



BOSCH

FLEXIDOME corner 7100i IR

NCE-7703-FK | NCE-7703-FK-GOV

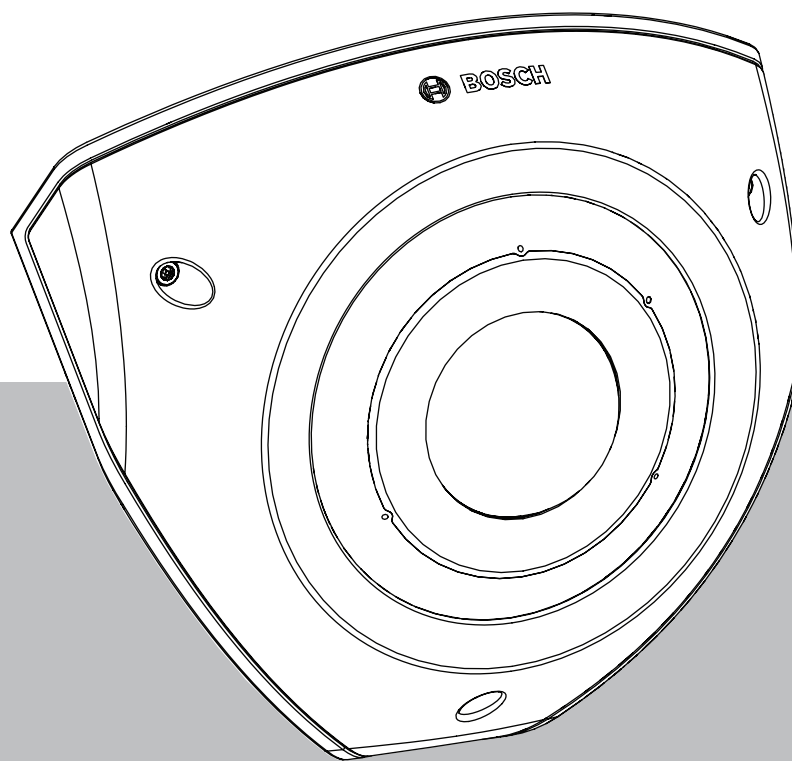


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1 Safety and security information

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

1.1 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.

1.2 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.
- 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.
- Use STP Category 5e (or higher) cable with RJ45 connectors.
- When using a Class I adapter with your product, the power cord shall be connected to a socket-outlet with a connection to ground.
- The Low Voltage power supply unit used must comply with EN 62368-1.
- For PoE connections, the adapter shall be rated 48 VDC, 0.30 A minimum and a temperature specification up-to and including 50°C / 122°F
- For AC/DC connections, the adapter shall have the following requirements:
 - the adapter shall be rated 12 VDC, 1.12 A minimum; or
 - the adapter shall be rated 24 VAC, 50/60 Hz, 0.80 A minimum
 - the adapter specification shall cover temperatures up-to and including 50°C / 122°F
- Your product shall only be connected to PoE networks without routing to the outside plant.
- When your product is powered by a power adapter, the adapter shall be powered by a Listed Power Adapter, or DC power source, marked **L.P.S.** - Limited Power Source.
- To install the terminal block, the following is required:
 - Wiring should be installed and connected by certified professionals.
 - Usage of the appropriate wire for terminal block: AWG 24~20, Cu type wire, FW2
 - To install the wire to the terminal block: Insert and clamp.

1.3

Notices

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 62368-1, UL 60950-22. 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 A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC suppliers Declaration of Conformity

FLEXIDOME corner 7100i IR: NCE-7703-FK, NCE-7703-FK-GOV

Responsible party

Bosch Security Systems, LLC
 130 Perinton Parkway
 14450 Fairport, NY, USA
www.boschsecurity.us

RoHS information

Hazardous substance table according to SJ/T 11364-2014						
Product: network camera						
Part	Harmful substance					
	Pb (Pb)	Hg (Hg)	Cd (Cd)	Cr 6+ (Cr(VI))	PBB (PBB)	PBDE (PBDE)
Case	O	O	O	O	O	O
Printed circuit board and its electronic components	O	O	O	O	O	O
Lens module	O	O	O	O	O	O
Mechanical parts: Metal	O	O	O	O	O	O

Hazardous substance table according to SJ/T 11364-2014						
Mechanical parts: Non-metal	O	O	O	O	O	O
Internal wire/connector	O	O	O	O	O	O
Packaging accessories: Metal	O	O	O	O	O	O
Packaging accessories: Non-metal	O	O	O	O	O	O

This form is compiled in accordance with SJ/T 11364.
 O: Indicates that the content of the hazardous substance in all homogeneous materials of the part is below the limit requirement specified in GB/T 26572.
 X: Indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement of GB/T 26572. But all parts comply with EU RoHS requirements.

