Display Panel

BAT 100 LSN

BOSCH

en Operation Guide

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1 Safety

Warning!
Electrostatic discharge
The standard precautions for CMOS technology must be taken when handling PC boards.

- The fire panel may only be installed and commissioned by trained specialist personnel.
- Only use installation materials recommended by BOSCH Sicherheitssysteme. Otherwise, interference resistance cannot be guaranteed.
- Connection conditions set down by the regional authorities and institutions (police, fire service) must be observed.
- Fire panels may only be installed in dry, clean interior rooms.
- The following environmental conditions must be noted:
- Permissible ambient temperature: - 5 °C to + 50 °C
- Permissible relative humidity: max. 95 %, non-condensing
- Do not operate devices showing condensation.
- Display elements should be positioned at eye level.

2 Short information

The BAT 100 LSN Display Panel handles the display of faults and/or alarms for detectors or detector zones.
Up to three ATG 420 LSNi can be installed in the BAT 100 LSN housing. An ATG 420 LSNi has 32 indicator points supporting three colors (red, green, yellow) and three states (off, continuously on, flashing). Each indicator point can be controlled individually, which allows to display status information in a flexible and intuitive way. Labeling strips allow easy naming of indicator points using a printer.
The panel has a buzzer and a reset button for the buzzer. If there is no alarm, the reset button can be used to test the indicator points.
The ATG 420 LSNi has integrated isolators for maintaining the function of the elements on the LSN loop in the event of wire interruptions or short-circuits.

