5410EOL
END-OF-LINE (EOL) SUPERVISION DEVICE

5411EOL
END-OF-LINE (EOL) SUPERVISION DEVICE

TECHNICAL DATA SHEET

PRODUCT SUMMARY

The **5410EOL** and **5411EOL** are end-of-line (EOL) supervision devices designed to monitor the continuity of 70/100V speaker circuits without requiring a return wire. Installed at the end of a loudspeaker line, these modules enable AtlasIED systems to detect open circuit faults anywhere along the speaker wiring - right up to the last speaker in the chain.

When paired with the speaker line supervision functions of the GLOBALCOM® or 5400 Series systems, the 5410EOL and 5411EOL enable comprehensive speaker circuit monitoring. GLOBALCOM® systems perform supervision in conjunction with AtlasIED DNA Series amplifiers, T112, and T112C amplifiers, while 5400 Series systems supervise speaker lines through Digital Zone Managers (such as the IED5404DZM and IED5432DZM) working with 5400 Series amplifiers (IED5414AMP, IED5434AMP, and IED5454AMP) or DNA Series amplifiers. These end-of-line devices present a measurable load at the supervision frequency (~20 kHz), without affecting the audible frequency performance of the paging or emergency audio system.

For proper operation, the speaker circuit must be wired as a continuous daisy-chain, without branches or parallel connections, and one EOL device should be installed at the end of each supervised speaker output.

MODELS AVAILABLE

- **IED5410EOL**
  For use with amplifier channels rated less than 200 watts continuous, including the 5400 Series IED5414AMP.
- **IED5411EOL**
  For use with amplifier channels rated at 200 watts continuous or greater, including AtlasIED DNA Series amplifiers, T112 and T112C amplifiers, and 5400 Series amplifiers such as the IED5434AMP and IED5454AMP.

FEATURES

- **End-to-End Line Monitoring** – Supports supervision of 70/100V speaker lines for open circuit faults without requiring a return wire.
- **Compatible with GLOBALCOM® and 5400 Series Systems** – Enables scheduled loudspeaker line supervision for enhanced reliability in critical paging and emergency applications.
- **Supports a Wide Range of Amplifiers** – Designed for use with AtlasIED DNA Series amplifiers, T112 and T112C amplifiers, and 5400 Series amplifiers and Digital Zone Managers.
- **Unaffected Audio Performance** – Presents a load at supervision frequencies (~20 kHz) without affecting audible paging or emergency messages.
- **Simple Installation** – Compact form factor mounts at the end of the speaker line with no external power required.
- **Designed for Continuous Line Wiring** – Supports single continuous speaker runs; not intended for branched or parallel circuits.

APPLICATIONS

- Airports
- Mass Transit Facilities
- Large Office Complexes and Retail Areas
- Hotels
- Schools and Universities
- Hospitals
- Churches
- Museums

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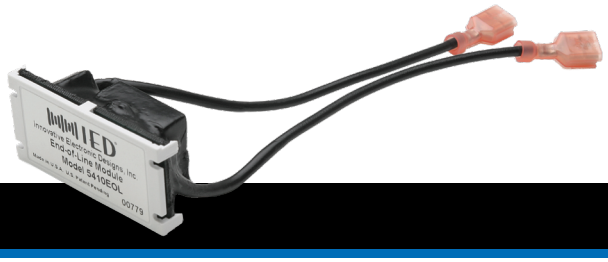

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TECHNICAL SPECIFICATIONS

Supervision Signal Limits	
≤ 15V, 20 kHz (measured at amplifier output)	May be applied continuously
> 15V, 20 kHz (measured at amplifier output)	Thermally limited to 100°C ±5% maximum supervision signal voltage 100V.

Connections	
Flying Leads	2x 18 AWG 6" measured from top surface

Mechanical	
Unit Dimensions (not including leads)	0.956" x 1.96" x 1.0" 24mm x 50mm x 25mm

Environmental	
Operating Temperature	-40° C - 100° C (-40° F - 212° F)
Storage Temperature	-50° C - 100° C (-58° F - 212° F)

Emergency Standards
UL 864 / UL 2572
CAN/ULC S527 CAN/ULC S576
EN54-16

Warranty	
Warranty Period	36 Months

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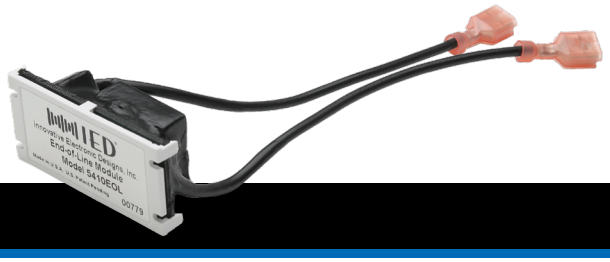

