.boschsecurity.com.

7.1 System requirements

The system recommendations are:
– Computer with Intel Skylake processor or better.
– Intel HD530 graphic card with performance that matches or is better than the resolution of the device.
– Windows 7 (or later) operating system.
– Network access.
– Internet Explorer version 11 or later

  - or -

  Application software: Video Security Client, Bosch Video Client, Bosch Video Management System or Project Assistant app.

7.2 Establishing the connection

The device must have a valid IP address to operate on the network and a compatible subnet mask.
By default, DHCP is pre-set at the factory **On plus Link-Local** so a DHCP server assigns an IP address or, if no DHCP server is available, a link local address (auto-IP) is assigned within the range 169.254.1.0 to 169.254.254.255.
The IP Helper, Project Assistant app or Configuration Manager 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.

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.
	Cabling between camera base and camera module doesn't allow proper closing.	Re-install camera and make sure that housing closes smoothly.
PTRZ does not work.	Cables are not correctly connected.	Separate camera module from camera base and make sure that all cables are properly connected.
	Motors have been used for long and have overheated.	Pause any lens movement until motors have cooled down.
	Camera parts are out of place or broken due to transportation.	Please contact your supplier or system integrator, or go directly to Bosch Security Systems customer service.
PTRZ does not work correctly.	Camera has lost calibration during transportation.	Reset the PTR in the user interface to reset the pan, tilt and roll motors. Reset the lens in the user interface to reset the focus and zoom of the lens. If that does not work, please contact your supplier or system integrator, or go directly to Bosch Security Systems customer service.
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.
Moisture/condensation inside the bubble, camera leaking.	Housing is not closed properly.	Re-install camera and check for proper closure.
	Closing seals are damaged.	Please contact your supplier or system integrator, or go directly to Bosch Security Systems customer service.
	Rubber grommet not placed correctly.	Re-install rubber grommet.
	Cable diameter or shape is not as specified.	Re-install camera with proper cabling.
	Air vents are blocked due to dirt/water.	Gently clean air vents.
	Air vents are damaged or loose.	Please contact your supplier or system integrator, or go directly to Bosch Security Systems customer service.
	Camera has been off for an extensive period of time.	Turn camera on and leave it on until condensation clears.
No audio transmission to remote station.	Hardware fault.	Check that all connected audio units are operating correctly.
	Faulty cable connections.	Check all cables, plugs, contacts and connections.
	Incorrect configuration.	Check audio parameters on the **Audio** configuration and **LIVE** page functions pages.
	The audio voice connection is already in use by another receiver.	Wait until the connection is free and then call the sender again.
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.
	Incorrect firmware file.	Enter the IP address of the unit followed by /main.htm in your Web browser and repeat the upload.

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.

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

There are different types of bubbles available to choose from. All bubbles require special care when handling and cleaning to avoid scratches.

9.1 Bubble handling

The bubble may be packaged with a protective plastic sheet. It is recommended that the bubble remain stored this way until it is ready to install. Limit handling the bubble, as any scratches can quickly affect visibility.

9.2 Bubble cleaning

If cleaning the bubble is required, use the following procedures and comply with all the warnings listed below.

Cleaning the bubble interior

The extremely soft interior surface should not be cleaned by rubbing or dusting with a cloth. Use clean dry compressed air, preferably from a spray can, to remove any dust from the interior surface.

Warning!

Do not use alcohol-based solutions to clean the bubble. This will cause it to cloud and over time cause stress aging, which makes the bubble brittle.

Cleaning the bubble exterior

The exterior of the bubble is hard coated for extra protection. If cleaning becomes necessary, only use cleaning solutions and cloths suitable for cleaning safety glass lenses. Dry the bubble thoroughly with a dry nonabrasive cloth to prevent water spots. Never scrub the bubble with any abrasive material or cleaners.

Cautions

- Do not clean bubbles in the hot sun or on very hot days.
- Do not use abrasive or highly alkaline cleaners on the bubble.
- Do not scrape the bubble with razor blades or other sharp instruments.
- Do not use Benzene, Gasoline, Acetone, or Carbon Tetrachloride on the bubble.

9.3 Bubble replacement

Notice!

Yellowing of bubble

Bubble may become yellow overtime due to exposure to UV radiation like direct or indirect sunlight.

In case the bubble gets damaged or yellow, it can be replaced by a clear bubble (NDA-8000-CBL) or a tinted bubble (NDA-8000-TBL).

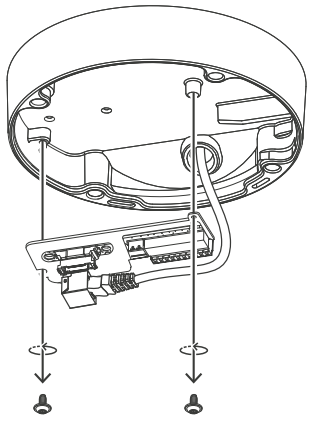
Clear bubbles offer maximum sensitivity by allowing as much light through as possible. Tinted bubbles offer covertness by making it difficult to see from the outside the direction the camera is facing.

For instructions on how to replace the bubble, refer to the respective Quick Installation Guide.

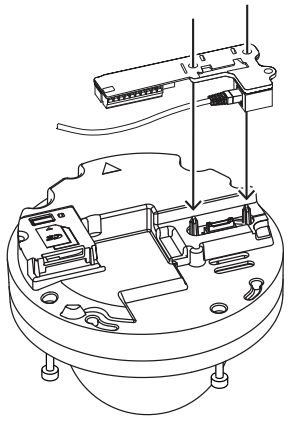
9.4 Camera reset

To reset the camera to factory settings:

1. Remove the camera module from the camera base.
2. Unscrew and remove the connection PCB from the camera base.



3. Attach the connection PCB to the camera module.



4. Connect a network cable with PoE or a 24V AC / 12-26V DC cable to power the camera module.
5. Press tightly and hold the reset button on top of the SD card slot for 15 seconds. The LED light by the reset button flashes in red.
6. Release the reset button.

7. Wait 60 seconds for the LED light to turn off and for the reset to be complete.
8. Remove the connection PCB from the camera module.
9. Disconnect the network or power cable from the camera module.
10. Re-install the connection PCB in the camera base.
11. Re-attach the camera module onto the camera base.

10 Decommissioning

10.1 Transfer

The unit should only be passed on together with this installation guide.

10.2 Disposal

	Disposal - Your Bosch product was developed and manufactured with high-quality material and components that can be recycled and reused. This symbol means that electronic and electrical appliances, which have reached the end of their working life, must be collected and disposed of separately from household waste material. Separate collecting systems are usually in place for disused electronic and electrical products. Please dispose of these units at an environmentally compatible recycling facility, per European Directive 2012/19/EU.

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