3 System overview

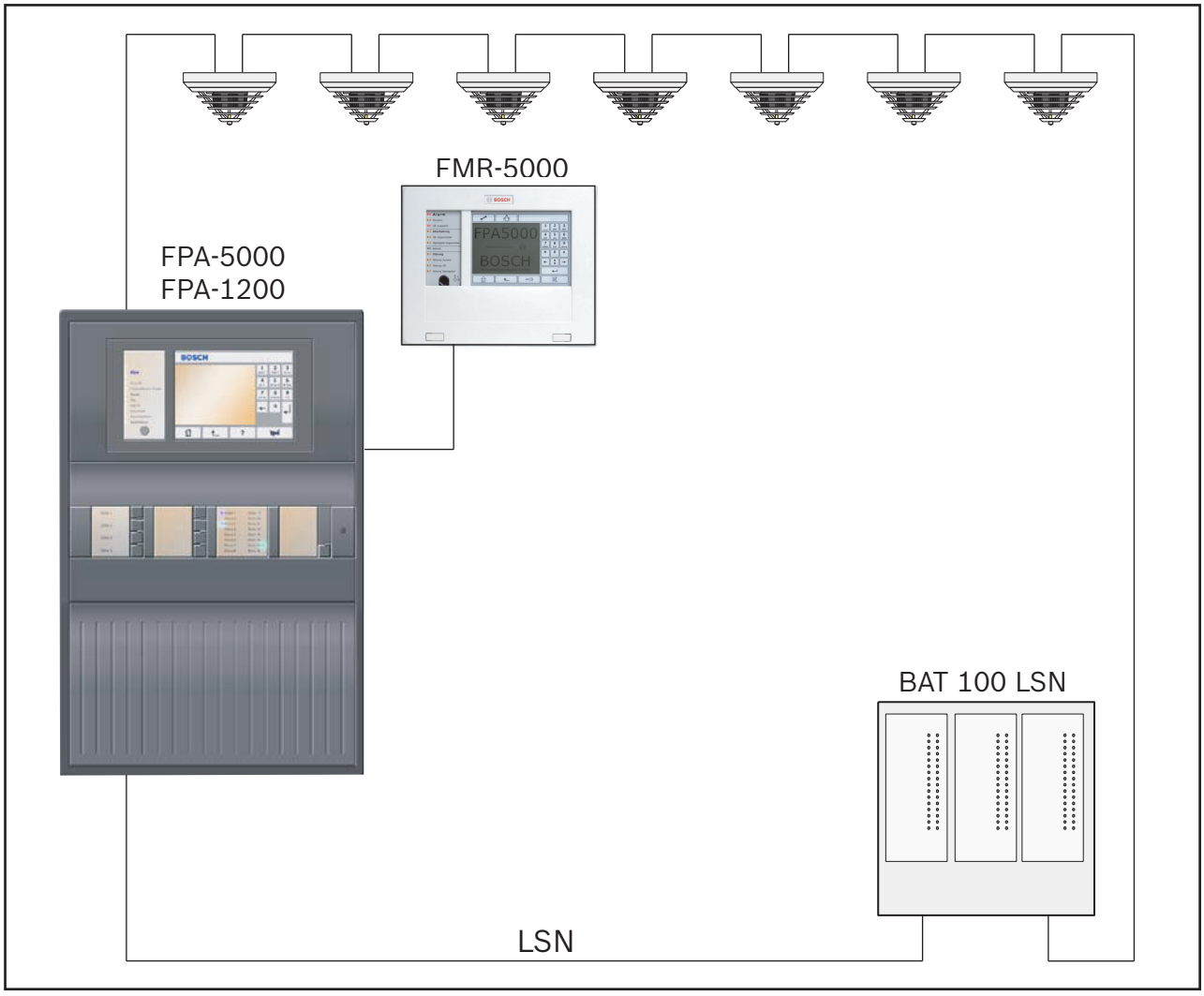


Figure 3.1: LSN loop with BAT 100 LSN

The BAT 100 LSN display panel can be integrated in an LSN loop or stub at any position.

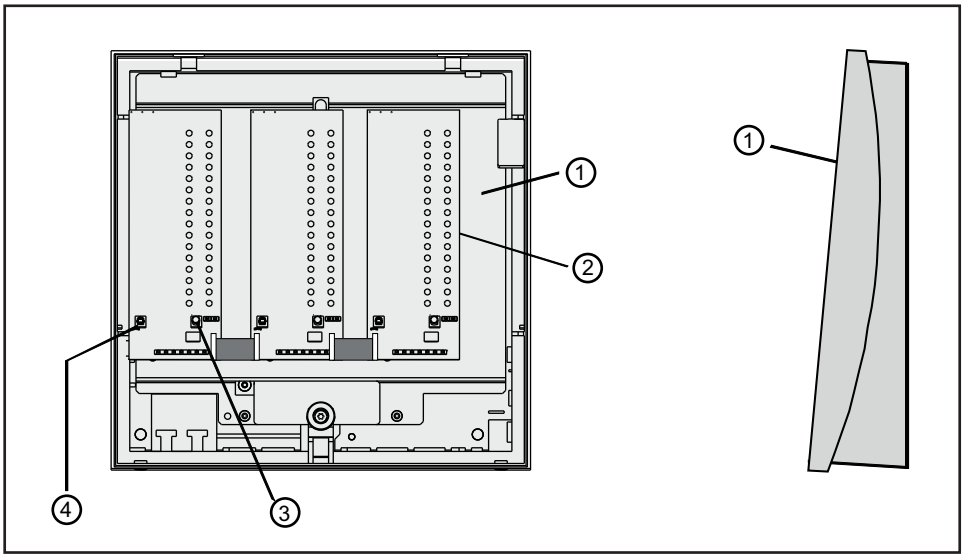


Figure 3.2: BAT 100 LSN overview

Position	Description
1	Housing base
2	ATG with 32 LEDs
3	Button for “LED display test” or “Buzzer OFF”
4	Tamper contact