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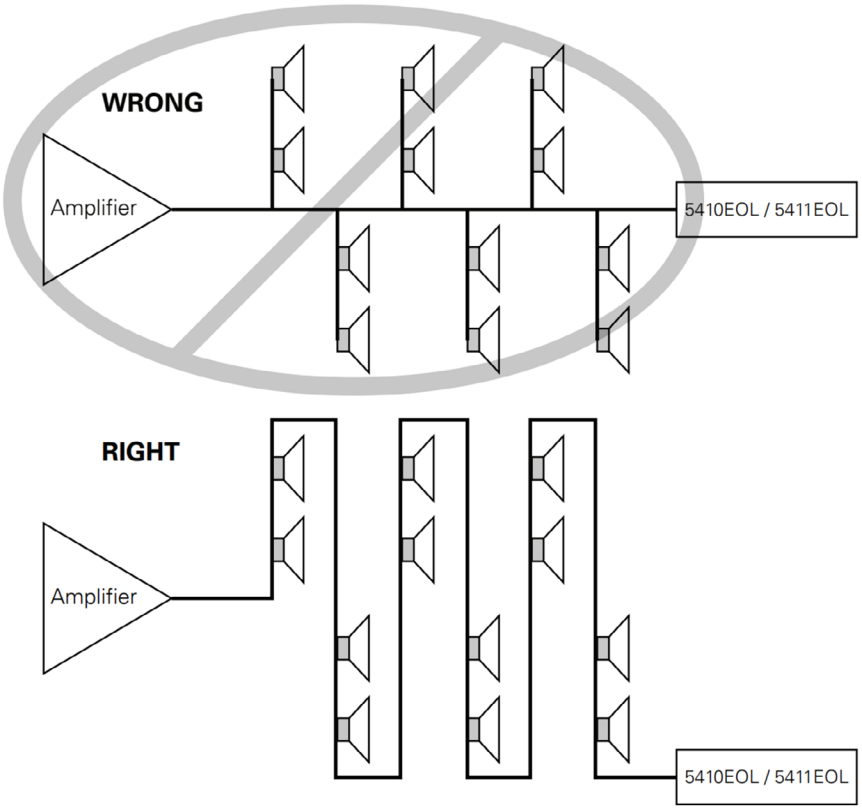
SPEAKER LINE INSTALLATION



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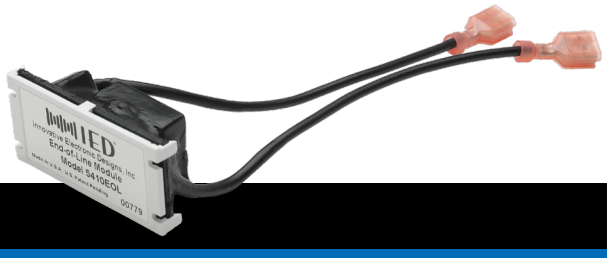

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ARCHITECT & ENGINEER SPECIFICATIONS

The end-of-line supervision device(s) shall be AtlasIED model IED5410EOL for loudspeaker circuits rated less than 200 watts continuous, or model IED5411EOL for circuits rated at 200 watts continuous or greater. The device shall provide loudspeaker circuit supervision for open circuit conditions when used with compatible amplifier supervision systems.

The device shall be designed for use on 70V and 100V distributed loudspeaker circuits and shall support systems operating on either the AtlasIED GLOBALCOM® platform or the AtlasIED 5400 Series platform. Supervision shall be performed by compatible amplifiers or amplifier controllers, including AtlasIED DNA Series amplifiers, T112 and T112C amplifiers, and 5400 Series amplifiers and Digital Zone Managers.

The device shall operate by presenting a measurable impedance at the supervision frequency (~20 kHz), allowing system controllers to verify the circuit's integrity. The device shall not affect audible frequency paging or emergency audio signals.

The end-of-line supervision device shall be passive and require no external power. Wiring to the device shall be a continuous daisy-chained circuit without branch or parallel connections, and one device shall be installed at the end of each supervised loudspeaker circuit.

The device shall be UL Recognized under UL 864 and UL 2572, and CAN/ULC Recognized under CAN/ULC S527 and CAN/ULC S576. It shall comply with EN54-16 for applicable life safety system installations.

The device shall be constructed with flying leads for easy connection to the speaker circuit and shall be capable of operating within a temperature range of -40° C - 100° C (-40° F - 212° F).

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