

DS 935 LSN Infrared motion detector



Security Systems



- Programming is done via the LSN control panel
- 2-wire connection to LSN
- Tamper surveillance (tamper)
- Wide-angle version and long range version
- Alarm, tamper and malfunction are evaluated via the LSN bus

The DS 935 LSN infrared motion detector is used to monitor rooms for unauthorized entry.

Functions

- The surfaces (floor, wall, etc.) defining the effective area are used as reference surfaces; these reference surface temperatures give the detector its standby value.
- As long as the temperature characteristics of these surfaces do not vary, the detector stays in its standby mode. If the sensor detects a change in temperature due to people, animals or materials inside its operating zone, it will determine a quick change in infrared radiation. The electrical signals generated by the sensor are used to trigger an alarm. Within the specified environmental conditions, the detector reacts to both fast and slow-moving objects within its operating zone.

Notice: The detector does not contain an alarm memory indicator. This is no longer necessary due to individual detector identification via the LSN control panel.

Parts Included

Qty.	Components
1	DS 935 LSN infrared motion detector

Certificates and Approvals

VdS approval No.: G 101552, B
(wide-angle version)

VdS approval No.: G 101553, B
(Long range version)

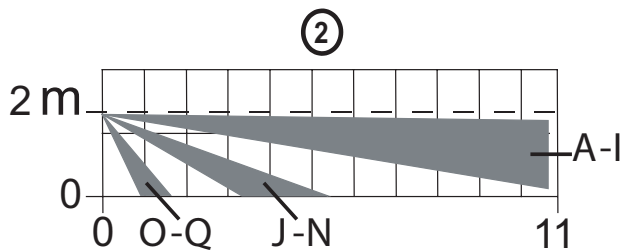
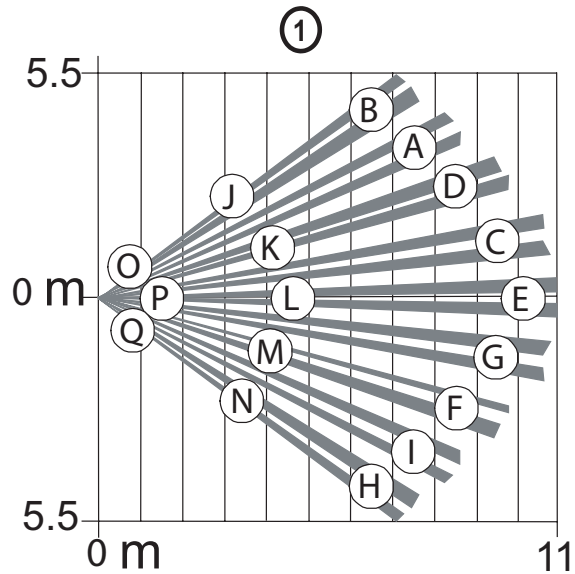
Installation/Configuration Notes

- Shielded installation cable is to be used to connect the detector.
- Choose the mounting location in such a way that a potential intruder must cross the beam pattern.
- The recommended mounting height is 2 to 2.6 m.
- The mounting surface should be solid and free from vibration.
- DS 935 LSN detectors do not mutually influence each other. If multiple detectors are used for wall-to-wall monitoring, the operating zones can overlap.
- Surfaces that limit the operating zone can be, for example, walls, furniture, columns or plates of glass.
- Mechanically stable ceilings and walls above and around the detector prevent surreptitious movement of a suspect outside the operating zone.
- False ceilings above the detector that can be easily penetrated increase the risk that the detector could be covered up. Detectors should therefore monitor each other.
- Please avoid the following:
 - Direct warm or cold air currents
 - Windows
 - Small animals
 - Air-conditioning outlets
 - Sources of heat
 - Direct sunlight
- Please note the following:
 - Movement behind glass is not recognized
 - The best detector results are obtained at right angles to the direction of beam spread
 - If two or more detectors are used, the beams should cross each other to allow optimum recording.
- Surveillance pattern (all measurements in meters).