4 Installation

Installation space and cable routing

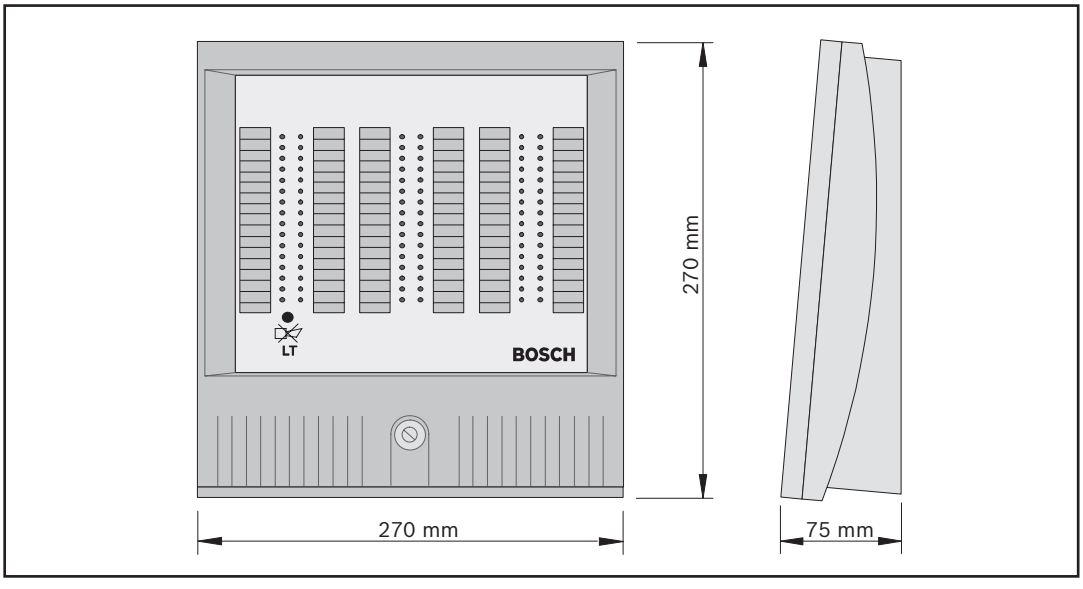


Figure 4.1: Required space

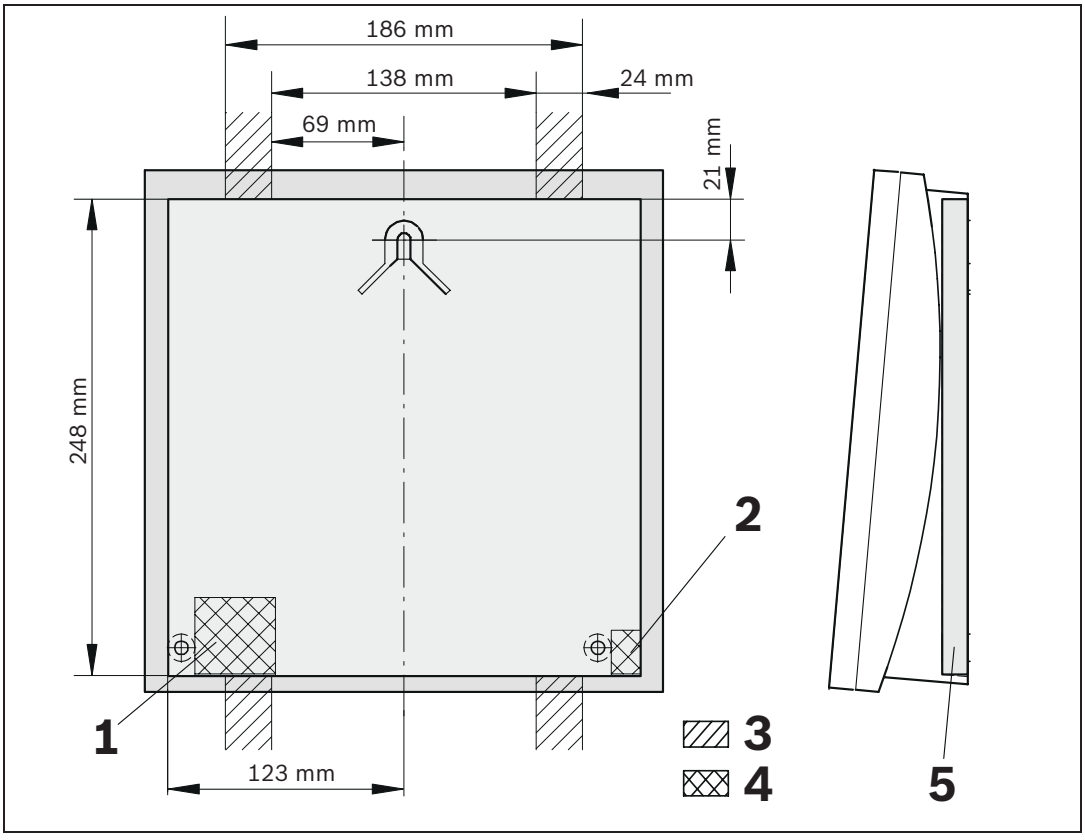


Figure 4.2: Cable routing

Position	Description	Position	Description
1	Cable entry for data transfer lines	4	Cable entry into the equipment
2	Cable entry for NYM 3x1.5	5	Free space with a depth of 14.5 mm, for cable entry
3	Exposed cable routing		

Installation Process

1. Mark anchor holes according to the drilling jig. The upper edge of the drilling jig should be approx. 170 cm above the floor.
2. Drill anchor holes (diameter 8 mm, min. 50 mm deep) and insert anchors (S8).
3. Turn in the upper screw (6x50 half-round) to the indicated depth. Keep a distance of 4 mm from the wall.
4. Loosen housing screws, and remove housing cap (see *Figure 4.3*):
   - Turn cap in the lower area approx. 1 cm forwards (1).
   - Lift cap a bit upwards (2).
   - Pull cap off forwards (3).

