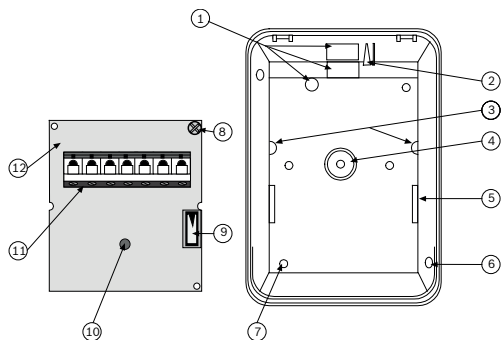


System overview



1	Wiring knockouts
2	Cable tie / strain relief
3	Circuit boards retainer tabs
4	Bracket mounting hole
5	Mirror tracks
6	Corner mounting holes

1. Mount the bracket to the mounting surface.
2. Knock out the bracket mounting hole in the enclosure base and attach the enclosure to the bracket.

3. Insert the mirror and circuit board.

For more information on the bracket mounting, refer to the installation manual of the bracket.

Selecting the vertical angle of the mirror

Caution!



Excessive handling of the mirror surface may lead to damage and malfunction of the detector.

Mounting height	Wide-angle mirror	Curtain mirror
2.0 m	-6°	-2°
2.3 m	-8°	-2°
2.6 m	-10°	-4°

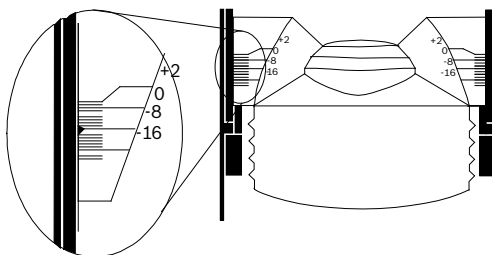
Notice! The vertical angle adjustment marks can be found on the mirror.

7	Surface mounting holes
8	Securing screw
9	Tamper switch
10	LED
11	Terminal block
12	Circuit board

Installation

- Avoid the following inside the monitoring area:
 - direct hot or cold drafts and air conditioning outlets
 - heat sources (a minimum distance of 1.5 m to a radiator is necessary)
 - windows
 - small animals
 - direct sunlight
- The detector cannot detect through glass.

1. Slide the mirror forward or backward until the appropriate angle adjustment marks are in line with the marks on each side of the frame.



Connection



Danger!
Injuries and damage of the detector due to electricity are possible. Inspect all connections to be correct before applying power.

- When using two or more detectors, the best coverage is achieved by overlapping the monitoring areas. The detectors do not affect each other.

Installation preparations

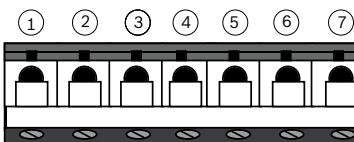
1. Select a surface that is solid and free of vibrations. In order to ensure the intrusion security of dropped ceilings, detectors should monitor each other.

Mounting

Notice! Removing masking from the mirror elements leaves adhesive residue that pollutes the mirror and leads to malfunction of the detector. VdS requirements prohibit mirror masking.

1. To remove the cover, insert a thin blade screwdriver into the notch at the bottom and pry it open.
2. To remove the circuit board, press one of the circuit board retainer tabs towards the side of the enclosure and lift the circuit board out of the enclosure base.

1. Connect the shielded cable to the terminal block as shown in the figure below.



1 + 2	aLSN1, bLSN1: coming from the preceding LSN element
3 + 4	aLSN2, bLSN: going to the next LSN element
5 + 6	Spare terminal
7	Connection for ground wire from shielded cable

For element 1 – 4: Use shielded cable for bus connections.

3. Slide the mirror out of its tracks.

Notice! To exchange the mirror, remove the current mirror and slide the other mirror into the tracks.
4. Open an appropriate wiring knockout by tapping it with a screwdriver then route the wiring through the opening.
5. For strain relief, attach the cable to the cable tie with the supplied plastic tie-down.

