Flexible

Easy

Reliable

Local SecurityNetwork L·S·N

We know what it's all about

BOSCH
Invented for life

A New Generation of Security

LSN — the Local SecurityNetwork bus system launched by Bosch — unifies fire and intrusion alarm systems. Featuring unrivalled flexibility, simplicity and reliability, it delivers on all counts — with several million elements installed so far. Now this economical, future-proof system is available with new, improved features.

Premium Flexibility

With LSN, you get a scalable, freely configurable security system bus that is sure to meet your needs. The LSN system is also used in a wide spectrum of third-party equipment, which gives you considerable freedom for selecting suppliers. Bosch offers a complete range of latest-generation fire and intrusion detectors with active self-monitoring, but it is also easy to integrate other makes of peripherals. Conventional components are simple to connect too, as well as equipment for monitored control and feedback. You can now choose from over 70 fire, intrusion, and malfunction detectors, operating units, and arming devices with LSN technology from eight different manufacturers. What's more, a vast range of LSN network topologies can be

LSN, the ultimate bus system for intrusion and fire, is now available with new, improved features. Shown here: example configuration of an LSN alarm system.

LSN technology protects the Semperoper, Dresden.

configured (next page). You can select manual or automatic address assignment. And the cables used can be either shielded or unshielded (with the LSN 1500 and LSN 300). This all adds up to unbeatable flexibility.

The Easier the Better
Simple to install, simple to use: the ease of installation of LSN makes site protection more affordable than ever. Automatic component identification and address assignment support and simplify configuration of the bus. If special programming of elements is needed, a powerful tool lets you do this flexibly. Because LSN is a 2-wire bus system, only a minimum of assembly work is required. All devices are initialized, controlled, and identified from the control panel, which displays precise, easy-to-read information on each detector. This provides a better overview and streamlines the security system's operation. Its simple technology also appeals to home and building owners who are concerned about esthetics.

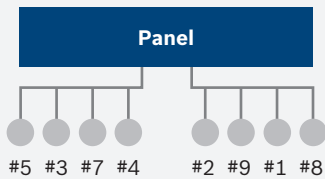Security has top priority at Munich Airport, which is why they chose LSN.

The Ultimate in Reliability

The LSN is extremely robust to maximize security: short circuit isolators in each device increase the system's integrity. 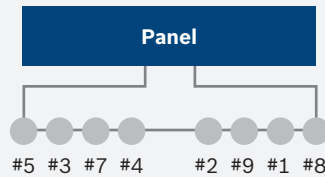A short circuit or a wire break in the loop does not affect functioning of the bus and connected devices. ASICs in all detectors integrate your entire system to create a centrally controlled communication network. This makes it nearly
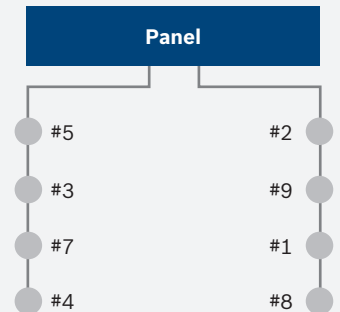
Example Network Configurations

T-tap only (without stubs or loops):

Panel

#5 #3 #7 #4   #2 #9 #1 #8

LSN loop only (without T-tap):

Panel

#5 #3 #7 #4   #2 #9 #1 #8

One or two LSN stubs (without T-tap):
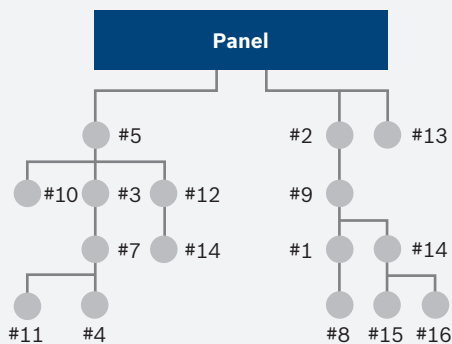
Panel

#5   #2
#3   #9
#7   #1
#4   #8

impossible to manipulate, which provides greater protection against tampering. Dedicated diagnostic functions make it easy to pinpoint and replace detectors in the unlikely event of a fault. Several million LSN devices installed during over ten years are proof of the system's outstanding reliability. It conforms to EN 54, EN 50131 Grade 4 and VdS Class C, in addition to CE, UL and BS.
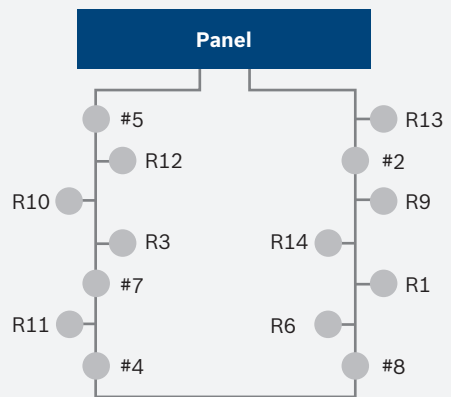
Flexible Network Topologies