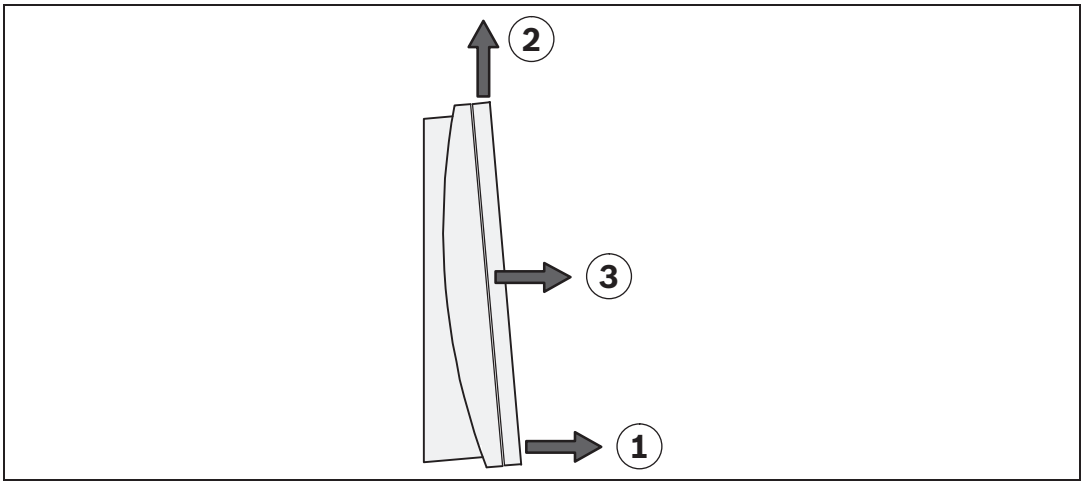


Figure 4.3: Removing the housing cap

5. Insert cable from behind into the lower part of the housing (see *Figure 4.4* (4)). Hang lower part of the housing on the upper screw and align (5). Turn in the two lower screws (6) and tighten the top screw.
6. Attach the ATG to the spacers of the BAT 100 LSN (always attach from left to right) next to the preassembled ATG. *Figure 4.4* shows the spacers for the first ATG (7).

