

**ESSER**

by Honeywell



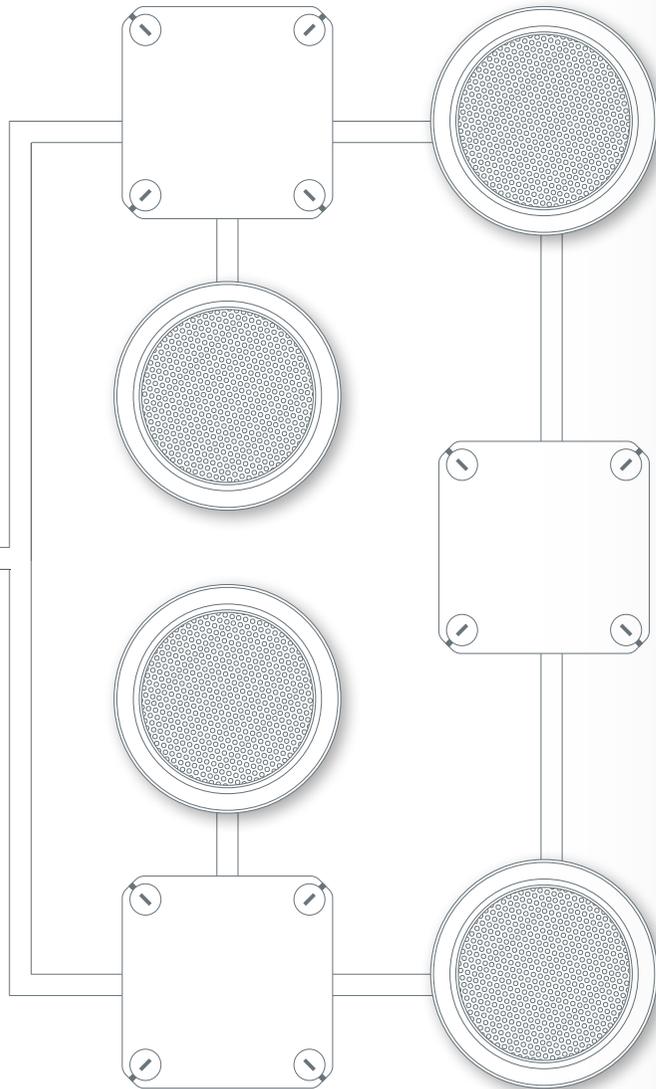
Loop technology with voice alarm redundancy  
in the event of failure

**VARIODYN D1&LIM**

## Features and benefits

- Considerable cost savings in cabling and installation because fire-resistant E-30 cabling is not required in every case
- Fully redundant loop technology, up to 64 loop isolator modules per loop and up to 4 loops per DOM
- Significantly higher system availability for voice messages as well as alarm signaling and evacuation
- Complete protection against failure from short circuits if all loudspeakers are equipped with LIMs
- Complete protection against failure from line breaks, because the loop is fed from two sides
- Network is simple to test and faults can be pinpointed precisely
- Higher availability for announcements compared to A/B cabling
- Also suited for systems according to DIN VDE 0833-4 and EN 60849, EN 54-16 compliant
- CPD certificate 0786-CPD-21149; VdS approval G 212061
- Works with all commercially available 100 V loudspeakers
- No need for two loudspeakers in small rooms

# VARIODYN loop technology—the new generation solution



VARIODYN D1 loop technology is the latest technology for optimal loudspeaker system reliability. It uses a loop which is tolerant of wire breaks and short circuits, similar to fire detection technology.

## Trailblazing technology

VARIODYN D1 is one of the first voice alarm systems on the market with loop technology. It uses the proven digital output module (DOM) to create up to four loops which are tolerant of wire breaks and short circuits. Up to 64 loop isolator modules (LIMs) can be operated on each of these four loops. Monitoring for the VARIODYN D1 relies on its tried and tested, sophisticated impedance monitoring technology. This enables loudspeakers without coupling capacitors to be used.