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.

Use latest software

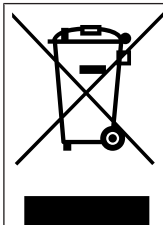
Before operating the device for the first time, make sure that you install the latest applicable release of your software version. For consistent functionality, compatibility, performance, and security, regularly update the software throughout the operational life of the device. Follow the instructions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

2.1 Product description

The FLEXIDOME corner 7100i IR is a discreet and vandal-resistant corner mount camera, featuring an anti-ligature (no-grip) design. The device provides a detailed and complete overview of any room with no blind spots, and the smart invisible IR keeps image quality consistent even in complete darkness or low lighting conditions

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

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.

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 Parts included

Quantity	Component
1	FLEXIDOME corner 7100i IR camera
1	Corner mount box
1	Face plate
1	IR cover
1	TR20 Allen key for camera installation
1	RJ-45 punch-through aid
2	M20 rubber grommets (attached to the camera)
3	MAC address labels
1	Quick Installation Guide
1	Safety and security information manual

3.3 Preparation

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

Pre-requisites

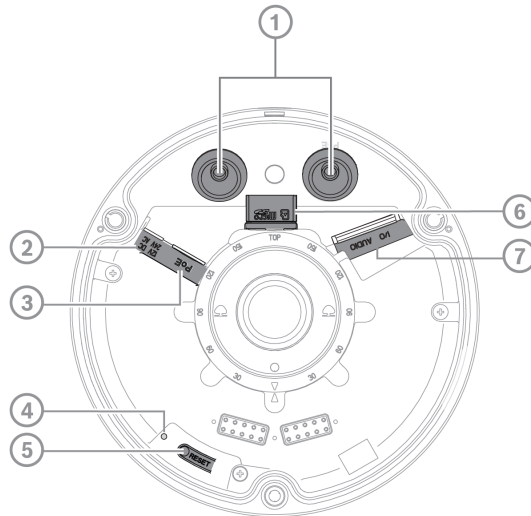
- The components are removed from the box. Make sure that all parts are included and are not damaged.
- The PoE cable is installed. Determine appropriate cable length based on distance to local connection point. Avoid excessively long cables.
- The necessary material and equipment:
 - To guarantee the IK10+ standard, 6 screws M4 and 6 mounting plugs M4 are necessary. For installation with conduit box, 10 screws M4 and 8 mounting plugs M4 are necessary.
 - Appropriate size power drill.
 - Screwdriver and bit holder for TR20 bit.
 - Micro SD card (optional)

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

3.4 In-box configuration

Without the need to fully unpack the camera from its packaging, the camera can already be pre-configured in the box. It provides direct access to an RJ45 connector right from the box. This allows for easy pre-configuration of settings and FW upgrades off site. This feature enhances the efficiency and ease of setup.