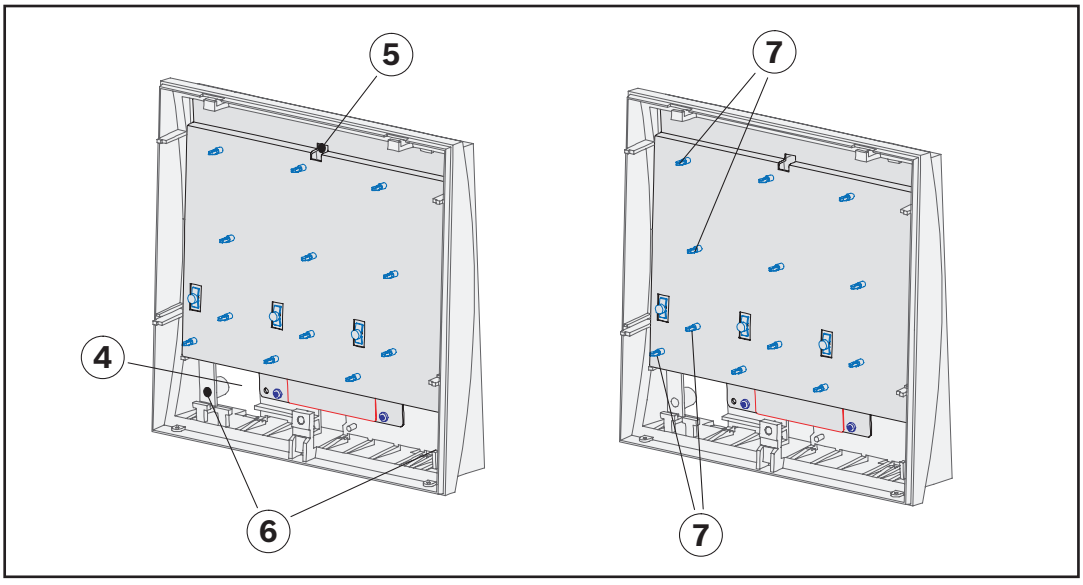


Figure 4.4: Mounting the BAT 100 LSN housing and attaching the ATG

7. Take off the grounding cable (9) from the rear of the housing cap.

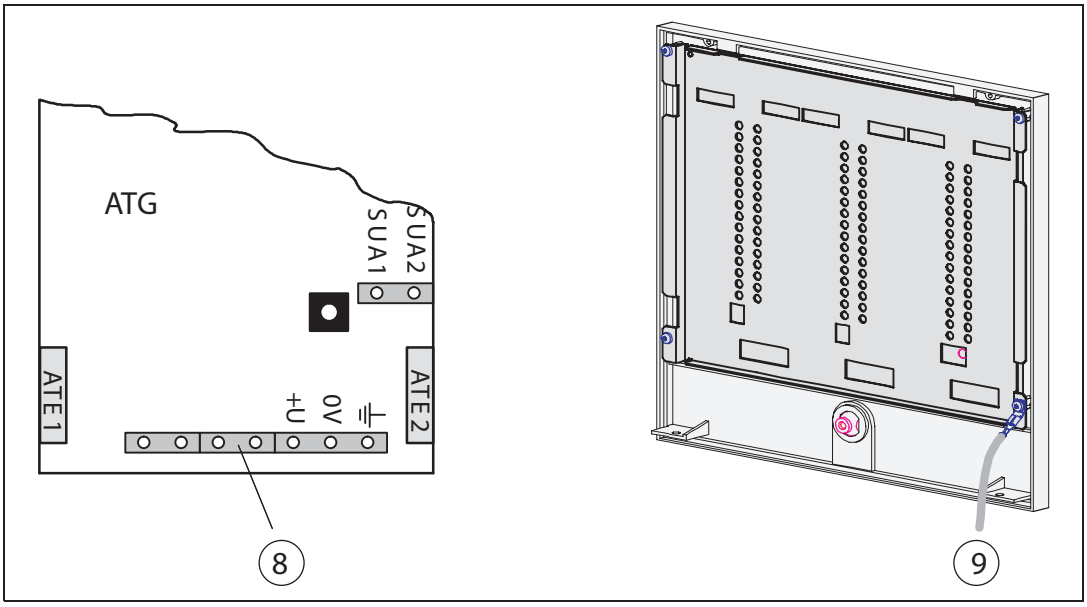


Figure 4.5: Grounding cable

8. Strip data cable and leave sufficient slack in the cable to attach to the fastening bars.
9. Insert wires into screw terminal blocks and attach to pins (8) according to Section 5 Connection.
   Figure 4.6 (11) shows the fastening bars for cable ties. If there is more than one ATG 420 make also the connections for SUA1 and SUA2 connectors according to Section 5 Connection.
10. Place button cap (included in accessory kit) on the button of the left ATG (10).