Wide-angle version

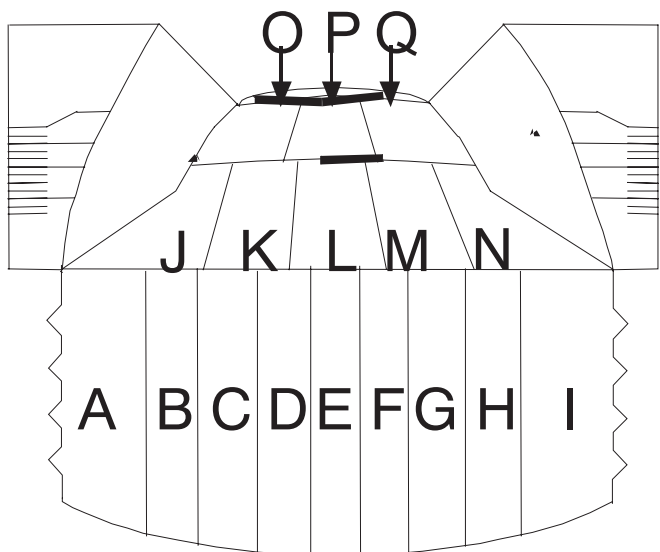
Use of several detectors, also with overlapping operational zones

Monitoring area 11 m x 11 m



Mirror set at -6°

- 1 View from above
- 2 View from the side

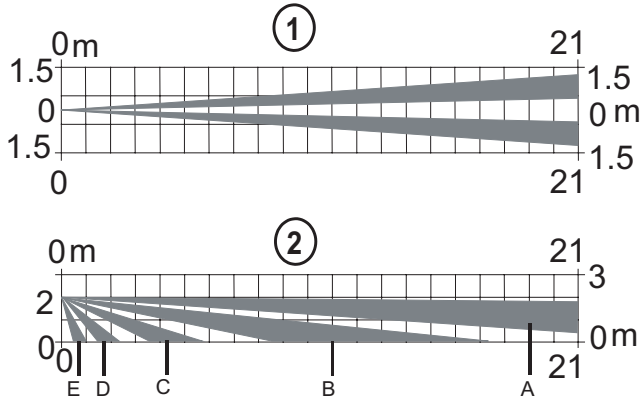


Relationship between mirror segments and monitoring zones.

Long range version

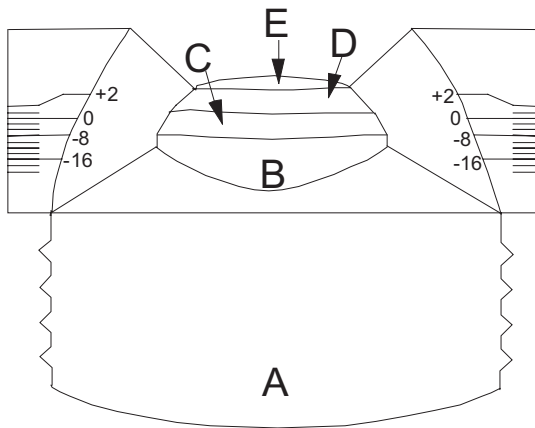
Long range version by changing the OMLR93-3 long range mirror

Monitoring area 21 m x 3 m



Mirror set at -2°

- 1 View from above
- 2 View from the side



Relationship between mirror segments and monitoring zones.

Configuration of the detector is done by programming software in the corresponding LSN control panel. Sensitivity is set to one of the following values by software.

Default: This setting offers the best possible protection against false alarms. Suitable for extreme environmental conditions.

The default setting is not recommended for the long range version, i.e. for large distances. The detector is delivered with the default settings.

High level of sensitivity: This setting is recommended when it can be assumed that a potential intruder can only access a small portion of the room being monitored or when fast detection is desired. Suitable for normal environmental conditions. This setting raises the response sensitivity. The detector contains a walk test indicator (LED).

Technical Specifications

DS 935 LSN Infrared motion detector	
LSN Operating voltage	max. 33 V
LSN Current consumption	0.8 mA
Monitoring area	
- wide-angle mirror	11 m x 11 m
- long range mirror	21 m x 3 m
Installation height	2 m to 2.6 m
Rates of movement	
- wide-angle mirror	0.2 to 3.0m/s
- long range mirror	0.2 to 4.0m/s
- Sensitivity adjustment	Default or High sensitivity
Environmental conditions	
- Operating temperature	-20 °C to +55 °C
- Storage temperature	-20 °C to +60 °C
- Relative air humidity (EN60721)	<95%relative humidity, no dew point
Housing dimensions	(H x W x D) 110 x 69 x 45
Housing protective system (EN60529, EN50102)	IP41 / IK02
VdS environmental class	II

Ordering Information	
DS 935 LSN Infrared motion detector	4.998.110.393
Hardware Accessories	
OMLR93-3 Long range mirror	4.998.111.865
B338 swivel ceiling mount bracket	4.998.111.637

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For more information please visit
www.boschsecuritysystems.com

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