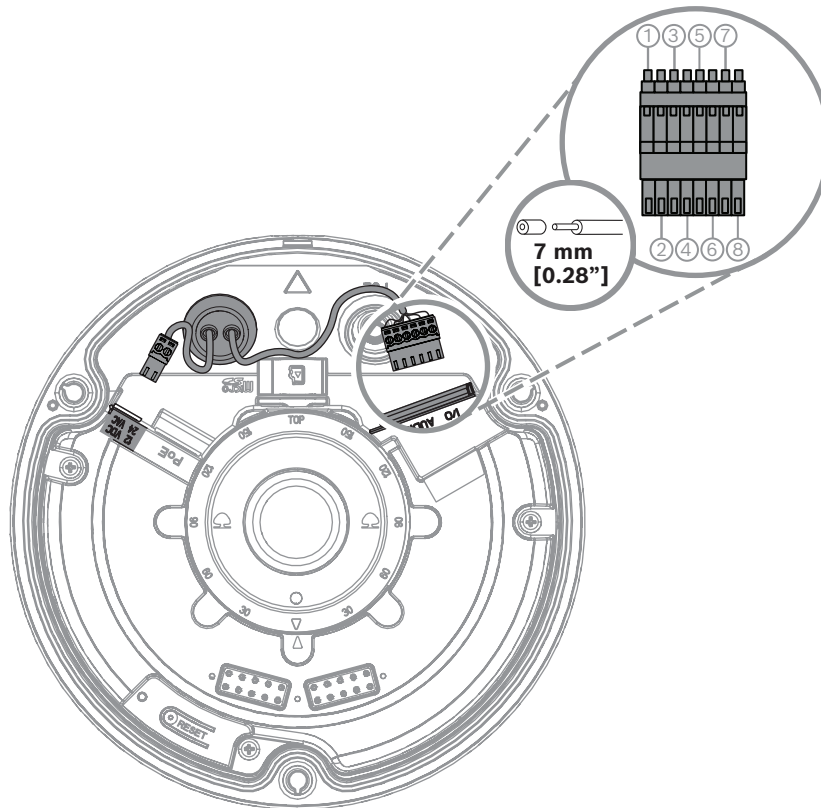
4 Installation



1	M20 Grommets	2	Power input
3	RJ45 connector	4	Activity LED interior
5	Reset button	6	MicroSD card slot
7	Alarm and Audio		

Note: 2-pin I/O connector is for DC12V or AC24V input terminal.
8-pin I/O connector is for alarm in/out, audio line in/out purpose

I/O Connector



Pin	Connection
1	ALARM OUT
2	ALARM OUT
3	ALARM IN
4	GND
5	AUDIO IN
6	GND
7	GND
8	AUDIO OUT

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!

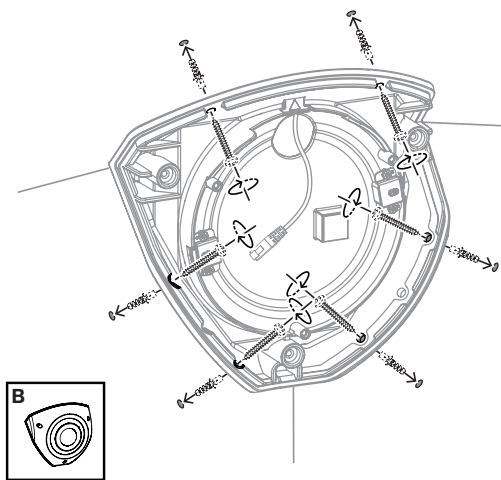
Use proper surge protection on cables that are routed outdoors, or close to large inductive loads or electrical mains supply cables.

4.1 Installing the Back Cover Plate

Note: Make sure the back cover plate fits the desired corner.

1. Use the back cover plate as template to mark and drill screw holes on the wall;
2. Pull the RJ-45 cable through;
3. Tighten the screws.

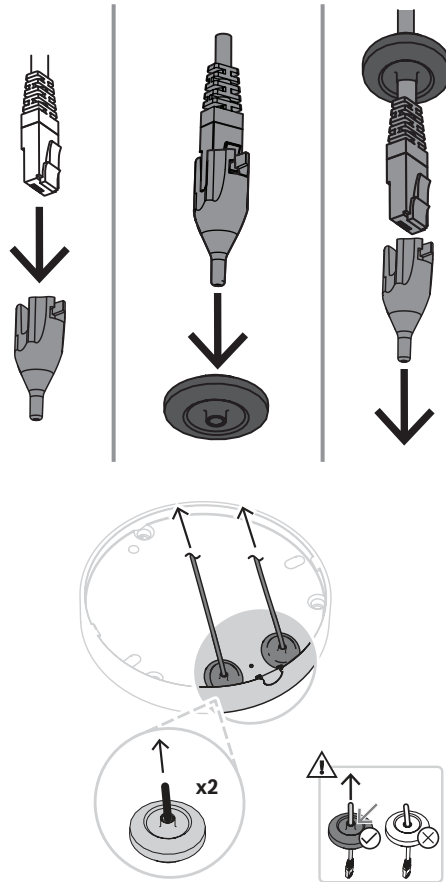
Note: Bosch recommends wall screws with a diameter of 4 mm (0.16 in.) and a length of ≥ 30 mm (1.18 in.).



4.2 Installing the Cable Grommets

1. Remove the protrusion;
2. Use a RJ-45 punch-through aid to pull the Ethernet cable through;
3. Insert the RJ-45 punch-through onto the Ethernet cable;
4. Pull the Ethernet cable through the grommet.

Note: To prevent water or dust ingress, install the two cable grommets supplied with the camera.



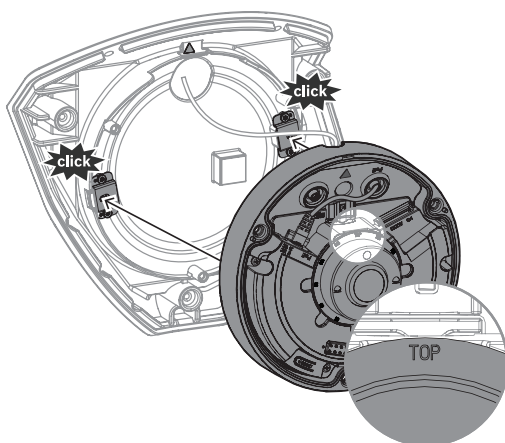
Notice!