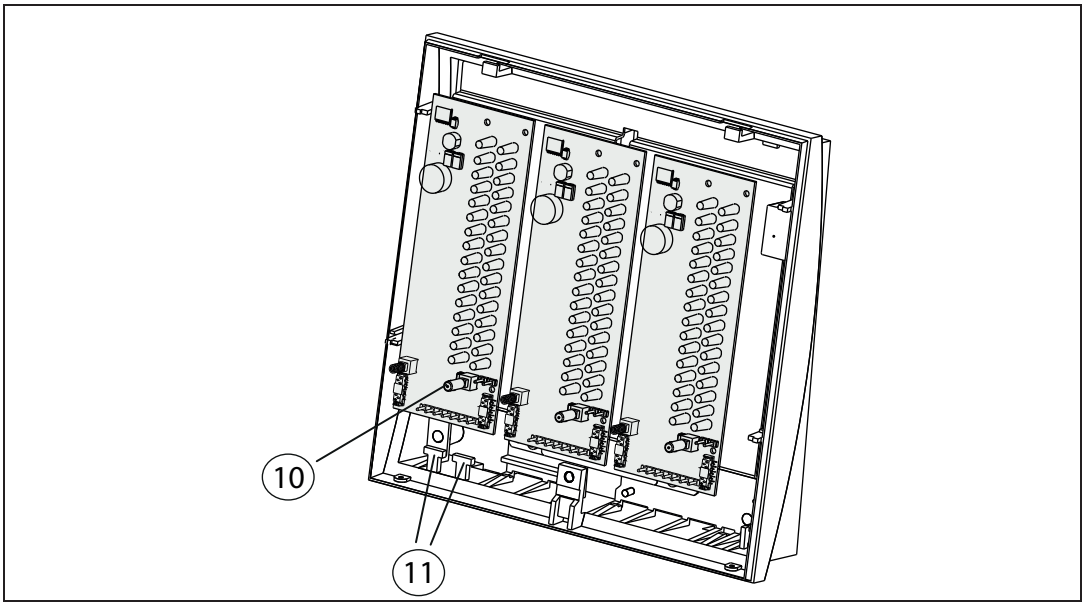


Figure 4.6: Button cap placement

11. The labeling strips for the detector modules can be individually printed using a standard laser printer. A dot file (Print_BAT100LSN.dot) is included on the CD supplied with the MPC Panel Controller. Insert the printed labeling strips into the slots on the rear side of the housing cap (see *Figure 4.7* (12)).

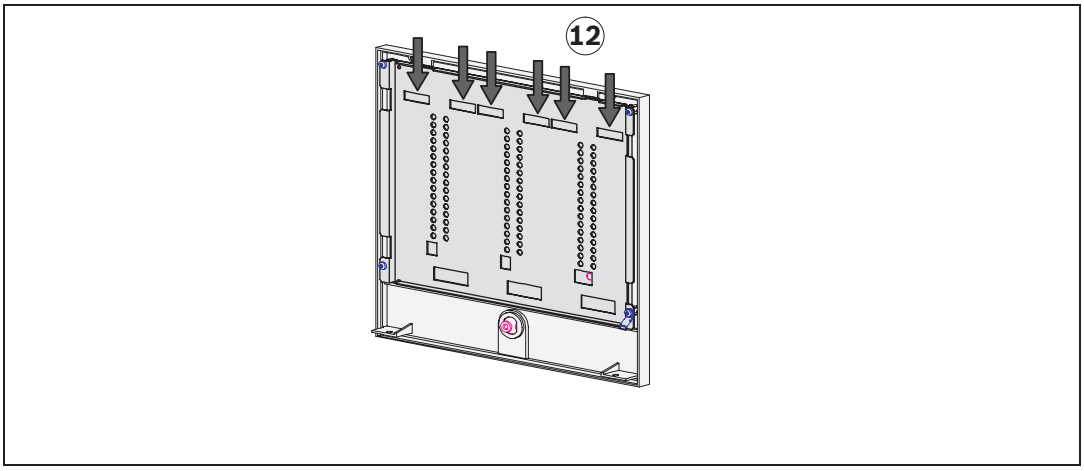


Figure 4.7: Inserting the labeling strips

12. Switch on supply voltage from the control panel. Test the functions of the BAT 100 LSN.
13. Attach grounding cable to the rear side of the housing cap (14) (see also *Figure 4.5* (9)).
14. Replace housing cap:
    - Hold cap in the lower area at a slight distance from the lower part of the housing (see *Figure 4.8* (14)).
    - Replace cap from above (15).
    - Press cap forwards onto the lower part of the housing (16).
15. Screw together housing.
    With VdS equipment, turn safety screws into the lower part of the housing from below (17).