Surface or corner mounting

1. Open either two of the four surface mounting holes or the two corner mounting holes.
2. Use the enclosure as a template and mark the location for the mounting screws.
3. Firmly mount the detector with appropriate hardware depending on the mounting surface (e.g., anchors).
4. Insert the mirror and circuit board.

Bracket mounting

Notice! When using a bracket, misalignment of the detector might reduce the monitoring range.



Notice!

Do not coil excess wire inside the enclosure or seal the wire entrance with the plug provided.

Configuration

1. Set the sensitivity to one of the following settings using the software:

Standard sensitivity (default)

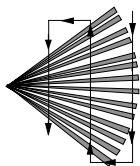
- Protection against false alarms
- Tolerance to extreme environmental conditions
- Not recommended for curtain mirror version

High sensitivity

- Recommended setting for any location where an intruder is expected to cover only a small portion of the monitoring area or when quick catch performance is desired
- Tolerance to normal environmental conditions
- High response sensitivity

To set up the detector

1. Mount the cover.
2. Insert the tamper screw, if desired.
3. Apply power to the unit.
4. Wait for approximately two minutes with no motion in the monitoring area, then begin walk testing across the pattern below.



5. Walk test the detector from both directions. The boundaries are determined by activation of the LED.
6. If the desired range is not achieved, angle the mirror up or down to assure the monitoring pattern is not aimed too high or too low.
7. If required, install the security seal (P/N 3.102.389.687) between the base and cover beside the cover locking screw.

Maximum current consumption in mA	0.8
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Mechanical

Dimension in cm (H x W x D)	11 x 6.9 x 4.5
Monitoring area in m	
– Wide-angle mirror	11 x 11
– Curtain mirror	21 x 3
Minimum installation height in m	2
Maximum installation height in m	2.6
Rates of movement in m/s	
– Wide-angle mirror	0.2 - 3.0
– Curtain mirror	0.2 - 4.0
Sensitivity setting	Standard or high sensitivity

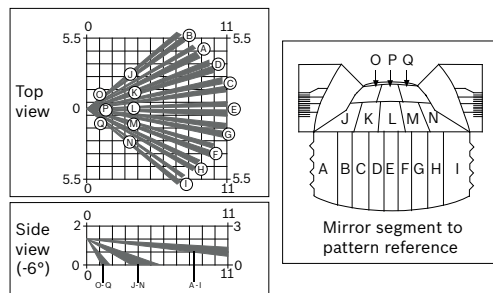
Environmental

Minimum operating temperature in °C	-10
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Monitoring Patterns

Wide-angle monitoring

- Use wide-angle monitoring to overlap monitoring areas when using more than one detector.
- Vertical swivel range of the mirror: +2° to -16°

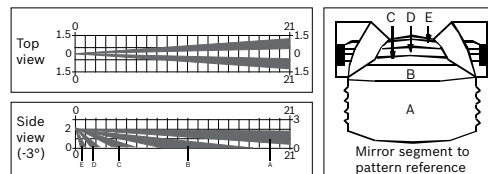


Curtain Monitoring

- Use curtain monitoring by installing the OMLR93-3 long-range mirror in the detector.

Maximum operating temperature in °C	55
Minimum storage temperature in °C	-20
Maximum storage temperature in °C	60
Maximum relative humidity in %	95; no dew point
Protection class	IP41 / IK02
Environmental class	II

- Vertical swivel range of the mirror: +7° to -16°



Maintenance

- Check the range and monitoring area with a walk test at least once a year.
- Instruct the end user to check the detector daily by walking through the outer edge of the monitoring area and observing the LED operation (if used). This assures an alarm output prior to arming.

Technical data

Electrical

Maximum operating voltage in VDC	33
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DS 935 LSN Infrared Motion Detector



en Installation Manual

Bosch Sicherheitssysteme GmbH

Robert-Bosch-Ring 5
85630 Grasbrunn
Germany

www.boschsecurity.com

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