## Loop circuit versus spur circuit

In the past, all 100 V loudspeaker lines used only spur technology. This carried a high risk of failure, because if a spur circuit fails, all loudspeakers after the wire break fail as well, and a short circuit puts the entire line out of operation. Up to now, E-30 cabling was used to prevent failures; in the event of fire, it ensures continued operation for thirty minutes. The use of loop technology with loop isolator modules can replace elaborate

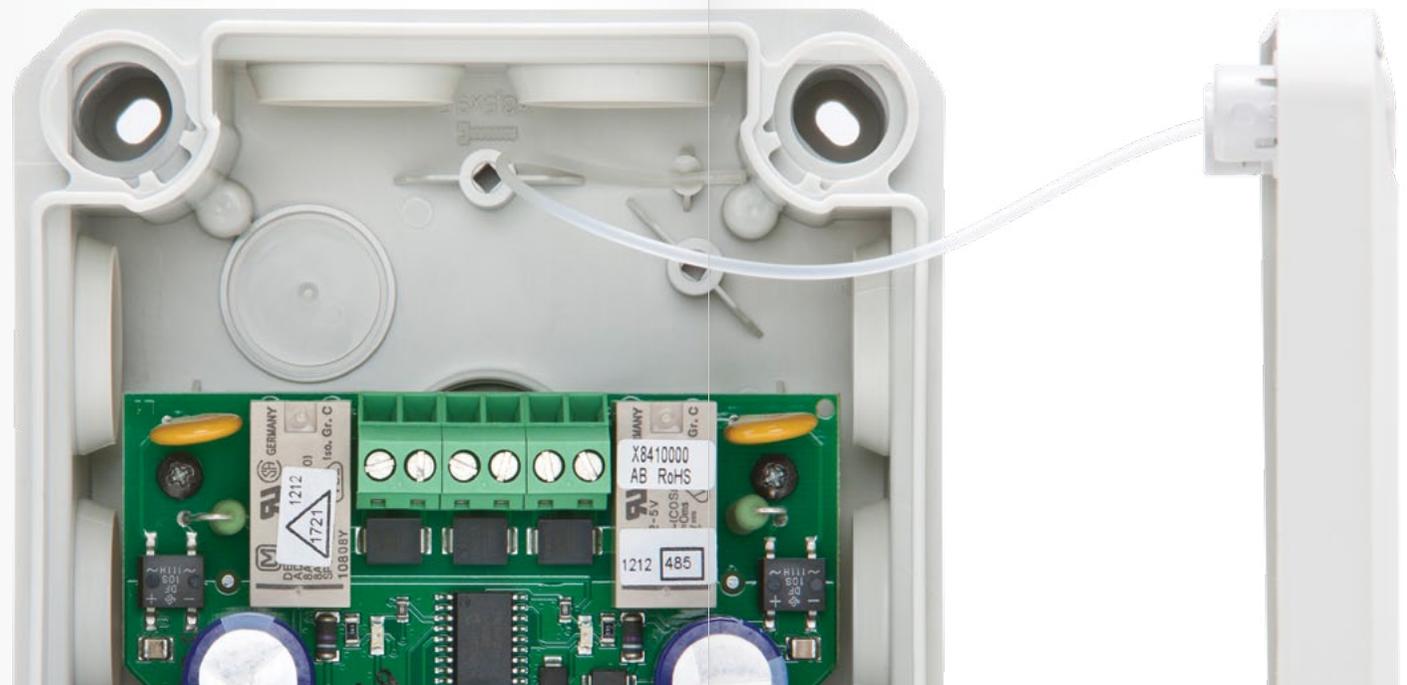
E-30 cabling, because the loop isolator modules and feed from two sides ensure redundancy in the event of failure. That's how VARIODYN and LIM technology deliver significant cost savings.

## Loop isolator modules for the lowest risk of failure

Loop isolator modules monitor the loudspeaker loop together with the digital output module and, if a short circuit occurs, separate the faulty line section from the loop. Equipping every loudspeaker with a loop isolator module ensures total security against failure in case of a wire-to-wire short circuit fault.

### What do you need to use the new technology?

1. New DOM firmware provides the new functionality
2. LIMs to separate failed loop sections



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