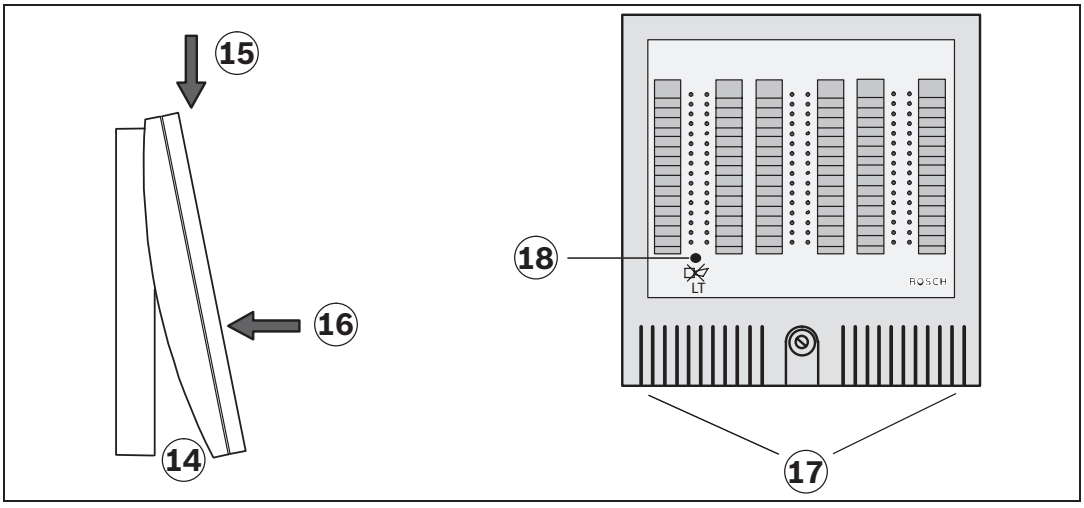
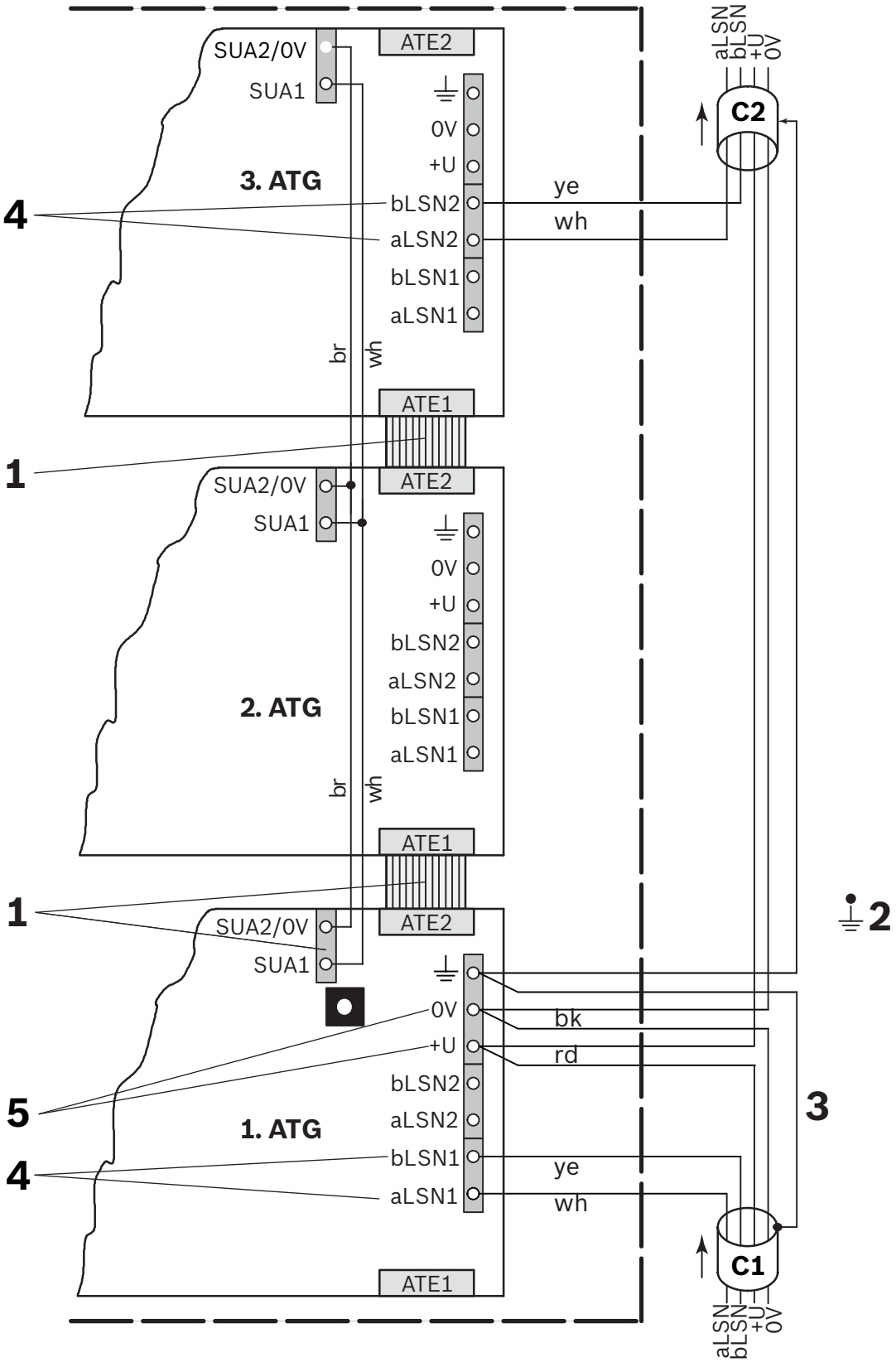