LSN technology lets you set up the network exactly as required: as a loop, stub or T-Tap configuration, or a combination of the three. This results from bidirectional digital transmission, which lets the detectors and control panel continually exchange data with one another. If necessary, elements can be bypassed. Additional detectors can be connected anywhere on the bus. A single two-wire cable carries both information and power (LSN works with standard installation cables in most countries). The flexible topologies let you upgrade old installations to LSN without replacing already installed wires.
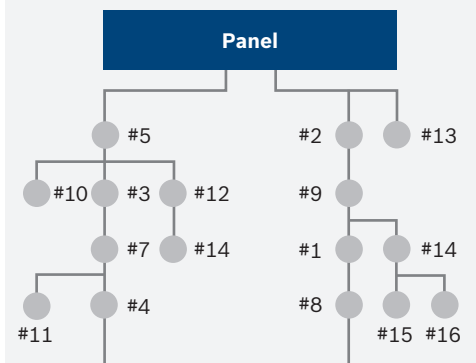
Mixed stubs (one or two):

Mixed loop for easy removal of detectors (R = removable):

Mixed loop:

New, Improved Features

The new LSN 300 and LSN 1500 modules introduce a number of improvements. For instance, the new maximum current of 1500 mA increases the number of loop-powered sounders that can be installed, thus reducing wiring costs. The longer 3000m maximum line length and the new possibility of connecting up to 254 elements per loop cuts down on the number of loops (and LSN modules) needed for large sites. This also translates into faster installation and cost savings.

Current consumption of the LSN's improved ASIC and the new LSNi peripherals has been reduced. Other new features make the system even more flexible and easier to install: Element addresses are now independent of the cable tree, making it easier to match them with their actual locations in the building. The LSN 1500 and LSN 300 also work with unshielded cables, so standard installation cables can be used in most countries. And programming is speeded by automation detection of installed elements and their sequence.

	Modules		
Overview of Features	**LSN 100**	**LSN 300** "improved version"	**LSN 1500** "improved version"
Max. current on line	100 mA	300 mA	1500 mA
Loop length	1000 m	1000 m	3000 m
Max. number of elements	127	254	254
Cable shielding required	Yes	No	No
Loop and stub configurations	Yes	Yes	Yes
T-tapping	No	Yes	Yes
Automatic addressing	Yes	Yes (no T-tap)	Yes (no T-tap)
Manual addressing	No	Yes	Yes
LSN elements connectable	Yes	In "classic" mode	In "classic" mode
LSN improved elements connectable	In "classic" mode	Yes	Yes

Cost Savings for Installation, Service, and Maintenance

The LSN technology saves you money in many ways.

"LSN" as "one" bus system for fire & intrusion saves you money in more ways than one. Professionals only have to handle one bus technology and master the corresponding installation and troubleshooting techniques, cable types, etc. To keep things as simple as possible, there's only one programming tool and one set of test tools for all users and devices. It's easy to expand the loop and add new detectors, and detectors can be replaced without reprogramming anything. A self-learn mode makes programming even quicker. Products can also be used for both fire and intrusion installations, which means reduced training and storage costs. Remote programming and maintenance also add convenience, as does centralized programming of all LSN devices.

Upward and Downward Compatibility

LSN "improved version" peripherals can be used with all existing LSN panels, and classic LSN peripherals also work with LSN "improved version" panels. This backward compatibility means easy maintenance of already installed panels (NZ 300, Fire Panel 500 Series LSN, Universal Instrusion and Fire Alarm Panel 2000 Series LSN and UGM).

The Basis for Modern, Affordable Security

Bosch took a great innovative step forward a few years ago by developing the Local SecurityNetwork (LSN). LSN technology offers true advantages in terms of flexibility, economy, and security. This is best-in-class security technology designed to cost-effectively and reliably meet your customers' present and future needs. Technology you can trust.

A Tradition of Quality and Innovation

For over 100 years, the Bosch name
has stood for quality and reliability.
Bosch is the global supplier of choice
for innovative technology, backed
by the highest standards for service
and support.

Bosch Security Systems proudly offers
a wide range of security, safety,
communications and sound solutions
that are relied upon every day in
applications around the world, from
government facilities and public venues
to businesses, schools and homes.