To ensure proper watertight installation, the cable entry marked with PoE needs to be used for RJ45/PoE cable.

4.3 Installing the Camera Module

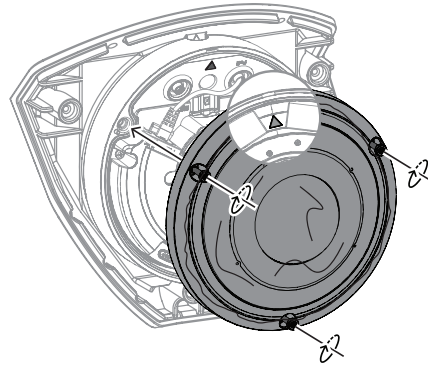
1. Put the appropriate cables for power, video, alarms, and audio through one of the access holes;
2. Pull back the cables until no excess is left;
3. Put the camera cover on the camera base in the right orientation.
4. Slightly press the camera base onto the mounting plate until you hear/feel a click.
5. Make sure that the camera base is secured.
6. Confirm that the lens module marking “TOP” is facing up. If not, turn the lens module in the correct orientation to ensure the images shows up correctly in the system or browser.

Note: Red arrows are printed on both parts to indicate the right orientation

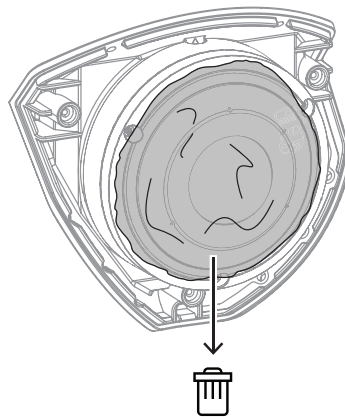


4.4 Installing the IR Cover and Front Face Plate

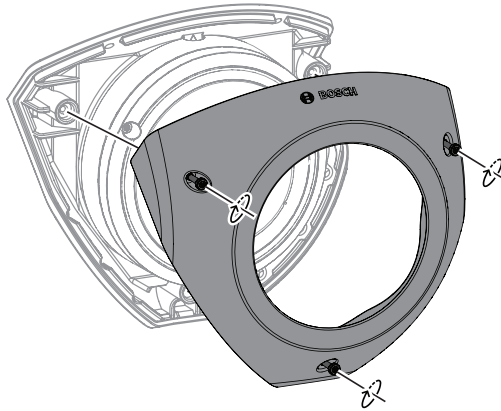
1. Align the IR connectors and red triangles;
2. Place the IR cover on the camera module;
3. Tighten the screws in the camera cover using the supplied TR20 allen key



4. Remove the protective foil from the IR cover;



5. Align the face plate with the Bosch logo on top;
6. Tighten the screws.



For video instructions scan the QR code below:



4.5

LED Status

A status LED can be seen in the camera top, above 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 **Disabled** in **Camera LED**.

5 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.

5.1 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.

5.2 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.

5.3 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.

6 Troubleshooting

6.1 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.	Check power supply. Check if PoE, 12 V or 24 V auxiliary input is used.
	Faulty cable connections.	Check 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.
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. Only use CPP14 firmware files.
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.

6.2 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.

6.3

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.

7 Maintenance

7.1 Cleaning

Lens cleaning

It is important to keep the lens clean to ensure optimum performance. Dust, grease, or fingerprints should be removed from the lens surface. When cleaning the lens, take extra care not to damage the special coating used to reduce light reflections.

- Remove dust with a blower-brush or grease-free soft brush.
- Wipe water drops off the lens with a clean soft lint-free cloth and dry the lens surface.
- Use special lens cleaning paper or cloth treated with lens cleaning fluid to gently wipe off any remaining dirt (wipe spirally from the lens center towards the edge).

7.2 Repair

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

7.3 Reset

To restore the unit of its original settings, push the reset button for 10 seconds. Any changes to the settings are overwritten by the factory defaults. A reset may be necessary, for example, if the unit has invalid settings that prevent it from functioning as desired.

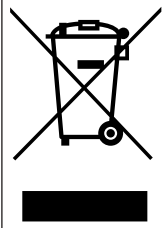
8 Decommissioning

8.1 Transfer

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

8.2 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.

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