Figure 4.8: Replacing the housing cap and display test

16. Hold down "LT" button for about 5 seconds to start the display test. All LEDs light up in all available colors in a sequence.
    The BAT 100 LSN is ready for operation.

5 Connection



1	The connection from ATG to ATG is made using a flatband cable (ATE2 after ATE1) and a 2-pin cable (SUA1/2 after SUA1/2).
2	Potential equalization. Ground connection is required and has to be connected to the housing metal parts.
3	If shielded cables are used, the shield wire has to be connected to the PE pin of the first ATG 420 LSNi (left side of the housing). Do not connect shield wires to local ground used in 2).
4	Wires aLSN and bLSN of cable 1 (C1) have to be connected to the pins aLSN1 and bLSN1 of the first ATG 420 LSNi (left side of the housing). Wires aLSN and bLSN of cable 2 (C2) have to be connected to the pins aLSN2 and bLSN2 of the last available ATG 420 LSNi in the housing.
5	For AUX power: Cable 1 (C1) and cable 2 (C2) have to be connected to the same ATG 420 LSNi module.
6	In installations where ATG 420 LSNi modules are installed in the same housing (e.g. BAT100) as ATG100 modules and therefore share the same lamp test button, it is required to swap the wires for the lamp test function. Connect the signals SUA1 of ATG 420 LSNi to SUA2 of ATG100 and signals SUA2 of ATG 420 LSNi to SUA1 of ATG100 to avoid unintended behavior of the lamp test function.

Notice!
Please make sure that the LEDs are fully visible after mounting the ATG 420 LSNi into the housing. Maybe the metal part has to be aligned by loosing the screws.

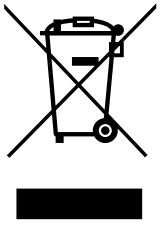
6 Maintenance

In Germany, maintenance work and inspection work on security systems are governed by the regulations of DIN VDE 0833; these regulations stipulate reference to the manufacturer's instructions for maintenance intervals.

Notice!
Have maintenance and inspection work carried out regularly by trained, qualified personnel. Bosch Sicherheitssysteme GmbH recommends a functional and visual inspection at least once a year.

Warranty
Defective modules/devices are exchanged free of charge in the case of a claim under the warranty.

Repair
In the event of any defect, the entire module/device is exchanged.



Disposal

Old electrical and electronic appliances

Electrical or electronic devices that are no longer serviceable must be collected separately and sent for environmentally compatible recycling (in accordance with the European Waste Electrical and Electronic Equipment Directive).

To dispose of old electrical or electronic devices, you should use the return and collection systems put in place in the country concerned.

7 Technical data

Electrics ATG 420 LSNi module	
Operating voltage	
– LSN part	+15 V DC to +33 V DC
– other functions	+8 V DC to +30 V DC
Current consumption	
– LSN part	3 mA
– other functions	- all 32 LEDs off: max. 10 mA@ 24 V DC or max. 15 mA@ 8 V DC - all 32 LEDs on: max. 25 mA@ 24 V DC or max. 60 mA@ 8 V DC
Mechanics BAT 100 LSN housing	
Dimensions (H x W x D)	270 x 270 x 75 mm
Material	Plastic, ABS Terluran
Color	Light gray, RAL 9002
Weight	Approx. 1 kg
Environmental conditions	
Permissible operating temperature	-5 °C to +50 °C
Permissible storage temperature	-20 °C to +60 °C
Special features	
LED flash frequency	1.25 Hz
LED colors	Multicolor

Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com